

Comments for the User's Guide Volume 2

Meeting Date	Comment Date	Commenter	Comment No.	Section	Page	Topic	Comment
	10.27.17	EPA HQ Water Permits Division	1	3.1, 4.6	4, 20	"New Source"	I think that there should be a clarification made that new sources and new dischargers are not equivalent, perhaps in section 3.1.? "New source" is defined in 122.2 of the NPDES regulations and the dischargers within this category consist of facilities that were constructed after an ELG was proposed, and this categorization remains in place for the life of the facility. A new discharger is not a new source by definition, and is one that had never previously received an NPDES permit.
	10.27.17	EPA HQ Water Permits Division	2	4.7.1	20	Compliance Schedules	This section should be revised a bit. I think that there are a few areas here where the use of schedules would not be consistent with the federal regulatory requirements. First, it should be clarified that compliance schedules in permits are intended to be used when dischargers cannot immediately meet their water quality-based effluent limitations. These schedules are not the same as compliance schedules in the enforcement and compliance context. So, the word in the 2nd sentence, "reacquire" should be deleted. I think that the specific reference to consent orders and compliance orders should be deleted because while a schedule can require tasks that are similar to what's required in those enforcement documents, the goal of the permit schedule is to meet the limit. The way it's currently drafted creates the possibility of confusion. Schedules are not intended to be used to document the generation or submittal of documents, so the last sentence in the first paragraph of this section should be revised to clarify that these are documents that are somehow related to the needed changes the facility is making to meet their limit(s).
	10.27.17	EPA HQ Water Permits Division	3	4.7.4.4	25	Pretreatment Program	As currently drafted, the development of a pretreatment program seems to be a tool for resolving compliance issues. I think that this section should be revised to reflect the language in 40 CFR Sec. 403.8(a) "Pretreatment Program Requirements: Development and Implementation by POTW"
	10.27.17	EPA HQ Water Permits Division	4	4.7.7	39	De Minimis Sources	What is the definition "de minimis" levels of mercury? Suggest including the specific level since a lot of the permitting approach described seems to be hinged on that factor.
	10.27.17	EPA HQ Water Permits Division	5	4.7.7.1	39-40	Mercury Minimization Plans	Suggest including a description or example of what is a "qualitative evaluation" that a de minimis discharger could perform to evaluate the possible contributing conditions to methylation.
	10.27.17	EPA HQ Water Permits Division	40	4.7.8	40	Phosphorus Management Plans	Will a determination be made about whether there is reasonable potential when there is an applicable water quality standard for phosphorus in the receiving water? I think that it needs to be clear that these management plans will work along with the requirements of 40 CFR 122.44(d), which requires that water quality based effluent limitations be included in permits if there is reasonable potential.

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Meeting Date	Comment Date	Commenter	Comment No.	Section	Page	Topic	Comment
10/10/2017	10/27/2017	EPA Region 10	1 (14)	4.7.13	42	Biosolids	This section should state that Idaho DEQ will begin administration of the biosolids program in 2021. This section should state that the EPA will continue to have jurisdiction over biosolids generated, handled or disposed at federal facilities and on Tribal land even after IDEQ implements the delegated federal biosolids program in 2021.

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ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 122, 124, and 125**

[OW-FRL-2532-8]

National Pollutant Discharge Elimination System Permit Regulations**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

SUMMARY: On May 19, 1980, the Environmental Protection Agency published final rules which consolidated the regulations and procedures for five EPA permit programs including the National Pollutant Discharge Elimination System (NPDES) permit program under section 402 of the Clean Water Act (CWA). Following promulgation of these Consolidated Permit Regulations, petitions for review of various aspects of these regulations were filed in several federal courts and were subsequently consolidated into a single action in the United States Court of Appeals for the District of Columbia Circuit (*NRDC v. EPA*, and consolidated cases, No. 80-1607 (D.C. Cir., filed June 2, 1980)). On June 7, 1982, EPA entered into a settlement agreement on Clean Water Act issues with numerous industry petitioners. Under the terms of that settlement, EPA agreed to propose changes to the May 19, 1980 regulations to reflect the resolution of issues in the settlement. EPA also agreed to take such action as may be necessary to suspend several sections of the regulations pending completion of final rulemaking. Accordingly, EPA proposed amendments to the NPDES sections of the Consolidated Permit Regulations on November 18, 1982. At the same time, EPA proposed to suspend portions of these regulations and related provisions of the NPDES application forms to correspond with proposed changes to the regulation agreed to in that settlement.

After considering numerous comments submitted on the proposed changes, EPA has developed the amended NPDES regulations which are promulgated in final form today. Today's action also represents the final rulemaking on the proposed suspensions. No final action had been taken previously since the most expeditious manner of resolving all outstanding issues was to complete rulemaking on the suspension issues as well as the others at the same time.

Today's rulemaking also contains final regulations for determining whether a facility is a new source. EPA suspended the existing new source criteria and proposed revisions to these

regulations on September 9, 1980 (40 FR 59317).

DATES: The effective date of this regulation is October 26, 1984.

In accordance with 40 CFR 100.01 (45 FR 26098, April 17, 1980), these regulations shall be considered final agency action for purposes of judicial review at 1:00 p.m. eastern time on October 10, 1984. In order to assist EPA to correct any typographical errors, incorrect cross references, and similar technical errors, comments of a technical and nonsubstantive nature on the final regulations may be submitted on or before November 26, 1984. The effective date of these regulations will not be delayed by consideration of such comments.

The modified information requirements contained in §§ 122.29(c)(5), 122.41(l)(1), 122.42(a), 122.45(b), 122.62(a), and 124.5 have not been approved by the Office of Management and Budget (OMB) and they are not effective until OMB has approved them.

ADDRESS: Comments of a technical and nonsubstantive nature should be addressed to: William Diamond, Permit Division (EN-336), Office of Water Enforcement and Permits, U.S. Environmental Protection Agency, Washington, D.C. 20460.

FOR FURTHER INFORMATION CONTACT: William Diamond, Permits Division (EN-336), Office of Water Enforcement and Permits, U.S. Environmental Protection Agency, Washington, D.C. 20460. Telephone: (202) 426-4793.

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I. BACKGROUND

On June 7, 1979, EPA published final regulations establishing program requirements and procedures for the NPDES program. A week later, on June 14, 1979, a number of petitioners representing major industrial trade associations, several of their member companies, the Natural Resources Defense Council (NRDC), and Citizens for a Better Environment filed petitions for judicial review of the regulations. Also on June 14, 1979, EPA published proposed regulations consolidating the requirements and procedures for five EPA permit programs. These included the NPDES program under the Clean Water Act (CWA), the Underground Injection Control (UIC) program under the Safe Drinking Water Act (SDWA), State "dredge or fill" programs under Section 404 of the CWA, the Hazardous Waste Management (HWM) program under the Resource Conservation and Recovery Act (RCRA), and the Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

Final Consolidated Permit Regulations (CPR) were published on May 19, 1980. These consolidated regulations were challenged in court. Petitions for review were filed in several U.S. Courts of Appeal and subsequently consolidated in the District of Columbia Circuit (*NRDC v. EPA*, and consolidated cases [No. 80-1607, filed June 2, 1980]). The petitions for review of the final NPDES regulations published June 7, 1979, were joined with this action. In response to these challenges, on September 9, 1980 EPA suspended the criteria for

determining whether a discharge is a new source (40 FR 59317). On the same day, EPA proposed regulations to replace the new source criteria (45 FR 59343).

EPA held extensive discussions with all litigants on the remaining issues raised in the petitions and subsequently signed four separate settlement agreements with the industry parties. One agreement covered only the UIC program, one covered the HWM program under RCRA, one covered the NPDES program, and the fourth covered issues which were common to at least two of the three permit programs involved in the litigation along with the definition of "new discharger" and its relationship to mobile drilling rigs under the NPDES program. Today's final rulemaking completes action initiated as a result of the settlement of NPDES issues.

The NPDES Settlement Agreement was reached after two years of intensive negotiations between EPA and the industry groups challenging the regulations. Industry litigants had raised approximately 47 issues affecting both substantive and procedural requirements in the NPDES regulations.

EPA signed the NPDES Settlement Agreement with industry petitioners on June 7, 1982. The settlement covered 27 of the 47 issues raised by industry litigants challenging the NPDES permitting portions of the Agency's regulations. Nine other issues were covered under the Common Issues Settlement Agreement. Of the nine, three related specifically to the NPDES permit program while the remaining six covered generic requirements common to all EPA permit programs. The remaining issues were determined either to be inappropriate for review except in the context of individual permit issuance or not capable of resolution among the parties. Additionally, no resolution was reached on other issues raised by the environmental group petitioners.

Under the terms of the NPDES Settlement Agreement, EPA agreed to propose revisions to the NPDES regulations. EPA also agreed to include certain language in the preamble to the proposed revisions that reflected the intent of the agreement. Finally, EPA agreed to take action necessary to suspend certain provisions, primarily relating to permit application requirements. The parties to the settlement agreed to withdraw their challenges to the regulations to the extent EPA promulgates final regulations and preamble language substantially the same as and not

altering the meaning of the language agreed to in the settlement agreement.

EPA received comments from many interested persons, including some of the parties to the settlement agreement, requesting that the rules be changed in ways different from those set forth in the agreement. EPA has considered carefully all such comments and has made changes in response to these.

On those issues in which final action differs from that proposed, industry litigants may decide to continue their challenges in court. Petitioners, the Natural Resources Defense Council and Citizens for a Better Environment, are not parties to the settlement agreement. Their challenges to provisions of the regulations may not be withdrawn as a result of today's final promulgation of changes to parts of the regulations. Certain industrial petitioners have also indicated an intention to litigate certain NPDES issues raised in their petitions that were not resolved by the settlement agreement and not covered by the proposed rules. In addition, two of the industry parties (Mobil Oil Company and the American Iron and Steel Institute (AISI)) did not join in the settlement of the net/gross issue (40 CFR 122.45(h) [CPR 122.63(h)]) and AISI did not join in the settlement of the total metals issue (40 CFR 122.45(c) [CPR 122.63(c)]). (See discussion below of citing format.)

EPA published proposed rules implementing the settlement agreement on November 18, 1982 (47 FR 52072). At the same time, proposed suspensions were also published (47 FR 52093). The comment period for the proposed rule closed on January 17, 1983. EPA received approximately 85 comments from numerous industries and trade associations, eight States and four environmental groups. Most of these comments were concentrated on a few issues such as the toxics control strategy, storm water discharges, anti-backsliding, and the construction prohibition for new sources.

The proposed changes in the regulations resulted from the settlement of challenges under the CWA to provisions of the regulations affecting the NPDES program. However, some of the changes to Part 124 affect RCRA, PSD, and UIC programs as well. EPA solicited comments on the extent to which the November 18, 1982 proposed changes to these sections should affect RCRA, PSD, and UIC permitting. No comments were received on this issue. Today's rulemaking implements several procedural changes to Part 124, Procedures for Decision-making, which

minimally affect the RCRA, PSD, and UIC permit programs.

On April 1, 1983, EPA published final rules "deconsolidating" the Consolidated Permit Regulations (48 FR 14146 [April 1, 1983]). The rule was published as a technical amendment to the regulations, and resulted in no substantive revisions. Under the deconsolidation, the permit regulations for each of the five programs appear in different portions to Chapter 40 of the Code of Federal Regulations. The NPDES regulations remain in Parts 122 and 123 (Part 124 was not affected by the revision and still applies to all of the programs). The deconsolidation of the NPDES regulations resulted in a renumbering of the provisions in Parts 122 and 123. Since the November 18, 1982 proposed regulations were published as revisions to the Consolidated Permit Regulations and the April 1 revisions completely renumbered the NPDES portions of the Consolidated Permit Regulations in Part 122, the format used in this preamble generally includes the Consolidated Permit Regulations (CPR) citation in brackets following the new (April 1) NPDES citation. For example: § 122.21 [CPR § 122.53]. This approach should help to eliminate confusion.

Today's final regulations reflect a final Agency determination on the proposed changes after full consideration of the comments received. To facilitate understanding, the rulemaking package includes in Part II of this preamble ("Final Regulations") for each part of the regulation EPA proposed to change a detailed discussion of the original regulation, the November 18, 1982 proposed change, the reasons for the proposal, the Agency's response to comments, and the final Agency determination.

Today's action also revises the portion of the NPDES regulations establishing criteria for new sources. As stated above, as a result of the challenge to the Consolidated Permit Regulations, EPA suspended the new source criteria (45 FR 59317) in the regulations and proposed substitute criteria. Because the revision to the new source criteria was initiated as a result of the challenge to the regulations, we have included the final action in this rulemaking.

For certain issues, today's final action is identical to the November 18, 1982, proposal, and thus consistent with the NPDES Settlement Agreement. However, some of the proposed rules have been modified, in some cases to retain existing regulatory requirements, as a result of EPA's review of the issues

and the public comments received on the proposal.

The implementation of the changes made to the NPDES permit program as a result of today's rulemaking affects one of the permit application forms (Form 2c). To assist the public in understanding these changes, EPA is publishing the revised Form 2c along with this rulemaking. However, because many States and EPA regional offices have large supplies of existing Form 2c, it is both administratively and economically impractical to immediately convert to the new permit application form. Therefore, the old permit application Form 2c will continue to be used until all have been used up and/or until copies of the revised Form 2c permit application can be furnished to the States and EPA regional offices. Since permit applicants must comply with the changes in the NPDES permit program resulting from today's rulemaking, applicants should cross out the sections of the existing Form 2c which no longer apply and insert the new information required. States and EPA regional offices may wish to prepare an addendum to the permit application Form 2c which explains the changes in reporting requirements.

II. FINAL REGULATIONS

A. Toxics Control Strategy (40 CFR 122.21 [CPR § 122.53], 122.42 [CPR § 122.61], 122.44 [CPR § 122.62], 122.62 [CPR § 122.15])

The Agency proposed a number of changes to regulatory provisions that are part of the Agency's overall strategy for controlling toxic pollutant discharges under the NPDES program. EPA previously discussed its Toxic Control Strategy in issuing the final Consolidated Application Forms (45 FR 33516, May 19, 1980). The NPDES effort to regulate the discharge of toxic pollutants is extensive. To assist readers in understanding how the proposed revisions and today's final rule fit into this strategy, it is appropriate to provide the public with a statement of the NPDES Toxic Control Strategy. Before discussing the changes to the regulations, today's preamble will outline some of the major objectives of the strategy.

(1) Background

Congress established the basis for controlling toxic discharges in the Federal Water Pollution Control Act Amendments of 1972 (FWPCA). Section 307(a) of the FWPCA required EPA to develop a list of toxic pollutants for which the Agency would establish effluent standards. These standards (or

discharge prohibitions) were to be established on a pollutant-by-pollutant basis within 180 days of listing as a toxic pollutant. EPA has established section 307(a) standards for only six toxic pollutants since 1972.

Concerned about the Agency's perceived lack of emphasis on controlling toxic pollutants and lack of progress in establishing section 307(a) standards, the Natural Resources Defense Council (NRDC) filed suit. The parties entered into a Consent Decree which subsequently formed the basis for the Agency's regulation of toxics. *NRDC v. EPA*, 8 E.R.C. 2110 (D.D.C. 1976). Under the Consent Decree, EPA would supplement the 307(a) standard approach with regulation of pollutant discharges, including toxics, through effluent limitation guidelines promulgated for industrial categories or subcategories. EPA was to establish effluent limitation guidelines reflecting the Best Available Technology Economically Achievable (BAT) to control a list of 65 classes of toxic pollutants in each of 21 primary industrial categories defined in the Consent Decree (the 65 classes were subsequently expanded to 129 toxic pollutants and the 21 industry categories were further subdivided into 34 categories). Congress, in the 1977 Clean Water Act Amendments, adopted the Consent Decree approach towards controlling toxic pollutant discharges.

In August 1978, EPA proposed NPDES regulations to implement the requirements of the Consent Decree and the 1977 CWA amendments. These regulations, published as final NPDES regulations on June 7, 1979, for the first time focused on obtaining adequate information on toxic pollutants through the permit application process. The final Consolidated Permit Regulations promulgated May 19, 1980, retained the NPDES provisions relating to the control of toxic pollutants.

The Agency's NPDES Toxic Control Strategy, which was discussed in detail in the preamble to the Consolidated Permit Application Forms, consists of three central elements.

First, the agency established a comprehensive process for identifying, reporting the presence of and gathering data on toxic pollutants in discharges. In addition to EPA's effluent limitation guideline effort, this activity is implemented through the NPDES permit application requirements. Permit applicants are required to identify the presence of toxic pollutants, and in certain circumstances, must submit data indicating the quantities and concentrations of pollutants present. To

ensure that the data accurately describe the discharge, sampling methods and minimum sampling requirements are also specified.

The second element of the Toxic Control Strategy is to establish specific effluent limitations in NPDES permits. Permit limitations are generally based either upon promulgated effluent limitation guidelines (technology-based limits) or State water quality standards (water quality-based limits). In the absence of or in combination with a promulgated guideline, EPA establishes technology-based limitations on a case-by-case basis under section 402(a)(1) of the CWA based on the permit writer's best professional judgment. EPA establishes permit effluent limitations on individual toxic pollutants or "indicator" pollutants that will assure adequate treatment of toxics (e.g. COD, TSS, TOC, etc.). Where these are inadequate, permit limitations may be established in terms of effluent toxicity.

The third element of the strategy is to ensure that the permitting authority receives adequate information concerning the discharge during the term of the permit and has the ability to adjust the permit if necessary. All permits require dischargers to monitor their effluent for pollutants (including toxic pollutants) limited in the permit and to report the results. These reports enable the permitting authority to determine compliance by the permittee. In addition, permittees generally must provide notice of new or potential discharges of toxic pollutants. The Director can then decide whether a change in the permit is necessary to control the modified discharge. The regulations specify the circumstances under which permits can be modified.

EPA has authority to request additional information to supplement permit applications or later compliance monitoring reports where necessary to carry out the objectives of the Act.

The regulations implementing the Toxic Control Strategy reflect a balance between the need for adequate information to control the discharge of toxic pollutants and the burden these requirements impose on the regulated public. The existing rules represent the Agency's initial decision on the appropriate balance. Litigants sued EPA because they disagreed with that decision. The November 18, 1982 proposal allowed the Agency to solicit public comment on possible changes to the existing rule. Today's final rule represents EPA's decision on what is necessary to provide adequate environmental protection yet not unduly burdensome or unproductive. EPA has

adopted some of the litigation settlement proposals as final rules. The changes adopted today will not inhibit the Agency's ability to carry out any of the elements in its Toxic Control Strategy.

(2) Quantitative Data Requirements (40 CFR 122.21(g)(7) [CPR § 122.53(d)(7)])

EPA's strategy for gathering specific information on toxic pollutants in existing industrial discharges relies primarily upon application Form 2c. Most important, the application requires disclosure of the presence and, for some pollutants, the quantities of specified pollutants in the discharge.

EPA proposed several changes to the quantitative data requirements of the application form. A brief overview of all the application data requirements will put these changes in perspective.

All applicants must test for and report quantitative data for seven listed conventional and nonconventional pollutants (§ 122.21(g)(7)(i) and Item V-A in Form 2c). The Director may waive testing for any or all of these pollutants for individual dischargers in certain circumstances.

In addition, all applicants must provide information on the presence of toxic pollutants in accordance with a scheme set forth in the regulation. In established testing requirements for toxic pollutants (metals and organic chemicals, with the addition of cyanide and total phenols), EPA balances the likelihood of the presence of the pollutants against the costs and burdens for applicants to analyze the effluent. It is unnecessary to require all applicants to test for all pollutants. In some industries there is no reasonable expectation that certain pollutants are present. Therefore, mandatory testing for any toxic pollutants applies only where EPA data (gathered primarily through the effluent guidelines development process) have indicated a likelihood that the pollutant will be present in the discharge. Testing requirements for toxic pollutants fall into two groups.

First, all process discharges in primary industrial categories must be tested for the presence of metals, cyanide and total phenols (§ 122.21(g)(7)(ii) and Item V-C of Form 2c.) However, testing is not required for all organic toxic pollutants in all primary industry categories. The specific organic pollutants for which an industry must test are listed in the regulations according to the fractions tested by the analytical procedure which uses gas chromatography/mass spectrometry (GC/MS). For example, organic chemical facilities are required to analyze for all fractions, while coal

mining operations are not required to test for any organic chemicals by this provision of the regulations.

Second, in addition to the mandatory testing explained above, all industrial dischargers must report quantitative data for any toxic pollutant that they know or have reason to believe is present in the discharge. A similar requirement applies to certain listed conventional pollutants, twenty-one nonconventional pollutants, and radioactivity. (§ 122.21(g)(7)(iii)(B) and Item V-B of Form 2c).

In addition to the toxic pollutant testing explained above, each applicant must indicate whether it knows or has reason to believe that certain hazardous substances or asbestos are discharged, and briefly explain why. Each applicant must also identify the presence of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it uses or manufactures certain listed substances or expects TCDD to be in its discharge.

(a) Mandatory Testing

1. Existing rules. As mentioned above, the NPDES regulations require all applicants to submit quantitative data for three conventional pollutants (BOD, Total Suspended Solids, and pH) and four nonconventional pollutants (Chemical Oxygen Demand, Total Organic Carbon, Ammonia, and Temperature). (§ 122.21(g)(7)(i) and Item V-A of Form 2c). Testing is required since these pollutants are commonly found in many different types of discharges and tend to be indicative of the nature of a discharge. Applicants may request the Director to waive this requirement for one or more of the pollutants. As discussed, there is also mandatory testing for toxic metals and organic pollutants required for process discharges from primary industrial categories (§ 122.21(g)(7)(ii)), but changes were not proposed to these provisions.

2. Proposed changes. EPA proposed to clarify the provision allowing the Director to waive the testing requirement for the seven listed conventional and nonconventional pollutants. The proposal stated that in order to obtain the waiver, the applicant must demonstrate that the reduced reporting will still provide the Director with sufficient information to write adequate permit limitations. Additionally, the proposal would make it clear that requests for waivers could be submitted not only for individual facilities, but also for an entire industry category or subcategory. Waiver requests for an entire category or subcategory of discharges should be

submitted to the Director, Office of Water Enforcement and Permits.

3. Comments and responses. EPA received no comments on this proposal.

4. EPA action. The final rule clarifying the waiver provision is adopted as proposed.

(b) Testing Potentially Required—Toxic Pollutants

1. Existing regulations. All permit applicants must report quantitative data on any listed toxic pollutant and certain conventional and nonconventional pollutants the discharger knows or has reason to believe are present in the discharge (§ 122.21(g)(7)(iii)(A) and (B) [CPR § 122.53(d)(7)(iii)]; Items V-B and V-C of Form 2c). This testing is in addition to the mandatory testing for toxic pollutants of process discharges in primary industry categories. Testing requirements for toxic pollutants are established to ensure that permitting authorities receive adequate information on the presence of toxic pollutants in a discharge. This information enables permit writers to establish appropriate limitations to control pollutants that may be of concern. Permitting authorities are not required to establish effluent limitations for all toxic pollutants on which a discharger reports quantitative data under the "know or have reason to believe" standard. In general, EPA does not intend that information supplied in the application process automatically trigger the establishment of effluent limitations. Rather, it allows the permit writer to make appropriate judgments about the need for such limitations. The regulations require the establishment of permit limitations if the pollutants are or may be discharged above the technology-based levels applicable to the discharge (as specified in effluent limitations guidelines or developed through the permit writer's best professional judgment) or, before today's revision, if they are used or manufactured at the permitted facility (see Part A. (5), below).

2. Proposed changes. Industry litigants were concerned that the toxic pollutant testing requirements were too extensive. They felt the regulation was unclear on how applicants should determine whether pollutants are "believed to be present" and that it failed to address *de minimis* quantities of pollutants. Industry contended the "believed to be present" provision required them to test, unnecessarily, for all pollutants that could be present in any amounts, simply to assure that the applicant would not be liable for incomplete and false reporting. In response to these concerns,

EPA proposed to establish a threshold level below which testing would not be required. Applicants would be required to submit quantitative data only for those toxic pollutants that they know or have reason to believe are present in the discharge at levels exceeding 100 µg/l (parts per billion (ppb)). For four pollutants (acrolein, acrylonitrile, 2,4-dinitrophenol, and 2-methyl-4,6-dinitrophenol), EPA proposed a higher threshold of 500 ppb. If an applicant knew or believed a toxic pollutant was present at less than the threshold level, the applicant could either submit quantitative data or simply explain why the applicant thought it was in the discharge. As noted in the preamble, and reflected in the proposed regulation, this cut-off would not apply to testing for process discharges in the primary industry categories.

The threshold levels in the proposal were seen as a compromise between industry's desire for a level that would eliminate testing for pollutant discharges in extremely small amounts and concentrations and EPA's need to have sufficient data to identify the presence of pollutants which should be controlled through permit limitations. This is particularly important because in accordance with section 402(k) of the CWA, a permittee is deemed to be in compliance with the CWA if he meets the requirements and limitations of his permit. Thus, pollutants not prohibited or limited by the permit can be discharged unless and until the permit is modified. EPA acknowledged in the preamble that EPA water quality criteria indicate that many of the pollutants required to be analyzed are known to cause significant adverse impact to aquatic organisms and human health at levels of 100 ppb or less (47 FR 52075, November 18, 1982).

EPA also based the 100 ppb upon an assessment of GC/MS methods 624 and 625 (as proposed December 3, 1979, 44 FR 69464). In general, those methods indicated a detection limit of 10 ppb or less for most toxic pollutants. For purposes of the application proposal, EPA then multiplied those limits by a factor of 10 as a rough measure to respond to concerns about analytical variability. EPA described this variability factor as "conservative," based upon Agency analytical experience. The higher threshold for four specific toxic pollutants was based upon the same proposed test methods, although a smaller variability factor was added since there is far less analytical variability at higher concentrations.

The proposal was intended primarily to minimize analytical burdens on

applicants, while still providing permit writers with adequate information to evaluate a discharge and write appropriate effluent limitations. EPA's concern about the suitability of this proposed revision led the Agency to specifically request in the preamble that the public comment on the appropriateness of establishing threshold levels and whether 100 ppb was a reasonable level.

3. Comments and responses. This provision generated a great deal of comment. Several commenters opposed the 100 ppb threshold level. Several States that have been administering the NPDES program commented that threshold levels were inappropriate and applicants should submit quantitative data for any toxic pollutant they know or have reason to believe is present in the discharge in any amount. They felt that extensive application data on toxic pollutants are essential to any effective toxic pollutant control program and that the cost of testing is not excessive relative to the information gained. Several pointed to statements in EPA's own preamble that many pollutants are toxic below 100 ppb. One State commenter suggested that applicants should be required to submit quantitative data unless the Director specifically waives the requirement for an individual facility. Industry commenters supported the threshold concept. They suggested that it should be extended to other requirements and that the testing threshold should be raised to 250 ppb, or even higher. They argued that the analytical variability of samples taken at low concentrations resulted in imprecise data which should not be used in establishing permit effluent limitations.

After careful review of the comments and of the possible impacts of a 100 ppb threshold, we have concluded that the proposed threshold was too high. Requiring applicants to submit quantitative data on any pollutant that they know or have reason to believe is present in the discharge will supply permit writers with information that is often necessary in developing appropriate permit conditions, including monitoring and reporting requirements. This is consistent with the purpose of the application to provide permitting authorities with sufficient information to fully evaluate the discharge. Permitting authorities can use the data to identify pollutants that may be of concern and in appropriate cases, to control them through effluent limitations in the permit.

The Agency recognizes that quantitative data at extremely low

levels may have some uncertainties, although those uncertainties are more likely to concern accuracy of specific quantitative readings than to involve any false positive readings of pollutants that actually are not present. Nonetheless, even at levels where the accuracy of the data may be somewhat uncertain, analytical information is useful to the permitting authority as a screening technique to identify the presence of a pollutant and supply an estimate of its concentration. Permit writers will be aware of any uncertainty as to the accuracy of the data submitted on the application. If more precise information is necessary to set permit limitations, the permit writer can request additional quantitative data through a gas chromatography (GC) test tailored to a specific pollutant. These GC test methods provide more accurate data at much lower levels than the GC/MS test methods which dischargers will generally use and at much less cost.

Industry's concern that there is a level below which quantitative data are of little value does have some legitimacy; but it is most significant only at levels low enough to trigger some likelihood of "false positives." Therefore, EPA has decided to retain the threshold concept, but to set it at a level where the data are sufficiently accurate to be useful and the value of the data is not outweighed by the burden of testing imposed on the applicant. After the review of the available information, the Agency has decided that a threshold of 100 ppb best achieves this balance.

There are several reasons why the Agency is establishing this new threshold level. As several commenters observed, a number of toxic pollutants are acutely toxic at levels below 100 ppb. EPA water quality criteria indicate that many of the organic toxic pollutants (e.g. chlordane, aldrin) are either carcinogenic or acutely toxic at levels well below 100 ppb (in a number of cases, toxic effects occur below both GC and GC/MS detection limits). The criteria also indicate that many of the toxic metals have effects at levels near or below 10 ppb (e.g., cadmium, hexavalent chromium). Under the proposal, permit writer would only be able to obtain data on these toxic pollutants if the permittee expected discharge at or above 100 ppb, well in excess of the levels where health or aquatic effects occur. Several States approved to administer the NPDES program commented that given these toxicity levels, it is important to require a submission of data at lower levels. On reconsideration, EPA agrees that data on these toxic pollutants at low levels

may be necessary for comprehensive evaluation of a discharge and establishment of permit limits.

The proposed threshold level was designed to take into account the possibility of imprecision and analytical variability associated with testing for toxic pollutants at levels near detection limits. EPA based the proposed threshold on method detection limits for the proposed GC/MS methods 624 and 625 (see 44 FR 69464, December 3, 1979), since multi-pollutant GC/MS testing will generally be used to report quantitative data on toxic pollutants. To take into account analytical variability, EPA added a variability factor of ten to the general detection limit of 10 ppb, which resulted in a proposed threshold of 100 ppb (for 4 pollutants with higher detection limits, a lower variability factor was set, resulting in a 500 ppb threshold).

The final rule contains an application testing threshold at 10 ppb, based in large part upon the detection limits in the proposed GC/MS test methods (see above), without the addition of the variability factor of ten. The proposed methods indicate that most organic toxic pollutants can be detected in waste water at that level (see 44 FR 69532, December 3, 1979). (For the four toxic pollutants discussed above that cannot be detected at 10 ppb the Agency is establishing a higher threshold at 100 ppb.) EPA recognizes that the 10 ppb threshold is based upon proposed methods rather than final rules. However, since the testing threshold is intended as a general number for testing purposes, the proposal is sufficiently accurate as a basis for the threshold. Moreover, more recent Agency data on these test methods confirm these detection limits and, in fact, indicate that GC/MS detection limits are actually lower.

The final rule is based upon a determination that it is unnecessary to include a variability factor above the detection limit in the testing threshold. While such a factor may be appropriate in some cases, such as in the establishment of effluent limitations since compliance is based upon these limits, a similar degree of precision is not necessary in establishing a testing threshold for permit applications, particularly since the data often serve a screening function. In fact, variability factors incorporated into the application threshold deprive permit writers of valuable information. The application is intended to obtain complete information on the discharge, thus enabling permit writers to determine the parameters for which permit limits must be set. This

can be accomplished even if the initial data are somewhat imprecise due to alleged analytical variability since the permit writer will still have enough information to evaluate the discharge and can take such factors into account at the time of establishing permit limitations. If more precise data are needed to establish permit limitations at levels where variability may be a concern, the permittee is free to submit such data and the permit writer retains the authority to request additional data on the toxics, such as through more accurate GC testing.

Furthermore, in developing method detection limits, EPA has already considered analytical variability to some degree. Thus, adding a variability factor of ten to the detection limits compounds the consideration of analytical variability. In light of concerns expressed by commenters that the 100 ppb threshold would deprive permit writers of application data necessary to fully evaluate a discharge, it is not appropriate to add this second variability factor.

The Agency has also determined in rulemaking published subsequent to the November 18, 1982 proposal, that not only detection, but quantification of toxic pollutants below 100 ppb is possible, thus further confirming EPA's reliance on the 10 ppb figure. The proposed effluent limitations guideline for the Organic Chemicals Manufacturing Point Source Category contains limitations for a number of organic chemicals at the 50 ppb level (48 FR 11628, March 21, 1983). Moreover, as stated in the preamble to that proposal, EPA recognizes that with careful analytical techniques, toxic pollutants can be quantified below the levels at which limits were proposed (48 FR 11839). The limitations on the discharge of Total Toxic Organic (TTO) pollutants in the final Effluent Guidelines for the Electroplating and Metal Finishing Point Source Categories are based upon adding all quantifiable values of the 113 toxic organic pollutants over 10 ppb to determine whether the discharge complies with the TTO limitations. (48 FR 32462, July 15, 1983.) For most of the organic toxic pollutants, the Final Development Document for the Metal Finishing effluent guideline indicates that 10 ppb is an appropriate quantification level. EPA also proposed limitations for one toxic pollutant, N-nitrosodi-n-propylamine, at one ppb and numerous other toxic pollutants at levels between 20 and 50 ppb in the Pesticide Chemicals Guideline (47 FR 53994, November 30, 1982). The Agency recently made available for comment

data on the Pesticides Category that would set limitations on a number of pollutants in the 10 ppb to 20 ppb range (49 FR 24492, June 13, 1984).

For four toxic pollutants (acrolein, acrylonitrile, 2,4-dinitrophenol, and 2-methyl-4,6-dinitrophenol), EPA is establishing a higher application testing threshold of 100 ppb (EPA had proposed 500 ppb). The proposed GC/MS test methods indicate that two of these pollutants are detectable at 100 ppb and the others (the phenolic compounds) at 250 ppb. However, the same proposal indicated that both of the phenolic compounds were detectable using GC methods at levels well below 100 ppb (44 FR 69467, December 3, 1979). Thus if applicants expect concentration below the GC/MS detection limit, they can perform GC analysis to obtain the precise data.

Finally, while analytical variability may be higher for samples taken at extremely low concentrations, it is not necessary or appropriate to eliminate all uncertainties by setting a relatively high concentration as the threshold. Since the establishment of too high a threshold could trigger a large number of supplemental requests for information to be submitted to the permit writer, this could substantially delay permit issuance and create significant additional burden on both applicants and permit writers. EPA concluded that it would be appropriate and desirable to set a threshold that will enable permitting authorities in most cases to rely on data submitted from applicants without extensive supplemental information requests.

The threshold level does not mean that permit limitations should necessarily be set for all pollutants present at 10 ppb, nor that it may never be appropriate to set limitations below this level. The submission of data, whether under § 122.21 (g)(7)(iii), (g)(7)(ii) [CPR § 122.53(d)(7) (iii), (ii) (for specified GC/MS fractions), or otherwise, does not automatically trigger the establishment of effluent limitations for the pollutants reported. Before setting technology-based limitations on pollutants present in the discharger's effluent at any level, the permit writer must consider whether the appropriate technology can reduce the pollutants in question to that level, and whether the analytical uncertainty and variability that may exist are so significant that the imposition and enforcement of specific limitations at that level may be unreasonable.

Clearly, for the reasons set forth above, the 250 ppb threshold proposed by some commenters is too high.

One commenter submitted data concerning the fact that analytical variability may be a problem even at 100 ppb. The Agency recognizes that analytical variability is more likely at lower levels. However, as discussed above, EPA does not consider it appropriate to add a variability to the threshold for *application* purposes.

Commenters also questioned EPA's proposal to require toxics testing under the "know or have reason to believe" standard only for routine or frequent discharges. On reconsideration, EPA is persuaded that all toxic pollutant discharges should be tested under the "know or have reason to believe" standard, not just those discharged on a routine or frequent basis. As stated above, the application is intended to provide a complete picture of the permitted facility once every five years. For permit writers fully to evaluate the discharge and impose appropriate permit controls, complete information on the discharge is essential. Even if permit effluent limitations are inappropriate due to the non-routine nature of the discharge, permit writers could determine that control through Best Management Practices (BMP) requirements are necessary or that additional monitoring is warranted. Therefore, the final regulation will apply to all toxic pollutant discharges and eliminate the proposed limitation for only routine or frequent discharges.

One State commenter expressed concern that the 100 ppb application testing threshold would require permit writers to impose additional monitoring requirements to verify the quantities of pollutants reported as being discharged below the threshold. EPA believes that the lower threshold adopted in today's final rules lessens any need to require permit monitoring to verify application information. EPA recognizes, of course, that some State permitting authorities may require pre-application testing for all pollutants the discharger may know or have reason to believe are present. States have the authority to adopt this approach or to request additional data on any pollutant identified in the application and to impose additional monitoring requirements during the permit term.

Another commenter stated that the proposed application testing threshold would interfere with the imposition and enforceability of effluent limitations below the threshold. This concern is also applicable to the lower threshold adopted today. EPA emphasizes that the application testing threshold is established only for triggering a requirement to test for particular toxic

pollutants in the application process and it in no way restricts the levels at which effluent limitations can be set for specific pollutants in the permit. Most pollutants can be detected and quantified accurately at the 10 ppb using GC/MS for multi-pollutant analyses. Pure GC methods for a single pollutant frequently are quantifiable well below this level. Determining appropriate effluent limitations involves considering treatment technology as well as possible analytical variabilities when testing a pollutant. Effluent guidelines are developed based on analysis of the treatment capabilities for an industry category. Permit limitations often will be set at levels different from the application testing threshold.

One commenter questioned the basis on which applicants would determine whether a pollutant was likely to be present above the threshold level without testing. Under the regulation, each discharger must assess the likelihood that a particular toxic pollutant will be discharged above the threshold levels. Applicants may base their assessments on available information on the discharge, including their own experience and knowledge. In some cases, applicants can rely upon previous monitoring data for the pollutant, while in others, new testing may be necessary. EPA expects the applicants to consider, among other things, the age and amount of available data, the levels measured in the past, and any changed circumstances that would suggest the need for additional testing. Of course, the permit writer can always request testing for pollutants if he determines it is necessary to evaluate the discharge.

Several commenters stated that the proposed 100 ppb threshold should be applicable to the mandatory testing requirements for process discharges in primary industries as well as testing under the "know or have reason to believe" standard. As discussed above, § 122.21(g)(7)(ii) [CPR § 122.53(d)(7)(ii)] imposes a mandatory duty on applicants in primary industrial categories to test for the presence of certain toxic pollutants as specified in the regulation. The commenters stated that EPA's rationale, that 100 ppb was a technically achievable measurement level using "conservative" variability factors, was also applicable to these discharges.

The mandatory testing requirements for each primary industry category are based upon a review of data on the likelihood that a particular pollutant will be discharged, rather than the more speculative "know or have reason to believe" standard. Because of this

difference, an application testing threshold is inappropriate. EPA, in developing effluent limitations guidelines, conducted extensive sampling of primary industries and this information was used in developing the mandatory testing requirements. In fact, EPA set these mandatory testing requirements based upon whether the toxic pollutants appeared in concentrations above 10 ppb. (See discussion in preamble to the Consolidated Application Forms, 45 FR 33516, May 19, 1980.) EPA periodically revises the testing requirements in the NPDES regulations, based upon consideration of this or any new data. For example, EPA suspended testing in certain categories where further data indicated that toxic pollutants were not likely to be present in all facilities within the category (see discussion of suspensions below). In recognition that it may be more burdensome for applicants to predict what pollutants may be discharged, EPA has established a threshold to relieve applicants of some of the testing burdens. Because of the greater degree of certainty of the presence of pollutants in primary industry process discharges, relief in the form of a threshold is not justified.

Another commenter requested that EPA clarify the status of suspensions of the mandatory testing requirements for organic toxic pollutants. EPA suspended mandatory testing requirements for all organic toxics in the Coal Mining Point Source category on January 8, 1981 (46 FR 2054) and for some or all organic toxic pollutants in the Textile Mills, Ore Mining and Dressing and Porcelain Enameling Point Source Categories on April 20, 1981 (46 FR 22584). On July 1, 1981, EPA also suspended mandatory testing for some or all organic toxic pollutants in the Gum and Wood Chemicals; Leather Tanning and Finishing; Paint and Ink Formulation; Photographic Supplies; Petroleum Refining; Pulp, Paper and Paperboard; and Steam Electric Power Generating Point Source Categories (46 FR 35090). These requirements are still suspended. EPA intends to propose regulations in the future that will make the changes to the mandatory testing a permanent regulation change.

4. EPA Action. In response to public concerns over the 100 ppb threshold provision, today's rule modifies the proposal. The final rule requires applicants to submit quantitative data for any toxic pollutant they know or have reason to believe is present in the discharge above 10 ppb. For four pollutants (acrolein, acrylonitrile, 2,4-dinitrophenol, and 2-methyl-4,6

dinitrophenol), we are establishing a higher threshold of 100 ppb. Applicants must continue to identify any toxic pollutant they know or have reason to believe is present but below these threshold levels applicants have the option to either supply quantitative data or explain why the pollutant is known or believed to be discharged.

Several persons requested that we clarify whether the inclusion of the requirement to sample and test the parameter "total phenols" in Item V-C of NPDES Form 2c is intended to classify total phenols as a toxic pollutant. While all other pollutants covered by Item V-C are toxic pollutants, EPA recognizes that this parameter (total phenols) using the 4-aminoantipyrine (4AAP) standard method, measures both toxic and non-toxic pollutants. Total phenols are covered in Item V-C merely for the purpose of specifying the type of testing and reporting that is required. EPA is modifying the Title to Appendix D to Part 122 to clarify that total phenols are included in Item V-C only for testing purposes and not to classify the parameter as a toxic pollutant.

Therefore, an applicant would be eligible for a variance under sections 301(c) or 301(g) from a BAT permit limit on total phenols upon a demonstration (e.g., by GC or GC/MS) that either those toxic phenolics listed under section 307(a) of the CWA are not present or that each section 307(a) toxic phenolic present is at a level below that required by BAT or is directly controlled by a BAT effluent limitation. Where limitations on total phenols (as measured by 4AAP) are being used to control section 307(a) toxic pollutants not otherwise limited in the permit, a variance cannot be granted unless the total phenols limitation as an indicator for control of the toxic pollutants is replaced by another indicator pollutant not the subject of the variance request or individual limits are placed on the toxic or conventional pollutants in question.

(c) Certain Conventional and Nonconventional Pollutants

1. Existing rules. Section 122.21(g)(7)(iii)(B) [CPR 122.53(d)(7)(iii)(B)] and Item V-B of Form 2c require applicants to submit quantitative data for certain conventional and nonconventional pollutants identified in the regulations (Part 122, Appendix D, Table IV) if they know or have reason to believe the pollutant is present in the discharge. Like the other testing requirements, this provision is intended to supply adequate

information on the contents of the discharge to establish permit conditions.

2. Proposed change. As with the testing requirements for toxic pollutants, industry litigants were concerned that this requirement was overly broad in that it required testing for every pollutant believed present, regardless of the amount. In response, the Agency again proposed to establish a screening criterion for testing purposes. Since a concentration-based threshold was inappropriate for a number of the pollutants in this group, EPA proposed that applicants be required to submit quantitative data only if the pollutants were either directly or indirectly (through an indicator) limited in an applicable, promulgated effluent limitation guideline. Under the proposal, permitting authorities would rely upon guidelines to indicate when pollutants were of concern and would supplement data through subsequent requests to the applicant. If quantitative data were not required because the pollutant was not limited in a guideline, applicants would still be required to identify any pollutants that they know or have reason to believe are present and explain why the pollutants are expected in the discharge.

3. Comments and responses. Most commenters expressed general support. However, one stated that all dischargers should be required to submit data on pollutants that they have used, handled, or generated within the previous five years, or which they know or have reason to believe are present in the discharge. Because the potential for extensive, potentially unneeded testing is great and the pollutants subject to this application requirement are not among the 126 toxic pollutants of primary concern, we consider this suggestion overly broad. While information on such pollutants may be useful, after general consideration of testing burdens and the value of the information in setting permit conditions, we have concluded that for these pollutants it is not always necessary to require extensive up front submission of testing results through the application form unless they are limited by a guideline. The Director may still obtain quantitative data if he determines that additional information is necessary. Otherwise, data on pollutants regulated by a guideline and a narrative description of the reason other pollutants in this category are expected to be discharged should provide sufficient information to develop adequate permit limitations.

Another commenter observed that in the case of discharge categories for which no effluent limitations guideline

has been promulgated, no testing is required by the proposal. It is true that the proposal would not require testing for such discharges as part of the application. However, the applicants must still identify these pollutants expected to be present in the discharge and explain why they are present. If additional information is needed to decide whether to establish effluent limitations, the Director can use his authority under § 122.21(g)(13) [CPR § 122.53(d)(13)] to obtain the additional information. EPA expects that in these cases, the Director will closely examine the circumstances surrounding the discharge, including the applicant's explanation of why the pollutant is expected to be present, and request information whenever pollutants may be of concern.

4. EPA action. EPA is adopting the modification to § 122.21(g)(7)(iii)(A) as proposed. The change will reduce testing requirements for many dischargers, while not affecting EPA's ability to obtain necessary information concerning the pollutants. Since applicants must still submit quantitative data whenever the applicable effluent limitation guideline regulates the pollutant, EPA can write adequate permit conditions for many of the more significant discharges without additional requests for information. For discharges not covered by effluent limitation guidelines, the permitting authority may rely upon its authority to request additional information to ensure that adequate data are available to establish permit limitations. The final rule is a reasonable compromise between the need to avoid extensive, unnecessary testing and the need to assure that enough information is readily available to allow the Director to develop an appropriate permit.

(3) Sampling (40 CFR 122.21(g)(7) [CPR § 122.53(d)(7)])

1. Existing rules. Section 122.21(g)(7) specifies the type of sampling that applicants are required to perform to obtain quantitative data required by the application. Under the regulation, applicants must use 24-hour composite samples for all testing, except that grab samples must be taken for seven named pollutants (pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform).

2. Proposed changes. EPA's sampling requirements were considered too restrictive by a number of litigants. EPA proposed to revise the sampling requirements to allow the expanded use of grab samples in three cases. Grab samples in lieu of composite samples

would be allowed for holding ponds and other impoundments with a retention time of over 24 hours. Applicants could also use grab samples for storm water discharges, but would be required to take one grab sample for each hour of discharge up to a minimum of four grab samples for discharges of four or more hours duration. The proposal would also allow the Director to waive composite sampling if the applicant demonstrates that use of an automatic sampler is infeasible and that the minimum of four grab samples would be representative of the discharge. The proposed changes were intended to allow greater sampling flexibility where use of grab samples would still provide representative data and to recognize the impracticalities of obtaining composite samples of storm water discharge.

3. *Comments and responses.* All comments received supported the proposal. Several persons stated that there was no need to specify a particular sampling method where other methods can produce reliable data. EPA is convinced it is appropriate to specify these methods because sampling methods affect the reliability and accuracy of analytical data submitted on the application. For most discharges, EPA requires composite samples since these samples usually produce the most reliable and representative data for assessing the environmental impact of the discharge over time. The existing regulations require grab samples for seven pollutants because storage of the sample for the time to take a 24-hour composite sample makes evaluation of the parameter difficult or impossible (e.g., temperature). EPA recognizes that in certain cases where applicants can generate reliable data through other methods, it is appropriate to increase flexibility. Therefore, EPA will now allow grab samples for storm water discharges because the unpredictable and infrequent nature of such discharges makes composite sampling very difficult. EPA is also allowing grab samples for holding ponds or other impoundments with 24-hour retention time and, at the Director's discretion, other discharges if use of an automatic sampler is infeasible. The one grab sample minimum for holding ponds or other impoundments applies both to holding ponds at the end of the treatment system and to those that are themselves treatment systems. This change should reduce sampling costs for applicants while not appreciably reducing the reliability of the application data.

One commenter supported EPA's proposed change as it affects storm

water discharges. Composite sampling may not be possible for some storm water discharges and hourly sampling (for the first 4 hours) up to a minimum of four grab samples should be sufficient to accurately reflect the discharge. The regulations do not specify any particular time during each hour that applicants must test although applicants must take samples that are representative of the discharge. Since, in many instances, the first discharge of pollutants after a rainfall is the most significant, applicants should wherever feasible, take their first grab sample during the first quarter hour of storm-water discharge.

4. *EPA action.* For the reason stated above, today's final rule is adopted as proposed.

(4) *Potential Discharges* (40 CFR 122.21(g)(10) [CPR § 122.53(d)(10)])

1. *Existing rules.* The NPDES regulations require permit applicants to list any toxic pollutant that is expected to be discharged during the following five years at more than twice the level reported in the application. The requirement is intended to provide notice of anticipated discharges to allow permit writers to establish limitations at the time of permit issuance and ensure installation of adequate control technology prior to changes in the discharge.

2. *Proposed changes.* Litigants argued that accurate prediction of future discharges was extremely difficult. They also stated that changes in discharge levels were inherent given the analytical variability in pollutant testing. They feared the requirement could mean that failure to properly predict or report on such changes would expose them to liability for filing an incorrect application. EPA proposed to delete § 122.21(g)(10) since the information on potential discharges, although useful, was not essential to writing adequate permits. Additionally, EPA relied upon § 122.42(a) [CPR § 122.61(a)], under which permittees would be required to notify the Director during the term of the permit of toxic pollutant discharges exceeding five times the application value, thus allowing permit modification if necessary.

3. *Comments and responses.* One commenter objected to the deletion of this application requirement, stating that the information allows establishment of permit limits and installation of control equipment prior to discharge. Several other commenters supported the proposal stating that accurate prediction was impossible given analytical variability.

EPA agrees that the establishment of permit limitations and installation of any appropriate treatment equipment prior to the discharge or increased discharge of toxic pollutants is an important goal. However, exact prediction of future discharges is not always possible, and only in some cases will information on future discharges be sufficient to allow the permit writer to establish such limitations at the time the permit is issued. Therefore, the burden on applicants of predicting future discharges does not appear justified in light of the generally speculative nature of making future discharge level predictions. Under § 122.42(a), permittees must notify the Director whenever the routine or frequent discharge of a toxic pollutant exceeds the higher of 100 ppb or five times the value reported in the application. This should generally be sufficient to allow the Director to modify the permit to impose permit limitations or other conditions if appropriate. In addition, most significant increases will also be associated with process changes that dischargers must still report under §§ 122.42(a) or 122.41(l)(1) [CPR § 122.7(l)(1)]. Of course, applicants are encouraged to provide the permit writer with any relevant information on planned new or increased discharges expected during the term of the permit being sought (usually five years).

4. *EPA action.* For the reasons stated above the final rule adopts the provision as proposed and deletes § 122.21(g)(10). (A new paragraph § 122.21(g)(10) is added by revisions to the storm water regulation. See B., below.)

(5) *Used or Manufactured pollutants* (40 CFR 122.21(g)(9) [CPR § 122.53(d)(9)], 122.42(a)(2) [CPR § 122.61(a)(2)], 122.44(e)(1)(ii) [CPR § 122.62(e)(1)(ii)], 122.62(a)(13) [CPR § 122.15(a)(ix)])

1. *Existing rules.* Four provisions of the NPDES regulations relate to application, notification, and control requirements for pollutants that the discharger uses or manufactures as intermediate or final products or byproducts. These requirements affect all aspects of the Toxic Control Strategy.

Applicants must identify all toxic pollutants that the applicant does or expects to use or manufacture within the next five years (§ 122.21(g)(9) [CPR § 122.53(d)(9)] and Item VI of Form 2c). Examination of such pollutants can assist in the establishment of permit limitations by supplementing quantitative data that the discharger has submitted. The NPDES regulations also require the Director to establish permit limitations on all toxic pollutants that

the discharger does or may use or manufacture § 122.44(e)(1)(ii) [CPR § 122.62(e)(1)(ii)]. Permittees must notify the Director whenever they begin or expect to begin to use or manufacture a toxic pollutant that was not reported in the permit application (§ 122.42(a)(2) [CPR § 122.61(a)(2)]). Based on such information, the Director has authority to modify the permit to then include limits for these toxic pollutants (§ 122.62(a)(13)) [CPR § 122.15(a)(5)(ix)].

2. *Proposed changes.* A number of litigants objected to EPA's regulations dealing with used or manufactured toxic pollutants, suggesting that EPA had authority only to regulate the discharge of pollutants. Since not all pollutants that are used or manufactured by a permittee are necessarily discharged, EPA determined that the requirements might be unnecessarily broad. Although EPA did not agree that it lacked authority to regulate such pollutants, EPA proposed to delete all four provisions relating to the use or manufacture of toxic pollutants and thereby avoid unnecessary application requirements, and the imposition of permit limitations on pollutants that are not discharged. EPA concluded that requirements in the permit application for obtaining data on the actual discharge of pollutants and authority to impose permit limitations on any of these pollutants would provide adequate control of toxic pollutants.

3. *Comments and responses.—a. Comments on application and notification requirements.* Several commenters opposed the deletion of the application and notice requirements. One State indicated that EPA should retain the existing regulations to allow imposition of permit limitations and installation of control technology prior to discharge. Several others commented that, at a minimum, information on toxic pollutants currently used or manufactured was necessary. Another State added that the information from the application was very useful during inspections of a permittee. Other commenters supported the elimination of the application requirement to predict future use or manufacture due to the difficulty of making such predictions. These commenters also supported the proposal as it related to permit conditions and notification requirements stating that it is more appropriate to concentrate on pollutant discharges than on their use or manufacture.

EPA has carefully considered the comments and concluded that the proposal to delete all four provisions went too far in eliminating regulation of used or manufactured toxic pollutants.

Since pollutants that are used or manufactured at a facility frequently have some potential to be discharged, even if unintentionally, it may be appropriate to regulate them. Information on the use or manufacture of pollutants allows permit writers to establish appropriate conditions to control the discharge of pollutants. These controls may take the form of permit effluent limitations on the pollutant. In some cases, permit writers may determine that the imposition of Best Management Practices (BMP) conditions in permits will be a more effective means to control the pollutant by reducing the possibility of actual discharge. (For example, BMPs may be appropriate where a potential for discharge exists due to leaks or spills from storage facilities.) Quantitative data requirements will generally not provide information on all used or manufactured toxic pollutants since the applicant may not have reason to believe the pollutants will be discharged. Thus, permit writers would not have adequate data to impose limitations on these pollutants. Additionally, as the commenter noted, this information can assist authorities in performing compliance inspections.

However, instead of requiring speculative prediction of future use or manufacture and notification when the discharger begins to use or manufacture a toxic pollutant, the regulations will only require applicants to submit information on toxic pollutants currently (at the time of application) used or manufactured. This will be sufficient for permit writers to impose adequate permit limitations since the permit must be renewed at least once every five years. The notification of pollutant use or manufacture during the entire permit term is more burdensome than the one time application requirement and has been eliminated to reduce permittee burdens.

EPA recognizes that for some dischargers the obligation to report all used or manufactured toxic pollutants may be difficult or even impossible to meet, particularly when there are numerous toxic components in a substance. For example, applicants that use chemical solvents purchased under a brand name may be unaware of or unable to ascertain the specific toxic pollutant components that are in the solvent. To reduce these burdens, the regulation will allow the Director to modify or waive the requirement to list all used or manufactured toxic pollutants if the applicant can demonstrate that it would be overly burdensome. For example, the Director

could modify the application provision for a discharger to require only a listing of solvents by brand name and then use the information, along with other information available to him (such as toxicity testing results or water quality data), in conjunction with his best professional judgment, to decide whether more exact information is needed. Even where the waiver is granted, the Director can use his authority under (§ 122.21(g)(13) [CPR 122.53(d)(13)]) to request additional information where necessary. This change will reduce burdens for many applicants, without reducing the Director's ability to obtain needed information.

While data on future use and manufacture might also be useful to allow the imposition of permit limitations prior to any potential for discharge, this value is outweighed by the burdens it creates for applicants. Some applicants will be unable to predict future use or manufacture of toxic pollutants, making the information of little value because of its speculative nature. The permitting authority should still receive notice when the permittee has reason to believe these pollutants will be discharged at or above 100 ppb (see § 122.42(a)(1)), and the Director may then impose such permit conditions as are necessary.

One commenter supporting the proposed change to the application stated that the existing requirement to report used or manufactured toxic pollutants in the permit application could lead to the divulgence of confidential business information. Data on currently used or manufactured pollutants are needed to ensure that the permit contains adequate conditions to control potential or actual discharges. Since the CWA specifically provides that application forms must be available to the public (section 402(j)), EPA has no discretion to keep portions of the application confidential (see § 122.5(c) [CPR § 122.19(c)]). EPA recognizes the possibility that some confidential information may be included in the listing of used or manufactured pollutants. However, EPA believes that the need for this information to assure adequate environmental protection in general outweighs the burden to applicants. EPA, therefore, will continue to require submission of data on current use or manufacture. The Agency expects, however, that some of the commenter's concerns may be alleviated by the deletion of the requirement that permittees predict future use or manufacture. In addition, the Director can exercise his discretion in truly

burdensome situations to modify or waive the requirement to list all pollutants currently used or manufactured where this information is not necessary to establishing permit limitations.

b. Comments on permit limitations. Several commenters supported the proposed deletion of the requirement that permits contain limitations on all toxic pollutants the permittee does or may use or manufacture. Because it requires effluent limitations even when the Director determines that they are unnecessary or where other means to control pollutant discharge, such as BMPs, are more appropriate, the Agency agrees that this regulation is unnecessary and overly restrictive and that it is better to allow the Director discretion in determining what limitations are appropriate. The Director still must impose limitations on any pollutant regulated by an applicable guideline and has authority under § 122.44 to impose permit limitations on any pollutant that may be of concern.

Another commenter supported the proposed deletion of the requirement to impose permit limitations, but suggested that we modify § 122.44(e)(1)(i) [CPR § 122.62(e)(1)(i)] which requires the Director to impose permit limitations on any pollutant that may be discharged at levels above BAT. The suggested modification was to require the establishment of such limitations for pollutants discharged at levels below BAT, but above water quality standards. Since permitting authorities have adequate authority to impose any limitations that are necessary to ensure compliance with State water quality standards (§ 122.44(d), [CPR 122.62(d)]) it is unnecessary to modify the regulation as suggested.

4. EPA action. For most of the provisions, the final regulation is identical to the proposal. Sections 122.42(a)(2), 122.44(e) (i) and (ii), and 122.62(a)(13) are deleted by today's rule. However, in response to commenters' concerns, EPA will retain the requirement that applicants list all toxic pollutants that are currently used or manufactured as an intermediate or final product or byproduct (§ 122.21(g)(9)—Item IV of Form 2c). Applicants will no longer be required to predict future use or manufacture. The regulation will also allow the Director to modify or waive the currently used or manufactured application requirements if the applicant can demonstrate that it would be overly burdensome.

(6) Toxics Notification (40 CR 122.42(a) [CPR § 122.61(a)])

1. Existing rules. The third element of the Toxic Control Strategy is the provisions for obtaining follow-up information concerning discharges during the permit term. One mechanism for providing such information is § 122.42(a) [CPR § 122.61(a)] which requires all industrial permittees to notify the Director when an activity has occurred or will occur that will result in the discharge of a toxic pollutant that is not limited in the permit. The permittee must provide such notice if the discharge exceeds the higher of 100 ppb (or 250 ppb for four pollutants identified in the regulation) or five times the concentration level reported for the pollutant in the application. This report is intended to ensure notification of new or increased toxic pollutant discharges during the permit term and allow for any appropriate permit modification.

2. Proposed changes. Industry litigants alleged that the regulation required continual notification because of the analytical variability when testing for the presence of pollutants at 100 ppb. This provision was not intended to require notification of daily fluctuations in pollutant readings, but rather to require notice of actual changes in the amount of the pollutants being discharged. EPA therefore proposed to modify the regulation to more accurately reflect the intent. Permittees would be required to notify the Director of the discharge of toxic pollutants exceeding threshold levels (the higher of 100 ppb or five times the concentration reported in the application) but only for toxic pollutants discharged on a routine or frequent basis, since these discharges are most appropriately controlled through permit limitations.

The proposal also required permittees to report nonroutine or infrequent discharges of a toxic pollutant not limited in the permit, if a single occurrence exceeds 10 times the value reported in the application, or 500 ppb, whichever is greater. EPA stated that infrequent and nonroutine discharges are still of concern, but are not as likely to be controlled through permit limitations.

3. Comments and responses. Several commenters supported the proposal because it would eliminate unnecessary burdens and concentrate on discharges that have a regulatory significance. EPA agrees that the proposal will eliminate burdens for dischargers, although the Agency would not characterize non-routine and infrequent discharges as lacking regulatory significance. The notification requirement is intended to

provide information on new or increased toxic pollutant discharges thereby allowing the imposition of permit limitations (see 45 FR 33521, May 19, 1980). Non-routine and infrequent discharges may still be significant, not due to a continuing discharge problem, but rather because many of these discharges are pollutant spills or other irregular events. However, since permitting authorities are less likely to modify the permit to impose limitations to control such discharges, EPA has established a higher threshold for reporting those toxic discharges. This higher threshold will reduce reporting burdens for permittees, while still alerting the Director to possible problems with the discharging facility that would require permit modification. In addition, permittees may have an independent obligation to report the spill situations not addressed by the NPDES permit under section 311 of the CWA.

Several commenters supported the proposal preamble statement that the notification requirement was not intended to require continuous monitoring. The Agency reiterates that the notification requirements of this provision are not intended to impose on a permittee a burden of continuous monitoring throughout the term of the permit. Rather, if the permittee discovers through any means available (e.g., routine monitoring required by the permit, independent monitoring done by the permittee, or a professional judgment that a reasonable potential for discharge exists based on a knowledge of changes in the facility or process operations) that it now expects toxic pollutants not limited in the permit to be discharged, the permittee must notify the Director. In determining whether a discharge is routine or frequent within the level specified, the permittee should examine the circumstances of the discharge and the operations of its facility or activity to determine whether additional self-monitoring is necessary to make an accurate determination of whether it is routine or frequent.

One commenter stated that threshold levels were inappropriate for notifications of the new discharge of toxic pollutants. While EPA recognizes that requiring dischargers to report any discharge of new toxic pollutants would provide the maximum possible information, this could impose an extremely large burden on permittees to report toxic pollutants at extremely low levels. Unlike the permit application which requires the submission of information only once every five years, permittees must report throughout the

permit term under the notification requirement whenever a toxic pollutant is discharged. Therefore, the Agency has established a notification level to relieve dischargers from having to report all new discharges. The threshold level is set to require reporting a toxic discharge not limited in the permit in excess of 100 ppb or when the discharge of a pollutant exceeds five times the value reported on the application.

One commenter suggested that EPA impose permit limitations based upon the discharge values reported in the application. The Agency proposed such an application-based permit limit approach twice, and rejected it on the basis of extensive public comment. (See 45 FR 33516, May 19, 1980; 44 FR 34346, June 14, 1979; 43 FR 37078, August 21, 1978). EPA's decision was based on the inadequacy of data on wastestream variability and the problem of batch processes. EPA also concluded that the application-based approach could have imposed severe monitoring costs on applicants and permittees and that a more focused approach was preferred. The Agency continues to support the reasoning for the decision.

Several commenters claimed that the higher notification level could result in significant pollutant discharges without notification. In addition, these commenters suggested that the lack of a definition of routine or frequent discharge could also allow discharges without notification. EPA recognizes that some discharges below 500 ppb may be significant. However, the primary purpose of § 122.42(a) is to provide information on new or increased dischargers that may warrant permit modification. Since discharges subject to the higher threshold are infrequent and non-routine, the Director is generally less likely to modify the permit to impose limitations. Therefore, EPA has established a threshold at which the significance of the discharge increases the likelihood of permit modification.

EPA would also like to clarify the meaning of routine or frequent discharges. The lower threshold levels apply to any discharge that is either routine or frequent, not necessarily both. Routine discharges are those that occur on some regular basis (whether once a week or four times a year). This does not mean that routine discharges are only those that occur with clockwork regularity. Any discharge that the permittee expects will occur as a result of normal plant operation is likely to be routine. Thus, a facility that has a large holding pond from which it discharges several times a year would be subject to the routine discharge standard.

Discharges that occur more than twice a year are frequent, whether or not they are routine. One-time spills are an example of infrequent discharges. These infrequent discharges are less likely to be controllable through permit limitations.

4. *EPA action.* After review of the comments, EPA has decided to promulgate the rule as proposed. Section 122.42(a) requires an existing industrial permittee to notify the Director when some activity has occurred or will occur causing it to discharge toxic pollutants which were not previously limited in the permit. In general, when such a discharge of a toxic pollutant occurs on a routine or frequent basis, the permittee must notify the Director if that discharge exceeds 5 times the level reported in the permit application form, or 100 ppb, whichever is higher. The permittee must also notify the Director when any one occurrence of a discharge exceeds 10 times the reported value or 500 ppb, whichever is greater.

(7) Toxicity Limits (§ 125.3(c)(4))

1. *Existing rules.* Most NPDES permit effluent limits are expressed as numeric limitations for specific pollutants. In addition to limiting specific chemicals, several generic pollutant parameters which simultaneously measure the effect of a number of distinct chemical substances are commonly limited (e.g., biochemical oxygen demand (BOD), chemical oxygen demand (COD), color, etc.). The NPDES regulations also authorize effluent limitations expressed in terms of effluent toxicity. Under the regulations, toxicity limits must reflect appropriate requirements of the Act (e.g., technology-based requirements or water quality standards). Toxicity limitations are useful where chemical limitations are either inadequate or infeasible (see 45 FR 33523, May 19, 1980). Permitting authorities determine compliance with toxicity limitations through biomonitoring of the effluent.

2. *Proposed changes.* Industry litigants had questioned the appropriateness of setting effluent toxicity permit limitations, particularly in the absence of an Agency policy. There was also some concern over the accuracy with which these limitations could be established and compliance measured. At the time of proposal, EPA was studying toxicity testing and its role in the NPDES program. EPA, therefore, proposed to delete § 125.3(c)(4) until we could complete our review and develop a policy for using toxicity-based permit limitations. Recognizing the usefulness of toxicity data as an assessment device in evaluating wastewater discharges, EPA continued to encourage its use for

this purpose. Nevertheless, until EPA could develop a policy towards using biomonitoring and toxicity-based permit limitations, the use of actual toxicity-based limitations was discouraged.

3. *Comments and responses.* Several commenters stated that there is adequate information to justify the use of toxicity limitations in conjunction with other limits. These commenters argued that in many cases toxicity testing is a more valid approach than attempting to address all of the chemical pollutants and provides the only means to assess the actual impact to receiving water biota. One commenter also observed that toxicity-based limits created flexibility to use all available information to set limits. Other commenters expressed concern that the state of the art was not adequately developed for effective use of toxicity-based limitations.

Since the proposal, EPA has extensively considered the use of toxicity as a parameter for evaluating the effects of discharges and establishing permit limitations. EPA has concluded that toxicity testing is sufficiently refined to be used in setting effluent limitations, and has developed a policy for using toxicity testing in conjunction with chemical limitations to achieve water quality standards. This policy was issued on February 3, 1984 and published in the Federal Register (49 FR 9016, March 9, 1984). The policy explains that, in addition to enforcing specific numerical criteria, EPA and the States will use biological techniques and available data on chemical effects to assess toxicity impacts. In many cases, imposing effluent toxicity limits will be a better (and more feasible) means to prevent adverse water quality impacts and control toxic pollutants than attempting to address all of the individual chemicals in the effluent. Toxicity limitations can be particularly effective in controlling the cumulative impact of toxic pollutants in complex effluents. Additionally, as one commenter observed, site-specific characteristics of the receiving waters can also affect pollutants' toxicity. Analytical methods and information are available to determine controls to reduce toxicity through toxicity reduction evaluations. Therefore, EPA has decided to make no change in the regulation.

States commenting on the proposal were opposed to the change, arguing that they had effectively used toxicity limits for years. These States feared that EPA's revision would undermine their ability to use this permit and enforcement mechanism. EPA

recognizes that many States have successfully used permit limitations based on overall effluent toxicity and that the proposed deletion of the regulation authorizing toxicity limits and our preamble statements discouraging their use could undercut these State efforts. EPA's intention was only to announce EPA's plan to limit use of toxicity limitations prior to development of a formal policy, not to affect State use of toxicity limitations. EPA has now issued a policy to strongly encourage States to use both chemical and biological techniques, including consideration and elimination of total toxicity, to assess and control toxic pollutants.

Several commenters argued that EPA has no authority to prescribe toxicity permit limitations. The Agency has consistently taken the opposite position. EPA has authority to impose toxicity permit limitations either on a case-by-case basis under section 402(a)(1) or as necessary to implement State water quality standards. The definition of effluent limitations in section 502(11) does not indicate that the limitations must be either numerical or identify a particular pollutant. Additionally, toxicity limitations are similar to other generic pollutant parameters controlled in effluent limitations guidelines and used in permits, such as BOD, some of which are expressly authorized by the CWA (see section 304(a)). Similarly, toxicity limitations are also authorized when necessary under section 301(b)(1)(c) to meet State water quality standards. Section 308 of the CWA clearly authorizes EPA to require the generation of any information reasonably necessary to carry out its responsibilities; it specifically authorizes requirements for biological testing and other information as needed to establish permit limits.

Two commenters objected to the use of toxicity permit limitations in the absence of approved section 304(h) test methods. The absence of approved section 304(h) test methods is not sufficient reason to refrain from using available methodologies, since it does not mean that there are not well-established analytical procedures. Permitting authorities should use their judgment in determining which methods to use. In requiring toxicity monitoring or specifying a permit toxicity limitation, the regulatory authority must specify in the permit the analytical methodology to be used until methods are established under 304(h). EPA has successfully used this approach for a number of years for the priority pollutants for which there are not yet approved test methods.

One commenter stated that toxicity limits could subject discharges to changing treatment requirements which may include technologies different from those contemplated by an applicable effluent limitations guideline. The CWA requires compliance with two principal requirements: technology-based standards and water quality standards. EPA and the States will use biological techniques and available data on chemical effects to evaluate and control toxicity impacts primarily to achieve water quality standards. Therefore, the use of toxicity to define water quality requirements does not impose any burdens not already required by the CWA. To the extent toxicity limitations are technology-based, the permitting authority must consider the statutory factors in the development of the limitations, as required for any other technology-based limitation.

4. *EPA action.* As noted, the primary reason for proposing to delete the regulation was the absence of a formal EPA policy for the use of toxicity limits. EPA issued a policy which develops an integrated strategy for use of biological and chemical discharge control methods. Issuance of the policy will also replace our statement in the proposed rule discouraging use of toxicity limits. To enable EPA to implement the policy now issued, today's final rule retains the existing regulation authorizing the use of toxicity effluent limitations.

B. Storm Water Runoff Discharges (40 CFR 122.21 [CPR § 122.53], 122.22 [CPR § 122.6], 122.26 [CPR § 122.57])

1. *Background.* The appropriate means of regulating the discharge of storm water into the waters of the U.S. has long been a matter of concern to EPA. In its first attempt to resolve the issue, EPA, in 1973, distinguished among various types of storm water. At that time, the Agency promulgated regulations which exempted certain sources, among them storm water runoff discharges uncontaminated by industrial or commercial activity, from the requirement to obtain an NPDES permit. EPA maintained that, although these discharges fell within the definition of point source, they were ill-suited for inclusion in the NPDES permit program and better dealt with through non-point source controls. It was reasoned that pollutants are best eliminated from storm sewers by "process changes" which prevent pollutants from entering rainwater runoff rather than by treating the discharge by the traditional "end-of-pipe" NPDES permit method. In addition, EPA determined that to issue permits to the tremendous number of storm water sources would be

administratively unworkable within the framework of the NPDES permit program.

Shortly thereafter, the Natural Resources Defense Council (NRDC) challenged EPA's authority to exempt categories of point sources from permit requirements under the CWA (*NRDC, Inc. v. Train*, 396 F. Supp. 1393 (D.D.C. 1975)). The U.S. District Court for the District of Columbia held that EPA could not lawfully exempt discharges which it identifies as point sources from regulation under the NPDES permit program. Although denying EPA the authority to exempt point sources from permit requirements, the Court did recognize the Agency's substantial discretion to define what activities constitute point and non-point sources. Furthermore, in response to EPA's administrative burden argument, the Court recognized EPA's discretion to use administrative devices, such as area permits, to manage its workload. (Id. at 1401-2).

On appeal, the U.S. Court of Appeals for the D.C. Circuit affirmed the lower court decision. (*NRDC v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977)). On March 18, 1976, in response to the Court decision in *NRDC v. Train*, EPA published final storm water regulations which required NPDES permits for all storm water discharges, other than rural runoff, which the Agency contended was better considered non-point sources. Changes to these regulations were reflected in the separate storm sewer regulations published on June 7, 1979, 44 FR (40 CFR 122.79); re-published on May 19, 1980 at 40 CFR 122.57, 45 FR 332290.

2. *Existing rules.* Section 122.26 [CPR § 122.57] describes those storm water runoff discharges which are considered "point source" discharges under the CWA and thus are subject to NPDES permitting requirements. Two types of storm water discharges are identified. First, a "separate storm sewer" is defined as a conveyance or system of conveyances primarily used for collecting and conveying storm water runoff which is located in an urbanized area as designated by the Bureau of the Census or which is designated by the Director on a case-by-case basis as a "separate storm sewer" for any of the reasons discussed in § 122.26(c). A second type of storm water discharge is a conveyance which discharges storm water runoff contaminated by contact with wastes, raw materials, or pollutant-contaminated soil from areas used for industrial or commercial activities. Such conveyances are not considered "separate storm sewers," but are nonetheless considered point sources

which must obtain NPDES permits. A conveyance or system of conveyances operated primarily for the purpose of collecting and conveying storm water runoff which does not fit within either of the above described categories is not considered a point source and need not obtain an NPDES permit.

Dischargers of storm water that are defined as point sources are required to apply for a permit and to submit the same information required of all existing industrial and commercial sources, such as discharge location and flow quantities. Analytical requirements are also set forth in the application. Applicants must submit information about the presence of pollutants in the discharge and, in some cases, quantitative data are required. (See discussion of application and testing requirements in Toxics Control Strategy section of the preamble.)

3. Proposed changes. Despite EPA's efforts to formulate an environmentally sound and administratively workable approach for the permitting of point source storm water runoff discharges, a number of litigants challenged the storm water provisions of the May 19, 1980 regulations. Industry representatives argued that EPA had not gone far enough in excluding storm water dischargers from the NPDES program. They asserted that most storm water discharges pose no significant environmental danger and therefore should not be considered point sources subject to permitting requirements. The Agency's use of the term "contaminated" to decide which storm water discharges are not "separate storm sewers" was also challenged as being overbroad and ambiguous. Finally, industry claimed that the permit application testing requirements for those storm water discharges classified as point sources were inappropriate and unduly burdensome.

Citing EPA's limited resources and the magnitude of its permit issuance tasks, industry questioned the value of EPA's accumulation of storm water runoff data via the application form. It is widely recognized that permitting of storm water runoff discharges not associated with industrial/commercial facilities is a low priority in EPA permit issuance and enforcement actions. The extremely large number of storm water runoff discharges potentially encompassed by the existing regulations represents an enormous permit writing burden. Even with the use of resource saving devices such as general permits, just developing the basis for permit terms and conditions for such a disparate group of sources is an enormous task. Industry

claimed that EPA and the States would never get to this task in most cases, thereby making pointless industry's costly gathering and submission of application data. In light of the vast disparity among different types of storm water runoff discharges with respect to size, flow amounts, the seriousness of the pollutant loadings, and the economic feasibility of control measures, industry urged the Agency to adopt a new approach to the control of storm water.

Based upon the settlement agreement resulting from almost two years of negotiations, EPA proposed a new approach to the permitting of storm water discharges. (See 47 FR 52073.) In the November 18, 1982 proposal, EPA attempted to balance the environmental concerns associated with storm water discharges, the practical limitations of the NPDES permit as a tool for regulating storm runoff, and the realities of limited government resources. Elsewhere in the November 18 Federal Register notice, EPA proposed the suspension of certain existing application and testing requirements for storm water discharges pending completion of final rulemaking. The Agency took this step in recognition that its final action might make this potentially large and costly data base unnecessary.

a. Definitions. A central element of the proposal was the definition of those storm water runoff discharges which were point sources and thereby required to obtain NPDES permits. EPA attempted to distinguish between storm-related discharges that were best suited to control by permits as point sources and those that were not. In making this determination, EPA relied upon its authority under the CWA to define what are point sources and what are nonpoint sources (*NRDC, Inc. v. Costle*, 563 F.2d 1369 (D.C. Cir. 1977), on appeal from *NRDC, Inc. v. Train*, 396 F.Supp. 1393 (D.D.C. 1975)).

In the proposal, the term "separate storm sewer" was eliminated and replaced with the term "storm water discharge." A storm water discharge was defined as a conveyance or system of conveyances primarily used for collecting and conveying storm water runoff that is either:

(1) Contaminated by contact with process wastes, raw materials, toxic pollutants, hazardous pollutants listed in Table V of Appendix D to Part 122, or oil and grease; or

(2) Designated as a storm water discharge by the Director.

A conveyance or system of conveyances operated primarily for the purposes of collecting and conveying

storm water runoff that did not constitute a "storm water discharge" under this definition would not be considered a point source. This new definition was based on the determination that the excluded discharges were generally *de minimis* sources of pollution that Congress did not intend the Agency to regulate as point sources through the NPDES permit program.

Combined sewer discharges were not affected by the November 18 proposal.

b. Application requirements. The November 18 proposal also reduced the NPDES permit application requirements as they applied to point source storm water runoff discharges. Although under the proposal NPDES permits were required for "contaminated" storm water discharges, most such discharges were expected to pose far less environmental concern than typical industrial discharges for which the application requirements were designed. The belief was expressed in the proposal preamble that extensive testing and reporting would not be needed in order to issue adequate storm water permits.

The amount of information an individual applicant would be required to submit depended upon the particular category of storm water discharge involved. EPA divided those storm water discharges defined as point sources into two broad groups based upon their assumed potential for significant pollution problems. The first group were those which were likely to pose the relatively more significant pollution problems. Therefore, the proposed regulation subjected them to more extensive application and testing requirements. This first group consisted of three categories of storm water discharges:

(1) Those subject to specific effluent limitations guidelines or toxic pollutant effluent standards;

(2) Those designated as significant contributors of pollution by the Director under § 122.26(c); or

(3) Those located at industrial facilities in areas immediately adjacent to the industrial plant or in plant associated areas, if there was a potential for a significant discharge of runoff contaminated by contact with process wastes, raw materials, toxic pollutants or hazardous substances.

The third category covered conveyances which discharged rain runoff that had the potential for becoming contaminated by contact with raw materials, intermediate or finished products, wastes, or substances used in production or treatment operations. The

term "plant associated areas" included areas such as industrial plant yards, immediate access roads, drainage ponds, refuse piles, storage piles or areas, and material or product loading and unloading areas. The term excluded commercial areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots, since contamination from process operations was not expected to occur there.

These Group I dischargers would be required to submit NPDES applications that complied with all the requirements of § 122.21 [CPR § 122.53], and EPA permit application Forms 1 and 2c, with one exception. Group I applicants would generally not be required to submit *quantitative* sampling and analysis data. They were only required to indicate (in Items V-B and V-C of EPA application Form 2c) whether they believed any of the listed pollutants were present or absent and briefly describe why. Group I applicants would not be required under the proposal to test for pollutants they believed to be present. However, they were still required to test for seven listed conventional and nonconventional pollutants (§ 122.21(g)(7)(i)(A)—Item V-A of Form 2c). It was felt that this less expensive conventional pollutant testing would serve to alert the permit writers to possible significant pollution problems where they could request further testing for toxic and non-conventional pollutants. This approach was considered more economically and environmentally practicable than requiring Group I dischargers to test for the full range of conventional and non-conventional/toxic pollutants.

Group II consisted of all point source storm water discharges required to be permitted under § 122.26 that were not included in Group I. While these sources might be "contaminated", EPA asserted that since they were removed from pollutant generating commercial or industrial facilities, they would, logically, present less significant pollution problems than those in Group I. The reduced likelihood of the presence of significant amounts of pollutants justified even fewer application requirements. The proposed rules required only basic information necessary to identify the type, number and location of Group II storm discharges. The proposal eliminated all testing for and identification of pollutants for Group II.

In recognition of the intermittent and seasonal nature of storm water discharges, EPA further proposed that both Group I and Group II be allowed to

estimate the average flow of their discharge. This estimate was to be based upon actual prior experience and the applicant would have to indicate the rainfall event upon which the estimate was based.

An additional simplification was proposed concerning the signatory requirements for Group II. Sections 122.22 (a) and (b) [CPR § 122.6 (a) and (b)] specify who is required to sign permit applications. EPA proposed to amend § 122.22(b) to allow permit applications for Group II storm water dischargers to be signed by a duly authorized representative of the person or position identified in § 122.22(a) as responsible for signing applications. EPA decided this was appropriate since Group II storm discharges are much less complex than most point source discharges.

To allow sufficient time for both EPA and permittees to implement procedures reflecting the final promulgation of regulations covering storm water discharges, EPA proposed that existing unpermitted point source storm water dischargers be given six months from the date new final storm water regulations were issued to submit applications. For a discharger designated by the Director as a "storm water discharge" under § 122.26(c), the application would not be due until six months from the date of notification of its designation.

Finally, EPA proposed to revise § 122.26(a) to clarify that one permit could be issued covering all storm water discharges that are part of a storm water discharge system. In this case, each owner or operator of a discharge would be identified in an application form submitted by the owner or operator of the portion of the system discharging directly into the waters of the U.S. Any permit written to cover more than one owner or operator would have been required to identify the limitations applicable to each discharge and could not, without the source's consent, have imposed limitations on a source for discharges from another source.

On June 23, 1982, in conjunction with the settlement agreement on the storm water issues, EPA issued a non-enforcement letter. The letter indicated that while the proposal was pending, it was EPA's policy not to take enforcement action against storm water discharges other than those covered by an existing NPDES permit, subject to effluent limitations guidelines or toxic pollutant standards, or designated as a significant contributor of pollution. The "non-enforcement" policy also did not apply to existing enforcement actions.

To be covered by the policy, storm water dischargers must submit new or amended applications, within six months after promulgation of new, final amended-storm water regulations or within six months of designation as a storm water discharger under § 122.26(c).

4. Comments and responses. Its protracted gestation and thoughtful preparation notwithstanding, the storm water proposal generated more comment and controversy than almost any other section of the November 18 notice. Generally, trade associations and industries agreed with the proposed changes or stated they did not go far enough, while States and environmental groups opposed the proposal. Despite the numerous comments, there are only two major issues—which storm water discharges are point sources; and, what are the appropriate application and testing requirements for those that are.

a. Definitions. The most hotly contested portion of the proposed rulemaking is the same fundamental issue that has been disputed for over a decade. That is, what, if any, storm water discharges should be defined as point sources and thereby be subject to NPDES permit requirements. The Agency's proposal to classify as point sources those storm water discharges that are contaminated by contact with certain wastes, materials or pollutants received some support. However, it was also criticized on legal, technical, practical, and administrative grounds. Finally, a number of commenters stated that the proposal was flawed because it lacked sufficient clarity and specificity.

Those commenters supporting the proposal saw it as a common sense approach which appropriately focussed NPDES storm water permitting activities on discharges of concern. Several claimed that Congress did not intend the CWA to require regulation through NPDES permits of *de minimis* sources of pollutants and that the "contamination" screening criteria was a step in the right direction.

Comments criticizing the Agency's proposal as not going far enough emphasized several points. A number of commenters felt the proposal was still too all-encompassing and would classify as point sources some discharges, such as parking lots, which should not, and could not effectively, be controlled through the permit process. These comments were linked to concerns about EPA and States' ability to process thousands of applications from what were characterized as very minor discharges. Questions were also raised as to whether EPA had any practical

treatment processes in mind for these discharges. On the other hand, one commenter stated the proposal was too narrow in limiting "contamination" to a select list of pollutants and materials.

The use of the term "contamination" was criticized as being vague and ambiguous. Several commenters requested clarification in the form of a definition. They asked that specific threshold levels of pollutants; which would constitute contamination, and thereby trigger the permit requirement; be added to the regulation. Others questioned whether any acceptable, generic criteria could be established, and suggested that only case-by-case determinations on whether a discharge was a point source were appropriate.

These administrative and technical comments were bolstered on both sides by legal arguments. Those supporting a narrow use of the permit program for controlling storm water discharges contended that "pollutants" associated with storm water discharges were often naturally occurring and pandemic and that the CWA permit program was not intended to deal with this type of pollution problem but rather with pollutants relating to manufacturing and industrial processing. They asserted that Congress had specifically created non-point source provisions in the CWA to address the low pollutant levels and widespread occurrences often associated with runoff from rainstorms. In opposition to this approach, other commenters claimed the CWA requires storm water runoff to be regulated through the permit process regardless of the level of pollutants present in such discharges. This assertion notwithstanding, these same commenters questioned whether the Agency had a legally sufficient and technically supported basis for the distinction contained in the proposal.

The Agency recognizes that commenters have raised a number of legitimate issues with its proposal. However, although some uncertainty may exist about which specific discharges are properly classified as point sources, certain fundamental precepts are clear. Among these is that the best approach to deal with storm water related pollution problems, and the approach most consistent with the CWA, clearly falls between the extreme positions of not regulating any storm water discharges through the permit process, or of using NPDES permits to control all storm water which may potentially contain any pollutants. The Agency approach, set forth in the proposal, was a well-reasoned attempt at striking a balance. Under the CWA,

Congress recognized that there are separate problems related to point and non-point sources of water pollution and different means to address them. Different sections of the Act deal with these distinct sources. Runoff from rain storms is best controlled as a point source in certain cases and as a non-point source in others. The Agency has the authority and the discretion to determine how this division should be made. In the preamble to the proposal, EPA cited the decision in *NRDC, Inc. v. Train*, 568 F.2d 1369 (D.C. Cir. 1977) in support of this authority. In their comments on the storm water proposal, NRDC alleged that EPA had improperly cited that case. NRDC is correct that in *NRDC, Inc. v. Train* the Court held that where the Agency defines a discharge as a "point source" it has no authority to exclude that source from the NPDES permit requirement. However, the Court in *NRDC, Inc. v. Train* additionally recognized that EPA has discretion to identify which sources are appropriately classified as point sources and which as non-point sources. This interpretation is upheld in subsequent cases, a number of which cite a statement by Senator Muskie in the 1971 debate on the FWPCA, "[G]uidance with respect to the identification of 'point sources' and 'non-point sources' . . . will be provided in regulations and guidance by the Administrator." (117 Cong. Record 38, 816 [1971]) Without the flexibility provided by this discretion, EPA would be hindered in its efforts to establish the most effective controls for various types of rain runoff.

Although EPA maintains that it has statutory authority to delineate between point and non-point sources, it does agree that to some extent both the existing regulation and the proposal were unclear. Further, EPA agrees that the proposal may have classified as non-point sources certain discharges which are best controlled under the NPDES permit program as point sources. The final regulation clarifies the point source/non-point source delineation as it applies to storm water runoff. Since EPA is persuaded by commenters that the proposal went too far in narrowing coverage of storm water under the NPDES permit program, the final rule maintains approximately the same coverage as the existing regulation.

The final rule classifies as a point source any storm water discharge which is located in an urbanized area, discharges from land or facilities used for industrial or commercial activities, or is designated by the Director as a point source. The data analyzed by the Agency to date do not support the

proposed broad exclusion of storm water discharges from coverage as point sources. The final rule, therefore, retains comprehensive coverage of storm water discharges through the NPDES permit program. While EPA recognizes that in many cases these discharges may be better controlled as non-point sources, as several commenters pointed out, EPA may not exclude discharges without some basis. In fact, information currently available to the Agency, such as data recently available from EPA's Nationwide Urban Runoff Program (NURP) study, support the broad coverage of storm water discharges.

That study indicated there are both existing and potential pollutant problems with urban storm water runoff. NURP found significant instances of high levels of heavy metals (especially copper, lead and zinc) in urban runoff. Freshwater water quality standards (chronic) were exceeded for lead (94% of all samples), copper (82%), zinc (77%) and cadmium (48%). Nationwide, BOD loadings from runoff were estimated as comparable to that from secondary POTWs, while TSS loadings were estimated to be a factor of 10 higher than loadings from POTWs. Fecal coliform levels also indicated significant impacts from urban storm runoff, especially from runoff into lakes and shellfish harvesting areas. NURP considered a number of simple technologies which may significantly reduce levels of pollutants, although no economic analyses have been done.

Today's final regulation retains the classification of rural runoff as non-point sources. The Agency is convinced that most rural runoff cannot be effectively regulated by NPDES permits. In those cases where it can be, the regulations specifically classify the discharges as point sources (such as animal feedlots) or the Director has the authority to individually designate a discharge as a storm water point source. This is also consistent with Congressional intent that agricultural runoff be uniformly regulated through non-point source controls. This is indicated by the 1977 Clean Water Act amendments which exempted irrigation return flows from the point source definition. Congress' intent was to treat return flows similar to natural agricultural runoff, which was then already exempted by the Agency from point source control:

* * * return flows from irrigated agriculture are indistinguishable from any other agricultural runoff, which may or may not involve a similar discrete point of entry into a watercourse. All such sources regardless of the manner in which the flow

was applied to the agricultural lands, and regardless of the discrete nature of entry point, are more appropriately treated under the requirements of section 208 * * *

Senate Report, 4 Legis. Hist. Vol. 4, 668 (1977). See also Senate Debate of Conference report, 4 Legis. Hist. 527-8.) Consistent with this intent, EPA has excluded rural runoff that is not discharged from industrial or commercial lands or facilities.

EPA will continue to review existing information, including NURP data and any other available studies to determine appropriate control measures for storm water discharges. If these data indicate that further exclusions may be appropriate, EPA will propose such exclusions in the future.

Some improvement of clarity has been achieved by the replacement of the old terms, "separate storm sewer" (existing regulation) and "storm water discharges" (proposal) with the more descriptive "storm water point sources". The existing regulation defined three different types of storm water discharges, two of which were point sources. The final regulation has only two categories—storm water point sources, which are subject to permit requirements as point sources, and other storm water discharges, which are not classified as point sources unless designated. EPA also agrees with the commenters who challenged as vague the use of the terms "contact," "contaminate," and "significant" in the proposed definitions of storm water point sources and Group I storm water discharges (proposed § 122.57(b) (1) and (2)). Some of these commenters wanted EPA to set numerical limits to define the point at which storm water became "contaminated;" however, the Agency lacks sufficient data to do this. To alleviate confusion, the final rule does not use these terms, but rather defines storm water point sources based solely on objective measures (i.e., by geographic criteria, rather than by the internal nature of the storm water).

On a related matter, other commenters requested that storm water discharges caused by diversion around an industrial facility, those contaminated by oil and grease, discharges from parking lots, and storm water discharges at natural gas compressor stations be classified as non-point sources. Although diversions from undisturbed areas around an industrial or commercial activity would not be considered industrial or commercial facility runoff for purposes of the storm water point source definition, nonetheless, they will be considered point sources if they are located in urbanized areas or designated

a significant runoff source. With regard to discharges contaminated only by oil and grease, EPA has generally dropped the concept of contamination, so this point is now moot. No data or information were submitted to support the claims that parking lot runoff is not a pollution problem and therefore should be excluded from permit coverage. In fact, data from NURP indicate that discharges from parking lots may indeed present a problem and, therefore, EPA is maintaining coverage of such discharges as point sources. Similarly, no sufficient data were submitted to eliminate specific industrial categories from the point source definition. Therefore, EPA cannot exclude natural gas facilities that would otherwise fall within the definition of point sources.

Another commenter wished to exclude discharges that may be covered under the provisions of 40 CFR Part 112 (Spill Prevention Control and Countermeasure plans—SPCC). EPA disagrees. The provisions of Part-112 are meant to generally minimize the amount of pollutants that may need to be disposed of, by providing management practices to minimize spills. They do not replace the specific NPDES requirements necessary to control pollutant discharge levels when the resulting drainage is discharged into navigable waters.

Several commenters suggested the use of general permits to cover classes of storm water discharges, such as those discussed above. EPA agrees that this is an idea worthy of consideration and suggests that dischargers raise the concept with their permitting authority.

One commenter wanted more specification of the process by which storm water would be designated as a point source by the Director under § 122.26(c). This is a case-by-case decision which is highly site-specific and will be made by the Director on the basis of all information available, including application data. Of course, where the Director finds existing data are inadequate to make such a designation, he may request additional data from the owner or operator, including analytical testing, or may initiate data gathering on his own.

EPA recognizes that maintaining the broad coverage of the existing regulations will result in some burden for dischargers and the Agency. Lack of Agency resources and higher permitting priorities will mean that in many cases discharges which are classified as storm water point sources will not receive permits in the near future and will contribute to the backlog of minor permits. Nonetheless, this classification scheme will best allow the Agency to

identify and target those storm water discharges which are amenable to NPDES permit control.

b. Application requirements.

Comments on the proposed changes in the application and testing requirements for storm water point sources ranged from strong support to strong opposition. The two-tiered application approach was commended by many commenters as a practical recognition of the lesser likelihood of serious amounts of pollutants being present in Group II discharges. Generally, industry claimed it made little sense to require the same information for thousands of minor, intermittent storm water point sources as is required for process wastestreams. Thus, supporters stated the proposed changes would be substantial improvements by eliminating unnecessary analytical data and paperwork requirements, particularly the toxic testing requirements. Industry commenters asserted there was a limited likelihood that toxic pollutants would be present at levels of concern. These commenters pointed to the high costs and difficulty of obtaining samples that proved to have little value. Additionally, many commenters claimed that even though some rain discharges might be point sources, they were environmentally insignificant and, accordingly, less application data were needed. Supporters of the proposal also indicated that it was preferable to supplement data through requests to sources for additional information than to require thousands of sources to submit extensive data that would not be used.

Opponents of the proposal claimed the reduction in application testing requirements for rain runoff discharges deprived the permit writer of the information necessary to make a rational determination on appropriate permit terms and conditions. Several commenters questioned the logic of eliminating the requirement to monitor for toxics, especially since the proposed Group I classification on its face indicated there was a potential for discharge of toxic materials. EPA's claim that Group I testing data for conventional pollutants, such as BOD and TSS, would alert the permit writer to possible significant pollution problems was characterized as an "ignorance is bliss" policy. Commenters challenged the Agency position on the basis that these pollutants fail to identify potential long term toxicity problems. A number of commenters also criticized the use of the phrase "potential for significant discharge" in the criteria identifying Group I as unduly

vague. The minimal requirements for Group II were opposed as inadequate even to carry out the Agency's professed purpose of being able to confirm that these discharges should not be classified as Group I. Commenters claimed that with no quantified discharge data required it would not be possible to assess environmental impacts.

Finally, a commenter challenged the adequacy of the record to support the Agency's classification scheme and proposed reductions in testing.

Based upon the extensive comments, EPA has reexamined the storm water point source application requirements. The Agency is persuaded that in some respects the proposal went too far in eliminating application requirements. The final rule retains a two-tiered application approach, although both the distinguishing factors and the application requirements are modified. Group I storm water point sources are any sources subject to effluent limitations guidelines or toxic pollutant effluent standards, designated by the Administrator under § 122.26(c), or located at an industrial plant or in plant associated areas. These areas include any lands immediately adjacent to an industrial plant and such areas as industrial plant yards, immediate access roads, drainage ponds, refuse piles, storage piles or areas, and material or product loading and unloading areas. Any storm water point source discharge from these areas is considered Group I, irrespective of pollutants in the discharge. The final rule does not adopt the distinction based upon pollutants that EPA proposed. Generally, because of the greater presence and prevalence of industrial material and wastes in these areas, these discharges are more likely to contain higher levels of pollutants than other storm water point sources. For example, storm water discharges covered by effluent guidelines are included in Group I since the promulgation of the guideline represents the Agency's determination that there may be pollutant problems. Areas separate from the plant's industrial activities are excluded from Group I. Thus, commercial areas, such as office buildings and their accompanying parking lots, are excluded from Group I because they are separate from the industrial plant. All Group I storm water point sources will be required to comply with the same application requirements as other industrial point sources (as outlined in § 122.21 (f) and (g)) [CPR §§ 122.4(d) and 122.53(d)] and must submit both Application Forms 1 and 2c.

All other storm water point sources will be considered Group II dischargers. Under new § 122.21(g)(10), these dischargers are exempted from the requirement to submit Form 2c and need not submit the topographic map required by Form 1 (§ 122.21(f)(7) [CPR § 122.7(d)(7)]). However, to provide permit writers with information on the discharge, Group II storm water dischargers must provide a brief narrative description of the discharge that identifies the nature of the discharge; the drainage area, including the size and nature of that area; the receiving waters; and any treatment applied to the discharge. This information is easy to obtain and should be adequate for permit writers to determine whether a source should be designated as a Group I storm water point source.

The Agency had decided to adopt the two-tiered application approach for several reasons. EPA's resources for permitting storm water point sources are limited; the Agency and States approved to administer the NPDES program are unable to issue permits to all of these dischargers at this time. However, as discussed above, these storm water discharges are point sources under the CWA, subject to permit requirements. To balance these competing concerns, the final rule will focus application requirements upon the discharges that EPA's experience and common sense indicate are relatively more significant and reduce application burdens for other sources. Group I storm water point sources are more likely to be issued permits in a timely manner and full information is therefore required. In many cases, these sources are specifically regulated by an effluent limitations guideline, such as in the Ore Mining and Dressing Point Source Category (47 FR 54598, December 3, 1982). Permit writers will generally include permit limits for storm water outfalls covered by a guideline along with the other limits in the facility's permit. Given the likely delay in permitting Group II sources, full permit application data submitted at this time would probably be stale and useless by the time resources are available to begin permit processing. When a permitting authority prepares to issue permits to these Group II sources, it can request additional, current information. To require full Form 2c information and quantitative data in advance of that time is pointless and unnecessarily burdensome.

EPA has rejected the requests to adopt or go beyond the proposal in reducing the application requirements

for Group I [commenters suggested exemption from the longitude/latitude provisions in Form 2c, Item I (§ 122.21(g)(1) [CPR § 122.53(g)(1)]] or the conventional testings in Item 5-A of that form (§ 122.21(g)(7)(i)). These requests are inconsistent with EPA's decision that Group I storm water point sources are sufficiently significant to submit all application materials. These data will provide permit writers with adequate data to assess the storm water discharge and impose appropriate limitations.

EPA also agrees with the logic that data on toxic pollutants should be required where such pollutants are likely to be present. It is unlikely that data on these conventional pollutants will be adequate to identify the presence of such pollutants, much less to allow permit writers to establish permit limits. As in other situations, where testing for these seven pollutants is unnecessary, permittees may request a waiver under § 122.21(g)(7)(i)(B).

Several commenters requested that oil and gas production facilities be specifically designated Group II storm water sources because they are of little environmental concern. No information has been submitted which justifies this statement. In addition, EPA has concluded that the best approach to storm water discharge is to establish application requirements based upon the likelihood that pollutants of concern may be present. Therefore, proximity to industrial facilities is a major criteria for inclusion in Group I. This applies equally to oil and gas facilities as to other industrial facilities.

c. Other provisions. Several persons supported the proposal to allow storm water dischargers to estimate the flow of the discharges rather than reporting the average flow as now required by § 122.21(g)(3) [CPR § 122.53(d)(3)]. Since storm water generally flows intermittently, making it difficult to obtain average flow data, EPA agrees with the commenters that it is appropriate to modify the application requirements to allow flow estimation. Applicants will have to identify the rainfall event on which the estimate is based. In addition, EPA has modified the final rule in response to a comment to require storm water dischargers to indicate the method of estimation used. The modified flow reporting requirements will not reduce information necessary to issue permits or to evaluate storm water impacts.

Several commenters supported the proposal to allow permit applications for Group II storm water discharges to be signed by a duly authorized

representative of the person or position identified in § 122.22(b). Since these discharges are generally less complex than other storm water discharges, we agree that it is appropriate to modify the signatory requirements. To relieve Group II storm water dischargers of application burdens further, today's final rule is modified as proposed. No commenters opposed the proposal.

Commenters also suggested that EPA extend the revised signatory requirements to Group I dischargers as well as Group II's. EPA does not agree that such extension is appropriate. Group I dischargers are subject to different, more detailed application requirements. Given the more serious nature of the application, it is appropriate to obtain higher level corporate involvement in the application process so as to ensure corporate responsibility.

5. EPA action. EPA is committed to a workable and environmentally sound approach to the control of storm water discharges, recognizing both the strengths and the limitations of the NPDES permit and non-point source programs. Today the Agency is promulgating a clear definition of storm water point sources as those which are located in urbanized, industrial, commercial areas, or are designated by the Director. It is also promulgating a two-tier application system which will enable permitting agencies to gather sufficient data to set priorities for storm water permitting and minimize the burden on regulated facilities.

EPA has retained the scope of the existing regulation defining which dischargers are point sources and are thus required to obtain a permit. The final rule defines a storm water point source as a conveyance or system of conveyances primarily used for collecting and conveying storm water runoff which is located in an urbanized area as designated by the Bureau of the Census or which discharges runoff from industrial or commercial facilities or areas or which is designated as a storm water point source by the Director. EPA has deleted the term "contaminated" as vague and confusing. In essence, the regulations will consider as point sources all storm water discharges located in urbanized commercial, or industrial areas regardless of the amount or type of pollutants they contain. EPA has adopted this approach for two reasons. First, the Agency has no information to indicate that currently regulated storm water discharges are not contributors of pollutants subject to regulation as point sources. To the contrary, preliminary analysis of data

from the National Urban Runoff Program indicates that such discharges generally contain pollutants of concern, such as toxic pollutants and others, and may be best controlled under the NPDES program. Second, there is no reason to extend the current definition, since the Agency's analysis of data has not indicated that sources excluded from classification as point sources under the existing regulations are contributors of pollutants of concern that should be covered by NPDES permits.

Storm water point sources will be required to submit application information to enable permit writers to set priorities for permit issuance and to establish adequate permit conditions. All storm water discharges coming in contact with plant associated areas (as defined in the regulation) will be required to submit application form 1 and form 2c, as will storm water discharges regulated by an effluent limitation guideline or effluent standard. In addition, any other storm water discharges may be required by the Director to submit complete applications. These discharges will be classified as Group I storm water point sources. All other storm water discharges (Group II) will be exempted from the requirements of § 122.21(g) [Form 2c] and will only be required to submit Form 1 and a brief description of type and extent of area drained and any effluent treatment. As described above, the Director may require other information on a case-by-case basis.

As part of this rulemaking, the Agency is also revoking the non-enforcement letter issued as part of the Settlement Agreement. That letter stated that EPA would not take enforcement actions against certain storm water dischargers for failure to have a permit so long as a permit application is filed within six months of promulgation of final rules or of designation as a storm water discharge. Within six months of the effective date of this regulation all Group I storm water dischargers which have not already submitted applications are required to submit complete NPDES applications, including both Form 1 and Form 2c; all Group II storm water discharges must submit only Form 1.

The Agency is promulgating as final rules two of the proposed changes. The requirement that permit applicants submit flow data is modified for storm water dischargers by amending § 122.21(g)(10)(ii) to allow such dischargers to estimate the flow if they identify the storm water event and method of estimation upon which the estimate is based. The Agency has also modified the application signatory

requirements for storm water dischargers to allow applications for Group II storm water dischargers to be signed by a duly authorized representative of the person or position identified in § 122.22(a) as responsible for signing applications.

C. Construction Prohibition (40 CFR 122.29(c)(4), (c)(5) [CPR § 122.66(c)(4), (c)(5)])

1. Existing rules. EPA's issuance of an NPDES permit to a new source is subject to the National Environmental Policy Act of 1969 (NEPA). Section 511(c)(1) of the Clean Water Act states that "Except for * * * the issuance of a permit under section 402 of this Act for the discharge of any pollutant by a new source as defined in section 308 of this Act, no action of the Administrator taken pursuant to this Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of [NEPA]." Compliance with NEPA may involve the preparation of an Environmental Impact Statement (EIS) if the issuance is determined to be a major federal action significantly affecting the environment. As is discussed elsewhere in today's preamble, EPA has the authority to impose permit conditions, including non-water quality related conditions, or deny a permit based upon the EIS (see discussion in Part F., below).

EPA has implemented the requirements of section 511(c)(1) through several provisions of the NPDES regulations. Several sections of the regulations authorize the imposition of EIS-related conditions in NPDES permits, or the denial of permits based upon the EIS. (See §§ 122.7(g) [CPR 122.12(g)], 122.29(c)(3) [CPR 122.66(c)(3)]; and 122.44(d)(9) [CPR 122.62(d)(9)] as discussed below.) In addition, in accordance with a long-standing Agency policy, § 122.29(c)(4) generally prohibits on-site construction of a new source for which an EIS is required until after final Agency action in issuing an NPDES permit that incorporates EIS-related requirements. Section 122.29(c)(5) requires an applicant to notify the Regional Administrator if the applicant commences construction in violation of this prohibition.

The "ban" on pre-permit construction of a new source is far from absolute. The regulations allow construction to commence prior to final permit issuance if the applicant executes a legally binding written agreement to comply with all EIS-related conditions. In addition, the Regional Administrator has discretion to allow pre-permit

construction to commence if he determines that it will not cause significant or irreversible adverse environmental impacts. In exercising his discretion, the Regional Administrator may, for example, allow pre-permit construction after reaching agreement with the applicant on any appropriate mitigative measures. Regional Administrators have used this authority to allow construction prior to permit issuance in a number of instances. Thus, the pre-permit construction ban does not actually bar construction where there are appropriate safeguards to protect against environmental harm. In addition, although construction in violation of the ban is a cause for denial of a new source permit application, denial is not required. A decision to deny a permit application based on violation of the construction ban will depend upon the Agency's evaluation of all factors, including the degree of environmental harm and mitigating measures taken by the applicant.

EPA established the pre-permit construction ban to ensure that it could fulfill its obligations under NEPA in issuing new source permits. EPA has relied upon the pre-permit construction ban to ensure that its statutorily required NEPA review had substantive meaning. Because important issues in many NEPA reviews are facility siting and construction-related impacts, if review takes place after construction has been commenced or completed, the review may be meaningless as to these issues. These impacts could be adequately considered during or after construction only if the significant expenditures of the applicant are ignored or if restoration of the environment was physically possible. Because this would be difficult, undesirable, and perhaps impracticable, EPA has used the pre-permit construction ban, along with the discretionary waiver, to ensure review is completed prior to construction, unless appropriate conditions can be imposed.

The Agency has taken the position, since 1976, the EPA has authority to prohibit construction of a new source prior to issuance of a permit containing EIS-related conditions. (See General Counsel Opinion No. 76-18, September 23, 1976; the General Counsel concluded that: "Congress could not have intended that [the NEPA review] be a hollow one or one of extremely limited value. The case law that has developed under NEPA is clear in requiring an agency to consider all of the reasonable alternatives to its proposed action * * *. The only way the Administrator can

meaningfully consider [facility siting alternatives] in an NPDES proceeding is to perform his evaluation prior to the construction of the facility." (See also former 40 CFR § 6.906, 42 FR 2454, January 11, 1977). Pre-permit construction was expressly prohibited in both the June 7, 1979 NPDES regulations (§ 122.47(c), 44 FR 32854) and the May 19, 1980 Consolidated Permit Regulations (§ 122.66(c), 45 FR 33290).

2. *Proposed rule.* Industry litigants challenged EPA's authority to impose the pre-permit construction ban. They argued that the ban would delay construction of new sources, particularly since any administrative hearings on the permit must also be completed prior to construction. Industry also stated that the pre-permit construction ban would create inconsistencies between EPA and approved States that do not have State laws comparable to this Federal requirement. In response to these concerns, EPA proposed to eliminate the pre-permit construction ban and allow on-site construction to commence prior to permit issuance without approval by EPA or imposition of NEPA-related conditions. However, EPA noted that in performing the balance of costs and benefits required by NEPA, EPA would not consider any costs "which might be incurred by the applicant in restoring the site or in altering construction plans" no matter how substantial these costs might be. (See proposed § 122.66(c)(4), 45 FR 52091, Nov. 18, 1982.) Industry would commence construction before permit issuance entirely at its own risk, and EPA would issue, deny, or condition the permit based upon the NEPA review as if no construction had commenced. EPA's proposal was based in part on the fact that the CWA explicitly requires that EPA regulate discharges, not the construction of facilities that may discharge. Consistent with deleting the pre-permit construction ban, EPA also proposed to delete the requirement that applicants give notice of construction prior to permit issuance (§ 122.29(c)(5)).

3. *Comments and responses.* A number of commenters addressed the legality of the pre-permit construction ban. Several environmental groups stated that the proposed rule would unlawfully curtail EPA's opportunity to exercise its NEPA responsibilities and would violate NEPA, since an Agency may not take action that would foreclose reasonable alternatives to the proposed action, have significant adverse effects on the environment, or unfairly prejudice future decisions. One environmental group added that since site selection is frequently a major issue,

serious and avoidable damage could result from the elimination of the pre-permit construction prohibition. Industry commenters supported the proposal, and alleged that EPA had no authority to impose the pre-permit construction ban since the CWA regulates discharges, not construction. Several argued that since a permit is still a prerequisite to discharge, EPA can carry out its obligations prior to pollutant discharge. Others argued that private facility construction is not a Federal action subject to NEPA. Industry comments also addressed the discriminatory impact of the pre-permit construction ban and its potential to delay construction activities.

Upon consideration of all the comments and a reexamination of the statute and case law, the Administrator has determined that the pre-permit construction ban is authorized by both the CWA and NEPA and that it is the most effective mechanism to enable EPA to carry out its obligation under section 511(c)(1) of the CWA. While the CWA clearly requires EPA to regulate discharges of pollutants, section 511(c)(1) also requires EPA to comply with NEPA in the issuance of NPDES permits to new sources. Under section 501(a), the Administrator is given authority to promulgate such regulations as are necessary to carry out his functions under the Act. In addition, NEPA clearly supplements the factors which EPA must consider in its decisionmaking and authorizes the Agency to take action based on its evaluation. E.g., *United States v. King Fisher Marine Service*, 640 F. 2d 522, 523 (5th Cir. 1981), *Calvert Cliffs Coordinating Committee, v. AEC*, 449 F. 2d 1109, 1115, 1128 (D.C. Cir. 1973).

EPA believes it can more effectively carry out its NEPA review if construction has not yet commenced, unless the Regional Administrator exercises his authority to allow construction to proceed prior to completion of an EIS. (The discretionary waiver provides needed flexibility to assure that construction is not unduly delayed where the review is not likely to involve irreparable harm to the environment.) A construction ban is necessary to ensure that NEPA's requirement for a comprehensive evaluation of all environmental effects of a project is not frustrated.

In order to do a comprehensive review as envisioned by NEPA, EPA must consider all reasonable alternatives to the proposed action. Once extensive on-site construction work has begun, some alternatives to the proposed action may be foreclosed, thus reducing the value of that review. One alternative to be

evaluated is whether the environment at the specific site should be altered by the proposed construction. Even where construction is appropriate, the manner and timing of construction may be legitimate factors for consideration. Options affecting significant environmental matters such as land use, aesthetics, historic preservation, and air quality might also be precluded to the extent construction is allowed to proceed. To allow construction to proceed prior to completion of an EIS could limit the Administrator's alternatives for action. The cost of remedial measures and site restoration is incalculable once irreparable alterations have already taken place. Even in circumstances where remedial measures or relocation to another site may be physically possible, it would be extremely difficult, if not impossible, for EPA to require this where the applicant has made significant capital investments in the project. EPA would also have to consider delays in the commencement of operation that would result if EPA made a permit decision that was inconsistent with the construction under way. EPA would find it difficult to ignore these factors in making its permit decision, especially since they would put the equities on the applicant's side. These considerations do not enter into the permitting process if the NEPA review and permit issuance is completed prior to construction.

As one commenter pointed out, the pre-permit construction ban is also consistent with the Council on Environmental Quality NEPA regulations (40 CFR Part 1506). These regulations establish general criteria that Agencies should follow in conducting NEPA reviews. Section 1506.1(a) of the NEPA regulations states that until an Agency issues a record of decision (including an EIS), no action should be taken which would limit the choice of reasonable alternatives or have an adverse environmental impact. The pre-permit construction ban ensures that EPA follows these guidelines.

EPA recognizes that all uncertainties for permit applicants are not eliminated under the existing regulations, since even if the Regional Administrator allows pre-permit construction, there is no guarantee that the final permit will be consistent with that construction. However, under the scheme in the existing regulations it is more likely that EPA and the applicant can consider the possible impacts of the construction prior to its commencement and can better coordinate the construction with the probable EIS outcome. These agreements will help avoid delays in

operation that may result if there is no agreement and EPA subsequently makes a decision that is inconsistent with construction.

Several commenters stated the pre-permit construction ban would cause delays. Discussions with EPA Regional Offices, however, identified only a few instances in which applicants claimed that the ban actually resulted in construction delay. In some of these cases no actual delay occurred since the Regional Administrator exercised his discretionary waiver of the ban to allow construction to proceed. Very few facilities should have actual construction delays due to the construction ban. Moreover, most new sources for which an EIS would be prepared are large; there is substantial "lead time" between the planning and the construction of the facility that would allow EIS completion and permit issuance. Alternatively, the applicant could begin construction after entering into a binding legal agreement with the Regional Administrator, committing to meet certain conditions as needed to assure environmental protection. It is EPA's experience that this process provides adequate flexibility to avoid inappropriate results in specific cases.

EPA agrees with commenters who stated that private facility construction is not a Federal action. However, the CWA recognizes EPA's issuance of an NPDES permit to the facility as the Federal action which subjects it to NEPA. Construction of a discharge source generally proceeds in reliance on future Federal action: the issuance of an NPDES permit which is clearly within the Agency's jurisdiction. Without the permit the source would be unable to operate as intended. Thus, EPA's pre-permit construction review is not an attempt to control private activity *per se*, nor to expand the Agency's organic jurisdiction, but rather to protect the Agency's jurisdiction by preserving an unaltered balance of cost and benefit factors, as envisioned by NEPA.

In response to comments about the discriminatory impact of the pre-permit construction ban, there are at least six approved NPDES States which have State legal authorities comparable to the EPA pre-permit construction ban. Thus, contrary to the comment that the pre-permit construction ban applies only in States not approved to administer the NPDES program, construction is prohibited prior to final consideration of the environmental review in some cases where EPA is not the permitting authority. Even though there is some inconsistency since all States do not have a pre-permit construction ban, this

is a natural result of the variation among State laws and would not provide sufficient justification to modify a requirement of federal law necessary to carry out EPA's independent statutory responsibilities. There would be some difference between States regardless of what action EPA takes on this regulation.

4. EPA action. In light of the comments, and EPA's reevaluation of legal authorities related to the duty to comply with NEPA, the Administrator has determined that retention of the prepermit construction ban and the notice of construction prior to permit issuance is appropriate. In conducting a review under NEPA, EPA must ensure that all results of that review are considered.

Moreover, the proposal would have required EPA to ignore the costs of prior construction or site restoration. As we discuss above, such a position would be very difficult to carry out in practice and would be inconsistent with the normal Agency practice, which is to consider all relevant facts available to the decisionmaker prior to final action. The decisionmaker should not ignore substantial capital expenditures and possible severe adverse economic impacts when determining whether to issue a permit. Accordingly, after a full evaluation, EPA has determined, with one exception, not to modify the existing rules on this issue.

EPA is making one change from the proposal to clarify that violation of the ban is grounds for denial of the permit. Section 122.29(c)(5) already implies that permits may be denied due to on-site construction. However, we are modifying that provision to make it clear that EPA considers violation of the construction ban to be grounds for permit denial. Consistent with existing policy, EPA will consider all factors relating to the facility in making its permit decision.

D. Anti-backsliding (40 CFR 122.44, 122.62 [CPR §§ 122.15, 122.62])

1. Existing rules. The Clean Water Act controls the discharge of pollutants through the application of technology-based effluent limitations or more stringent water quality-based standards. All existing dischargers were required to comply with effluent limitations based upon the best practicable control technology currently available (BPT) by July 1, 1977, under section 301(b)(1) of the Clean Water Act (CWA). By July 1, 1984, dischargers must comply with limitations reflecting the best available technology economically achievable (BAT), or in the case of "conventional"

pollutants, the best conventional pollutant control technology (BCT), under section 301(b)(2). This scheme of imposing increasingly stringent pollution control requirements illustrates the Act's national goal of encouraging reasonable further progress towards eliminating the discharge of all pollutants. Section 101(a)(1).

EPA is directed to implement technology-based requirements primarily through the development of national effluent limitation guidelines (guidelines) for categories of point source discharges. In the absence of applicable guidelines, NPDES permits are issued on a case-by-case basis under section 402(a)(1) of the CWA, establishing effluent limitations based on the permit writer's best professional judgment (BPJ) of what constitutes the appropriate technology requirement (BPT, BAT, or BCT). In developing these BPJ limitations, permit writers must consider the same factors (set out in section 304(b) of the CWA) that would be used in the development of an effluent limitation guideline.

In order to implement the Act's goal of continued further progress towards eliminating pollutant discharges EPA established an "anti-backsliding" policy reflected in the NPDES regulations at 40 CFR 122.44(1) [CPR § 122.62(1)]. See *U.S. Steel v. Train* 556 F.2d 822, 842 (7th Cir. 1977). This provision prohibited the reissuance of an NPDES permit with limitations, standards, and conditions less stringent than those in the previous permit unless the circumstances on which the previous permit had been issued had materially and substantially changed and constituted cause for permit modification or revocation. With respect to BPJ permit limitations which were more stringent than subsequently promulgated effluent limitation guidelines, "backsliding" was prohibited, except in limited circumstances set forth in the regulations.

2. Proposed changes. Industry litigants questioned EPA's authority to impose BPJ technology-based permit limitations more stringent than effluent limitation guidelines. They asserted that once promulgated, the limitations established by a guideline should replace case-by-case permit limitations. They also considered the anti-backsliding policy inequitable, arguing that permittees who had accepted BPJ limitations developed prior to guideline limitations are required to meet more stringent control requirements.

EPA disagreed with the challenge to the legality of the policy. However, in response to the equity concerns, EPA proposed to eliminate its anti-

backsliding policy for BPJ permits where it subsequently promulgates an applicable effluent limitation guideline with limitations less stringent than those imposed in the permit. Under the proposal, EPA would, upon the request of the permittee, be required to modify EPA-issued BPJ permits to reflect the less stringent guideline limitations. Although States were free to provide similar relief, no mandatory obligation to modify State-issued BPJ permits to reflect less stringent guideline requirements was proposed, since Section 510 of the CWA authorizes States to impose more stringent requirements. EPA also proposed to apply the new policy to existing permits during their terms by adding a new cause for permit modification consistent with the above approach.

In explaining its proposed abandonment of the "antibacksliding policy", EPA stated that the national effluent limitation guidelines should be applied equally to all dischargers, rather than penalizing, or placing at a competitive disadvantage, those companies within an industry that had received a BPJ permit before guidelines promulgation. The revised policy would also facilitate issuance of second round BPJ permits that might otherwise be challenged in evidentiary hearings.

3. Comments and response. Many commenters addressed the legality of the antibacksliding policy. Supporters of the proposal stated that EPA had no authority to impose limitations, standards, or conditions more stringent than those in applicable law and regulations. They reasoned that after an effluent limitation guideline is promulgated, EPA must include limitations based upon that guideline in permits, in lieu of previously established more stringent case-by-case permit limitations.

Opposing commenters stated that deletion of the antibacksliding policy was inconsistent with the statutorily prescribed goal of continued further progress toward attaining the Act's goal of fishable/swimmable waters. Commenters also argued that the deletion would violate the individual permit process required by section 402(a)(1) by allowing case-by-case limitations to be relaxed even where the discharger can meet the limits at acceptable cost, where the permittee has exhausted or waived its opportunity to challenge those limits, or where the discharger already has achieved those limits. Commenters, focusing on relaxation of BPJ permits based upon BPT, stated that the BPJ permits represented the Agency's determination of BPT and therefore, BAT cannot be

less stringent. However, under the proposal this could be possible if BAT guidelines were less stringent than previously established BPJ limitations.

It is EPA's position that the CWA provides the Administrator with the authority to prohibit backsliding from a case-by-case permit when a guideline is subsequently promulgated. While the CWA does not explicitly establish an antibacksliding requirement, such a requirement is a logical outgrowth of the CWA's requirements and goals. Effluent limitation guidelines are calculated for industrial categories, and represent the minimum limitations that each facility within the industry should be capable of attaining if it installs the appropriate control technology. Guidelines are generally calculated with a 99% confidence level. Therefore, if a discharger exceeds the effluent limitations established by the guideline regulation, there is a 99% certainty that it was caused by discharger error rather than statistical variation. To achieve this certainty, the limitations in an effluent guideline must be established at a level that all dischargers within the industrial category can meet after the installation of pollution control equipment. Although many dischargers should be able to attain more stringent limitations, this approach to guideline development ensures that the standard can be achieved by all facilities. It is well established that EPA has authority to set technology-based limitations required by section 301 of the CWA through industry-wide regulations, provided that limited allowance is made for variation in industrial plants. *E. I. duPont de Nemours and Co. v. Train* 430 U.S. 112, 97 S.Ct. 965, 975 (1977).

In the absence of guidelines, EPA has the authority to establish permit limitations on a case-by-case or BPJ basis under section 402(a)(1). In issuing a BPJ permit, permit writers must consider all of the statutory factors that pertain to the promulgation of a guideline (whether BPT, BAT, or BCT). (See discussion of the Agency's BPJ authority in section F of the preamble.) When EPA issues a BPJ permit, it establishes the Agency's determination of the appropriate technology-based limitations for the facility. See *U.S. Steel Corp. v. Train*, *supra*. Moreover, since it is calculated on a case-by-case basis, a BPJ determination can be tailored to the relevant circumstances and capabilities of the permittee and thereby inherently incorporates any necessary allowance for variations in individual plants. It would be inconsistent with that process to replace such limitations with less precisely calculated limitations. EPA's

subsequent issuance of effluent limitations guidelines does not invalidate the detailed BPJ determination of BPT or BAT/BCT made at the time of permit issuance. To adopt the policy that a subsequently issued less stringent effluent limitation guideline should replace BPJ established permit limits would cast an undeserved pall of uncertainty on BPJ permits. Such a policy could have a chilling effect on the issuance of permits in advance of guideline promulgation since the possibility would exist of a burdensome permit modification process.

A prohibition on backsliding for BPJ permits is also consistent with reasonable further progress towards controlling pollutant discharges. If a BPJ permit has been issued, a modification (or reissuance) to reflect subsequently promulgated less stringent guidelines would be inconsistent with the section 301(b)(2)(A) requirement that BAT represent reasonable further progress towards achieving the goals of the Act. Only in limited circumstances where it is demonstrated that the original BPJ limitations cannot technically be achieved despite all good faith efforts, might some allowance be legitimate. EPA has provided corrective measures for dealing with such situations in its existing regulations.

In relation to this, however, EPA does not completely agree with the commenter who stated that it was impermissible to allow backsliding where permittees had met their limits, could meet the limits at acceptable cost, or had waived or exhausted their opportunity to challenge their permits. Although backsliding, in general, is inconsistent with the Act for permittees who can or are meeting permit limitations, the anti-backsliding provision should not limit the Director when the previous case-by-case limitations prove to be an incorrect assessment of the discharger's capabilities. The regulations, therefore, create two exceptions from the policy. Permittees may obtain less stringent limitations when, despite installation and proper operation and maintenance of the necessary treatment system, they are unable to meet a BPJ permit. (§ 122.44(1)(2)(i) [CPR § 122.62(1)(2)(i)].) Today's rulemaking will also allow permits to be modified during their term in these cases. Additionally, permittees that can only meet their BPJ limitations at unreasonable costs should be able to obtain less stringent limitations. Therefore, today's regulation provides relief to a permittee that can meet its current permit effluent limitations only with operation and maintenance costs

wholly out of proportion to those of average facilities covered by a subsequent guideline for the category. For dischargers with permits based upon guidelines, EPA already allows relief if the removal costs are wholly disproportionate from those considered in developing the guideline. EPA will now allow qualifying facilities to request permit modification (or reissuance) with less stringent limitations under a similar standard although the permit may not be less stringent than the subsequent guideline. The final rules thus create a new cause for permit modification. In light of this, the status of the permit and whether challenges to it have been exhausted are not appropriate considerations. However, if the facility is able to meet its BPJ limits with reasonable costs, it is consistent with the case-by-case process to require the permittee to continue to achieve those limits.

Several commenters argued that the anti-backsliding policy was unfair to permittees that accept BPJ permits and that these permittees should not be penalized. These commenters pointed out that permittees that contest case-by-case permits may be rewarded. Another commenter countered that EPA had not demonstrated that the anti-backsliding policy would place BPJ permittees at a competitive disadvantage.

It is possible that some case-by-case permittees will attempt to delay the permitting process in the hope that they will obtain less stringent limitations. However, as we explained above, a BPJ permit represents the Agency's determination of the appropriate technology-based limitations applicable to an individual facility. It would be inconsistent with the goals of the Act for the Agency to reverse that decision solely because a permittee may try to delay a permit process in hopes of achieving a more favorable result. In addition, the Agency received no specific data from commenters in support of the allegation that the anti-backsliding policy created a competitive disadvantage.

Commenters agreed with EPA's statement in the proposal that the anti-backsliding policy could result in challenges to second round NPDES permits. EPA acknowledges that it cited this concern in the November 18, 1982 preamble as support for the proposed elimination of the anti-backsliding policy. At the time, EPA expected to issue many of the second round permits on a case-by-case basis and anticipated that many would be challenged. Since then, a great deal of progress has been made in promulgating effluent

limitations guidelines. In addition, EPA's second round industrial permit issuance policy assigns highest priority to permits that will be based on water quality standards more stringent than technology standards. In other cases, if promulgation of a guideline is expected, EPA will generally defer permit issuance rather than issue a BPJ permit. Thus, it now appears that far fewer permit challenges will result from the anti-backsliding policy than had been anticipated.

Two commenters pointed out that the Agency's retention of § 122.44(1)(2) [CPR § 122.62(1)(2)] (which sets out specific instances under which BPJ permits may be reissued with less stringent limitations) was inconsistent with the proposed revision and ought to be deleted. EPA agrees with the commenters that the retention of this language was inconsistent with the proposal. However, since today's final rule does not eliminate the anti-backsliding policy as it applies to BPJ permits, it is unnecessary to delete § 122.44(1)(2).

One commenter stated that since the proposed rule appeared in § 122.62(a) [CPR § 122.15(a)] "Cause for Permit Modification", we should clarify that the change would also apply to permit renewal and revocation and reissuance. The commenter's question reflects a misunderstanding of § 122.62(a). Section 122.62(a) states that if the permittee agrees, each of the causes for permit modification also constitutes cause for permit revocation and reissuance. The proposal would also have applied to renewal through § 122.44(1)(1) which states that permits may be renewed with less stringent limitations if there is cause for permit modification under § 122.62.

A single commenter stated that dischargers covered by revised water quality standards should also be able to obtain less stringent limitations at reissuance. The existing NPDES regulations already contain provisions that allow this change. Section 122.62(a)(3) allows permit modification if the permit is based upon a water quality standard or promulgated effluent limitation guideline and that standard or guideline is made less stringent. This also applies to reissuance through § 122.44(1).

Another commenter stated that we should clarify that the term "effluent limitations guidelines" in the proposed rule and in § 122.62(a)(3) includes New Source Performance Standards (NSPS). Thus, if EPA wrote a permit based upon an NSPS that was subsequently modified or revised, the permittee could

request permit modification to obtain less stringent limitations. The commenter further argued that since the permittee would no longer be a new source, EPA could not apply NSPS to these permittees, but would be required to include BAT conditions.

The suggested interpretation of § 122.62(a)(3) and the proposed rule is inconsistent with the existing regulations. The NPDES regulations define the term "effluent limitations guidelines" as regulations published under section 304(b) of the CWA. (See § 122.2 [CPR § 122.3].) Effluent limitations guidelines thus include BAT, BPT, and BCT guidelines, but not NSPS which are promulgated under section 306 of the CWA. The reference to "standards" in § 122.62(a) is clearly intended to refer to water quality standards and not NSPS. Thus, by the terms of this regulation, sources covered by an NSPS are subject to the Agency's current anti-backsliding policy.

The regulation is supported by section 306 of the CWA which requires that NSPS reflect the greatest degree of effluent reduction determined to be achievable through the application of the best available demonstrated control technology. NSPS are only applicable to sources which are constructed after proposal or promulgation of an NSPS (see 40 CFR 122.2). This is because NSPS are intended to impose state-of-the-art technology upon new sources which are capable of constructing their facilities to meet such requirements. Limiting the circumstances by which these NSPS can be modified once imposed on a facility is consistent with Congressional intent that NSPS represent the "maximum feasible control of new sources," S. Rep. No. 92-414, p. 58 (1971), Leg. Hist. 1476. See also *E. I. duPont de Nemours & Co. v. Train* 430 U.S. 112 (1977) (a variance procedure for NSPS is inappropriate).

Promulgation of a subsequent "new" NSPS by the Agency does not justify elimination of the anti-backsliding policy. It is clear under the statute that a later promulgated NSPS would not apply to "existing" new sources since the "existing" new source was constructed prior to the promulgation or proposal of the "new" NSPS. Furthermore, the promulgation of the "new" NSPS does not withdraw or revise the original standard for an "existing" new source since by its terms it only affects "new" new sources whose construction commenced after its promulgation. Thus, the commenter's statement that the promulgation of a subsequent NSPS converts the "existing" new source into an existing source subject to BAT effluent limitations is incorrect. Rather,

the existing NSPS remains applicable to sources that were constructed after its promulgation but before a new NSPS is issued. Modification of permit limitations based upon the existing NSPS to reflect later promulgated NSPS would be inappropriate.

Only in a situation where the new NSPS was intended to withdraw or revise, in whole or in part, the previous NSPS because of some error or infeasibility might an exemption from the anti-backsliding be legitimate. See, for example, the recent proposed changes to the NSPS for coal mine point sources. 49 FR 19240 (May 4, 1984). However, a change to the NPDES regulations at 40 CFR 122.62(a) to modify the anti-backsliding policy to generally allow for backsliding with respect to NSPS would require a reproposal to allow for public comment since the issue was not raised by the November 18, 1982 proposal. Since the Agency considers it appropriate to retain the anti-backsliding policy for NSPS, EPA is not proposing such a change.

One commenter stated that EPA cannot allow backsliding to BCT guidelines where the initial BPJ/BPT permit limitations are more stringent than the guideline limitations. This commenter misconstrues the existing regulations which now contains an exception from the anti-backsliding policy allowing BPJ permit limitations to be made less stringent to conform to a later promulgated BCT effluent limitation guideline (§ 122.44(l)(2)(iii) [CPR § 122.62(l)(2)(iii)]). EPA included this exception in the June 7, 1979 NPDES regulation, reasoning that it would only be available in a small number of cases and that it was in accord with Congressional intent that BCT, rather than BAT, represent the highest level of treatment applicable to conventional pollutants (44 FR 32864, June 7, 1979).

On reevaluation, the Agency recognizes that the BCT exception as explained in the 1979 preamble is inconsistent with the general intent of the anti-backsliding policy to prevent unwarranted "backsliding" in pollution control. EPA agrees with the commenter's statement that BCT must in all cases be at least as stringent as BPT, whether BPT is in a guideline or in a BPJ permit. Moreover, requiring permittees to maintain the level of control imposed by BPT requirements would not be contrary to Congressional intent with respect to control of conventional pollutants. Under section 301(b)(1), all dischargers are required to comply with BPT requirements by 1977. BPT is intended to be the floor for purposes of

determining BCT requirements whether BPT was established by guideline promulgation or by a permit writer's best professional judgement.

Due to the inconsistency in our current regulations, EPA is considering revising the BCT exception to make it consistent with the rest of the anti-backsliding policy. The Agency is currently working on a BCT methodology and has not yet promulgated any BCT guidelines. Additionally, it is unclear whether there are any BPJ permits more stringent than BPT or BCT guidelines that will present a real backsliding issue. Therefore, the Agency will assess the need to correct the anti-backsliding policy in conjunction with issuance of a final BCT methodology. If BCT guidelines are likely to allow backsliding, EPA will propose a revision to correct the anti-backsliding regulation at that time.

Finally, one commenter supported the proposal on the grounds that it would allow EPA to correct previous errors. This provision is not intended to provide general authorization to correct previous errors. EPA already has authority to correct BPJ permit limitations when they are unachievable. As noted above, existing § 122.44(l)(2)(i) allows the reissuance of permits with less stringent limitations if permittees install and properly operate and maintain the necessary BPJ limits. Elsewhere in this rulemaking, we are extending this policy to apply to *modification* of BPJ permits. Under today's revision, the permitting authority will also be able to modify (or reissue with less stringent limitations) BPJ permits upon promulgation of subsequent guidelines when they can only be achieved with costs wholly disproportionate to those considered in the guidelines, although the revised limits may not be less stringent than the guideline.

4. EPA action. Based upon EPA's review of the comments and the requirements of the CWA, the Agency has decided to retain the current anti-backsliding policy with one exception. The regulation will now allow BPJ permits to be made less stringent if the permittee can demonstrate that its removal costs are wholly disproportionate to those considered in a subsequently promulgated effluent guideline. This demonstration should be equivalent to the similar showing in variance requests from guidelines-based permit limitations (see § 125.31(b)(3)).

Generally, the BPJ permit limitations are based upon technology that is widely known and not different from that considered in guideline development. Permit writers usually

know the approximate removal costs at the time the limitations are established. However, in some cases, technology may be installed that requires unexpected and inordinate operation and maintenance costs to meet the guideline. In these cases, we will reevaluate the previous determination and allow the permit to be modified to reflect removal costs that are not wholly disproportionate to those on which the guideline is based [although in no event may the limitations be made less stringent than the guideline without a variance].

EPA would like to clarify one final point on the new information exception to the anti-backsliding policy in the existing regulations. For purposes of implementing the anti-backsliding provision in § 122.44(l) for a reissued permit, where limitations in the expiring permit were based on water quality standards, "information" under § 122.62(a)(2) may include alternative grounds (including necessary methodology; mathematical parameters, and other assumptions) for translating water quality standards into water quality-based limitations.

E. Disposal to Wells, POTW's, or by Land Application (40 CFR 122.50 [CPR § 122.65])

1. Existing rules. The existing regulation sets forth a formula for adjusting mass-based permit effluent limitations for those dischargers that do not dispose of all their wastes to waters of the United States. The purpose of the formula is to assure that if part of a discharger's total process wastewater flow is diverted to wells, land application or POTW's, the remaining wastes discharged to surface waters are subject to technology-based requirements notwithstanding the diversion. Mass-based limitations are adjusted proportionally to the percentage of the wastewater disposed into a well, a POTW, or by land application. Thus technology-based effluent limitations cannot be met merely by diverting most of the wastestream by one of these three methods.

The existing regulation does not limit or prevent a discharger from disposing of part or all of its wastewater to a well, by land application or to a POTW. That decision is clearly within the discretion of the discharger. The provision simply recognizes that the NPDES permit program of the CWA focuses on control of that waste *actually* discharged to waters of the United States. Therefore, limitations calculated upon the assumption that a facility's entire wastewater flow would be discharged to

waters of the United States must be adjusted to reflect the fact that only a portion of it is in fact being discharged. This technical adjustment is accomplished through use of the formula in the existing regulation. The regulation does not regulate, directly or indirectly, the wastewater that is diverted. No limits are placed on the amount of wastewater that may be diverted, nor upon how that waste is treated or disposed of. Generally, such activities are outside the scope of the NPDES program.

The existing regulations also provide that, if a discharge to a well, POTW, or by land application "changes the character or treatability" of the pollutants being discharged to receiving waters, the effluent limitation can be made more stringent than required by application of the adjustment formula established in the regulations. This provision was originally included in response to commenters' concerns that a strict application of the formula would otherwise allow a discharger to inject concentrated wastes into a well, to a POTW, or by land application and then discharge relatively dilute wastes to surface water with little or no treatment.

2. Proposed changes. Industry litigants complained that the adjustment formula in the regulation unlawfully and unfairly discriminated against some forms of treatment in favor of others. They claimed that their diversion of wastewater to land application, a POTW or a well was, in fact, treatment of that waste for purposes of the Clean Water Act and that therefore no adjustment of their permit limits was necessary or appropriate. Industry supported this assertion by contending that since mass-based permit limits are based on a discharger's level of production and not the volume of wastewater discharged, reduced flow was not grounds for different permit limits. The litigants further argued that the adjustment formula was flawed. They alleged that it assumes pollutant load to be uniform over all flow rates and treatment plant efficiency to be linear; litigants opined that treatment plant efficiency might decline when flow is reduced.

In the settlement with industry litigants, EPA agreed to propose their approach for public comment.

Consistent with that agreement, the proposal would amend the regulations to recognize land application and well disposal as forms of treatment, under the NPDES program, that prevent wastes from reaching waters of the U.S. Therefore, technology-based limitations would not be adjusted if part of the

wastestream was disposed of in a well or by land application. The remaining wastes directly discharged would be allowed the full wasteload limitation.

The proposal, however, retained the adjustment formula for industries which discharge a portion of their wastes into POTW's, since pollutants from a POTW *will* (indirectly) be discharged into waters of the U.S. However, the adjusted effluent limitation could be further adjusted under the proposal if the effluent limitations yielded by the formula would require a greater degree of effluent reduction (taking into account both reduction of the POTW and reduction at the permittee's facility) than would have been required if the industry has treated and discharged all its wastes directly to the receiving waters.

Furthermore, the proposal removed the "change the character or treatability" provision which would have allowed the effluent limitation to be made more stringent if the wastewaters directly discharged were not representative of the total waste flow. This provision would have been superfluous under the proposal.

3. Comments and responses. Several commenters supported the proposed rule and reiterated litigant contentions that well injection and land application are forms of treatment and that the existing regulation unlawfully discriminated against such forms of treatment. One commenter believed EPA should not be concerned about the impacts of diverted wastewater because other programs such as the UIC, pretreatment, and RCRA programs should adequately protect the environment. Other commenters objected to well injection and land application being considered forms of treatment. They stated that the overall effect of such an interpretation would be an increase of pollutant discharges to the waters of the U.S. and to the environment. These commenters pointed out that both disposal into wells and land application may ultimately result in contamination of ground and surface waters. One commenter stated that the proposal could lead to the situation where a facility discharged all but the guideline amounts to land or wells and then discharged the remainder to surface waters, untreated. Similarly, another commenter claimed that the proposal would allow a municipality to discharge raw sewage from a portion of its population if wastes from the remainder of its population are disposed of on land or by discharge to another municipality.

Other commenters objected to land application being considered treatment

that prevents wastes from reaching wastewaters of the U.S., since surface runoff from the application area would convey applied pollutants to receiving waters. One commenter objected to EPA's "novel" approach, stating that underground injection cannot be considered a form of treatment, and, in fact, is more properly regarded as a substitute for treatment.

After reviewing comments received and reevaluating the issues, the Agency has decided to retain the existing regulation. If all the effluent limitations guidelines and permit limitations were expressed solely in terms of concentration, there would be no need for the adjustment formula contained in the existing regulation. If a discharger sent half of his wastewater to an injection well or land application, a concentration-based limit would assure the same level of treatment of wastewater directly discharged as would have been applied to the total wastestream. However, to preclude dilution as a substitute for treatment and to encourage flow reduction (such as recycling of process water) at the industrial facility, effluent limitation guidelines are often expressed solely in terms of mass. While mass-based limits address the problems related to dilution, such limits do not similarly assure a consistent level of treatment for dischargers who reduce flow by well injection, land application, or routing to a POTW. By retaining the existing regulation, EPA ensures that the regulatory approach to both mass-based and concentration-based limits is consistent.

The policy in the existing regulation is also consistent with the development of effluent guidelines. Production-based mass limits in effluent limitations guidelines are based upon the assumption that total process flows would be directly discharged. In the guideline development process, the treatment technology is evaluated and a concentration limit determined. The concentration limit is then multiplied by the process flow per unit of production. The result of this multiplication is the mass limit per unit production. If some of the process flow is diverted, it is necessary to adjust the above calculation since the mass guideline limit is based upon the total process flow. (While flow reduction techniques may also reduce process flow to the treatment facility, there is no diversion of wastewater containing pollutants; since pollutant loads are not changed, adjustment is unnecessary.) The existing regulation makes the necessary adjustment by revising the limitation to

reflect the amount of wastewater directly discharged.

Furthermore, the adjustment of mass-based permit limitations accords with the intent of the CWA. Section 402(a)(1) authorizes the Administrator to issue a permit for the "discharge of any pollutant" upon the condition that the discharge meets the requirements of, *inter alia*, section 301. It is clear from the Act that the "discharge of a pollutant," as defined in section 502(12), must comply with the technology-based standards of section 301. If part of a discharger's process wastewater is released to the environment in a manner that is not a "discharge of a pollutant," e.g., into a POTW or by land application, then it would be inappropriate to allow the discharger to escape the technology-based requirements of section 301 in the section 402 permit for the remaining flows. The existing regulation requires the same degree of treatment to the wastewater directly discharged as would have been applied to the total wastewater. As noted, this is also the same degree of treatment that would be required if EPA had included concentration-based limits. Dischargers should not be given a credit merely because EPA chose to encourage flow reduction by solely limiting pollutant mass. To give a discharger "credit" because he disposed of the rest of his wastewater into an injection well or by land application would be inconsistent with the intent of the CWA to apply technology-based limits to all discharges to waters of the U.S. The statute requires technology-based limits for "discharges of pollutants" without regard to whether all or only some process wastewater is discharged.

Waste disposal through land application and discharge to wells also presents environmental risks of an unknown dimension. Surface impoundments and water treatment lagoons that handle other than hazardous wastes are not extensively regulated by the Agency. EPA's recently completed Surface Impoundment Assessment indicates that many such facilities have the potential to and do contaminate groundwater. About 40% of municipal and industrial impoundments are located in areas with thin or permeable soils or over aquifers currently used or that could be used for drinking water. The impact of land application systems upon groundwater is not yet known, although recent information indicates some environmental threat. Also, some land application systems are designed to lead to sheet runoff to surface waters, which

would be classified as a non-point source not subject to NPDES permitting. Although well injection will ultimately be regulated by the Underground Injection Control (UIC) Program, the UIC program is not yet fully implemented in most States, and requirements for some varieties of wells have not yet been specified. In light of the risks, well injection and land application should not be considered treatment for the purpose of avoiding recalculation of mass-based permit limitations, since they could ultimately result in increased release of uncontrolled pollutants to the environment. The present uncertainty and potential for harm as well as the fact that NPDES permit writers are not equipped to evaluate the effectiveness or environmental impacts of these means of disposal is another reason EPA has decided not to allow credit.

Contrary to one commenter's view, EPA does not intend or expect its action today to discourage land application or well injection where these are appropriate. Dischargers can still dispose of any part of their wastewater by land application or well disposal. The NPDES regulations are neutral and are not intended to either encourage or discourage other disposal options. If a portion of a discharger's process wastewater is disposed into a well or by land application, the proposal would have allowed the remaining wastewater to be directly discharged with the same total mass of pollutants as if all the wastewater were directly discharged. In some, perhaps many cases, this would mean that the discharge itself would not be treated at all. Such a result would be inconsistent with the basic technology-based approach of the CWA.

One commenter asserted that the existing regulation would, in effect, penalize a discharger for her investment in wells or in land application by requiring more stringent treatment of the wastewater actually discharged to the waters of the U.S. EPA does not agree because, as indicated above, the regulation does not require *more* stringent treatment but simply a proportionate level of treatment for the portion which is directly discharged. If a facility chooses to dispose of some wastewater by land application or other means instead of discharging it directly, that decision is most likely based on a weighing of all relevant factors, one of which is the relative costs. The Agency is not concerned with this industrial cost balancing, but rather with ensuring that *whatever* amount of wastewater the facility ultimately decides to discharge is treated to a level consistent with the CWA requirements. Consistent with this

approach, the costs of disposal into a well, POTW, or by land application will not be considered appropriate costs in determining control measures which constitute BPT, BAT or BCT in BPL determinations.

In a similar vein, it has been asserted by a commenter that the Agency has not considered the economic achievability of complying with an effluent guideline limitation if that limitation has been adjusted to reflect reduced flow. This assertion is incorrect. The determination of economic achievability for an effluent limitations guideline also applies to the adjusted limitation.

When technology-based effluent limitations guidelines are developed, the Agency estimates the costs for investment and operation of a treatment system. If plant-specific costs are estimated, the size of the treatment system reflects the amount of the facility's wastewater. This amount of wastewater flow may reflect the facility's current flow or a reduced flow that the Agency believes can be achieved through process changes such as recycling. In either case, the costs of the treatment system reflect those that will allow the facility to comply with the effluent guideline limitation. These costs are the basis of the economic impact analysis, which is used to determine economic achievability.

If a discharger chooses to reduce wastewater flow by disposal practices such as well injection, a smaller or less extensive treatment system should be required and the end result will still be economically achievable. In fact, the discharger would likely not make such a change unless it results in cost savings. It is reasonable to assume that in exercising its discretion to select wastewater disposal practices, a facility will not choose a more costly option than is necessary. EPA should not adjust the regulations to benefit dischargers that choose a more expensive method of disposal.

Other commenters point out that the proposed rule would be unfair to dischargers that discharge directly because a comparable degree of treatment would not be required for those using land application or an injection well. EPA agrees that in some circumstances inequities could result if a competitor were able to avoid treatment costs by disposing of part of his wastewater to a well or by land application. In addition, the proposal would lead to inequities between dischargers with concentration-based limits and those with mass-based limits, since concentration-based limits remain applicable, unchanged, even if a portion

of the wastewater is land applied or injected to wells.

Another concern raised by commenters was in reference to the existing provision which provides EPA with the authority to make the limitations more stringent under Part 125, Subpart D, if discharges to wells, POTWs or by land application change the "character or treatability" of the pollutants discharged to receiving waters. One commenter pointed out that the proposal never provided a reason for omitting that provision. The proposal to provide treatment "credits" for disposal into wells, by land application and for the amount of effluent reduction at a POTW, would have eliminated the need for the "character or treatability" provision. Since EPA has decided not to proceed with the proposed approach, it is appropriate to maintain that provision.

A few commenters stated that the existing regulation assumes that the efficiency of a treatment plan is linear, but in fact the efficiency declines when process flow is reduced. Generally, EPA's experience is that efficiencies of treatment systems are linear in relation to flow. Effluent guidelines regulate large and small plants based upon a linear model; the discharge limit is based upon the size of the plant -- reflected by its production level and process wastewater flow. In fact, contrary to the commenters' suggestions, EPA expects that, in most instances, if the flow is reduced, the efficiency of an existing treatment plant would increase because of the greater retention time of the wastewater by the treatment facility.

However, in certain circumstances the efficiency of a treatment plant may decline when process flow is reduced. This might occur, for example, if disposal of highly concentrated wastewater to a well, POTW or by land application leaves a discharger with highly diluted wastewater to be treated. It is also possible that the situation might arise where the efficiency of a plant declines merely because the process flow is reduced. If application of the adjustment formula would lead to removal costs which would be wholly out of proportion to the removal costs considered during development of the national limits, then the discharger may be eligible for a further adjustment under Part 125, Subpart D fundamentally different factor variance procedure. For this reason, today's rulemaking clarifies that the effluent limitations may be further adjusted under Part 125, Subpart D to make them either more or less stringent if disposal to a well, POTW or by land application changes the

character or treatability of the pollutants being discharged to receiving waters. This clarification should alleviate the concerns of commenters who pointed out that a reduction in flow rate may decrease efficiency or that the existing regulation assumes that pollutant loads are uniform over all flow rates.

In the case of discharges to POTWs, the proposal would have allowed effluent limitations to be adjusted if the formula would require a greater degree of effluent reduction (taking into account both reduction at the POTW and at the permittee's facility) than would have been required if the industry had treated and discharged all its wastes directly to the receiving waters.

Several commenters supported the proposed approach for POTWs. Another commenter pointed out that this provision is equivalent to "removal credits" which provide a discharger into a POTW with an allowance for the treatment achieved by the POTW. However, the commenter stated that it does not have any of the detailed showings and other safeguards required under the removal credit program in 40 CFR 403.7. Consistent with the approach taken with respect to well disposal or land application, the final regulation applies mass-based guidelines to the wastewater to be directly discharged into waters of the U.S. If part of the total wastewater is disposed of elsewhere (e.g., into a POTW), it should be dealt with in the context of other regulatory programs. For example, discharges to POTWs must meet categorical pretreatment standards and other local limits imposed on industrial dischargers by the municipal treatment authority. Wastewater disposed into a POTW may be eligible for a removal credit under a pretreatment program and will be dealt with in that context.

4. EPA action. After analyzing the comments received and reevaluating our proposal, we have decided to retain our long-standing policy expressed in the existing regulation. In response to comments, however, we have clarified the regulation to allow less stringent limitations if the character or treatability of discharged wastewater is changed.

It should also be clarified that when information comes to the attention of the permitting authority concerning a discharger reducing the flow upon which a permit is based by well injection, land application or discharge to a POTW, this constitutes grounds for permit modification as new information under 40 CFR 122.62(a)(2) [CPR § 122.15(a)(2)].

F. Best Professional Judgment (BPJ) and Draft Development Documents and Treatability Manual

1. Best Professional Judgment (BPJ) (40 CFR 124.56(b)(1), 125.3(c)(2), (3), 125.3(d)).—a. Existing rules. Effluent limitations may be established on a case-by-case basis under section 402(a)(1) of the Clean Water Act in the absence of applicable effluent limitations guidelines, or in addition to effluent limitations guidelines if these guidelines do not control pollutants of concern or particular wastestreams at a facility. Permits containing case-by-case effluent limitations are based on a permit writer's "best professional judgment" (BPJ) and represent the appropriate statutory requirement—"best practicable control technology currently available" (BPT), "best conventional pollutant control technology currently available" (BCT), or "best available technology economically available" (BAT)—for that particular facility.

Because "BPJ" permit effluent limitations and conditions operate in the absence of, or in addition to, effluent limitations guidelines authorized under section 304(b) of the Clean Water Act, permit writers are required to apply the appropriate statutory factors in that section when imposing technology-based effluent limitations in permits on a case-by-case basis. The current regulations clearly state this obligation by requiring permit writers when writing BPJ permits to "apply the appropriate factors listed in section 304."

b. Proposed changes. Industry litigants were concerned that permit writers would not address these statutory factors unless expressly listed in the regulation. They were also concerned that permit writers would not explain the basis for their case-by-case determinations unless the regulation expressly required that their bases be set forth in the fact sheet required by § 124.56. EPA responded to these concerns by proposing to list the section 304(b) factors in proposed § 125.3(d) and to specifically reference the fact sheet in proposed § 125.3 (c)(2) and (c)(3). EPA also proposed a conforming revision to § 124.56(b)(1).

c. Comments and responses. Industry groups supported the proposed changes contending that listing the statutory factors would help ensure that permit writers follow the proper methodology in setting BPJ effluent limitations. They also claimed that requiring the fact sheet to set forth the basis for BPJ limitations would make it easier for applicants to comment on draft BPJ permits and for courts to review challenges to these

permits. Two States administering the NPDES program objected to the proposal on the grounds that it would impose a burdensome requirement on the administering agency and, if followed literally, could make the fact sheet a larger document than the permit.

Sections 124.8 and 124.56 of the current NPDES regulations require permit writers to prepare a fact sheet for every draft permit for a major NPDES facility or activity. In accordance with these provisions, a fact sheet must include calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to applicable effluent limitations guidelines or where not applicable, an explanation of how alternative limits were developed. (For minor dischargers the permit writer must prepare a statement of basis (40 CFR 124.7). Although less detailed than a fact sheet, a statement of basis still requires an explanation of the derivation of the permit conditions.) States opposing the proposal apparently believed that reference to the fact sheet in proposed § 125.3 (c)(2) and (c)(3) imposed some greater burden of justification for BPJ limitations. The intent was merely to point out the requirements of §§ 124.8 and 124.56 of BPJ situations. To avoid misunderstanding, EPA has deleted the reference to the fact sheet in proposed § 125.3 (c)(2) and (c)(3) as redundant with existing §§ 124.8 and 124.56. The final regulation retains the section 304(b) statutory factors a permit writer must consider when setting technology-based effluent limitations on a case-by-case basis. Although BPJ permit writers are required to consider these factors whether or not they are listed in the regulations, the Agency agrees it is more efficient and effective to restate them in the regulations.

One commenter requested that permit writers be specifically instructed in § 125.3 to use the proposed BCT methodology (47 FR 49176 et seq., October 23, 1982) in determining BPJ-BCT effluent limitations. Since the BCT methodology has not yet been finalized, it would be inappropriate to reference it in this rulemaking. However, permittees and permit writers should be aware that once EPA establishes a BCT methodology, permit writers must apply this methodology in establishing BPJ permit limitations.

d. EPA action. Based on an evaluation of the comments in light of our BPJ permit experience, EPA will retain the list of statutory factors but has not adopted the fact sheet portion of the proposal.

2. Draft Development Document and Treatability Manual (40 CFR 125.3(c)(2)).—a. Existing rules. The current regulation includes EPA draft or proposed development documents or guidance in a parenthetical clause as examples of available information a permit writer must consider when making case-by-case determinations of technology-based effluent limitations.

b. Proposed changes. Industry parties to the settlement agreement were concerned that permit writers would do more than just *consider* development documents and guidance when writing BPJ permits. They feared that permit writers would be bound by these documents which, in their opinion, often contained faulty data. Additionally, litigants claimed that if permit writers are required to consider draft development documents and guidance, there would be no incentive for EPA to finalize effluent limitation guidelines. In response to these concerns, EPA proposed to delete the parenthetical reference to the documents in § 125.3(c)(2)(i), and stated in the preamble to the proposal that although not bound by EPA draft or proposed development documents or guidance, permit writers must consider all pertinent information, including these documents, in developing case-by-case effluent limitations.

c. Comments and responses. We received two comments on this issue. Both supported the proposed deletion of the parenthetical clause and stated that this change would ensure that undue weight would not be given to these documents.

d. EPA action. The final regulation does not contain the parenthetical clause. EPA continues to support the position taken in the preamble to the proposal that in establishing case-by-case permit limitations under section 402(a)(1) of the CWA, permit writers are not bound by EPA draft or proposed development documents or guidance. Permit writers should consider all pertinent information, including these documents, when developing case-by-case effluent limitations, just as they must consider significant comments and criticisms of the data they contain.

G. Net/Gross Limits (40 CFR 122.45(g)) [CPR § 122.63 (c), (h)]

1. Existing rules. The issue of whether and to what extent net/gross credits should be granted arises because of what appears to be a fundamental dichotomy. Industry has argued that dischargers are not responsible for removing pollutants already present in their intake water. (See *Appalachian*

Power Co. v. Train, 545 F.2d 1351, 1377 (4th Cir. 1977)). This should lead, they contend, to simple subtraction of intake pollutant values from effluent values when setting permit limits and measuring compliance. However, effluent limitations guidelines (guidelines) and other technology-based permit limitations are written on a gross basis without any such subtraction, because within a broad range of influent pollutant concentrations, treatment systems typically reduce pollutants to a certain level. Pragmatically, therefore, technology-based limits should be achievable regardless of the amount of intake pollutants. To grant a net/gross credit may give an unfair advantage to facilities with measurable levels of pollutants in their intake waters. Such facilities, by relying on intake credits, could "comply" with effluent limitations by utilizing a lower level of treatment than their competitors on cleaner streams—frequently a far lower level of treatment than that designated by EPA as BAT. Furthermore, intake pollutants rarely simply pass through a facility and all its associated intake and/or effluent treatment without some removal and/or complicated exchange of pollutants. In particular, generic pollutant parameters, such as total suspended solids or biochemical oxygen demand, frequently measure very different things in the influent and effluent. Thus, a simple subtraction of intake pollutants often does not make sense and would result in relaxing control standards in inappropriate circumstances.

The existing rule was intended to provide an allowance for intake pollutants considering the circumstances described above. Credits are available for pollutants to the extent that they are not removed by intake and effluent treatment systems. Also, to qualify for a credit, the intake water must come from the "same body of water" as that which receives the discharge. Additionally, pollutant parameters in the effluent must be physically, chemically and biologically identical to those found in the influent. These and other conditions are intended to address the problems described above and to limit the use of net credits to appropriate circumstances.

2. Proposed changes. Industry litigants were concerned that the restrictions in the existing rule severely limited the availability of net credits. For example, most pollutants change form in some way as they pass through a facility, and thus it is nearly impossible to provide exact physical, chemical, and biological identity between intake and effluent pollutants. EPA, for its part, was concerned that permitting authorities

were overlooking the need for careful application of net credits due to the excessive complexity of the existing rule. Therefore, the proposal dropped many of the existing restrictions in an attempt to respond to both these concerns. They were replaced by a statement that net credits would be given only where necessary to meet applicable technology-based limitations. In place of the demonstration of exact equivalency of pollutant parameters in influent and effluent, three alternative demonstrations of substantial similarity were provided. The "same body of water" restriction was dropped. (See 47 FR 52080-81, November 18, 1982.) Both the existing rule and the proposal reflected the efforts of many parties to deal with many individual situations of concern. In both cases, this led to detailed and lengthy regulations and preamble discussions. The settlement agreement resulted in such a complicated proposal that EPA became concerned, after reviewing public comments on the proposal, that the proposed changes failed to simplify the net/gross provision so that it might be properly understood and implemented.

3. Comments and responses. The most controversial aspect of the net/gross issue was the removal of the "same body of water" restriction. Industry comments were strongly in favor of removal of this restriction while environmental groups and government organizations were strongly opposed. One government organization stated that it was aware of several instances in which contaminated groundwater was being used for non-contact cooling water and discharged to cleaner surface water without treatment. During the development of the existing rule, EPA was particularly concerned with fresh water discharge to estuaries. Several of the environmentalist and government organizations gave hypothetical examples in support of retention of the restriction. Industry commenters claimed that water quality standards were sufficient to protect receiving water while those opposed to the proposal pointed out that standards are often inadequate, especially for toxic pollutants. While EPA agrees with this latter argument, we also note that in some limited cases the same body of water restriction may not be appropriate. One example might be a case where intake waters are taken from a relatively clean tributary of a relatively dirty body of water and discharged to the latter body, possibly adjacent to where the tributary itself flows into the large body. Therefore, EPA has decided to retain the same

body of water restriction but with some discretion available to the permitting authority to waive the requirement on a case-by-case basis. EPA agrees with the commenters who said that water quality standards are often inadequate since many States have not yet developed specific limitations on toxic pollutants, and hence meeting water quality standards is not alone a sufficient condition for this waiver.

One commenter stated that the proposed regulations have too many restrictions and give too much discretion to the permit writer. The commenter said industry is not responsible for removing pollutants in the intake water and that EPA should provide for simple subtraction of all intake pollutants from effluent standards. For the reason stated above, EPA cannot accept this argument. Intake pollutants do not pass through intake treatment systems, facilities, and effluent treatment systems unchanged. Thus, simple subtraction would amount to a relaxation of standards that were based on a determination of what technology can achieve, without taking into account the true removals the technology accomplishes. Another industrial commenter stated that EPA should "continue to allow a full credit * * * and * * * not use a threshold test." The commenter misinterprets the current regulation which does not allow a full credit, but only a credit after consideration of removal in intake and effluent treatment systems. Today's regulation replaces that complicated calculation with a more simple approach of granting credit as needed to meet technology-based standards.

Several commenters stated that the proposal was too complex. As indicated above, EPA agrees and, in today's final rule, has attempted to simplify the regulations and preamble explanation. A State agency commented that discretion regarding net credits should be left to the permitting authority. EPA agrees that the permitting authority is best positioned to decide when net credits are appropriate and has significantly simplified the regulation and preamble to further this principle.

A commenter representing a water treatment plant supported the proposed changes to the net/gross rules and argued that raw water clarifier sludge and filter backwash should be allowed to be discharged back to the stream. A State maintained that this was an unwarranted exemption from NPDES requirements. The existing regulation has been interpreted by some as imposing an absolute ban on clarifier

sludge discharges, although on its face it only bans net credits for such discharges. The proposal was interpreted to allow these discharges without restriction, except for restrictions required to meet water quality standards.

After review of all of the comments on this issue, EPA has decided that both extreme positions are undesirable. Discharge requirements for discharges of raw water clarifier sludge and filter backwash are best determined at the local permitting level after consideration of the appropriate technology-based effluent limits and water quality standards. Since there are no national guidelines for these discharges, they must be limited on a case-by-case basis according to the permit writer's Best Professional Judgment (BPJ), with more stringent limits if necessary to meet water quality standards. The particular technology used to determine EPJ technology-based effluent limits depends on the application of the statutory criteria for different levels of control, for example, best practicable or best conventional technology. These regulations are intended neither to ban such discharges nor to prohibit permit authorities from imposing such a ban in specific cases where this is the appropriate standard for control.

An environmental group commented that the proposed tests for similarity of generic pollutants may not be adequate to fulfill the objectives of the Clean Water Act, especially with regard to water quality. Their concern was that generic pollutants in the influent which were composed of relatively non-toxic constituents would be credited against more harmful constituents in the effluent. On the other hand, an industrial commenter said that the proposed tests to show substantial similarity of generic pollutant parameters are much more reasonable than the existing rule. In general, EPA believes that the "substantial similarity" approach (as opposed to demonstration of identical chemical, physical and biological characteristics) appropriately provides greater flexibility to permit writers in considering requests for net credits, but nevertheless provides adequate protection against environmental harm. However, EPA agrees that strict application of only one of the three tests for demonstrating substantial similarity suggested in the proposal, in some cases, may not provide adequate protection. Therefore, the three tests of the proposal have been replaced in today's final regulation with a more flexible regulation which relies more heavily on the exercise of

judgment by the permit writer. The tests specified in the proposal may still be considered by permit writers. However, other alternatives may be required where necessary for adequate protection.

An industrial commenter asked for more flexible specification of the definition of "control system" arguing that net credits should be available in cases where the control strategy intended to be employed to meet permits limits involves management practices, such as a chlorine minimization program, rather than physical treatment technology. As explained in the preamble to the proposal, control system means any control measures considered by permit writers in developing effluent limitations which are applied by the permittee to wastestreams in order to meet the technology-based limitations and standards established in the permit. This includes measures such as chlorine minimization programs. This regulation is not intended to require the installation of specific treatment technology in all cases (e.g., in many cases it may not be necessary, or even useful, to run noncontact cooling water or raw water clarifier sludge through the same treatment system designed for process waters). Nor would this regulation bar a permitting authority from requiring treatment technology, other controls, or zero discharge in a particular case. In considering net credit requests permit writers should examine the control measures that were intended to be employed to meet the applicable permit limits.

Another industrial commenter wanted net credits to be available for water quality-based standards. A State also raised water quality concerns. The proposed regulation included a section stating that the regulation did not preclude consideration of intake pollutants in setting water quality based limits. For the following reasons, EPA is deleting this section as unnecessary. This regulation deals only with technology-based standards. The Clean Water Act's requirement to protect and enhance water quality is not conditioned on factors such as intake water quality and it would be inappropriate for EPA to impose such a condition. Eligibility for a net credit under these regulations does not imply any right to violate water quality standards. However, EPA recognizes that implementation of water quality-based standards is a complex balancing and consideration of many facilities and many factors and that, in setting water quality based permit limitations, a

permit writer may take into account the presence of intake water pollutants, as appropriate. Of course, in any case limits must be adequate to meet the water quality objectives of the Clean Water Act when considered along with control requirements for other dischargers to the stream.

An environmental group maintained that the provision that dischargers need not incur significant additional expense to remove intake pollutants amounts to an economic variance which is illegal under the Clean Water Act. EPA does not agree with this contention. EPA is not authorizing variances from the applicable effluent limitations based on the costs to a particular permittee to meet these. Rather, EPA is recognizing that in meeting these limitations the permittee should not be responsible for additional incidental removal of intake pollutants where this would result in significant additional costs. EPA believes this comports with the Fourth Circuit ruling in *Appalachian Power*. In addition, we note that net credits are only available to the extent needed to meet applicable limitations.

4. *EPA action.* The issue of net/gross credit presents difficult problems. While in certain circumstances credits may be appropriate, there are abundant possibilities for abuse. Attempts by EPA to deal with this situation in complicated and detailed regulations do not seem to have resolved these problems and may have unduly restricted the legitimate use of net credits. Therefore, EPA has decided to restructure the regulation, preserving the best of the existing rule and settlement proposal, but simplifying it and providing for more discretion by the local permitting authority. This should make the granting of net/gross credits on a reasoned basis more workable and less arbitrary.

Three particular situations merit specific comment. First, "proper" operation of the control system as required in § 122.45(g)(1)(ii) could arguably be interpreted to require the permittee to incur significant additional expense (such as additional chemical cost) to treat as much of the pollutant present in the effluent as the system is capable of removing. EPA intends that if the permittee would incur significant additional expense above those contemplated in the development of effluent limitations in achieving the incidental removal of intake pollutants the discharger should qualify for a credit to account for these. EPA cannot place a precise figure on what is a "significant" additional cost. This determination must be made on the basis of site-specific

information during the individual permit process. Similarly, when a company is adding a pollutant (e.g., chlorine) only during certain times, it need not continuously operate the system intended to remove that pollutant, but rather only needs to operate as necessary to remove the pollutant added, if it would require significant additional expense to add more chemicals to also control the pollutants present in the intake water.

Second, raw water clarifier sludges and filter backwash, if discharged, are subject to NPDES regulations as are any other discharges of pollutants. Consideration must be given to any additions to the intake water by the permittee, such as the use of flocculants. Since, as described above, EPA believes that these discharges are best dealt with outside the context of net/gross, the language in the proposal concerning raw water clarifier sludges has been deleted. Further, to avoid the improper use of the net/gross regulation to avoid appropriate technology-based limitations on these discharges, a provision has been added to remove them from coverage under net/gross.

Third, a large volume of non-process water, such as non-contract cooling water, is frequently combined with a relatively small volume of process water. An otherwise appropriate grant of net credits for the non-process water could conceivably lead to outfall limits so high as to mask inadequate process water treatment. If a net credit is deemed appropriate in such a situation, the permit writer should set additional limits, under § 122.45(g)(2), to assure proper removal of process water pollutants. These limits may cover the generic pollutants immediately after the process water treatment system or more specific process water pollutants at the outfall. Finally, ineligibility of a facility for net/gross credits under this regulation does not affect that facility's right to apply for a fundamentally different factor (FDF) variance.

H. Total Metals (40 CFR 122.45(c) [CPR § 122.63(c)])

1. *Background.* Metals in water occur in both dissolved and solid forms. There are three methods for measuring the level of metals in water. Each of these methods will give a different result depending upon the amounts of metals which are in each form. The total metals method uses a strong acid digestion to dissolve solids and measures both dissolved and solid metals. The dissolved metals method uses filtration to remove solids and measures only dissolved metals. The total recoverable metals method is an intermediate

method which uses a weak acid treatment to dissolve readily soluble solids and filtration to remove residual solids. Details of these methods may be found in the publication "Methods for the Chemical Analysis of Water and Wastewater", EPA-600/4-79-020, March, 1979.

Decisions on how to measure metals in effluents must be made when establishing permit limitations and compliance monitoring requirements. These decisions are complicated by the chemical and biological processes that occur when effluents combine with receiving waters. Additionally, what ultimately happens to these pollutants in the receiving waters is very complex. Metals in solid form may dissolve and, although somewhat less likely, metals in dissolved form may change to solid. (See "Water Related Environmental Fate of 129 Priority Pollutants", EPA-440/4-79-029a.)

2. *Existing rules.* The current regulation takes the conservative approach of regulating metals as total metals, unless otherwise specified in a nationally promulgated effluent limitations guideline (guideline) or the permit writer in setting case-by-case permit limitations determines that a different method of measurement is appropriate. This approach is based on the assumption that all solid metals have the potential to dissolve and adversely affect the environment.

3. *Proposed changes.* Industry litigants claimed that only dissolved metals were environmentally significant and, therefore, that the appropriate method of measurement should be dissolved metals. EPA disagreed with this claim because of the complex chemical and biological processes that occur when effluents combine with receiving waters. For example, metals in the effluent of an electroplating facility that adds lime and uses clarifiers will be a combination of solids not removed by the clarifiers and residual dissolved metals. When the effluent from the clarifiers, usually with a high pH level, mixes with receiving water with a significantly lower pH level, these solids instantly dissolve. Measuring dissolved metals in the effluent, in this case, would underestimate the impact on the receiving water. Measuring with the total metals method required by the existing regulations, on the other hand, would assure no violation of water quality. Furthermore, proper sizing and operation of the clarifiers is a necessary part of the technology of reducing metals to acceptable levels. Measuring dissolved metals in the effluent would

mask any inadequacies in the clarification step.

EPA, therefore, proposed a lesser relaxation of the existing rule, using total recoverable metals as the general standard, unless otherwise specified in a guideline or the permit writer determines other measures are appropriate. This standard for determining the level of metals in the effluent would measure dissolved metals plus that portion of solid metals which can easily dissolve. This is intended to measure metals which are or may easily become environmentally active, while not measuring those which may be expected to settle out and remain inert.

4. *Comments and responses.* An industrial commenter wanted the use of the total recoverable metals method extended to cases where guidelines are based on total metals. However, as stated in the preamble to the proposal, data using total metals and that using total recoverable metals are not interchangeable. Therefore, EPA could only change the guidelines measurement method based on compilation of a new data base. This would be a large and extensive undertaking and would adversely affect EPA's ability to address important priorities. Such a disruption to program implementation is unwarranted and would conflict with court ordered deadlines. Where guidelines specify total (or dissolved) metals, that is the method to be used.

Several commenters stated that data based on total recoverable metals are not readily available. This is generally true at this time. Where effluent data based on total metals are being used to set permit limits (such as treatability manual data used for a "best professional judgment" determination), the permit writer may need to gather additional comparison effluent data using both methods. Data involving water quality standards is quite a different case. Analytical methods used to set water quality standards are not uniform and often vary within, as well as among, States. Consequently, when using data based on water quality standards to set effluent limitations, permit writers may discover that these data were derived from any of the three methods of measuring metals in the receiving water. However, because of the complex processes that occur when effluents combine with receiving waters, it is not possible to relate directly the form of the metals in the effluent to those in the receiving water. Therefore, it is not necessary to use the same analytical method used in developing the water quality standards for

developing effluent limitations. EPA's intent in promulgating this regulation is to endorse the total recoverable method as the best predictor of effluent impact on water quality. Using the total recoverable method to set water quality-based effluent limitations is independent of the method used to develop water quality standards for the receiving water.

Several commenters asserted that this standard is not sufficiently environmentally protective since metals excluded from total recoverable metals (but included in total metals) could eventually dissolve and affect water quality. A particular concern was an accumulation of slowly dissolving solid metals on the bottom of a water body. There are little or no data available on such long term environmental effects. To some extent these slowly dissolving solids will either disperse or be covered over, lessening any potential impacts. EPA has concluded that the total recoverable metals method is the most reasonable approach because it gives results that best approximate the amount of metals that are likely to produce water quality impacts. While all the metal measured by the total metals method could eventually dissolve, the portion of total metals represented by total recoverable metals is a better measure of potential adverse environmental impact.

An industry commenter asked that the phrase "dissolved or valent or total" in § 122.45(c)(1) [CPR § 122.63(c)(1)] and 122.45(c)(2) be revised to "dissolved or ionic or valent or total" and that the word "dissolved" in § 122.45(c)(3) be expanded to "dissolved or ionic." The commenter wished to make these sections include specific simple or complex metal ions. (A complex metal ion is a combination of a metal with other chemical compounds.) EPA agrees in part with this comment. The term "valent" in § 122.45(c) (1) and (2) is intended to include simple or complex metal ions. Section 122.45(c)(3) is also applicable to simple or complex metal ions. However, the commenter wished to use the sections to encourage the regulation of specific simple or complex ions. EPA disagrees that the regulation of metals as specific simple or complex ions is useful or desirable. The general standard to be applied is *total* recoverable metal, since metals may change form in receiving waters or elsewhere in the environment. Also, the NRDC consent decree [8 ERC 2120 (D.D.C. 1976)] requires EPA to regulate all compounds containing the specified toxic metals. While some complex ions have strong bonds, many are weak and

easily convert to other forms, especially when passing from an effluent to the receiving water. Therefore, it is important to control all ions containing the metal. Also, practical difficulties would arise since the analytical methods for distinguishing specific simple or complex metal ions are often complicated, sensitive, and prone to error. The single known example of a case where it may be useful to regulate a specific ionic form is hexavalent chromium. The strongly oxidized state of this highly toxic ion makes its formation from other chromium in the environment essentially impossible. Furthermore, hexavalent chromium limits are frequently used in addition to total chromium limits, rather than as a substitute for total chromium.

5. EPA action. EPA is today promulgating, unchanged, the proposed regulation. By choosing a total recoverable metals standard, the use of dissolved metals limits is being strongly discouraged, especially for toxic metals. Except where otherwise provided in guidelines, or where required in highly unusual cases to implement the Clean Water Act, metals limits in permits should be stated as total recoverable metals.

I. Actual Production § 122.45(b)(2) [CPR § 122.63(b)(2)]

1. Existing rule. The existing regulation requires production-based permit limits to be based upon a reasonable measure of actual production, not upon the design capacity of the facility. This requirement is intended to assure that facilities operating below full capacity are treating their wastewater to the extent required by the Clean Water Act's technology-based treatment requirements, rather than enjoying relaxed limits due to unused production capacity. Such an approach also assures equity among facilities in the same industry, regardless of their design capacity.

2. Proposed changes. Industry litigants expressed concern that, especially for cyclical industries which are currently in a slump, estimates of projected production should be allowed where the historical measures of actual production may not be reasonable predictors of future production. They also were concerned that should production increase beyond the level on which the permit was based, the permit modification process might not be fast enough to respond to the need for a higher production based limit in the permit. The proposal, recognizing the unique nature of the auto industry, in which demand is extremely volatile and

the Director may not be able to modify permits to increase effluent limitations with sufficient speed to allow increased production, provides for alternate effluent limitations for that industry. The proposal requires EPA, and allows States, to write alternate permit limits for the automotive manufacturing industry if the applicant satisfactorily demonstrates that its actual production is substantially below maximum production capability and there is a reasonable potential for an increase above actual production during the permit term. Under the proposal, a permit could be written providing more than one permit limitation—one based on the discharger's current production level and one or more based on potential increased production rates. For example, a hypothetical automotive plant with historic production of 60% of capacity might have a permit limit on pollutant "X" of 2 pounds per day. The alternate limits might be 2.5 pounds per day for production from 61–80% of capacity, and 3 pounds per day for 81–100% of capacity. If the plant's production for a month was in the higher range, then it could discharge up to the corresponding higher effluent limitation. The proposal also required monthly notice of anticipated production increases.

In addition, the preamble to the proposal clarified that the operative requirement is that the permit be based on a reasonable measure of actual production and the examples cited in the regulation are not meant to be all-inclusive, but are merely illustrative.

3. Comments and responses. Many commenters supported the concept of alternate permit limitations as allowing companies to respond quickly to changes in the market. Several commenters suggested that the concept also be applied to other industries besides the auto industry. EPA agrees that alternate permit limits may be useful in developing permits for other industrial categories and therefore has revised the final regulation to explicitly provide that EPA and the States have the discretion to adopt such limitations. Use of alternate limits is mandatory only where EPA writes permits for discharges associated with the automotive manufacturing industry if the discharger makes the requisite demonstration. Only the automotive industry has clearly demonstrated the need for the alternative limits. In all other situations, alternate limits will be used at the discretion of the permit writer, although dischargers may request the use of such limits. For approved NPDES States, the use of

alternate permit limitations is discretionary even for the automotive manufacturing industry.

It should also be noted that alternate permit limitations may also be appropriate where a decrease in production is expected to occur during the term of the permit, such as in industries where the production reported on the application is significantly higher than the long term production. Today's rulemaking clarifies that, on a case-by-case basis, the permit writer may provide for alternate limits based upon possible declining production.

EPA anticipates that alternate permit limitations will be used in instances where historical production levels are not indicative of expected future production. The alternate limits approach, however, is not a substitute for the permit modification process or a cure-all for other problems, such as bypass situations, which are addressed separately in the regulations. Alternate permit limitations are appropriate only when production is expected to change so substantially during the permit term that a single set of permit limitations could not adequately cover all the production levels. Permit writers, however, are not required to consider all possible contingencies or to address all anticipated fluctuations in production rates with alternate limits.

As pointed out by one commenter, although providing increased flexibility, the regulatory change will require increased technical supervision to ensure that permit conditions are not violated. Therefore, when they are used, the alternate permit limitations generally should be based upon a tiered approach, providing, for example, 2 or 3 alternative limits based upon reliably anticipated ranges of production levels. Because of the administrative and enforcement difficulties, the permit should generally not entail the use of a continuum of effluent limitations based upon all possible production levels up to capacity. However, permit writers have the flexibility to include a continuum where appropriate, such as for industries likely to have daily production fluctuations that cannot adequately be accounted for otherwise.

Another commenter suggested that the permit contain limits on both pounds per day of pollutant per unit production (essentially a continuum), and pounds per day based on production capacity or recent historic or projected production, in order to avoid the requirement to report at the beginning of each month when production is expected to rise to higher alternate levels. We have not chosen this approach since, as discussed

above, it is more difficult to effectively regulate and monitor compliance of dischargers using permit limits based upon a continuum. Should a permit writer, however, on a case-by-case basis find such an approach useful, the regulations provide sufficient latitude. In addition, as discussed below, the final regulation has addressed the reporting requirements concern and reduced the reporting burden to a minimum. Furthermore, notification of increased production levels is not required when the permit includes a continuum, rather than a tiered approach.

Several other commenters thought that the reporting requirements should be changed. One commenter thought that it may not always be possible to give advance notice two business days before each month of production increases. Although a discharger may not always be certain that production will change two business days before the ensuing month, he nevertheless will know whether there is a reasonable likelihood. It is a good business practice to conduct advance planning of production levels on at least a monthly basis so that production personnel, materials and other factors can be coordinated. Since the notification process is only two days in advance of monthly production change, information concerning the likelihood of a change should be readily available to the permittee. If the permittee thinks there is a reasonable likelihood that production will increase, he should submit a notice indicating the anticipated production level, otherwise he would not be eligible for the higher limit. The notification requirement may also benefit permittee pollution control programs since it will encourage permittees to effectively plan and coordinate their pollution control programs and production levels.

Of course, when the discharger submits notification, the higher limit applies only if the production actually increases. If production does not increase, the permittee must comply with the limitations applicable to the actual production for the period. Thus, permittees are not rewarded for overestimating future production. EPA and States will track compliance against limitations corresponding to actual production, irrespective of any notices submitted by permittees. To track compliance in any other way would be unfair to permittees or would benefit dischargers that inflate production values.

The notification requirement applies whenever a permittee wants to be eligible for a discharge limit other than the lowest limit in the permit. The

notice, however, does not have to be limited to an ensuing 30 day period, as EPA proposed, if the discharger expects to qualify for a higher limitation over a longer period of time. For example, if a discharger expects to be producing at a higher level for six months, the Agency sees no reason for requiring notification before each month. When submitting the notice of future discharge levels, the permittee should specify the period of time for which the higher anticipated level will apply. If the period covered by the notice extends beyond the ensuing month, then the notice should specify the reasons why the higher production level is anticipated. A new notice is required (1) to cover a period or production level not covered by a prior notice or (2) 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. Permitting authorities will assume that the facility is operating at the higher level (except for possibly an interim month) until the end of the noticed period or until a new notice is received indicating production at an even higher level (although compliance will still be tracked against the actual production levels).

The notices will provide inspectors with the knowledge of the levels at which the facility expects to operate at the time inspections are performed. The discharge monitoring report (DMR) for each period must contain the level of production that actually occurred. Dischargers must also identify on the DMR the permit limits that correspond to the actual production level, since EPA will track compliance against such limits.

Furthermore, to obtain the actual production figures and determine applicable limits for compliance monitoring purposes as soon as possible, it will usually be appropriate for dischargers with alternate permit limits to submit DMRs on at least a monthly basis. EPA does not expect monthly submission to result in a change in total reporting burdens, since the dischargers most likely to have alternate limits are generally major facilities with monthly DMRs requirements in their current permits.

One commenter objected to the reporting and publicizing of anticipated production schedules and actual production figures. Anticipated production information is vital to the permit writer if the Agency is to provide alternate permit limits. Actual production figures also must be reported to EPA in order for EPA to determine compliance with the appropriate

discharge limit. Although this information would be available to the public upon request, EPA does not plan to publish the information. However, to restrict access to this information would prevent the public from evaluating compliance.

A few commenters pointed out that the preamble to the proposed regulations was helpful in clarifying the "reasonable measure of actual production" standard. As stated in the preamble to the proposed regulation, § 122.45(b)(2) [CPR § 122.63(b)(2)] requires that production based permit effluent limitations be based on some "reasonable measure of actual production of the facility, such as the production during the high month of the previous year, or the monthly average for the highest of the previous 5 years." As stated in the preamble to the proposal, the operative requirement of this provision is that the permit be based on a reasonable measure of actual production. The examples given are simply examples, and merely illustrate typical acceptable measures. Other measures of actual production are entirely acceptable if the Director finds them "reasonable". To clarify that the examples are not the operative requirement, EPA has deleted them from the final rule. The regulations will now only require use of a reasonable measure of actual production.

In addition, the alternate permit limitations approach should avoid the controversial nature of determining actual production. Instead of having permit limitations potentially based upon a "worst case scenario", i.e., the period of maximum production, alternate limitations allow the limitations to correspond to varying production levels. Thus, when alternate limits are used, average production measures can be used as one reasonable measure of actual production, unless an effluent limitations guideline specifies otherwise. For example, the alternate permit limitations approach would allow permit writers to take into account changes in production levels using long-term average values, instead of relying on a short-term maximum level of production to cover normal day-to-day variations.

One commenter provided specific descriptions of two facilities which he thought met the criteria of the examples of a "reasonable" measure provided in the preamble. It is not appropriate to respond to specific permit situations in the context of these general regulations since all the facts of the situation may not be available.

One commenter objected generally to the use of mass-based (as opposed to

concentration-based) limits and particularly those based on production. Permit writers are encouraged to express limits in terms of both mass and concentration. Mass-based limits are necessary and encouraged to prevent the use of dilution as a means of treatment and also, where water quality is limiting, control total loadings in regard to the assimilative capacity of the receiving water body. Concentration-based limits ensure proper operation of treatment facilities regardless of raw wastewater load and protect against water quality impacts where pollutant concentration is important (e.g. toxic pollutants). The amended regulation provides the procedural means for implementing production-based limits. Comments about the appropriateness of a production-based limit should be submitted during the comment period for the relevant effluent guideline or where the limit is not based on a guideline, for the draft permit.

4. EPA action. EPA has expanded the proposal. The final regulation allows industries other than automotive manufacturing to be covered by alternate permit limitations and alternate limits to be written if there is an expected increase or decrease in production levels during the permit term.

J. Imposition of Water Quality Conditions Stayed by a Court or Agency (40 CFR 122.44(d)(3) [CPR § 122.62(d)(3)])

1. Existing rules. Section 401 of the CWA requires EPA, before issuing an NPDES permit, to obtain from the State in which the discharge originates a certification that the discharge, under the terms of the permit, will comply with State legal requirements, including water quality standards. If the State waives certification or fails to act within a "reasonable period of time (which shall not exceed one year)," then EPA may issue the permit without certification.

Section 124.53 of the NPDES regulations provides that the State will be deemed to have waived certification of the conditions in a draft permit if it has not responded within a specified time, not to exceed sixty days, unless the EPA Regional Administrator authorizes a longer period. This waiver period assures that the issuance of NPDES permits is not delayed until State certification issues are resolved in all cases. Generally, sixty days have proven to be a reasonable and achievable time frame for certification.

In addition, § 122.44(d)(3) [CPR § 122.62(d)(3)] provides that if a State certification is stayed by a court or State board or agency, EPA shall include

conditions in the permit which may be necessary to comply with section 301(b)(1)(C) of the Clean Water Act. Section 301(b)(1)(C) requires NPDES permits to include any more stringent limitations established under State law or regulations or any other Federal law, including those necessary to meet water quality standards.

2. Proposed changes. EPA proposed that, if a State certification is stayed by a court or by a State board or agency, States would have sixty days in which to submit the certification before the certification is deemed waived. The proposal responded to the industry litigants' concern that if EPA issues the permit without giving the State an opportunity to resolve its proceedings, the State's proceedings would effectively be moot. The proposed regulation would allow a State an opportunity to complete its review proceedings prior to the issuance of the permit.

3. Comments and responses. Some commenters recognized the proposed rules as a reasonable compromise between EPA's interest in prompt permit issuance and the permittee's interest in ensuring that his permit incorporates finally effective State requirements which may have been revised as a result of their being challenged. Other commenters questioned EPA's authority to deem certification waived within sixty days as being inconsistent with section 401(a)(1) of the Act. They suggested a longer period of time (e.g., from six months to a year) is warranted, since it is unlikely that a State could complete judicial or administrative proceedings in sixty days.

According to the legislative history of this provision, the State certification procedure was included in the CWA to provide a State water pollution control agency an opportunity to determine whether or not effluent limitations established for dischargers in an EPA issued permit are at least as stringent as any applicable State requirements. (See Senate Consideration of the Report of the Conference Committee, October 4, 1972, 93rd Cong., 2d Sess. (1972), reprinted in Environmental Policy Decision of the Library of Congress, A Legislative History of the Water Pollution Control Act Amendments of 1972, 93rd Cong., 1st Sess., 176, Serial No. 93-1, hereinafter referred to as Legislative History.) Section 401(a)(1) requires the Agency to provide a reasonable period of time, not to exceed one year, before State certification is deemed waived. The waiver provision of section 401 was provided to assure that a State's inaction would not

frustrate the application for a federal permit. See H.R. Rep. No. 92-911, 920 Cong., 2d Sess., 22 (1972) reprinted in Legislative History, p. 809.

In choosing a "reasonable time period", the Agency had to balance the opportunity for a State agency to evaluate and assure compliance with State requirements, the permittee's interest in assuring that its permit reflects State regulations which may ultimately be revised as a result of their being challenged, and the goals of the Clean Water Act to assure prompt permit issuance and compliance with statutory deadlines. In § 124.53 EPA chose sixty days as the waiver period, agreeing with commenters that delays caused by the State certification process to the NPDES program would be unwarranted if a year were allowed for certification, See 44 FR 32880 (Revision of NPDES regulations, June 7, 1979). Consistent with that determination, today's rulemaking would provide another sixty day period prior to issuance of the permit if the certification is stayed by a court or State board or agency.

EPA recognizes that in some instances States will not be able to resolve their proceedings in sixty days or even in one year, the maximum time allowed under section 401(a)(1) of the CWA. In some cases, however, States can complete review proceedings quickly. EPA has concluded that it is reasonable to allow sixty days from the staying of a certification for a State to resolve issues. This time frame is consistent with the original certification period provided in § 124.53 and is based on the same balancing of interests reflected therein.

It is important that NPDES permits be issued in a timely fashion to assure compliance with the Act and, where necessary, to avoid unwarranted delays in the construction and operation of new facilities. No evidence has been submitted to EPA demonstrating that a six-month time period, or any other alternative period, would assure resolution of a significantly larger number of State proceedings so as to warrant delays in the NPDES permit issuance process.

Sixty days is a minimum time period and does not preclude EPA from delaying permit issuance if it is apparent the State decision is imminent. On a case-by-case basis, EPA has the discretion to wait and incorporate the State decision. In addition, even if EPA chooses to proceed, if a modified State certification is received prior to final Agency action on the permit, the permit will be modified to issuance, if necessary, to be consistent with the certification. See § 124.55.

Regardless of whether a State has certified or waived certification, EPA has an independent obligation to include in permits limitations necessary to comply with State law. See section 301(b)(1)(c) of the CWA and Decision of the General Counsel No. 58 (March 29, 1977). Any permit issued by EPA must protect the State's interest by assuring compliance with State standards. In addition, the permittee's interests are protected even after EPA has issued the permit. If the State proceedings determined that a State standard which has been incorporated into the permit is invalid, the permittee may seek a permit modification.

One commenter stated that the proposal provides a discharger opposed to conditions of State certification with the incentive to intentionally delay State proceedings. The commenter suggested that the certification should not be deemed waived if the State is unable to complete judicial or administrative proceedings due to the discharger's failure to cooperate.

EPA disagrees that its proposal provides an unfair incentive for intentional delays. EPA's ability to proceed with permit issuance after 60 days, regardless of whether State proceedings have been completed, in most cases will eliminate any advantage to delay. In situations where a discharger is delaying solely because it believes a determination by EPA will be more advantageous, EPA does have the ability to extend the 60 day period to allow more time to complete State proceedings. In addition, the new regulation in fact makes it more difficult for a discharger to avoid the State certification requirements because it provides the State with an additional sixty days in which to complete State proceedings beyond that provided in the current regulations. However, we caution that EPA should not become involved in findings of fact as to whether lack of resolution of a State's proceedings is due to a discharger's failure to cooperate.

One commenter suggested that alternative means, such as the State/EPA agreement, be used to deal with permit certification "log jams" that may occur. EPA recognizes that the State/EPA agreement and other means may be needed to assure timely State certification and this is not precluded by the regulations. It is always preferable, from EPA's standpoint as well as the States, to have State certification prior to EPA's issuance of a permit and EPA will continue to work to assure that this is done. The regulations, however, are needed to assure a consistent method of

dealing with the unusual case of procedural delay.

4. *EPA action.* Based on review of the proposal and the comments, the amendment is promulgated as proposed.

K. Incorporation of NEPA-based Conditions in Permits (40 CFR 122.7(g) [CPR 122.12(g)], 122.29(c)(3) [CPR 122.66(c)(3)], 122.44(d)(9) [CPR 122.62(c)(9)], 124.85(e), 124.121(f)]

1. *Existing rules.* Under section 511(c) of the CWA, the issuance of an NPDES permit to a new source is subject to review under the National Environmental Policy Act of 1969 (NEPA). This may require the preparation of an Environmental Impact Statement (EIS). Several sections of the NPDES regulations deal with the incorporation of EIS-related conditions in new source NPDES permits. Section 122.44(d)(9) [CPR § 122.62(d)(9)] provides that when EPA is the permitting authority, new source permits shall incorporate requirements, conditions or limitations under NEPA and section 511 of the CWA. Similarly, § 122.29(c)(3) [CPR § 122.66(c)(3)] requires Regional Administrators to issue, condition, or deny new source permits after a NEPA review, including an EIS, if prepared. Section 122.47(g) [CPR § 122.12(g)] notes that NEPA may require the inclusion of EIS-related conditions, as described in § 122.29(c)(3).

2. *Proposed changes.* In response to litigants' concerns that NEPA could not legally be used as broadly in the permit process as EPA regulations provided, EPA proposed several changes. First, EPA proposed to modify §§ 122.7(g), 122.29(c)(3), and 122.44(d)(9) to clarify that NEPA cannot be used to review effluent limitations or other requirements established by the CWA or to set such effluent limitations. Section 511(c)(2) of the CWA expressly prohibits the use of NEPA for such purposes. EPA also proposed to revise these sections to explain that, in all other respects, the regulations take no position on the circumstances under which NEPA conditions (other than effluent limitations) may be imposed in NPDES permits. The proposal was intended to eliminate the implication that EIS-related conditions must be incorporated in permits and to allow the appropriateness of EIS-related conditions (including whether any such conditions should be incorporated) to be resolved in the context of specific permit issuance.

EPA also proposed a new section to its evidentiary hearing rules (§ 124.85(c)) to provide that evidence of

environmental impacts of a facility may be submitted at an evidentiary hearing concerning a new source subject to NEPA if the evidence would be relevant to the Agency's obligations under § 122.29(c)(3). This proposal would also apply to Non-Adversary Panel Procedure (NAPP) hearings through a revision to § 124.121(f). (The existing evidentiary and NAPP hearing regulations contain no specific provisions concerning the admission of evidence on environmental impacts.) In addition, for sources that hold final RCRA, PSD, UIC, or ocean dumping permits, the proposal would also bar the admission of evidence and cross-examination related to environmental issues that were or could have been considered in the permitting proceedings for these permits. Under the proposal, the Presiding Officer would have the discretion to admit portions of the record from those permit proceedings in order to fulfill evaluation obligations. The proposal was intended to avoid having an evidentiary or NAPP hearing on an NPDES permit subject to NEPA become a forum for reexamination of decisions under other statutes to which NEPA does not apply. The proposed rule would thus limit the scope of evidence that could be submitted at hearings to the scope of analysis required under NEPA.

3. Comments and responses. One commenter supporting the proposal states that EPA has no authority to include EIS-related conditions in permits. Several others added that EPA could only impose NEPA conditions related to the permitted discharge. An opposing commenter objected that the proposed change violates NEPA and reverses EPA's previous interpretations that EPA could condition or deny a permit based upon non-water quality impacts.

After careful consideration of these comments and the statutes, the Administrator has determined that NEPA, in conjunction with the CWA, authorizes the Agency to deny or impose conditions, including non-water quality related conditions, in NPDES permits on the basis of the NEPA review. Section 511(c)(1) makes clear Congress' intent that NEPA applies to the issuance of an NPDES permit to a new source. That review might be meaningless if EPA had no authority to consider and act upon its results. Thus, EPA has consistently taken the position that EPA can take appropriate actions by conditioning or denying the permit to mitigate or prevent unacceptable environmental impacts identified by the EIS. This position is supported by the legislative

history of the CWA and NEPA case law. (See Opinions of the General Counsel Nos. 76-18 and 76-19 (September 23, 1976).)

The authority to include conditions related to the EIS would also apply to non-water quality impacts identified in the EIS. Section 511(c) does not limit the scope of the NEPA review, except to prohibit EPA from reviewing or establishing effluent limitations. EPA interprets this to imply that the Agency may consider all other results of the environmental review. The Administrator may impose appropriate non-water quality conditions using his authority to condition or deny permits under section 402(a)(1) of the CWA.

The proposed regulation would not change this position. NEPA does not mandate that EPA take any particular action as a result of a NEPA review, but rather grants the Agency discretion to determine what action is appropriate. EPA's change to the provisions related to NEPA conditions will still authorize EPA to impose such conditions. The only changes will be (1) to allow questions of whether particular permit conditions based upon the EIS are appropriate or authorized to be resolved in the permit issuance process and (2) to remove any implication that EPA must always include such conditions.

A commenter asserted that NEPA requires that EPA consider using more stringent effluent limitations to satisfy NEPA requirements. It was suggested that "there may be circumstances in which, for an individual site, more stringent effluent limitations ought to be considered since they may provide a better balance of costs and benefits than would non-water quality conditions that EPA could impose in the permit. Since this suggestion directly conflicts with the language of section 511(c)(2), EPA concludes that it would not be permissible under the statute. EPA may consider the entire EIS in deciding whether to issue or deny an NPDES permit or include mitigating measures other than effluent limitations, but EPA has no authority to establish or review effluent limitations based upon the NEPA review. More stringent limitations may not be imposed if not otherwise authorized by the CWA. EPA does have authority to impose limitations in addition to those in an applicable New Source Performance Standard (NSPS), under section 402(a)(1) using the permit writer's best professional judgement (BPJ), if an NSPS does not address a particular waste stream or pollutant present in the discharge and it is determined such controls are necessary. (See discussion above, Part F.) In such a

case, NEPA would not be the basis for establishing such BPJ limitations, but rather EPA would develop such limitations as necessary to meet the requirements of the CWA, using information from the EIS in addition to other sources. EPA can also impose limits more stringent than an NSPS where necessary to comply with water quality standards or address other water quality concerns, even if the EIS was used to identify the impacts.

Another commenter stated that the proposal conflicted with the New Source Performance Standards for the Ore Mining and Dressing Point Source Category (49 CFR Part 440; 47 FR 54593, December 3, 1982). That standard specifically exempted the Quartz Hill Molybdenum Project from coverage under the standard (§ 440.100(b)) to allow full consideration of non-water quality environmental impacts through an EIS the NEPA review was triggered by the Alaska National Interest Lands Conservation Act, not the CWA). (See 47 FR 54601, December 3, 1982). The commenter stated that the proposed change would eliminate all possible bases for the development of an NPDES permit.

EPA does not agree that the revision will make permit issuance impossible. The Quartz Hill Project is not a new source within the definition of § 122.2 [CPR § 122.3], since it is specifically excluded from the Ore Mining NSPS and is not covered by another NSPS. Therefore, the NPDES permit for the facility will be based on the permit writer's BPJ under section 402(a)(1) of the CWA and the Director may include such conditions as are necessary to comply with the Act. In issuing the permit, the Director may use all available information to determine what effluent limitations are necessary to meet the requirements of the CWA. This information could include the EIS.

Several commenters opposed EPA's proposed limitations on the admission of evidence at evidentiary and NAPP hearings. One of these suggested that issues that were not raised in the prior permit decision should not be barred in the NPDES permit hearing. Another suggested that the Presiding Officer should be authorized to make an independent determination of whether to allow admission of evidence. EPA has concluded that these suggestions could allow undue complication of NPDES proceedings. The proposal eliminates unnecessary duplication of effort and relitigation of issues while still ensuring that EPA meets its NEPA review responsibilities. EPA does not interpret the limited applicability of NEPA to new

source NPDES permit proceedings under section 511(c) to authorize reexamination of determinations made by EPA under other statutes to which NEPA does not apply. For example, PSD determinations, like all EPA determinations under the Clean Air Act, are exempted by statute from NEPA's EIS requirements. (See section 7(c)(1) of the Energy Supply and Environmental Coordination Act, 15 U.S.C. 793(c)(1).) The limitation on the admission of evidence also carries out Congress' directive in Section 101(f) of the CWA that "the procedures utilized for implementing this Act shall encourage the drastic minimization of paperwork and interagency decision procedures, and the best use of available manpower and funds, so as to prevent needless duplication and unnecessary delays at all levels of government."

In response to the comments, EPA has modified the final rule to clarify that the limitations on the admission of evidence at EPA hearings applies only where the previous permit proceedings were held by EPA. EPA cannot delegate its NEPA responsibilities to States. *Stuebting v. Brinegar* 511 F.2d (2nd Cir. 1975); *Greene County Planning Board v. FPC* 455 F.2d 412 (2nd Cir. 1972), cert. den. 409 U.S.C. 849 (1972). Therefore, EPA can limit admission of evidence that could have been submitted at a previous hearing on a permit for the facility under a different program only if the permit was issued by EPA. States approved to administer other permit programs may make decisions on such other permits that address issues relevant to EPA's NEPA review. However, since these issues were previously considered only by the State, evidence on these issues is admissible at an EPA-held hearing for a new source. Otherwise, EPA would have impermissibly authorized the State to carry out EPA's NEPA responsibilities.

4. *EPA action.* The language of today's final rule is the same as the proposal, except for the revision to § 124.85(e) clarifying that the limits on admissibility at hearings of evidence on environmental impacts applies only if the issues could have been raised at prior EPA hearings. Sections 122.47(g), 122.29(c)(3), and 122.44(d)(9) have been revised as proposed to make clear that, under section 511(c)(2) of the CWA, NEPA cannot be used to review effluent limitations or other requirements established under the CWA or to set such limitations. These revised provisions now make clear that, in all other respects, the regulations take no position on particular circumstances under which NEPA conditions (other than effluent limitations) may be

imposed in NPDES permits. These revisions do not substantively change EPA's authority to impose EIS-related conditions.

EPA will continue to impose EIS-related conditions in permits in appropriate circumstances. For example, conditions have been used to limit the times of the year during which discharges are authorized where such discharges may have an impact upon fish spawning. EPA has also used EIS-related conditions to require consultation with appropriate State officials by coal mine operators in archeologically important areas. Where a NEPA review indicates that such conditions are appropriate, EPA will use them.

New § 124.85(e) provides that evidence on environmental impacts of a facility may be submitted at a hearing for a new source subject to NEPA if the evidence would be relevant to the Agency's obligations under § 122.29(c)(3). That section, in turn, requires EPA, to the extent allowed by law, to conduct an evaluation of significant environmental impacts of the proposed action. Thus, the scope of the evidence on environmental impacts admissible at a NPDES hearing turns ultimately on the scope of analysis required by NEPA.

In order to minimize delay and duplication of effort, § 123.85(e) also provides that where a source holds a final EPA-issued RCRA, PSD, UIC, or ocean dumping permit, no evidence may be admitted nor will cross-examination be allowed with respect to issues that were considered or could have been considered in those permit proceedings, even as to matters that may have been within the proper scope of NEPA analysis. In such cases, the Presiding Officer may (to the extent required by NEPA) instead admit relevant portions of the record of the PSD, RCRA, UIC, or ocean dumping proceedings. This evidence may be necessary to perform the balancing of costs and benefits required by NEPA.

L. Compliance Schedule Prohibition (40 CFR 122.47, 122.29(d)(4) [CPR §§ 122.10, 122.66(d)(4)])

1. *Existing rule.* The current regulations treat new sources, new dischargers and recommencing dischargers differently from existing sources and do not allow them to be placed on compliance schedules to meet permit limitations. Permits issued to existing sources may contain compliance schedules, but new sources, new discharge and recommencing dischargers must install and start up all pollution control equipment prior to

discharger and comply with their permit limitations within the shortest feasible time, not to exceed 90 days following commencement. The current regulations treat these dischargers differently because new sources and new dischargers have never operated under a previously issued permit and, like recommencing dischargers which begin to discharge after terminating operations, are considered to be in a better position than existing sources to install and "start up" their equipment and meet their permit limitations. Existing sources, on the other hand, may need additional time to upgrade their treatment technology to meet new permit limitations.

2. *Proposed changes.* Industry litigants challenged the compliance schedule prohibition on the grounds that it was too inflexible and did not address the situation when EPA issued or revised requirements after a facility began to construct but before it began to discharge. Industry argued that such a facility should be given a reasonable time to adjust its equipment to comply with newly issued or revised requirements. In response to these concerns, EPA proposed to allow permits issued to new sources, new dischargers and recommencing dischargers to include compliance schedules which allow those dischargers to meet their permit limitations within a reasonable time after discharge begins rather than in all cases at the time of discharge. Under the proposed regulations, reasonable compliance schedules could be issued to new sources and new dischargers if requirements were issued or revised after construction began but less than three years before they begin to discharge. Because construction is not an issue with recommencing dischargers, the proposal allowed them to be placed on compliance schedules if requirements were issued or revised less than three years before discharge recommences.

3. *Comments and responses.* We received five comments on the proposal. All comments were from industry and all supported the proposed change. One commenter suggested that we should conform the proposed change to the section on new sources and new dischargers.

4. *New action.* Based on the comments received, we are promulgating the final regulation as proposed and cross-referencing it in § 122.29(d)(4) [CPR § 122.66(d)(4)] (New sources and new dischargers).

M. Notice of Physical Alterations or Additions (49 CFR 122.41(1)(l) [CFR § 122.7(1)(l)]

1. Existing rule. The existing rule requires the permittee to give notice to the Director of any planned physical alteration or addition to the permitted facility. The rule was based on the rationale that notice of such changes would enable the Director to decide whether a permit modification was necessary.

2. Proposed changes. The proposed regulation would require permittees to give notice to the Director of physical alterations or additions which could significantly change the discharge. The proposal further provides that this notice applies to pollutants for which the Director would not otherwise receive notice through (1) compliance reporting for pollutants limited in the permit or (2) notification of toxics under § 122.42(a)(1) [CFR § 122.61(a)(1)]. The proposal recognized that many industrial facilities frequently undergo physical alteration or additions which are minor and have little or no impact on a permittee's discharge and thus, reporting all such changes would be unnecessarily burdensome. Notice of only those changes which could result in significant changes to the permitted facility's discharge should provide EPA or the State permitting agency sufficient information to determine the need for permit modification.

3. Comments and responses. EPA received ten comments, all supporting the proposal. Several commenters stated that most alterations and additions to industrial facilities are minor and have little impact on the permittee's discharge. Several other commenters felt that the existing rule created an unnecessary reporting burden on permittees. Some commenters noted that the proposal ensured that EPA would receive sufficient information to assess permit compliance and to decide whether permit modifications are necessary.

Commenters also contended that the existing rule exceeded EPA's authority under the CWA. EPA does not agree that the original rule exceeded EPA's authority under the CWA, since EPA has broad authority under section 303 of the Act to require recordkeeping and reporting. However, EPA has concluded that notice of every physical alteration or addition is unnecessary, since many changes have little impact on a permittee's discharge and would create an unnecessary reporting burden. Under the final regulation, EPA will still be kept informed of significant changes to the permitted facility which could result in a permit modification.

One commenter asked that the word "significantly" modify both "change" and "increase." EPA interprets "significantly" to modify both verbs, making such a change unnecessary.

4. EPA action. EPA is promulgating the final rule as proposed, with some minor clarifications. The rule will provide the Director with sufficient information for evaluating permit compliance or the need for permit modification, without imposing unnecessary reporting requirements. The second sentence of § 122.41(1)(l) has been split into two sentences to clarify Agency intent that the toxics notification under § 122.42(a) [CFR § 122.61(a)] and reporting on pollutants limited in the permit are separate requirements that do not depend on a significant change in the nature of or increase in the quantity of pollutants discharged. EPA has also added a sentence to clarify the Agency's intent that any change to the permitted facility which may result in a new source must be reported to the Director, allowing him to make a new source determination. Without such notice EPA may not become aware of changes to an existing facility which would be subject to new source performance standards.

EPA has also deleted "For NPDES permittees," since under the deconsolidated regulations this provision only applies to NPDES permittees. Finally, the reference to § 122.42(a)(1) [CFR § 122.61(a)(1)] has been changed to reflect the renumbering sequence of the April 1, 1983 deconsolidation.

N. Signatories to Reports (49 CFR 122.22(b)(2) [CFR § 122.6(b)(2)])

1. Existing rules. Under the NPDES regulations, all reports required by permits, and any other information requested by the Director, must be signed by a principal executive officer of a corporation or a duly authorized representative of the executive officer (§ 122.22(b)(2) [CFR § 122.6(b)(2)]). The authorization may be to either a person occupying a specified position or a named individual having responsibility for the overall operation of the regulated facility or activity. The signatory requirement is intended to ensure that the corporation is legally accountable for the information submitted. The signature on reports or authorization by a principal executive officer provides this accountability.

2. Proposed rules. Industry litigants complained that the signatory requirement was overly restrictive. Many companies have environmental managers who have responsibility within the corporation for ensuring

compliance with environmental laws. Litigants argued that these managers would best be able to judge the accuracy and completeness of NPDES reports since they are often in charge of the personnel who do the monitoring and sampling. EPA accepted the litigants' contentions and proposed to allow the principal executive officer to authorize an individual or position having overall responsibility for environmental matters for the company to sign reports.

3. Comments and responses. All twelve comments received on this proposed revision supported the change. Commenters supported the idea that environmental managers were the most logical persons to sign reports since they are knowledgeable of the subject area. They suggested that the change would contribute to the accuracy of the reports, while ensuring high level attention to the facility's activities. EPA agrees with commenters that environmental managers will, in many cases, have the best knowledge of the company's facility. Since these managers must still have overall environmental responsibility within the company, and since their authorization to sign the report must come from a principal executive officer, the proposal will also ensure corporate responsibility.

Two commenters, citing the preamble discussion of the proposal (47 FR 52075), questioned whether the signatory provision applied to environmental managers at an individual facility within a company. They suggested that if it did not, the regulation should be further modified. The preamble to the proposed regulation did use language which might have implied that individuals with overall responsibility for a particular facility could be delegated authority to sign reports. EPA's intent, however, was to allow authorization only to an environmental manager having overall responsibility within a company. This would not normally include persons or positions that have responsibility for environmental matters at an individual facility, or even an operating division of a large corporation. This is necessary to assure high level corporate knowledge of and responsibility for a corporation's pollution control operations. Even though environmental managers of individual facilities may have greater personal familiarity with the discharging facility, these individuals may not have sufficient authority to direct activities and responsibilities within the corporation or require changes to corporate procedures which guarantee that all necessary actions are taken to assure accurate reports and compliance.

Several commenters advocated that EPA modify the signatory requirements for permit applications to allow a person with the level of responsibility for signing reports to sign the applications. EPA addressed signatories for applications under a separate settlement agreement with industry litigants and promulgated final regulations. A discussion of the issue can be found at 48 FR 39611 *et seq.*, September 1, 1983.

4. *EPA action.* EPA is adopting a final rule equivalent to the proposal. This action is consistent with the Agency's action concerning signatories for permit applications (see § 122.22(a), 48 FR 39611, September 1, 1983) in that EPA intends to relax the burdens of the signatory requirement where adequate responsibility is ensured. However, unlike the revision to application signatory requirements, this rulemaking will allow environmental managers having overall responsibility for a corporation to sign reports if authorized. The less stringent requirement for reports will provide additional relief, but still ensure responsibility.

O. Bypass (40 CFR 122.41(m) [CPR § 122.60(g)])

1. *Existing rules.* The NPDES regulations prohibit bypass, which is defined as the intentional diversion of waste streams from any portion of a treatment facility. The regulation thus requires permittees to operate their entire treatment facility at all times. There are, however, exceptions to the strict prohibition on bypass even where effluent limitations may be violated as a result. Bypass may be excused if the bypass was unavoidable to prevent loss of life, personal injury or severe property damage and there were no feasible alternatives to the bypass. The "no feasible alternatives" provision is not satisfied if the permittee could have installed adequate back-up equipment as preventative maintenance or to prevent a bypass which occurred during normal periods of equipment downtime.

The prohibition of bypass applies even where the permittee does not violate permit limitations during the bypass. However, permittees may bypass if they do not exceed effluent limitations and if the bypass was for essential maintenance to assure efficient facility operations.

The bypass provision was intended to accomplish two purposes. First, it excused certain unavoidable or justifiable violations of permit effluent limitations, provided the permittee could meet the bypass criteria. Second, it required that permittees operate control equipment at all times, thus obtaining maximum pollutant reductions

consistent with technology-based requirements. Without such a provision, dischargers could avoid appropriate technology-based control requirements.

2. *Proposed changes.* Industry litigants argued that as long as a permittee complies with the effluent limitations in its permit, no further obligations are incurred. These litigants asserted that a decision to bypass treatment equipment is, and should be treated as, a part of the permittee's discretion in selecting how to treat his waste. At most, additional monitoring should be required during these periods of "in compliance" bypassing to assure permit limits are being met. Litigants from the oil and gas industry argued that even a requirement to monitor effluent during a bypass to ensure it was within permit limitations was too difficult and expensive at offshore facilities. They claimed the cost of transporting samples onshore for analysis would be a unique and significant burden on them.

In response to these concerns, EPA proposed to amend the provision prohibiting bypass where the resultant effluent is in compliance with permit limitations. The proposal would allow any bypass which does not cause a violation of permit limitations or other permit conditions. However, to ensure that permit limitations are, in fact, not exceeded during the bypass, the proposed amendment would require permittees to monitor all affected discharge points at the time of any bypass. In response to claims by offshore oil and gas facilities that they had special circumstances, the proposal allowed the Director to waive additional monitoring requirement if the permittee could otherwise demonstrate that effluent limitations will not be exceeded during the bypass.

EPA also proposed to revise the provision that the "no feasible alternatives" condition is not met if the permittee could have installed adequate back-up equipment. The proposal clarified that this provision is not intended to require the installation of back-up equipment in all cases merely because such equipment could prevent the need for a bypass. Rather, backup equipment would be required where the exercise of reasonable engineering judgment indicated that backup equipment was appropriate to prevent bypass during anticipated periods of equipment downtime or preventive maintenance.

3. *Comments and responses.* In general, industry supported the settlement agreement provision, while State environmental offices and environmental groups opposed the proposal. There are two issues involved

in this bypass provision. The first is whether bypass should be allowed when no violation of permit effluent limits results. The second is under what circumstances a permittee must install backup equipment to avoid bypasses during periods of equipment downtime or preventive maintenance.

Supporters of the proposal on the first issue claim there is no justification for prohibiting bypasses that do not cause a violation of permit limits. They argued that the November 18 proposal provides more flexibility in operation and maintenance without decreasing water quality and possibly reduces a facility's operating costs. One commenter supported the relaxation arguing that under the existing regulation an industry might have to shut down operations in order to comply with its NPDES permit even though it was meeting its permit limitations.

Commenters opposed to the proposal stated that a bypass of treatment equipment should be allowed only during essential maintenance and unavoidable breakdown periods and/or only under stated conditions upon approval of the Director. To do otherwise, it was argued, might encourage facilities to "experiment" by eliminating certain unit processes in an effort to cut costs, with potentially disastrous impacts. This group of commenters contended that the CWA intended permittees to fully and effectively operate at all times wastewater treatment equipment installed to achieve permit limits. The proposed provision was regarded as negating this requirement to properly operate and maintain wastewater treatment facilities. Several States pointed out that allowing treatment systems to bypass or run at lower efficiencies, as long as effluent limits or water quality standards are met, undermines the concept of technology-based standards and well-run treatment systems.

The only comment on the provision concerning back-up equipment was a request for clarification of what constitutes "reasonable engineering judgment."

The range of comments on this issue and further analysis convinced EPA that the November 18 proposal on bypass needed further refinement.

EPA believes that the restriction on bypasses where permit limits are being met is necessary for several reasons. EPA's effluent limitations guidelines and standards-setting process are predicted upon the efficient operation and maintenance of removal systems. A number of the effluent limitations

guidelines and standards upon which NPDES permits are based do not contain specific limitations for all of the pollutants of concern for the given industry. For example in the aluminum forming industry, toxic metals such as cadmium, nickel, copper, lead, and selenium found in this industry's wastewaters are not specifically regulated. The data available to EPA show that effective control of these pollutants can be obtained by controlling the discharge of the pollutants regulated by the standard (i.e., chromium, zinc, and aluminum) to levels achievable by the model treatment technology upon which the effluent guideline limits are based. Effluent limitations guidelines imposed on the pulp, paper and paperboard industry are based, in part, upon biological treatment and several pollutants of concern are not specifically regulated due to their effective removal of good biological treatment. Resin acids, fatty acids, bleach plant derivatives, and chloroform are found in wastewaters from plants in this industry and are found to be effectively controlled by efficient biological treatment. If bypass of treatment equipment is allowed, there is no assurance that these unlimited pollutants will be controlled, even though those specifically limited still meet permit limitations.

Similarly, permit writers who establish permit limitations based on their best professional judgment (BPJ) generally evaluate the relevant treatment system and often decide that limitations on all pollutants of concern are not necessary. This may be because, as in the effluent limitations guidelines process, it is determined that limitations on only some of the pollutants will provide adequate control of remaining pollutants so long as treatment equipment is properly operated and maintained. This eliminates the need to impose numerous pollutant limitations and corresponding monitoring requirements which are burdensome and costly to the permittee. It may also be that the treatment system will remove some pollutants to de minimis levels or levels which are difficult to accurately detect. Again the permit writer may determine that it is unnecessary to limit such pollutants which properly run treatment systems will remove. If bypasses of treatment equipment are allowed, it is possible that all pollutants of concern will not receive the level of control anticipated in the establishment of permit limitations.

Several commenters raised questions related to the extent of additional monitoring which would be necessary if bypass up to permit limits was authorized. Some disagreed with the need for special treatment for oil and gas facilities. EPA's decision not to change the existing regulations render this issue moot. Nonetheless, the Agency believes it is appropriate to respond to certain comments on the issue. EPA is persuaded that the special provision allowing offshore oil and gas facilities to dispense with monitoring during periods of bypass was unjustified. Very few oil and gas facilities are situated such that it is unusually or unduly difficult and costly to maintain contact with mainland entities. Considering the unlikelihood that other demonstrations of compliance could be adequately made and the potential for serious adverse cumulative impacts from noncompliance by offshore facilities, EPA now believes the special treatment of these facilities was inappropriate.

The second major bypass issue was when back-up equipment is required to prevent bypass. The only comment on the provision was a request for clarification of what constitutes "reasonable engineering judgment." EPA has concluded that the term "reasonable engineering judgment" by its very nature requires a case specific determination and should not be defined in the regulation because of the complex circumstances that arise in individual cases.

4. EPA action. Today's final rule differs from the November 18 proposal. EPA is retaining the existing provision which prohibits bypass even if effluent limitations are not exceeded except for essential maintenance to assure efficient operation of the treatment facility. As described previously, bypassing may affect the effective removal of pollutants of concern which may not be specifically limited in the permit, but which are intended to be controlled.

In cases where in-process changes are made to eliminate or reduce pollutants limited in the permit, the permittee has the opportunity to petition the permitting authority to modify the permit limits. In addition, where a permittee wishes to permanently alter his treatment equipment, for example to replace an outdated component with more efficient, cost-effective equipment, a permit modification may be requested. At that time, the permitting authority may review the appropriateness of the request and the potential impacts of any changes to ensure all pollutants of

concern continue to be adequately controlled.

Generally, maintenance is that which is necessary to maintain the performance, removal efficiency and effluent quality of the pollution control equipment. However, for purposes of this section, it is necessary to distinguish between maintenance that is "essential" and that which is routine. Further, a distinction must be drawn between what is considered essential maintenance for industrial treatment systems and that for publicly-owned wastewater treatment plants (POTWs). Industrial facilities usually experience periods of nonprocess operation during which the facility operator can carry out the recommended maintenance procedures contained in the operation and maintenance manual for the facility and/or maintenance advised by the design engineer. Maintenance that can be performed during periods of nonprocess operation at an industrial treatment facility is considered to be routine maintenance, not essential maintenance. However, repairs and maintenance that cannot wait until the production process is not in operation would be deemed essential. If, for example, the seal on a valve malfunctions or a pipe bursts during production hours at an industrial facility and the facility operator bypasses that particular unit process in order to perform corrective maintenance, such maintenance would be considered essential. Of course, economic consideration alone would not be sufficient reason to qualify maintenance as essential.

Unlike most industrial facilities, POTWs are required to operate continuously. Therefore, maintenance must normally be conducted while the treatment facility is in operation. In this situation, it is often unavoidable to bypass certain equipment during maintenance. These maintenance activities would generally be classed as essential. However, since POTWs frequently have capacity exceeding normal loadings, maintenance can normally be conducted during periods of lower flow with no loss in treatment plant performance.

Seasonal effluent limitations which allow the facility to shut down a specific pollution control process during certain periods of the year are not considered to be a bypass. Any variation in effluent limits accounted for and recognized in the permit which allows a facility to dispense with some unit processes under certain conditions is not considered bypassing.

The bypass provision covering back-up equipment is promulgated as proposed. EPA believes that the existing provision could be interpreted to require unnecessary auxiliary treatment facilities. Necessary auxiliary facilities are those back-up systems which should have been installed in the exercise of reasonable engineering judgment to prevent a bypass from occurring during normal periods of equipment downtime or preventive maintenance.

P. Upset Defense (40 CFR 122.41(n), [CPR § 122.60(h)])

1. Existing rules. Several Courts have ruled that since the equipment underlying technology-based limitations is inherently subject to failure for reasons beyond the control of the operator, EPA must allow for upsets in applying these standards. See *Marathon Oil Co. v. EPA*, 564 F.2d 1253 (9th Cir. 1977); *FMC Corp. v. Train*, 539 F.2d 973 (4th Cir. 1976). (For a full explanation of applicable case law, see 44 FR 32863, June 7, 1979.) An upset is an exceptional incident in which there is a temporary and unintentional noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee (§ 122.41(n)(1)[CPR § 122.60(h)(1)]). For example, a power failure may cause a treatment system not to function, resulting in a permit violation before the facility can halt its discharge. Section 122.41(n) recognizes an upset as an affirmative defense to an enforcement action for violations of technology-based permit limitations. To establish an upset defense, a permittee must notify EPA of its occurrence within five days and, in any enforcement action, must demonstrate the specific cause of the upset and that the violation was beyond the permittee's reasonable control. Since permittees must develop the information necessary to establish the defense at the time of the upset, the demonstration requirements serve to encourage permittees to examine the treatment facility and to take steps to prevent future noncompliance resulting from the cause of the upset.

2. Proposed changes. Industry litigants argued that the upset defense should also apply to violations of water quality-based limitations, since compliance with these standards also depends upon technology. EPA proposed a change to extend the upset defense to permittees that violate water quality-based permit limitations. The proposal would require the permittee to demonstrate that instream water quality standards were achieved in all stream segments, and for all parameters that could have been affected by the discharge. EPA explained that it was not required to

provide an upset defense for water quality standards, since the CWA requires strict compliance with water quality standards, regardless of the efficiency of treatment technology. Nevertheless, EPA reasoned, there was no reason to penalize a discharger that can prove the occurrence of an upset if water quality standards were met despite noncompliance with permit requirements.

EPA also proposed to modify the requirement that permittees demonstrate the specific cause of the upset. Litigants were concerned that identification of specific causes would make the defense useless in many cases. To prevent an overly literal application of this requirement that might require a discharger to produce a scientifically impossible level of proof, EPA proposed to delete the word "specific."

3. Comments and responses. A number of commenters supported the proposal, stating that dischargers should not be penalized for an upset that violates water quality-based permit limits, but not water quality standards. Another commenter supporting the proposal stated that EPA should not require permittees to demonstrate that water quality standards were maintained throughout the upset. Several other commenters questioned the feasibility of implementing the proposal and, in particular, whether it would be possible for permittees to make the required demonstration.

After reevaluating the proposal in light of the comments on implementation, it is apparent that it is not practical to extend the upset defense to violations of water quality-based limitations. Failures of pollution control equipment can occur on water quality limited stream segments. However, water quality standards are established to protect uses of the water, and are legally required to be met all times. See CWA section 310(b)(1)(C). Any defense for upsets must ensure that water quality standards are achieved at all times throughout the upset. The proposal to establish an upset defense in permits, consistent with the CWA emphasis on protection and enforcement of water quality, would require a showing that water quality standards continued to be achieved in all stream segments, and for all pollutants, potentially affected by the discharge. Permittees would be required to begin monitoring the receiving waters as soon as the upset occurred and to continue to monitor until it was certain that the upset could no longer cause a violation of the water quality standards in the stream segment. To establish the defense, permittees would need to do

continuous monitoring on all stream segments that may be affected. If permittees were unable to perform such monitoring, they would be unable to use the defense.

Although the proposal would seemingly allow permittees to claim an upset defense, the costs, burdens, and technical difficulty of establishing that water quality standards were not violated would make the defense nearly impossible for permittees to establish. Since upsets are by definition unexpected, gaps in monitoring would inevitably occur at the onset of the upset condition. Gaps in the monitoring record could create uncertainty as to whether the permittee had complied with water quality standards at all times. In addition, questions could arise as to whether the permittee had monitored all appropriate stream segments. Monitoring and analytical costs for permittees trying to establish an upset defense are likely to be very high for all but minor upsets (for such upsets, EPA is likely to use its enforcement discretion anyway).

Since it would be almost impossible for a permittee to establish the upset defense, the proposed extension would be illusory; adding a provision to the regulations that suggests the existence of such a defense would merely create confusion. This does not mean that dischargers will be penalized whenever an equipment failure that is not within the operator's control occurs. EPA will continue to evaluate such discharges on a case-by-case basis and use its discretion in deciding whether to bring an enforcement action. This approach is more realistic than allowing an affirmative defense for upset that for most purposes cannot be substantiated by the requisite showing for water quality standard protection.

Several States opposed the proposal, suggesting that for violations of water quality-based permit limitations, the NPDES permitting authority should exercise its discretion to determine whether an upset was justifiable. One State went further to suggest that the entire upset provision be deleted and that enforcement discretion should be applied to all permit violations, with permittees left to establish their own defense. For upsets that result in violations of technology-based standards, EPA believes the upset provision is a more reasonable approach which is fully consistent with all legal opinions on the issue. Although most courts have concluded that EPA could rely on its enforcement discretion and need not provide a formal upset provision, EPA continues to believe that

all parties will benefit from allowing permittees an opportunity to present their claims in a formal judicial proceeding. The upset provision also comports with those decisions which have required some form of upset relief. (For a more thorough discussion of applicable case law, see 44 FR 32863 (June 7, 1979)). However, EPA agrees that reliance on enforcement discretion is best with respect to violations of water quality-based permit limitations.

Several persons commented on the proposed deletion of the word "specific" from § 122.41(n)(3)(i) [CPR § 122.60(h)(3)(i)]. Most supported the proposal, but one suggested the change was unnecessary. EPA believes the clarification is desirable since it will eliminate confusion over the meaning of § 122.41(n)(3)(i). This revision clarifies that the regulation does not require investigation to an impossible degree of certainty. For example, there may be cases where biological activity is disrupted in a treatment system, where no change in raw waste characteristics could be identified, and where a thorough investigation by the permittee could not identify the precise cause of the change resulting in the violation. Such evidence could be adduced to show the "cause" required by the regulation, even though the precise cause eluded detection.

EPA would also like to clarify whether a demonstration of "cause" of an upset required under § 122.41(n) can be based upon circumstantial evidence rather than direct evidence. It is EPA's intent that any demonstration of cause acceptable as proof of fact in court be available to a permittee seeking to utilize the upset defense. Proof of fact may be made through circumstantial as well as direct evidence. Indeed, circumstantial evidence may be all that is available. However, it is not enough simply to show that normal operating procedures were followed at the time effluent limitations were exceeded. The regulation requires at least a thorough investigation of the causes of an incident. Obviously, a claim of upset will be disfavored where previous violations have occurred and no efforts or insufficient efforts were made to identify and remedy the cause or causes.

One commenter felt that the upset defense should be available without limitation to all water quality limited dischargers in order to be consistent with the Agency's proposal of October 29, 1982 to revise regulations governing the adoption of water quality standards. The Agency has since promulgated water quality regulations different from

the October 29, 1982 proposal (see 48 FR 51400 *et seq.*, November 8, 1983).

4. EPA action. In view of the comments, we have reevaluated the proposed revisions to § 122.41(n) and decided to retain the existing regulations, except for the minor clarifying revision to the requirement that permittees demonstrate the cause of an upset (§ 122.41(n)(3)(i)). The affirmative defense of upset will thus only apply to violations of technology-based permit limitations. The upset defense is not available to permittees for violations of water quality-based permit conditions. EPA will rely on prosecutorial discretion and the facts surrounding the upset to determine whether to institute an enforcement action in any such case.

Q. Proper Operation and Maintenance (40 CFR 122.41(e) [CPR § 122.7(e)])

1. Existing rule. The existing regulations require all permittees to properly operate and maintain their treatment systems. The regulations provide several specific examples of proper operation and maintenance (O & M). This gives permittees notice of their responsibilities and gives permit authorities an additional enforcement tool when permittees are negligent. The ultimate objective is to reduce pollution by ensuring that treatment facilities operate at maximum efficiency.

2. Proposed changes. Industry litigants challenged these regulations on the grounds that their specificity improperly infringed upon internal plant management. They also were concerned with language stating that backup equipment must be properly operated and maintained could be interpreted to require such equipment in all cases. In response, EPA proposed to delete most of the specific examples of proper O & M and to clarify that this provision did not impose a requirement to install backup equipment. The proposed deletion of the examples was not intended to remove any obligation of the permittee to properly operate and maintain its treatment equipment but rather to provide greater flexibility to ensure that this is done. The backup provision would still require *available* backup systems to be properly operated and maintained.

3. Comment and responses. Six comments were received on this proposal. Five comments were from industry and supported the change, generally citing the litigants' concerns discussed above. One State agency objected to the proposal on the grounds that it gave too much discretion to the permittee to decide what constitutes proper O & M, and stated that backup

systems could be reasonably required in some cases. With regard to this comment, EPA has concluded that flexibility is justified and that the proposal still provides adequate environmental protection. The change is not meant to imply that the examples in the existing regulations are no longer considered elements of proper O & M. Permittees remain accountable for any O & M failings, as determined by the permitting authority, even if they occur in those areas deleted from the current regulations. With regard to the comment that installing backup equipment may often be reasonable, EPA agrees and emphasizes that such installation may still be required on a case-by-case basis by the permitting authority. Permit writers are also encouraged to be specific in formulating proper O & M requirements in the permit, especially where poor or inadequate O & M practices have caused problems in the past. This should help to avoid disputes later as to the degree of discretion allowed the permittee.

4. EPA action. The proposal does not restrict the permitting authority either in taking action for improper O & M or from requiring backup equipment to be installed on a case-by-case basis. It merely deletes certain examples of proper O & M and makes clear that installation of backup equipment is not a universal requirement. The final regulation is therefore promulgated as proposed.

R. Mistake and Failure of Technology To Meet Best Professional Judgment (BPJ) Limits as Grounds for Permit Modification (40 CFR 122.62(a) (16), (17) [CPR § 122.15(a)(5)])

1. Existing rules. The current regulations provide limited causes for modifying a permit during its term. These causes do not include as grounds for permit modification either correction of mistakes made at the time of permit issuance or failure of technology on which effluent limits were based to achieve the effluent limitations imposed in a best professional judgment (BPJ) permit. Under the current regulations, a permittee would have no immediate redress for BPJ permit limitations which appropriate, properly installed and operated treatment technology could not meet. A permittee would have to wait until its permit expired and was renewed before it could become eligible for different effluent limitations. In the case of technical mistakes, such as errors in calculations, or mistaken interpretations of law, the permittee would have no redress under the existing regulation except to correct

typographical errors. The Agency's anti-backsliding policy (§ 122.44(1) [CPR § 122.62(1)]) would prohibit reissuing a permit with less stringent limitations (See discussion in Part C, above).

2. Proposed changes. Industry parties to the settlement agreement were concerned that permittees may remain in violation of their permits for years before a change of effluent limitations could be obtained in a renewed permit. They were also concerned that technical mistakes could never be corrected since a reissued permit would be required to be as stringent as the original BPJ permit under the Agency's anti-backsliding policy. In response to this concern, EPA proposed to make both mistaken permit conditions and failure of technology to achieve BPJ limitations causes for permit modification.

3. Comments and responses. We received six comments on this proposal; all from industry and all favorable. In general, commenters stated that it was practical and fair for EPA to allow permits to be modified when mistakes are discovered and when properly installed and operated technology required by the permit fails to meet BPJ limitations.

One commenter requested that water quality-based permits be allowed to be modified when there has been a failure of approved technology. This commenter proposed that such a modification of the permit should only be effective until the water quality standards can be reconsidered by the appropriate agency.

Water quality standards are developed by the States, and issued, after approval by EPA, to protect designated uses for particular water bodies or streams. NPDES permits must include water quality-based limitations where the applicable technology-based limitations, whether derived from effluent limitation guidelines or on a BPJ basis, are not stringent enough to ensure compliance with the applicable water quality standards. At the point water quality standards are implemented in the permit issuance process, permit writers do not have the flexibility to reconsider the water quality standards to determine whether they are appropriate or technically achievable. To authorize the modification of an NPDES permit on the basis of BPJ considerations so that it no longer ensures compliance with existing water quality standards clearly cannot be allowed. In addition, to grant the permittee's request pending reconsideration of the water quality standards would result in a de facto change to the standards that is neither within EPA's authority nor appropriate. Rather, the commenter's request should

be dealt with in the State's standard setting process. Where a change has been agreed upon by the State, and approved by EPA, provisions for modifying an NPDES permit have already been provided for in the NPDES regulations at 40 CFR 122.62(a)(3) [CPR § 122.15(a)(3)].

One commenter was particularly concerned that the preamble discussion of the proposal drew an overly restrictive interpretation of the types of mistakes which would be grounds for permit modification. This commenter was especially concerned about permits written for new facilities well in advance of start-up and operation. The commenter urged that new information obtained about the particular situation surrounding a discharge be grounds for permit modification. The NPDES permit regulations already provide for permit modification in the event new information, which was not available at the time the permit was issued, is obtained after permit conditions have been established and where the information would have justified the inclusion of different limits at the time the permit is issued. See § 122.62(a)(2) [CPR § 122.15(a)(2)]. This cause adequately provides for permit modification in the circumstances reported by the commenter. However, if the permit was based on a promulgated new source standard, the permittee would be unable to obtain a permit modification (See Anti-backsliding discussion).

4. EPA action. As stated in the preamble to the proposal, whether a mistake results in overly lenient or overly stringent permit conditions, it makes sense to authorize permit modifications to correct the mistake. It also makes sense to modify permit conditions when the treatment technology upon which BPJ effluent limitations are based has been properly installed and operated but nonetheless fails to meet those limitations. In both cases, EPA acknowledges that it is unfair to force a permittee to remain in violation until the permit expires and is renewed. The change will allow EPA to correct earlier errors in permit conditions, such as the inclusion of incorrect compliance dates. The final regulation is promulgated as proposed.

S. Non-adversary Panel Procedures (40 CFR Part 124, Subpart F)

The Administrative Procedure Act (APA) allows decisions on the initial grant of a license or variance to be made by procedures less adversarial than traditional court room procedures, even where a formal hearing is required. Hearings on initial licensing are exempt

from formal evidentiary hearing requirements for a number of reasons, most importantly because the complex policy decisions in initial licensing are more akin to rulemaking than adjudication. Additionally, initial licensing decisions do not involve accusation of wrongdoing and, therefore, do not require "separation of functions" within the agency or an initial decision by a statutorily independent individual, such as an administrative law judge (ALJ).

EPA's non-adversary panel procedures for initial licensing were originally promulgated for the NPDES program on June 7, 1979, and revised to include other permit programs on May 19, 1980. Conceived as an innovative and efficient means of resolving disputed scientific and technical issues, these procedures depart from traditional evidentiary procedures in which adversaries present separate cases to an ALJ on a challenge to a final permit decision. Under the non-adversary procedures, participants present their views and arguments to a panel of EPA experts during a two-phased hearing on a draft permit. During the "legislative" phase, the panel explores issues and asks questions. Cross-examination can be ordered during the "adjudicative" phase if certain threshold conditions are met. After the hearing, the panel prepares a recommended decision which may be appealed to the Administrator, whose decision constitutes final agency action subject to judicial review.

1. Applicability of panel hearing procedures to initial licensing permits and variances (40 CFR 124.111).—a.

Existing rules. Non-adversary panel procedures are not mandatory. The current regulations grant the Regional Administrator the option to use either these procedures or traditional evidentiary hearing procedures for initial licensing and first grants of a variance. We acknowledge that panel hearings may not always be suitable for initial decisions, especially if the factual issues involved make the decisionmaking more akin to adjudication than to rulemaking. For these reasons, EPA made the decision to make use of non-adversary procedures dependent upon the discretion of the Regional Administrator.

b. Proposed changes. Industry litigants objected in general to the concept of non-adversary panel procedures, claiming that the procedures violate the formal hearing requirement of the Clean Water Act, that variance decisions do not constitute initial licensing, and that Congress never

intended the initial licensing section of the APA to apply to sharply contested issues of fact such as in NPDES permit proceedings. Specifically, litigants objected to the Regional Administrator's unilateral ability to invoke non-adversary procedures. EPA disagreed with industry's legal arguments and maintained its position that panel procedures are legal and provide an efficient, expeditious means of resolving technical and scientific issues. However, persuaded that panel hearings might not prove useful if invoked upon unwilling participants, EPA proposed that permit applicants must consent to the Regional Administrator's decision to use the panel procedures.

c. Comments and responses. EPA received eight comments on this issue, all favorable to the proposal. Some commenters repeated claims of illegal procedures and violations of procedural due process. EPA is unpersuaded by these legal arguments and continues to believe that non-adversary panel procedures for an initial grant of a permit or variance are authorized by the APA. (See 44 FR 32887-32891, June 7, 1979, for more detailed discussion of EPA's legal opinion.) Other commenters endorsed the non-adversary panel procedures, citing cost effectiveness, quicker permitting, better informed presentation of technical issues, and greater opportunity for public participation as the advantages of panel hearings. Nonetheless, they felt that use of such procedures should only be with the consent of the applicant.

d. EPA action. Based in part on an analysis of the legal arguments submitted by commenters and on a reevaluation of the role of panel hearings, EPA has decided to retain the regulation in its current form. Non-adversary panel procedures do not restrict the rights of applicants for first grants of permits or variances, and, therefore, the Agency considers it inappropriate to grant such applicants the authority to veto the informed decision of a Regional Administrator to convene a panel hearing. There is no evidence at all that Regional Administrators have invoked or will invoke panel hearings in inappropriate situations. Regional Administrators are in a better position than permit or variance applicants to decide whether certain procedures will aid decisionmaking or expedite permit issuance. For this reason, the sole authority to invoke the non-adversary panel procedures should remain with the Regional Administrator.

2. Role of panel members in panel hearings (40 CFR 124.120).—a. Existing

rules. As stated above, the APA exempts from initial licensing a number of evidentiary hearing requirements, including the concept of "separation of functions" within the agency. This allows initial licensing decisions to be "institutional" rather than adjudicatory and allows EPA to draw on the training and experience of a number of agency employees, including persons who participated in developing the draft permit. The current EPA regulations restrict the number of permit writers on a panel and require that there be at least two panel members who did not participate in developing the draft permit.

b. Proposed changes. Industry parties to the settlement agreement objected to permit writers as panel members on the grounds that it deprives permit applicants of any independent review of the draft permit by the agency, and violates the hearing requirements of the APA. In response to industry's objections, EPA proposed to limit panel members to EPA employees who did not participate in developing the draft permit. As stated in the preamble to the proposal, EPA disagrees with industry's legal arguments on this issue, but proposed the change to avoid the appearance of unfairness.

c. Comments and responses. Comments received on this issue supported the proposal to exclude permit writers as panel members.

d. EPA action. The final regulation is promulgated as proposed.

3. Scope of cross-examination (40 CFR 124.121 (a), (b)).—a. Existing rules. The existing regulations allow cross-examination in a non-adversary panel hearing solely on factual issues. (See § 124.121(a).) The regulation was intended to limit the scope of cross-examination on non-factual issues, since these issues can be better resolved through oral arguments and written presentations. See 44 FR 32886, June 7, 1979.

b. Proposed changes. Litigants were concerned that the limitations would prevent cross-examination on factual issues related to policy decisions. EPA, therefore, proposed to relax the restriction and allow cross-examination on policy questions, but only to the extent required to disclose the factual basis for the permit requirements. The proposal was intended to clarify that all factual judgments are eligible for cross-examination, whether or not they are related to policy judgments.

c. Comments and responses. All comment received supported EPA's proposal. Several commenters argued that there is no basis for treating cross-

examination in panel and evidentiary hearings differently. EPA disagrees with this view. The APA allows decision on the grant of an initial license or variance under procedures less adversarial than either courtroom or formal evidentiary hearings. Non-adversary panel hearings are initial licensing proceedings within the APA. However, while the law allows for different limitations on cross-examination, EPA believes it is reasonable to allow limited cross-examination on policy issues where necessary to resolve material factual issues.

d. EPA action. The final regulation on the scope of cross-examination is promulgated as proposed. The new regulation will extend to panel hearings the scope of cross-examination provisions now applicable to evidentiary hearings (§ 124.85(b)(16)). The regulation provides in § 124.121(b) (and in § 124.85(b)(16)), that no cross-examination shall be allowed on questions of policy except to the extent required to disclose the factual basis for permit requirements. This does not preclude cross-examination on facts which form the basis for EPA policy, if such cross-examination relates to the factual basis for permit requirements. Thus, for example, if it were EPA policy to require a specified frequency of monitoring for dischargers of certain pollutants, and if a permittee challenged such a proposed monitoring requirement in a permit subject to a hearing, the permit applicant would be allowed to cross-examine a witness on the factual basis for the required monitoring frequency or why the policy was applied to the applicant's situation. The witness (or EPA counsel) would not be able to terminate the examination simply by answering that the required frequency was EPA "policy."

T. Evidentiary Hearing Procedures

1. Obligation to submit evidence and raise issues (40 CFR 124.13, 124.14, 124.76).—a. Existing rules. The current regulations require all reasonably ascertainable issues to be raised and available arguments and supporting information to be submitted during the public comment period on a draft permit. If not raised or submitted during the public comment period, this information will not be allowed to be introduced in an evidentiary hearing without good cause. The purpose of these procedures is to encourage resolution of issues at the time comments are submitted on a draft permit, rather than in the far more burdensome context of an evidentiary hearing, and to link that hearing directly

to the preceding stages of permit issuance.

b. Proposed changes. Both environmental and industry litigants objected to these requirements on the grounds that the restriction on when evidence may be submitted conflicted with the formal hearing requirements of the Administrative Procedure Act. As a practical matter, litigants argued that the restrictions force parties to engage in "evidentiary overkill" when they disagree with permit terms at the draft permit stage. In response to these concerns, EPA proposed to require only that all reasonably ascertainable issues and available arguments to be raised during the public comment period. Generally, supporting information would not be required to be submitted during the comment period. Rather, all supporting material and factual grounds would be submitted during the public comment periods only if the Regional Administrator either believes that the permit will be contested or elects to reopen the public comment period. In either case, the Regional Administrator would have to determine that submission of evidence during the public comment period would expedite decisionmaking and therefore, require the upfront submission of supporting material in the public notice. If the Regional Administrator either decides that the permit will not be contested or elects not to reopen the public comment period, submission of supporting material and factual grounds would be allowed during an evidentiary hearing.

c. Comments and responses. The six comments EPA received on this proposal were from industry which generally supported the change. The American Petroleum Institute specifically endorsed the language in the preamble to the proposal which stated that Regional Administrators would most likely apply these procedures for submission of all information during the initial comment period primarily for major permits, such as for new factories or nuclear power plants, which are likely to be contested and which will involve complex technical issues.

d. EPA action. Based on these comments, the final regulation is promulgated as proposed. Section 124.14(a)(3) authorizes the Regional Administrator to require the submission of all evidence during the initial comment period where it reasonably appears that issuance of the permit will be contested and "collapsing the comment period" (i.e., requiring this information during the comment period) may substantially expedite the decisionmaking process. Collapsing the

comment periods in this manner may impose greater burdens on participants in the permitting process. Accordingly, the Regional Administrators should exercise this discretion with care. Also, Regional Administrators are encouraged to consult with permit applicants and other known interested persons before exercising their discretion to collapse the comment periods. Such consultation will tend to ensure that the decision is an informed one.

2. Ex Parte Communications (40 CFR 124.78(a)(1)).—a. Existing rules. The Administrative Procedure Act (APA) prohibits agency decisionmakers in formal hearings from engaging in *ex parte* discussions of the merits with "interested person outside the agency." 5 U.S.C. 557(d) The APA also contains a "separation of functions" provision which requires that no one involved in "investigative or prosecuting functions" may participate or advise in the decision, recommended decision, or agency review * * * 5 U.S.C. 554(d). The purpose of both requirements is to safeguard the administrative process and ensure impartial decisionmaking.

The current regulations refer to persons involved in "investigative or prosecuting functions" as members of the "agency trial staff" and, thereby, subject them to the *ex parte* rules during evidentiary hearings. Non-EPA witnesses are subject to *ex parte* prohibitions because they are considered "interested persons outside the agency." Under the current regulations, EPA witnesses in evidentiary hearings are not automatically included as part of the agency trial staff, nor are they considered "interested person outside the agency" for the purposes of *ex parte* communications.

b. Proposed changes. Industry parties to the settlement agreement objected to the special treatment afforded to EPA witnesses and claimed that these regulations violated the APA and that EPA's failure to designate its evidentiary hearing witnesses as part of the agency trial staff could result in improper *ex parte* contacts between those witnesses and the decisional body. In response to these concerns, EPA proposed to include as a member of the agency trial staff any EPA employee, consultant or contractor, who is either called as a witness by EPA or assisted in developing the draft permit that is the subject of the hearing. The preamble to the proposal emphasized, however, that EPA does not believe that this step is required by law. As stated in the preamble to the current regulations, witnesses from within EPA are subject to the

"separation of functions" provision only if they have performed "investigative or prosecuting" functions. (45 FR 33415, May 19, 1980). However, in order to avoid any appearance of unfairness, EPA proposed the above revision.

c. Comments and responses. EPA received three comments on this proposal which were from industry and supported the proposed change.

d. EPA action. The final regulation is promulgated as proposed.

U. Deferral of Hearing on New Source Determination (40 CFR 122.21(k)(4) [CPR § 122.53(h)(4)])

The Clean Water Act treats new sources differently from existing sources. New sources are subject to new source performance standards (NSPS) promulgated pursuant to section 308 which reflect the greatest degree of effluent reduction achievable through the application of best available demonstrated control technology (BADT). Existing sources, on the other hand are subject to different, often less stringent, technology-based effluent limitations, representing either best practicable control technology (BPT) or best available technology (BAT) or best conventional technology (BCT). The issuance of an NPDES permit to a new source may also constitute a major Federal action significantly affecting the quality of the human environment, triggering the environmental impact statement provisions of the National Environmental Policy Act (NEPA). (CWA section 511(c)). For these reasons, the decision of whether a facility is a new source (new source determination) is as important to the discharger as it is to the Agency. If dischargers or third parties disagree with the Agency's decision they may challenge the new source determination in an evidentiary hearing.

1. Existing rule. The current regulations allow the Regional Administrator to defer an evidentiary hearing on a new source determination until after a final NPDES permit decision is reached. The purpose of the regulation is to allow EPA to combine challenges to the final NPDES permit decision with challenges on the new source determination, and thus save Agency resources by conducting one evidentiary hearing.

2. Proposed changes. Litigants were concerned that deferral of a hearing on the new source determination could lengthen the permitting process and increase their costs if the original decision was changed in the hearing. EPA, therefore, proposed to authorize the Regional Administrator to defer an

evidentiary hearing on a new source determination only if all parties to the hearing agreed. The proposal would recognize that an early new source hearing could benefit the permit applicant by informing him of whether he would have to comply with BAT effluent guideline limitations or the generally more stringent new source performance standards. To defer such a hearing might later subject the applicant to potential additional construction costs to comply with new source requirements. The applicant might also be subject to unreasonable expense and delays caused by a NEPA evaluation, which was begun by EPA and later determined to be unnecessary by the hearing decision.

3. Comments and responses. The four commenters on this issue all supported the EPA proposal, noting that the Regional Administrator should not be allowed to defer the new source hearing where any party requested an early hearing. The commenters stated that an early hearing on a new source determination would resolve the important question of what treatment standards the facility must be constructed to meet. Three of the commenters were concerned that a deferred hearing would force the applicant to comply with costly additional new source requirements at the end of the permit issuance process (presumably when the facility plans to begin operation). Two commenters when the facility plans to begin operation). Two commenters also noted that an early hearing would help to resolve EPA's obligations under NEPA, since new sources requiring EPA-issued permits are subject to NEPA environmental review requirements.

EPA agrees that the permit applicant should not have to wait until the end of the permit issuance process for a final determination on whether he will be subject to treatment requirements for existing sources or new sources. Otherwise, there may be cases where the applicant designs a facility to meet requirements for existing sources, and subsequently learns that further costs must be allotted to meet a more stringent new source performance standard before the facility can begin operation. An early hearing on the new source determination would also allow EPA to begin its NEPA review work as early as possible, and to limit possible NEPA delays in issuing the final new source permit. In other cases, the early hearing could avoid the necessity of performing a potentially costly NEPA review.

4. EPA actions. EPA is promulgating the final rule as proposed. A timely hearing on the new source determination will provide permit applicants with greater certainty on the applicable treatment requirements, and on the costs to meet these requirements. The rule will also allow EPA to complete any required NEPA review (if the facility is a new source) at an early stage and thus limit delays in permit issuance. It will also resolve whether a facility is prohibited from constructing the source due to EPA's pre-permit construction ban (§ 122.29(c)(4) [CPR § 122.66(c)(4)]. See Part C, above). These benefits override any additional burdens on EPA to conduct separate new source and permit hearings.

V. New Source Criteria (40 CFR 122.29(b) [CPR § 122.66(b)])

1. Existing rules. On May 19, 1980, EPA published criteria for new source determinations (40 CFR § 122.66(b)) under the NPDES program as part of its Consolidated Permit Regulations (45 FR 33290). Under that regulation a discharger would be classified as a new source if it was a new facility, if it totally replaced an existing source, or if the construction at the site of an existing facility changed the nature or quantity of pollutants discharged. The classification of a facility as a new or existing source is important because under the CWA existing sources are subject to best available technology (BAT) and best conventional technology (BCT) requirements, while new sources are subject to the generally more stringent new source performance standards (NSPS) under section 303 of the CWA. This distinction is based on the concept that new facilities have the opportunity to install the best and most efficient production processes and wastewater treatment technologies. Section 122.2 [CPR § 122.66(b)] is intended to ensure that all sources are properly classified.

2. Proposed changes. On September 9, 1980, EPA suspended CPR § 122.66(b) (1) and (2) (45 FR 59317). This suspension responded to industry criticism that the language of the third criterion (CPR § 122.66(b)(1)(iii)) was overly broad and could be interpreted as classifying some structures as new sources that more appropriately should be considered as modifications of existing sources. On the same day, (45 FR 59343), EPA proposed that, in those situations where there was new construction but less than total replacement at existing facilities, the classification decision should be based on the degree to which the constructed facility functions independently of the existing source. The substantial

independence test was aimed at ascertaining whether an existing source which undertakes major construction that legitimately provides it with the opportunity to install the best and most efficient production processes and wastewater treatment technologies should be required to meet new source performance standards at that facility. Because EPA had already suspended the rule and proposed a new rule at the same time that settlement negotiations on the Consolidated Permit litigation began, EPA removed the issue from the scope of settlement discussions. However, to combine the two NPDES rulemakings, EPA is adopting the final new source criteria with the balance of the NPDES litigation issues.

3. Comments and responses. During the public comment period, EPA received twenty-one comments. Most of the commenters approved of the "substantial independence" test as a means of looking at the functional relationship between the existing facility and new facility.

One commenter suggested that further clarification was needed on the meaning of "substantially independent," and suggested a list of factors that should be considered in making such a determination. EPA agrees that such a clarification would help in making new source determinations. Today's amendment, therefore, adds two factors to be examined in deciding if new processes are substantially independent of existing facilities.

The first factor is the degree of integration of a new process with existing processes. Under this first factor, if the new facility is fully integrated into the overall existing plan, the facility will not be a new source. For example, a plant may decide to improve the quality of a product by installing a new purification step into its process, such as a new filter or distillation column. Such a minor change would be integral to existing operations and would not require the facility to be reclassified as a new source. However, on the other extreme, if the only connection between the new and old facility is that they are supplied utilities such as steam, electricity, or cooling water from the same source or that their wastewater effluents are treated in the same treatment plant, then the new facility will be a new source.

Four commenters argued that if a new process or plan uses existing wastewater treatment equipment, for that reason alone it should not be considered a new source. EPA disagrees with these comments. The legislative history of the CWA indicates that new

source requirements were intended to apply where new construction allows flexibility to incorporate new pollution control technology. The fact that a facility can be constructed to utilize an existing waste treatment plant does not address the issue of whether new technology could have been installed. To allow the use of an existing wastewater treatment system, by itself, to preclude the application of new source requirements would frustrate clear statutory intent.

One of the commenters went further and claimed that EPA had no legal authority to impose new requirements in this situation. The commenter argued that if a new facility's discharge is conveyed to waters of the United States through an existing waste treatment system, this new facility cannot itself be classified as a separate point source under the CWA. This claim is contradicted by language of the Act and by case law. A newly constructed facility can clearly meet the statutory definition of "source," which covers any "building, structure, facility, or installation from which there is or may be the discharge of pollutants" (section 308(a) of the Act). When a similar claim was raised in *Mahelona v. Hawaiian Electric Co.*, 9 ERC 1625 (D. Hawaii 1976), the Court held that the point source was the facility generating the discharge, not the system treating it.

The second clarifying factor that EPA has added is the extent to which the construction results in facilities or processes that are engaged in the same general type of activity as the existing source. Under this second factor, if the proposed facility is engaged in a sufficiently similar type of activity as the existing source, it will not be treated as a new source. For example, if a plant begins to produce a new product, e.g., nylon synthetic fiber, which is very similar to the product currently being produced by that plant, e.g., polyester synthetic fiber, using equipment that is essentially the same as the existing production equipment, this would likely be considered an existing source. However, if a plant producing a final product, e.g., polyester synthetic fiber, adds new equipment to produce the raw materials for that product, e.g., terephthalic acid or ethylene glycol, the proposed structure would likely constitute a new source. Of course, to the extent the construction results in facilities engaged in the same type of activity because it essentially replicates, without replacing, the existing source, the new construction would result in a new source.

The proposed regulation provides that if there is no independently applicable new source performance standard a source being classified as a new source under this section would be considered a new discharger. Several industry commenters, all of whom are parties to the litigation, questioned EPA's authority for the new discharger category. EPA continues to believe that EPA has authority to establish the new discharger classification. By such classification EPA is not requiring new dischargers to meet new source performance standards. EPA has merely devised appropriate procedural and substantive requirements for issuing a discharger its first NPDES permit. (See also amendments to the new discharger definition—48 FR 39619, September 1, 1983.)

One commenter further argued that a new facility at the site of a plant in existence before October 18, 1972, could never fit the definition of "new discharger" because there will have been discharges from the existing plant at the site prior to October 18, 1972. This comment misinterprets the definition of "new discharger" in § 122.2 [CPR §122.3]. A new discharger includes a new facility at any site at which "it," the *new facility*, had not discharged pollutants before October 18, 1972; the fact that there may have been discharges from another facility at that same site is irrelevant.

Several commenters suggested that EPA should consider whether the new facility *actually* operates substantially independently of the existing facility, not whether it *could* operate substantially independently, as stated in the preamble to the September 9, 1980 proposal (45 FR 59344). EPA agrees with this interpretation and will so apply the substantial independence test. Because language suggesting a contrary interpretation appeared in the preamble to the proposed rule, no change in the regulatory language is necessary. The test in § 122.29(b)(1)(iii) [CPR § 122.66(1)(iii)] will continue to be whether the processes of the new facility *are* substantially independent.

One commenter suggested that "totally independent" should be substituted for "substantially independent." EPA disagrees with this comment, since it could be argued that any new building, structure, facility, or installation at the same site as an existing facility has some *de minimis* relation to that existing facility.

Some commenters suggested that modernization by means of total replacement of process or production equipment should not result in a new

source determination unless it results in the discharge of significant new pollutants. EPA disagrees. Total replacement effectively involves the construction of a new facility, which Congress intended to make subject to new source requirements. An entirely new plant built at the site of an existing plant it totally replaces is no less a new source than the same plant built at a greenfield site, and should be required to build in new source treatment technology.

In a similar situation, if a facility replicates an existing facility, the fact that it shares or uses common land with another source does not prevent it from being considered a new source. The same criteria would be applied on a case specific basis. Thus, if a power company builds a new, but identical and completely separate power generation unit at the site of a similar existing unit, the new unit will be a new source. However, if a facility increases capacity merely by adding additional equipment in one or two production steps to remove a "bottleneck," it will not be a new source. For example, a plant which uses a four step process to convert ethylene oxide into ethylene glycol may increase capacity by installing additional equipment in steps 1 and 3. Such an expansion is likely to be a modification of the existing plant.

One commenter suggested that the phrase in proposed § 122.66(b)(1)(iii), "and it meets the definition of new source in [§ 122.2 [CPR §122.3]]," should more clearly modify all three items under (b)(1). EPA agrees and has placed this phrase at the beginning of (b)(1). This commenter also suggested that the two sentences beginning "A source meeting * * *" be made a separate paragraph (b)(2), with the succeeding paragraphs of (b) renumbered. EPA also agrees with this reformatting and has so amended the regulation. The NPDES new source criteria will apply to all industries where new source performance standards have been proposed or promulgated, except where new source definitions or criteria are otherwise specified in the industry effluent limitation guideline regulations. At the present time only two industries have such specific criteria—(1) the definition of new source in the wet process hardboard subcategory of the Timber Products effluent limitations guideline (See 46 FR 45382, October 13, 1982); and (2) the criteria for new source determinations in the Coal Mining effluent limitations guideline (See 46 FR 8260, January 26, 1981).

4. *EPA action.* In the final rule, EPA has retained the proposed substantially

independent test to ascertain whether construction at the site of an existing source, which does not involve total replacement of process or production equipment, would result in a new source. EPA has clarified this test by adding the following factors which should be considered in making the determination of whether construction at an existing facility results in processes that are substantially independent and therefore qualify as a new source: (1) The extent to which the new facility is integrated with the existing plant; and (2) the extent to which the new facility is engaged in the same general type of activity as the existing source.

W. Modification of NPDES Permits (40 CFR 122.62, 122.63 [CPR §§ 122.15, 122.17])

1. Existing rules. The NPDES permit regulations specify causes for permit modification. In general, permits are not modified to incorporate changes made in regulations during the term of the permit. This is to provide some measure of certainty to both the permittees and the Agency during the term of the permits. Thus, the changes made in today's final promulgation of regulations, with few exceptions, do not affect or provide cause for modification of existing permits. Permittees must comply with the terms of their permits, even if those terms might be different than the requirements of subsequent regulations. See CWA section 402(k).

2. Proposed changes. Industry litigants were concerned that current regulations would preclude modification of permits to incorporate changes made by today's regulations. Thus, in order to allow current permittees to benefit from today's final rules, EPA proposed to add a new subsection to § 122.62 [CPR § 122.15] allowing NPDES permits that became final after March 9, 1982, to be modified to conform to the final rules concerning bypass, actual production, total metals, and discharge into POTWs, wells, or by land disposal. (Specific discussions on each of these final rules appear above.) In order to prevent the administrative burden that would result if all currently issued permits were eligible for modification, EPA proposed to allow modification only for permits issued after March 9, 1982, and limited those provisions for which modification was available. Otherwise, permit modifications would create a severe administrative burden and divert Agency resources better spent in reissuing permits.

A permittee seeking modification would be required to demonstrate that it qualifies for the modification and that

good cause exists to modify the permit. A permittee would also have to request modification within 90 days of the issuance of a final rule. The good cause requirements calls for the permittee to show something more than that it qualifies for the modification since such a showing must be made in any modification request. For example, the permittee might show good cause by demonstrating that the modification would result in cost savings, reduce energy consumption, allow the use of simpler or more reliable control technologies, or otherwise significantly alleviate the burdens imposed by its current permit terms and conditions, including permit limits.

EPA also proposed to add a new subsection to § 122.63 [CPR § 122.17] allowing modifications to incorporate certain newly modified provisions to be processed as minor permit modifications. These provisions are: proper operation and maintenance, planned facility change, bypass, upset, and toxics notification. (For specific discussions on each of these, see above.) Changes to a permit to reflect these revised rules could, under that proposal, be processed through the streamlined minor modification procedure which does not require public notice and comment. These provisions do not require recalculation of permit limits; they merely add boilerplate language to the permit. Therefore, full notice and opportunity for comment and public hearings on the changes to a specific permit are not essential. The notice and opportunity for comment on today's final rule have provided for adequate public participation on these provisions.

3. Comments and responses. Five comments were received on the modification of NPDES permits portion of the proposal. The commenters supported the proposal because it was believed it would prevent unnecessary applications for evidentiary hearings by applicants. The changes were viewed as conserving administrative resources while allowing a greater number of permittees to benefit from EPA's proposed revisions.

One commenter advocated allowing permits to be modified if the existing NPDES permit has been extended pending the issuance of a "second-round" permit; or if the permit is currently the subject of an enforcement proceeding which would be rendered moot by today's revisions; or if the permit has been subject to noncompliance problems which would be eliminated by today's revisions.

Permits which have "expired" cannot be modified. While expired permits may

be continued in effect beyond the permit terms under the Administrative Procedure Act and § 122.6 [CPR § 122.5], these permits may only be changed by reissuance. The other two situations advocated by the commenter concern violations of existing regulations or permit conditions. To allow broad retroactive application of permit revisions thereby rendering moot enforcement and noncompliance actions would thwart the intent of the CWA and the NPDES permit regulations. Permit conditions must be met during the term of the permit. And, in the situations described, a violation of permit conditions has occurred and enforcement or noncompliance actions have been deemed warranted. Subsequent changes in the regulation do not change the fact that violations of permit conditions occurred under the applicable regulations.

4. EPA action. EPA agrees that the modification of permits to conform to today's regulations is appropriate in order to prevent unnecessary administrative hearings and litigation. The cutoff date precludes unnecessary modifications that could place a strain on Agency or State resources. Therefore, the proposal is adopted in the final regulations. However, since some of the subjects listed in the provisions qualifying for modifications under today's rulemaking are not being changed in accordance with the settlement agreement and instead EPA is retaining the existing regulations, there is no need to provide a cause for modification of permits for those provisions. Section 122.62 covers only actual production and total metals. Section 122.63 covers only operation and maintenance, planned facility change, one specific provision relating to bypasses, and toxics notification.

III. EFFECTIVE DATE

Section 553(d) of the Administrative Procedure Act (APA) generally requires publication of a substantive rule not less than 30 days before its effective date. The purpose of this requirement is to allow sufficient lead time to prepare for compliance with new regulatory requirements. EPA considers today's rulemaking of sufficient complexity and import that the regulations shall not go into effect until October 26, 1984.

IV. EXECUTIVE ORDER 12291

Under Executive Order 12291, EPA must judge whether a regulation is major and therefore subject to the requirement of a Regulatory Impact Analysis. These amendments generally make the

regulations more flexible and less burdensome for affected permittees. For some provisions they make no change from the existing regulations. These regulations do not satisfy any of the criteria specified in section 1(b) of the Executive Order and, as such, do not constitute major rulemakings. This regulation was submitted to OMB for review.

V. PAPERWORK REDUCTION ACT

In accordance with the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, EPA must submit to the Director of OMB for review and approval, new or revised requirements for collection of information. The amendments promulgated today generally decrease or eliminate requirements for the collection of information. The revised information collection requirements in this rule are not effective until OMB approves them and a technical amendment to that effect is published in the Federal Register.

VI. REGULATORY FLEXIBILITY ACT

Under the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, EPA is required to prepare a Regulatory Flexibility Analysis to assess the impact of rules on small entities. No regulatory flexibility analysis is required, however, where the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Today's amendments to the regulations generally make the regulations more flexible and less burdensome for permittees. For some provisions they make no change from the existing regulations. Accordingly, I hereby certify, pursuant to 5 U.S.C. 605(b), that these amendments will not have a significant impact on a substantial number of small entities.

List of Subjects

40 CFR Part 122

Administrative practice and procedure, Reporting and recordkeeping requirements, Water pollution control, Confidential business information.

40 CFR Part 124

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

40 CFR Part 125

Water pollution control, Waste treatment and disposal.

(Clean Water Act, 33 U.S.C. 1251 *et seq.*)

Dated: September 4, 1984.

Alvin L. Alm,
Acting Administrator.

1. The heading for Part 122 is revised to read as follows:

PART 122—EPA ADMINISTERED PERMIT PROGRAMS: THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Subpart B—Permit Application and Special NPDES Program Requirements

1a. Section 122.21 is amended by designating the existing paragraph (c) as (c)(1) and adding new paragraphs (c)(2) and (f)(9), by revising paragraphs (f) (7), (g)(7) introductory text, (g)(7)(i)(B), (g)(7)(iii), (g)(9), (g)(10), and (k)(4) to read as follows:

§ 122.21 Application for a permit (applicable to State NPDES programs, see § 123.25).

* * * * *

(c) * * *

(2) Any existing storm water discharger under § 122.26 that does not have an effective permit shall submit an application by March 26, 1985. Any discharger designated under § 122.26(c) shall submit an application within 6 months of notification of its designation.

* * * * *

(f) * * *

(7) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area. Group II storm water discharges, as defined in § 122.26(b)(3), are exempt from the requirements of paragraph (f) (7) of this section.

* * * * *

(9) For Group II storm water dischargers (as defined in § 122.26(b)(3)) only, a brief narrative description of:

(i) The drainage area, including an estimate of the size and nature of the area;

(ii) The receiving water; and

(iii) Any treatment applied to the discharge.

(g) * * *

(7) *Effluent characteristics.*

Information on the discharge of pollutants specified in this subparagraph. When "quantitative data" for a pollutant are required, the

applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136. When no analytical method is approved the applicant may use any suitable method but must provide a description of the method. When an applicant has two or more outfalls with substantially identical effluents, the Director may allow the applicant to test only one outfall and report that the quantitative data also apply to the substantially identical outfalls. The requirements in paragraphs (g)(7) (iii) and (iv) of this section that an applicant must provide quantitative data for certain pollutants known or believed to be present do not apply to pollutants present in a discharge solely as the result of their presence in intake water; however, an applicant must report such pollutants as present. Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform. For all other pollutants, 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours, and a minimum of one to four (4) grab samples may be taken for storm water discharges depending on the duration of the discharge. One grab sample shall be taken in the first hour (or less) of discharge with one additional grab sample taken in each succeeding hour of discharge up to a minimum of four grab samples for discharges lasting four or more hours. In addition, the Director may waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that the minimum of four (4) grab samples will be a representative sample of the effluent being discharged. An applicant is expected to "know or have reason to believe" that a pollutant is present in an effluent based on an evaluation of the expected use, production, or storage of the pollutant, or on any previous analyses for the pollutant. (For example, any pesticide manufactured by a facility may be expected to be present in contaminated storm water runoff from the facility.)

(i) * * *

(B) The Director may waive the reporting requirements for individual point sources or for a particular industry category for one or more of the pollutants listed in paragraph (g)(7)(i)(A) of this section if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of a permit

can be obtained with less stringent requirements.

* * * * *

(iii)(A) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in Table IV of Appendix D (certain conventional and nonconventional pollutants) is discharged from each outfall. If an applicable effluent limitations guideline either directly limits the pollutant or, by its express terms, indirectly limits the pollutant through limitations on an indicator, the applicant must report quantitative data. For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

(B) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants listed in Table II or Table III of Appendix D (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under paragraph (g)(7)(ii) of this section, is discharged from each outfall. For every pollutant expected to be discharged in concentrations of 10 ppb or greater the applicant must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, where any of these four pollutants are expected to be discharged in concentrations of 100 ppb or greater the applicant must report quantitative data. For every pollutant expected to be discharged in concentrations less than 10 ppb, or in the case of acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, in concentrations less than 100 ppb, the applicant must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. An applicant qualifying as a small business under paragraph (g)(8) of this section is not required to analyze for pollutants listed in Table II of Appendix D (the organic toxic pollutants).

* * * * *

(9) *Used or manufactured toxics.* A listing of any toxic pollutant which the applicant currently uses or manufactures as an intermediate or final product or byproduct. The Director may waive or modify this requirement for any applicant if the applicant demonstrates that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue the permit.

(10) *Storm water point source exemption.*

(i) An applicant that qualifies as a Group II storm water discharger under § 122.26(b)(3) is exempt from the requirements of paragraphs (f)(7) and (g) of this section, unless the Director requests such information.

(ii) For the purpose of paragraph (g)(3) of this section, storm water point sources may estimate the average flow of their discharge and must indicate the rainfall event and the method of estimation that the estimate is based on.

(iii) The Director may require additional information under paragraph (g)(13) of this section, and may request any Group II storm water dischargers to comply with paragraph (g) of this section.

* * * * *

(k) * * *

(4) Any interested person may challenge the Regional Administrator's initial new source determination by requesting an evidentiary hearing under Subpart E of Part 124 within 30 days of issuance of the public notice of the initial determination. If all parties to the evidentiary hearing on the determination agree, the Regional Administrator may defer the hearing until after a final permit decision is made, and consolidate the hearing on the determination with any hearing on the permit.

* * * * *

2. Section 122.22 is amended by revising paragraph (b) introductory text and (b)(2) to read as follows:

§ 122.22 Signatories to permit applications and reports (applicable to State NPDES programs, see § 123.25).

* * * * *

(b) All reports required by permits, other information requested by the Director, and all permit applications submitted for Group II storm water discharges under § 122.26(b)(3) shall be signed by a person described in paragraph (a), or by a duly authorized representative of that person. A person is a duly authorized representative only if:

* * * * *

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

* * * * *

3. Section 122.26 is revised to read as follows:

§ 122.26 Storm water discharges (applicable to State NPDES programs, see § 123.25).

(a) *Permit requirement.* Storm water point sources, as defined in this section, are point sources subject to the NPDES permit program. The Director may issue an NPDES permit or permits for discharges into waters of the United States from a storm water point source covering all conveyances which are a part of that storm water discharge. Where there is more than one owner or operator of a single system of such conveyances, any or all discharges into the storm water discharge system may be identified in the application submitted by the owner or operator of the portion of the system that discharges directly into waters of the United States. Any such application shall include all information regarding discharges into the system that would be required if the dischargers submitted separate applications. Dischargers so identified shall not require a separate permit unless the Director specifies otherwise. Any permit covering more than one owner or operator shall identify the effluent limitations, if any, which apply to each owner or operator. Where there is more than one owner or operator, no discharger into the storm water discharge may be subject to a permit condition for discharges into the storm water discharge other than its own discharges into that system without its consent. All dischargers into a storm water discharge system must either be covered by an individual permit or a permit issued to the owner or operator of the portion of the system that directly discharges. (See § 122.21(c)(2) for application deadline for existing storm water point sources.)

(b) *Definitions.* (1) "Storm water point source" means a conveyance or system of conveyances (including pipes, conduits, ditches, and channels) primarily used for collecting and conveying storm water runoff and which:

(i) Is located at an urbanized area as designated by the Bureau of the Census according to the criteria in 39 FR 15202 (May 1, 1974);

(ii) Discharges from lands or facilities used for industrial or commercial activities; or

(iii) Is designated under paragraph (c) of this section. Conveyances that discharge storm water runoff combined with municipal sewage are point sources that must obtain NPDES permits, but are not "storm water point sources".

(2) "Group I storm water discharge" means any "storm water point source" which is:

(i) Subject to effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards;

(ii) Designated under paragraph (c) of this section; or

(iii) Located at an industrial plant or in plant associated areas. "Plant associated areas" means industrial plant yards, immediate access roads, drainage ponds, refuse piles, storage piles or areas and material or products loading and unloading areas. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots.

(3) "Group II storm water discharge" means any "storm water point source" not included in paragraph (b)(2) of this section. (See § 122.21(g)(10) for exemption from certain application requirements.)

(4) A conveyance or system of conveyances operated primarily for the purpose of collecting and conveying storm water runoff which does not constitute a "storm water point source" under paragraph (b)(1) of this section is not considered a point source subject to the requirements of CWA.

(5) Whether a system of conveyances is or is not a storm water point source for purposes of this section shall have no bearing on whether the system is eligible for funding under Title II of CWA. See 40 CFR 35.925-21.

(c) *Case-by-case designation of storm water discharges.* The Director may designate a conveyance or system of conveyances primarily used for collecting and conveying storm water runoff as a storm water point source. This designation may be made to the extent allowed or required by EPA promulgated effluent limitations guidelines for point sources in the storm water discharge category or when:

(1) A Water Quality Management plan under section 208 of CWA which contains requirements applicable to such point sources is approved; or

(2) The Director determines that a storm water discharge is a significant contributor of pollution to the waters of the United States. In making this determination the Director shall consider the following factors:

(i) The location of the discharge with respect to waters of the United States;

(ii) The size of the discharge;

(iii) The quantity and nature of the pollutants reaching waters of the United States; and

(iv) Other relevant factors.

4. Section 122.28 is amended by revising paragraph (a)(2) as follows:

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

(a) * * *

(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 if the sources all:

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

(B) Discharge the same types of wastes;

(C) Require the same effluent limitation or operating conditions;

(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.

* * * * *

5. Section 122.29 is amended by revising paragraphs (b), (c)(3), and (d)(4), redesignating paragraph (c)(5) as (c)(5)(ii) and adding a new paragraph (c)(5)(i) to read as follows:

§ 122.29 New sources and new dischargers.

* * * * *

(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 paragraphs (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

(ii) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation with a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility engineering, and design studies do not constitute a contractual obligation under the paragraph.

(c) * * *

(3) The Regional Administrator, to the extent allowed by law, shall issue, condition (other than imposing effluent limitations), or deny the new source NPDES permit following a complete evaluation of any significant beneficial and adverse impacts of the proposed action and a review of the recommendations contained in the EIS or finding of no significant impact.

* * * * *

(5)(i) The commencement of on-site construction in violation of paragraph (c) of this section shall constitute grounds for denial of a permit.

* * * * *

(d) * * *

(4) The owner or operator of a new source, a new discharger which commenced discharge after August 13, 1979, or a recommencing discharger shall install and have in operating condition, and shall "start-up" all pollution control equipment required to meet the conditions of its permits before beginning to discharge. Within the shortest feasible time (not to exceed 90 days), the owner or operator must meet all permit conditions. The requirements of this paragraph do not apply if the owner or operator is issued a permit

containing a compliance schedule under § 122.47(a)(2)

Subpart C—Permit Conditions

6. Section 122.41 is amended by revising paragraphs (e), (l)(1), (m)(4)(i)(B), and (n)(3)(i) to read as follows:

§ 122.41 Conditions applicable to all permits.

(3) *Proper operation and maintenance.* The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(1) *Reporting requirements.—(1) Planned changes.* The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in § 122.29(b); or
- (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under § 122.42(a)(1).

(m) * * *

(4) * * *

(i) * * *

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(n) * * *

(3) * * *

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

7. Section 122.42 is amended by revising paragraphs (a)(1) introductory text, (a)(1)(iii), and (a)(2) to read as follows:

§ 122.42 Additional conditions applicable to specified categories of NPDES permits (applicable to State NPDES programs, see § 123.25).

(a) * * *

(1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with § 122.21(g)(7); or

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) Five hundred micrograms per liter (500 µg/l);

(ii) One milligram per liter (1 mg/l) for antimony;

(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with § 122.21(g)(7).

(iv) The level established by the Director in accordance with § 122.44(f).

8. Section 122.44 is amended by revising paragraphs (d)(3) and (d)(9); by removing paragraph (e)(1)(ii); and by redesignating paragraph (e)(1)(i) as paragraph (e)(1), to read as follows:

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

(d) * * *

(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 necessary to meet EPA's obligation under section 301(b)(1)(C) of the CWA:

(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)).

9. Section 122.45 is amended by revising paragraphs (b)(2), (c), and (g), deleting paragraph (h), and redesignating paragraphs (i) and (j) as (h) and (i) to read as follows:

§ 122.45 Calculating NPDES permit conditions (applicable to State NPDES programs, see § 123.25).

(b) * * *

(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 production 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.

Comments for the User's Guide Volume 2

Meeting Date	Comment Date	Commenter	Comment No.	Section	Page	Topic	Comment
10/10/2017	10/24/2017	EPA Region 10	1	1.2.3	2	Idaho Water Quality Standards	This section should reference the Idaho Water Quality Standards in Idaho's administrative rules (IDAPA 58.01.02).
10/10/2017	10/24/2017	EPA Region 10	2	3.1	4-6	Part A. Basic Information	<p>This section states that "The applicant's response to whether the POTW is currently covered under an NPDES/IPDES permit (not a new source or new discharger) determines subsequent sections of the permit application that need to be completed" and includes an endnote reference to the definitions of "new discharger" and "new source" in the Rules Regulating the Idaho Pollutant Discharge Elimination System Program.</p> <p>The parenthetical in this sentence should be revised to read "not a new discharger or recommending discharger" and the references to the rules should be changed accordingly. A POTW (as defined in IDAPA 58.01.25.010.73 and 40 CFR 122.2) cannot be a "new source" (as defined in IDAPA 58.01.25.010.58 and 40 CFR 122.2) because POTWs are not subject to standards of performance under Clean Water Act section 306 (i.e., new source performance standards).</p> <p>The fact that a source is not currently covered under an NPDES or IPDES permit does not necessarily mean it is a "new discharger." In order to be a "new discharger," a discharger must never have received a finally effective NPDES or IPDES permit for discharges at a particular site and must not have commenced a discharge of pollutants prior to August 13, 1979 (See IDAPA 58.01.25.010.57 and 40 CFR 122.2). A POTW which ceased discharging and wishes to resume discharging is a "recommencing discharger," not a "new discharger." See IDAPA 58.01.25.010.75 and 40 CFR 122.2.</p>
10/10/2017	10/24/2017	EPA Region 10	3	4.2	13-14	Effluent Limits and Associated Monitoring Requirements	<p>The descriptions of the effluent limit types should be rewritten to be consistent with the definitions of the terms "average monthly discharge limitation," "average weekly discharge limitation," "maximum daily discharge limitation," and "daily discharge" in State and federal regulations. See IDAPA 58.01.25.010 and 40 CFR 122.2.</p> <p>POTWs often have effluent limits which are expressed in ways that are not discussed in this section. For example, limits for E. coli are generally expressed, in part, as monthly geometric mean concentrations, limits for pH are generally expressed as a range of acceptable pH values, and POTWs are subject to technology-based effluent limits for removal rates for TSS and oxygen demand. Since these types of limits are common in POTW permits, they should be discussed in this section in addition to average monthly, average weekly, maximum daily, and seasonal or annual average limits. This section should also note that permits may include limits expressed in other ways that are not discussed in this section.</p>
10/10/2017	10/24/2017	EPA Region 10	4	4.3	14	Regulatory Mixing Zone	<p>This section states that "The permittee must monitor and report the effluent and upstream receiving water concentration of all pollutants with authorized mixing zones."</p> <p>While we agree that it is generally advisable to monitor the background concentrations of pollutants with authorized mixing zones, there are cases in which such monitoring would not be necessary. For example, non-conservative pollutants such as chlorine would be unlikely to be present in receiving waters (absent another nearby source), or there may be a long history of receiving water monitoring data showing low or undetectable concentrations of a given pollutant.</p> <p>The EPA suggests that the phrase "and upstream receiving water" from this sentence. If DEQ wishes to discuss receiving water monitoring in this section, the language should be changed so that it's clear that DEQ will decide whether to require receiving water monitoring on a case-by-case basis. We also suggest the use of the more general term "background," in lieu of "upstream," since it addresses both flowing and non-flowing receiving waters.</p>
10/10/2017	10/24/2017	EPA Region 10	5	4.4	14	Monitoring	This section should note that if the permittee monitors any pollutant more frequently than required by the permit, using approved test procedures, the results of such monitoring shall be included in the calculation and reporting of the data submitted on DMRs. See IDAPA 58.01.25.300.12d.ii and 40 CFR 122.41(l)(4)(ii).

10/10/2017	10/24/2017	EPA Region 10	6	4.5.4.1	19	Twenty-Four Hour and Five Day Noncompliance Reporting	<p>The last paragraph of this section, describing circumstances that are not considered bypasses, is overly broad. The phrase “or environmental conditions” should be deleted.</p> <p>The preamble to the bypass rule (40 CFR 122.41(m)) explains that: “Seasonal effluent limitations which allow the facility to shut down a specific pollution control process during certain periods of the year are not considered to be a bypass. Any variation in effluent limits accounted for and recognized in the permit which allows a facility to dispense with some unit processes under certain conditions is not considered bypassing” (49 FR 38037).</p> <p>Thus, the ability to shut down certain pollution control processes is based on “seasonal effluent limitations” or other “variation(s) in effluent limits.” Neither the State or federal bypass rules nor the preamble to the federal bypass rule provides an exception to the prohibition of bypass based on “environmental conditions.”</p>
10/10/2017	10/24/2017	EPA Region 10	7	4.7.1	20	Compliance Schedules and Interim Effluent Limits	<p>The last sentence of this paragraph reads “For compliance schedules longer than 1 year the permittee must also submit an annual progress report that describes efforts made in reaching compliance by the date specified in the compliance schedule.” This is not consistent with the IPDES rule which it references (IDAPA 58.01.25.305.01.d) or the corresponding federal rule (40 CFR 122.47(a)(3)).</p> <p>The State and federal rules for compliance schedules require that compliance schedules longer than 1 year include interim requirements and dates for their achievement. Progress reports are required if the time necessary for completion of an interim requirement is more than 1 year and is not readily divisible into stages for completion.</p>
10/10/2017	10/24/2017	EPA Region 10	8	4.7.2	20-21	Facility Capacity	<p>This section states that “Each month the permittee must record and report on DMRs the influent maximum daily flow, BOD5 and TSS loading averaged over the month. These are compared to the maximum daily flow, BOD5 and TSS loading, and other facility design capacity ratings identified in the facility plan.”</p> <p>The use of the phrase “maximum daily” implies that treatment plant capacity will be evaluated based on “maximum daily” flows and loadings, but this paragraph also states that flows and loadings will be “averaged over the month.” We presume the intent was to use monthly average flows and loadings for capacity planning purposes. If so, we suggest deleting the phrase “maximum daily” from this paragraph.</p>
10/10/2017	10/24/2017	EPA Region 10	9	4.7.3.1	22	Test Requirements	<p>This section should clarify that the “dilution factor” which determines whether acute or chronic whole effluent toxicity (WET) testing (or both) is required is based on the authorized mixing zone. See the EPA’s Technical Support Document for Water Quality-based Toxics Control at Figure 3-2.</p>
10/10/2017	10/24/2017	EPA Region 10	10	4.7.3.5	23	Accelerated Testing	<p>We recommend not stating a specific interval between receipt of a WET rest result which exceeds a WET trigger or limit and the start of accelerated testing. While two weeks is common practice, DEQ should retain the discretion to set this interval on a case-by-case basis.</p>
10/10/2017	10/24/2017	EPA Region 10	11	4.7.3.6	23	Toxicity Reduction Evaluations	<p>We recommend not stating in guidance a specific interval between receipt of an accelerated WET rest result which confirms toxicity and the initiation of a toxicity reduction evaluation (TRE). DEQ should retain the discretion to set this interval on a case-by-case basis.</p>
10/10/2017	10/24/2017	EPA Region 10	12	4.7.9	41	Mixing Zone Study	<p>The phrase “for non-flowing waters” should be deleted from the first sentence of the last paragraph of this section. Waters need not meet the definition of “non-flowing” in order for temperature stratification to be an important factor in mixing.</p>
10/10/2017	10/24/2017	EPA Region 10	13	4.7.13	42	Biosolids	<p>This section should state that, until DEQ has an authorized biosolids program, POTWs and other treatment works treating domestic sewage (TWTDS) will be subject to federal regulations governing the use and disposal of sewage sludge at 40 CFR Part 503.</p>