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It is important to note that EPA's policy is that public comments, whether submitted electronically or in paper, will be made available for public viewing online at <http://www.regulations.gov> without change, unless the comment contains copyrighted material, CBI, or other information whose disclosure is restricted by statute. Information claimed as CBI and other information whose disclosure is restricted by statute is not included in the official public docket or in the electronic public docket. EPA's policy is that copyrighted material, including copyrighted material contained in a public comment, will not be placed in EPA's electronic public docket but will be available only in printed, paper form in the official public docket. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the EPA Docket Center.

#### *B. How and to Whom Do I Submit Comments?*

You may submit comments as provided in the **ADDRESSES** section. Please ensure that your comments are submitted within the specified comment period. Comments received after the close of the comment period will be marked "late." EPA is not required to consider these late comments.

If you submit an electronic comment, EPA recommends that you include your name, mailing address, and an e-mail address or other contact information in the body of your comment and with any disk or CD ROM you submit. This ensures that you can be identified as the submitter of the comment and allows EPA to contact you in case EPA cannot

read your comment due to technical difficulties or needs further information on the substance of your comment. Any identifying or contact information provided in the body of a comment will be included as part of the comment that is placed in the official public docket, and made available in EPA's electronic public docket. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

Use of the <http://www.regulations.gov> Web site to submit comments to EPA electronically is EPA's preferred method for receiving comments. The electronic public docket system is an "anonymous access" system, which means EPA will not know your identity, e-mail address, or other contact information unless you provide it in the body of your comment. In contrast to EPA's electronic public docket, EPA's electronic mail (e-mail) system is not an "anonymous access" system. If you send an e-mail comment directly to the Docket without going through <http://www.regulations.gov>, your e-mail address is automatically captured and included as part of the comment that is placed in the official public docket, and made available in EPA's electronic public docket.

Dated: October 24, 2007.

**Richard B. Ossias,**

*Associate General Counsel.*

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## **ENVIRONMENTAL PROTECTION AGENCY**

[EPA-HQ-OW-2006-0771; FRL-8486-3]

**RIN 2040-AE89**

### **Notice of Availability of Preliminary 2008 Effluent Guidelines Program Plan**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of Availability of Preliminary 2008 Effluent Guidelines Program Plan.

**SUMMARY:** EPA establishes national, technology-based regulations known as effluent guidelines and pretreatment standards to reduce pollutant discharges from categories of industry discharging directly to waters of the United States or discharging indirectly through Publicly Owned Treatment Works (POTWs). The Clean Water Act (CWA) sections 301(d), 304(b), 304(g), and 307(b) require EPA to annually review these effluent guidelines and pretreatment standards. This notice presents EPA's 2007 review of existing effluent guidelines and

pretreatment standards. It also presents EPA's evaluation of indirect dischargers without categorical pretreatment standards to identify potential new categories for pretreatment standards under CWA sections 304(g) and 307(b). This notice also presents the Preliminary 2008 Effluent Guidelines Program Plan ("preliminary 2008 Plan"), which, as required under CWA section 304(m), identifies any new or existing industrial categories selected for effluent guidelines rulemaking and provides a schedule for such rulemaking. CWA section 304(m) requires EPA to biennially publish such a plan after public notice and comment. EPA is soliciting comment on its preliminary 2008 Plan and on its 2007 annual review of existing effluent guidelines and pretreatment standards and industrial categories not currently regulated by effluent guidelines and pretreatment standards.

**DATES:** If you wish to comment on any portion of this notice, EPA must receive your comments by December 31, 2007.

**ADDRESSES:** Submit your comments, data and information for the 2007 annual review of existing effluent guidelines and pretreatment standards and the preliminary 2008 Plan, identified by Docket ID No. EPA-HQ-OW-2006-0771, by one of the following methods:

(1) [www.regulations.gov](http://www.regulations.gov). Follow the on-line instructions for submitting comments.

(2) *E-mail:* [OW-Docket@epa.gov](mailto:OW-Docket@epa.gov), Attention Docket ID No. EPA-HQ-OW-2006-0771.

(3) *Mail:* Water Docket, Environmental Protection Agency, Mailcode: 4203M, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Attention Docket ID No. EPA-HQ-OW-2006-0771. Please include a total of 3 copies.

(4) *Hand Delivery:* Water Docket, EPA Docket Center, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC, Attention Docket ID No. EPA-HQ-OW-2006-0771. Such deliveries are only accepted during the Docket's normal hours of operation and special arrangements should be made.

**Instructions:** Direct your comments to Docket ID No. EPA-HQ-OW-2006-0771. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you

consider to be CBI or otherwise protected through regulations.gov or e-mail. The federal regulations.gov Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If you send an e-mail comment directly to EPA without going through regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

*Docket:* All documents in the docket are listed in the index at [www.regulations.gov](http://www.regulations.gov). Although listed in the index, some information is not publicly available, *i.e.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically at [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Water Docket in the EPA Docket Center, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426.

The following key document provides additional information about EPA's annual reviews and the Preliminary 2008 Effluent Guidelines Program Plan: "Technical Support Document for the Preliminary 2008 Effluent Guidelines Program Plan," EPA-821R-07-007, DCN 04247, October 2007.

**FOR FURTHER INFORMATION CONTACT:** Mr. Carey A. Johnston at (202) 566-1014 or [johnston.carey@epa.gov](mailto:johnston.carey@epa.gov).

**SUPPLEMENTARY INFORMATION:**

**How is this document organized?**

The outline of this notice follows.

- I. General Information
- II. Legal Authority

III. What is the Purpose of This **Federal**

**Register** Notice?

IV. Background

V. EPA's 2007 Annual Review of Existing Effluent Guidelines and Pretreatment Standards Under CWA Sections 301(d), 304(b), 304(g), and 307(b)

VI. EPA's 2008 Annual Review of Existing Effluent Guidelines and Pretreatment Standards Under CWA Sections 301(d), 304(b), 304(g), and 307(b)

VII. EPA's Evaluation of Categories of Indirect Dischargers Without Categorical Pretreatment Standards To Identify Potential New Categories for Pretreatment Standards

VIII. The Preliminary 2008 Effluent Guidelines Program Plan Under Section 304(m)

IX. Request for Comment and Information

**I. General Information**

*A. Does This Action Apply to Me?*

This notice provides a statement of the Agency's effluent guidelines review and planning processes and priorities at this time, and does not contain any regulatory requirements.

*B. What Should I Consider as I Prepare My Comments for EPA?*

1. *Submitting Confidential Business Information.* Do not submit this information to EPA through [www.regulations.gov](http://www.regulations.gov) or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD-ROM that you mail to EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Follow directions—The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.

- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

- Provide specific examples to illustrate your concerns, and suggest alternatives.

- Explain your views as clearly as possible.

- Make sure to submit your comments by the comment period deadline identified.

**II. Legal Authority**

This notice is published under the authority of the CWA, 33 U.S.C. 1251, et seq., and in particular sections 301(d), 304(b), 304(g), 304(m), 306, and 307(b), 33 U.S.C. 1311(d), 1314(b), 1314(g), 1314(m), 1316, and 1317.

**III. What Is the Purpose of This Federal Register Notice?**

This notice presents EPA's 2007 review of existing effluent guidelines and pretreatment standards under CWA sections 301(d), 304(b), 304(g) and 307(b). This notice also provides EPA's preliminary thoughts concerning its 2008 annual reviews under CWA sections 301(d), 304(b), 304(g) and 307(b) and solicits comments, data and information to assist EPA in performing these reviews. It also presents EPA's evaluation of indirect dischargers without categorical pretreatment standards to identify potential new categories for pretreatment standards under CWA sections 304(g) and 307(b). This notice also presents the preliminary 2008 Effluent Guidelines Program Plan ("preliminary 2008 Plan"), which, as required under CWA section 304(m), identifies any new or existing industrial categories selected for effluent guidelines rulemaking and provides a schedule for such rulemaking. CWA section 304(m) requires EPA to biennially publish such a plan after public notice and comment.

**IV. Background**

*A. What Are Effluent Guidelines and Pretreatment Standards?*

The CWA directs EPA to promulgate effluent limitations guidelines and standards ("effluent guidelines") that reflect pollutant reductions that can be achieved by categories or subcategories of industrial point sources using technologies that represent the appropriate level of control. See CWA sections 301(b)(2), 304(b), 306, 307(b), and 307(c). For point sources that introduce pollutants directly into the waters of the United States (direct dischargers), the effluent limitations guidelines and standards promulgated

by EPA are implemented through National Pollutant Discharge Elimination System (NPDES) permits. See CWA sections 301(a), 301(b), and 402. For sources that discharge to POTWs (indirect dischargers), EPA promulgates pretreatment standards that apply directly to those sources and are enforced by POTWs and State and Federal authorities. See CWA sections 307(b) and (c).

**1. Best Practicable Control Technology Currently Available (BPT)—CWA Sections 301(b)(1)(A) & 304(b)(1)**

EPA defines Best Practicable Control Technology Currently Available (BPT) effluent limitations for conventional, toxic, and non-conventional pollutants. Section 304(a)(4) designates the following as conventional pollutants: Biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids, fecal coliform, pH, and any additional pollutants defined by the Administrator as conventional. The Administrator designated oil and grease as an additional conventional pollutant on July 30, 1979 (44 FR 44501). EPA has identified 65 pollutants and classes of pollutants as toxic pollutants, of which 126 specific substances have been designated priority toxic pollutants. See Appendix A to part 423. All other pollutants are considered to be non-conventional.

In specifying BPT, EPA looks at a number of factors. EPA first considers the total cost of applying the control technology in relation to the effluent reduction benefits. The Agency also considers the age of the equipment and facilities, the processes employed, and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the EPA Administrator deems appropriate. See CWA section 304(b)(1)(B). Traditionally, EPA establishes BPT effluent limitations based on the average of the best performance of facilities within the industry of various ages, sizes, processes, or other common characteristics. Where existing performance is uniformly inadequate, BPT may reflect higher levels of control than are currently in place in an industrial category if the Agency determines that the technology can be practically applied.

**2. Best Conventional Pollutant Control Technology (BCT)—CWA Sections 301(b)(2)(E) & 304(b)(4)**

The 1977 amendments to the CWA required EPA to identify effluent

reduction levels for conventional pollutants associated with Best Conventional Pollutant Control Technology (BCT) for discharges from existing industrial point sources. In addition to considering the other factors specified in section 304(b)(4)(B) to establish BCT limitations, EPA also considers a two part "cost-reasonableness" test. EPA explained its methodology for the development of BCT limitations in 1986. See 51 FR 24974 (July 9, 1986).

**3. Best Available Technology Economically Achievable (BAT)—CWA Sections 301(b)(2)(A) & 304(b)(2)**

For toxic pollutants and non-conventional pollutants, EPA promulgates effluent guidelines based on the Best Available Technology Economically Achievable (BAT). See CWA section 301(b)(2)(A), (C), (D) and (F). The factors considered in assessing BAT include the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the process employed, potential process changes, non-water quality environmental impacts, including energy requirements, and other such factors as the EPA Administrator deems appropriate. See CWA section 304(b)(2)(B). The technology must also be economically achievable. See CWA section 301(b)(2)(A). The Agency retains considerable discretion in assigning the weight accorded to these factors. BAT limitations may be based on effluent reductions attainable through changes in a facility's processes and operations. Where existing performance is uniformly inadequate, BAT may reflect a higher level of performance than is currently being achieved within a particular subcategory based on technology transferred from a different subcategory or category. BAT may be based upon process changes or internal controls, even when these technologies are not common industry practice.

**4. New Source Performance Standards (NSPS)—CWA Section 306**

New Source Performance Standards (NSPS) reflect effluent reductions that are achievable based on the best available demonstrated control technology. New sources have the opportunity to install the best and most efficient production processes and wastewater treatment technologies. As a result, NSPS should represent the most stringent controls attainable through the application of the best available demonstrated control technology for all pollutants (*i.e.*, conventional, non-conventional, and priority pollutants). In establishing NSPS, EPA is directed to

take into consideration the cost of achieving the effluent reduction and any non-water quality environmental impacts and energy requirements.

**5. Pretreatment Standards for Existing Sources (PSES)—CWA Section 307(b)**

Pretreatment Standards for Existing Sources (PSES) are designed to prevent the discharge of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of publicly-owned treatment works (POTWs), including sludge disposal methods at POTWs. Pretreatment standards for existing sources are technology-based and are analogous to BAT effluent limitations guidelines.

The General Pretreatment Regulations, which set forth the framework for the implementation of national pretreatment standards, are found at 40 CFR part 403.

**6. Pretreatment Standards for New Sources (PSNS)—CWA Section 307(c)**

Like PSES, Pretreatment Standards for New Sources (PSNS) are designed to prevent the discharges of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of POTWs. PSNS are to be issued at the same time as NSPS. New indirect dischargers have the opportunity to incorporate into their facilities the best available demonstrated technologies. The Agency considers the same factors in promulgating PSNS as it considers in promulgating NSPS.

**B. What Are EPA's Review and Planning Obligations Under Sections 301(d), 304(b), 304(g), 304(m), and 307(b)?**

**1. EPA's Review and Planning Obligations Under Sections 301(d), 304(b), and 304(m)—Direct Dischargers**

Section 304(b) requires EPA to review its existing effluent guidelines for direct dischargers each year and to revise such regulations "if appropriate." Section 304(m) supplements the core requirement of section 304(b) by requiring EPA to publish a plan every two years announcing its schedule for performing this annual review and its schedule for rulemaking for any effluent guidelines selected for possible revision as a result of that annual review. Section 304(m) also requires the plan to identify categories of sources discharging non-trivial amounts of toxic or non-conventional pollutants for which EPA has not published effluent limitations guidelines under section 304(b)(2) or NSPS under section 306. See CWA section 304(m)(1)(B); S. Rep. No. 50, 99th Cong., 1st Sess. (1985); WQA87

Leg. Hist. 31 (indicating that section 304(m)(1)(B) applies to “non-trivial discharges.”). Finally, under section 304(m), the plan must present a schedule for promulgating effluent guidelines for industrial categories for which it has not already established such guidelines, providing for final action on such rulemaking not later than three years after the industrial category is identified in a final Plan.<sup>1</sup> See CWA section 304(m)(1)(C). EPA is required to publish its preliminary Plan for public comment prior to taking final action on the plan. See CWA section 304(m)(2).

In addition, CWA section 301(d) requires EPA to review every five years the effluent limitations required by CWA section 301(b)(2) and to revise them if appropriate pursuant to the procedures specified in that section. Section 301(b)(2), in turn, requires point sources to achieve effluent limitations reflecting the application of the best available technology economically achievable (for toxic pollutants and non-conventional pollutants) and the best conventional pollutant control technology (for conventional pollutants), as determined by EPA under sections 304(b)(2) and 304(b)(4), respectively. For nearly three decades, EPA has implemented sections 301 and 304 through the promulgation of effluent limitations guidelines, resulting in regulations for 56 industrial categories. See *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 113 (1977). Consequently, as part of its annual review of effluent limitations guidelines under section 304(b), EPA is also reviewing the effluent limitations they contain, thereby fulfilling its obligations under sections 301(d) and 304(b) simultaneously.

## 2. EPA’s Review and Planning Obligations Under Sections 304(g) and 307(b)—Indirect Dischargers

Section 307(b) requires EPA to revise its pretreatment standards for indirect dischargers “from time to time, as control technology, processes, operating methods, or other alternatives change.” See CWA section 307(b)(2). Section 304(g) requires EPA to annually review these pretreatment standards and revise them “if appropriate.” (Although

section 307(b) only requires EPA to revise existing pretreatment standards “from time to time,” section 304(g) requires an annual review. Therefore, EPA meets its 304(g) and 307(b) requirements by reviewing all industrial categories subject to existing categorical pretreatment standards on an annual basis to identify potential candidates for revision.

Section 307(b)(1) also requires EPA to promulgate pretreatment standards for pollutants not susceptible to treatment by POTWs or that would interfere with the operation of POTWs, although it does not provide a timing requirement for the promulgation of such new pretreatment standards. EPA, in its discretion, periodically evaluates indirect dischargers not subject to categorical pretreatment standards to identify potential candidates for new pretreatment standards. The CWA does not require EPA to publish its review of pretreatment standards or identification of potential new categories, although EPA is exercising its discretion to do so in this notice.

EPA intends to repeat this publication schedule for future pretreatment standards reviews (e.g., EPA will publish the 2008 annual pretreatment standards review in the notice containing the Agency’s 2008 annual review of existing effluent guidelines and the final 2008 Plan). EPA intends that these contemporaneous reviews will provide meaningful insight into EPA’s effluent guidelines and pretreatment standards program decision-making. Additionally, by providing a single notice for these and future reviews, EPA hopes to provide a consolidated source of information for the Agency’s current and future effluent guidelines and pretreatment standards program reviews.

## V. EPA’s 2007 Annual Review of Existing Effluent Guidelines and Pretreatment Standards Under CWA Sections 301(d), 304(b), 304(g), and 307(b)

### A. What Process Did EPA Use To Review Existing Effluent Guidelines and Pretreatment Standards Under CWA Section 301(d), 304(b), 304(g), and 307(b)?

#### 1. Overview

In its 2007 annual review, EPA reviewed all industrial categories subject to existing effluent limitations guidelines and pretreatment standards, representing a total of 56 point source categories and over 450 subcategories. This review consisted of a screening level review of all existing industrial categories based on the hazard

associated with discharges from each category and other factors identified by EPA as appropriate for prioritizing effluent guidelines and pretreatment standards for possible revision. EPA used this review to confirm the identification of the four industrial categories prioritized for further review in the final 2006 Effluent Guidelines Program Plan (December 21, 2006; 71 FR 76644) and to list the industrial categories currently regulated by existing effluent guidelines that cumulatively comprise 95% of the reported hazard (reported in units of toxic-weighted pound equivalent or TWPE).

As reported in the final 2006 Effluent Guidelines Program Plan (December 21, 2006; 71 FR 76644), EPA also continued or began work on four detailed studies as part of the 2007 annual review: Steam Electric Power Generating (Part 423), Coal Mining (Part 434), Oil and Gas Extraction (Part 435) (only to assess whether to include coalbed methane extraction as a new subcategory), and Hospitals (Part 460).<sup>2</sup>

Together, these reviews discharged EPA’s obligations to annually review both existing effluent limitations guidelines for direct dischargers under CWA sections 301(d) and 304(b) and existing pretreatment standards for indirect dischargers under CWA sections 304(g) and 307(b).

Based on this review and prior annual reviews, and in light of the ongoing effluent guidelines rulemakings and detailed studies currently in progress, EPA is not identifying any existing categories for effluent guidelines rulemaking at this time.

#### 2. How did EPA’s 2006 annual review influence its 2007 annual review of point source categories with existing effluent guidelines and pretreatment standards?

In view of the annual nature of its reviews of existing effluent guidelines and pretreatment standards, EPA believes that each annual review can and should influence succeeding annual reviews, e.g., by indicating data gaps, identifying new pollutants or pollution reduction technologies, or otherwise highlighting industrial categories for additional scrutiny in subsequent years. For example, during its 2005 and 2006

<sup>1</sup> EPA recognizes that one court—the U.S. District Court for the Central District of California—has found that EPA has a duty to promulgate effluent guidelines within three years for new categories identified in the Plan. See *NRDC et al. v. EPA*, 437 F.Supp.2d 1137 (C.D. Ca, 2006). However, EPA continues to believe that the mandatory duty under section 304(m)(1)(C) is limited to providing a schedule for taking final action in effluent guidelines rulemaking—not necessarily promulgating effluent guidelines—within three years, and has appealed this decision.

<sup>2</sup> Based on available information, hospitals consist mostly of indirect dischargers for which EPA has not established pretreatment standards. As discussed in Section VII.B, EPA is including hospitals in its review of the Health Services Industry, a potential new category for pretreatment standards. As part of that process, EPA will review the existing effluent guidelines for the few direct dischargers in the category.

annual reviews EPA started a detailed study of the Steam Electric Power Generating (Part 423) category. At the conclusion of the 2006 annual review EPA indicated that it would continue the detailed study of the Steam Electric Power Generating (Part 423) category and begin detailed studies for the following three industrial categories: Coal Mining (Part 434), Oil and Gas Extraction (Part 435) (only to assess whether to include coalbed methane extraction as a new subcategory); and Hospitals (Part 460) (which is part of the Health Services Industry detailed study). In addition, EPA identified two other industrial categories, Ore Mining and Dressing (Part 440) and Textile Mills (Part 410), at the conclusion of the 2006 annual review as candidates for "preliminary category reviews" in the 2007 review based on the toxic discharges reported to the Toxics Release Inventory (TRI) and Permit Compliance System (PCS). These are categories for which EPA lacks sufficient data to determine whether revision would be appropriate and for which EPA is performing a further assessment of pollutant discharges before starting a detailed study. This assessment provides an additional level of quality assurance on the reported pollutant discharges and number of facilities that represent the majority of toxic-weighted pollutant discharges. EPA published the findings from its 2006 annual review with its final 2006 Plan (December 21, 2006; 71 FR 76644), making the data collected available for public comment. Docket No. EPA-HQ-OW-2004-0032. EPA used the findings, data and comments on the 2006 annual review to inform its 2007 annual review. The 2007 review also built on the previous reviews by continuing to use the screening methodology, incorporating some refinements to assigning discharges to categories and updating toxic weighting factors used to estimate potential hazards of toxic pollutant discharges.

3. What actions did EPA take in performing its 2007 annual reviews of existing effluent guidelines and pretreatment standards?

a. Screening-Level Review

The first component of EPA's 2007 annual review consisted of a screening-level review of all industrial categories subject to existing effluent guidelines or pretreatment standards. As a starting point for this review, EPA examined screening-level data from its 2007 annual reviews. In its 2007 annual reviews, EPA focused its efforts on collecting and analyzing data to identify

industrial categories whose pollutant discharges potentially pose the greatest hazard to human health or the environment because of their toxicity (*i.e.*, highest estimates of toxic-weighted pollutant discharges). In particular, EPA ranked point source categories according to their discharges of toxic and non-conventional pollutants (reported in units of toxic-weighted pound equivalent or TWPE), based primarily on data from TRI and PCS. EPA calculated the TWPE using pollutant-specific toxic weighting factors (TWFs). Where data are available, these TWFs reflect both aquatic life and human health effects. For each facility that reports to TRI or PCS, EPA multiplies the pounds of discharged pollutants by pollutant-specific TWFs. This calculation results in an estimate of the discharged toxic-weighted pound equivalents, which EPA then uses as its estimate of the hazard posed by these toxic and non-conventional pollutant discharges to human health or the environment. For the 2007 annual reviews, EPA used the most recent PCS and TRI data (2004). The full description of EPA's methodology for the 2007 screening-level review is presented in the Technical Support Document (TSD) for the preliminary 2008 Plan (*see* DCN 04247) and in the Docket (*see* EPA-HQ-OW-2006-0771) accompanying this notice.

EPA is continuously investigating and solicits comment on how to improve its analyses. In particular, EPA recently conducted a peer review of the TWF methodology and the Agency's use of TWFs in effluent guidelines program planning. An independent panel of scientific experts was asked to provide comment on the appropriateness of the TWF calculations and the quality and hierarchy of the data used in developing individual TWFs. EPA is currently in the process of reviewing and responding to the peer reviewer's comments. EPA is also in the process of updating the following document, Draft Toxic Weighting Factor Development in Support of CWA 304(m) Planning Process, EPA-HQ-OW-2004-0032-1634, to address some of the peer reviewers concerns. EPA plans to release the peer review report with the Agency's response as soon as it's completed, but no later than when the final 2008 304(m) Plan is released. EPA also is exploring how best to communicate the uncertainty inherent with incomplete data regarding individual TWFs. EPA will continue to update individual TWFs as new information becomes available.

EPA also developed a quality assurance project plan (QAPP) for its use of TRI and PCS data in the 2007 annual review to document the type and quality of data needed to make the decisions in this annual review and to describe the methods for collecting and assessing those data (*see* DCN 04422). EPA used the following document to develop the QAPP for this annual review: "EPA Requirements for QA Project Plans (QA/R-5), EPA-240-B01-003." Using the QAPP as a guide, EPA performed extensive quality assurance checks on the data used to develop estimates of toxic-weighted pollutant discharges (*i.e.*, verifying 2004 discharge data reported to TRI and PCS) to determine if any of the pollutant discharge estimates relied on incorrect or suspect data. For example, EPA contacted facilities and permit writers to confirm and, as necessary, correct TRI and PCS data for facilities that EPA had identified in its screening-level review as the significant dischargers of nutrients and of toxic and non-conventional pollution.

Based on this methodology, EPA prioritized for potential revision industrial categories that offered the greatest potential for reducing hazard to human health and the environment. EPA assigned those categories with the lowest estimates of toxic-weighted pollutant discharges a lower priority for revision (*i.e.*, industrial categories marked "(3)" in the "Findings" column in Table V-1 in section V.B.4 of today's notice).

In order to further focus its inquiry during the 2007 annual review, EPA assigned a lower priority for potential revision to categories for which effluent guidelines had been recently promulgated or revised, or for which effluent guidelines rulemaking was currently underway (*i.e.*, industrial categories marked "(1)" in the "Findings" column in Table V-1 in section V.B.4 of today's notice). For example, EPA excluded facilities that are associated with the Chlorine and Chlorinated Hydrocarbon (CCH) Manufacturing effluent guidelines rulemaking (formerly known as the "Vinyl Chloride and Chlor-Alkali Manufacturing" effluent guidelines rulemaking) currently underway from its 2006 hazard assessment of the Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) and Inorganic Chemicals point source categories to which CCH facilities belong.

Additionally, EPA applied less scrutiny to industrial categories for which EPA had promulgated effluent guidelines or pretreatment standards within the past seven years. EPA chose

seven years because this is the time it customarily takes for the effects of effluent guidelines or pretreatment standards to be fully reflected in pollutant loading data and TRI reports (in large part because effluent limitations guidelines are often incorporated into NPDES permits only upon re-issuance, which could be up to five years after the effluent guidelines or pretreatment standards are promulgated). Because there are 56 point source categories (including over 450 subcategories) with existing effluent guidelines and pretreatment standards that must be reviewed annually, EPA believes it is important to prioritize its review so as to focus on industries where changes to the existing effluent guidelines or pretreatment standards are most likely to be needed. In general, industries for which effluent guidelines or pretreatment standards have recently been promulgated are less likely to warrant such changes. However, in cases where EPA becomes aware of the growth of a new industrial activity within a category for which EPA has recently revised effluent guidelines or pretreatment standards, or where new concerns are identified for previously unevaluated pollutants discharged by facilities within the industrial category, EPA would apply more scrutiny to the category in a subsequent review. EPA identified no such instance during the 2007 annual review.

EPA also applied a lower priority for potential revision at this time to categories for which EPA lacked sufficient data to determine whether revision would be appropriate. For industrial categories marked "(5)" in the "Findings" column in Table V-1 in section V.B.4 of today's notice, EPA lacks sufficient information at this time on the magnitude of the toxic-weighted pollutant discharges associated with these categories. EPA will seek additional information on the discharges from these categories in the next annual review in order to determine whether a detailed study is warranted. EPA typically performs a further assessment of the pollutant discharges before starting a detailed study of an industrial category. This assessment ("preliminary category review") provides an additional level of quality assurance on the reported pollutant discharges and number of facilities that represent the majority of toxic-weighted pollutant discharges. See the appropriate section in the TSD for the preliminary 2008 Plan (DCN 04247) for EPA's data needs for these industrial categories.

For industrial categories marked "(4)" in the "Findings" column in Table V-

1 in section V.B.4 of today's notice, EPA had sufficient information on the toxic-weighted pollutant discharges associated with these categories to start or continue a detailed study of these industrial categories in the 2007 annual review. EPA intends to use the detailed study to obtain information on hazard, availability and cost of technology options, and other factors in order to determine if it would be appropriate to identify the category for possible effluent guidelines revision. In the 2007 annual review, EPA began or continued detailed studies of four such categories.

As part of its 2007 annual review, EPA also considered the number of facilities responsible for the majority of the estimated toxic-weighted pollutant discharges associated with an industrial activity. Where only a few facilities in a category accounted for the vast majority of toxic-weighted pollutant discharges (*i.e.*, categories marked "(2)" in the "Findings" column in Table V-1 in section V.B.4 of today's notice), EPA applied a lower priority for potential revision. EPA believes that revision of individual permits for such facilities may be more effective than a revised national effluent guidelines rulemaking. Individual permit requirements can be better tailored to these few facilities and may take considerably less time and resources to establish than a national effluent guidelines rulemaking. The Docket accompanying this notice lists facilities that account for the vast majority of the estimated toxic-weighted pollutant discharges for particular categories (*see* DCN 04247). For these facilities, EPA will consider identifying pollutant control and pollution prevention technologies that will assist permit writers in developing facility-specific, technology-based effluent limitations on a best professional judgment (BPJ) basis. For example, EPA developed and distributed a 2007 technical document to NPDES permit writers in order to support the development of effluent limitations for facilities in the dissolving kraft (Subpart A) and dissolving sulfite (Subpart D) subcategories of the pulp and paper point source category (40 CFR Part 430) (*see* DCN 04167). As of the beginning of 2006, there were four affected facilities in these two subcategories, two in Florida and one each in Georgia and Washington. EPA indicated in the final 2006 Plan (*see* December 21, 2006; 71 FR 76651-76652) that it would provide support to permit writers in establishing facility-specific effluent limits for these subcategories based on their Best Professional Judgment (BPJ) in lieu of

finalizing its 1993 effluent guidelines rulemaking (*see* December 17, 1993; 58 FR 44078). In future annual reviews, EPA also intends to re-evaluate each category based on the information available at the time in order to evaluate the effectiveness of the BPJ permit-based support.

EPA received comments in previous biennial planning cycles urging the Agency to encourage and recognize voluntary efforts by industry to reduce pollutant discharges, especially when the voluntary efforts have been widely adopted within an industry and the associated pollutant reductions have been significant. EPA agrees that industrial categories demonstrating significant progress through voluntary efforts to reduce hazard to human health or the environment associated with their effluent discharges would be a comparatively lower priority for effluent guidelines or pretreatment standards revision, particularly where such reductions are achieved by a significant majority of individual facilities in the industry. Although during this annual review EPA could not complete a systematic review of voluntary pollutant loading reductions, EPA's review did indirectly account for the effects of successful voluntary programs because any significant reductions in pollutant discharges should be reflected in discharge monitoring and TRI data, as well as any data provided directly by commenters, that EPA used to assess the toxic-weighted pollutant discharges.

As was the case in previous annual reviews, EPA was unable to gather the data needed to perform a comprehensive screening-level analysis of the availability of treatment or process technologies to reduce toxic pollutant wastewater discharges beyond the performance of technologies already in place for all of the 56 existing industrial categories. However, EPA believes that its analysis of hazard is useful for assessing the effectiveness of existing technologies because it focuses on the amount and significance of pollutants that are still discharged following existing treatment. Therefore, by assessing the hazard associated with discharges from all existing categories in its screening-level review, EPA was indirectly able to assess the possibility that further significant reductions could be achieved through new pollution control technologies for these categories. In addition, EPA directly assessed the availability of technologies for certain industries that were prioritized for a more in-depth review as a result of the screening level analysis. *See* DCN 04247.

Similarly, EPA could not identify a suitable screening-level tool for comprehensively evaluating the affordability of treatment or process technologies because the universe of facilities is too broad and complex. EPA could not find a reasonable way to prioritize the industrial categories based on readily available economic data. In the past, EPA has gathered information regarding technologies and economic achievability through detailed questionnaires distributed to hundreds of facilities within a category or subcategory for which EPA has commenced rulemaking. Such information-gathering is subject to the requirements of the Paperwork Reduction Act (PRA), 33 U.S.C. 3501, *et seq.* The information acquired in this way is valuable to EPA in its rulemaking efforts, but the process of gathering, validating and analyzing the data can consume considerable time and resources. EPA does not think it appropriate to conduct this level of analysis for all point source categories in conducting an annual review. Rather, EPA believes it is appropriate to set priorities based on hazard and other screening-level factors identified above, and to directly consider the availability and affordability of technology only in conducting the more in-depth reviews of prioritized categories. For these prioritized categories, EPA may conduct surveys or other PRA-governed data collection activities in order to better inform the decision on whether effluent guidelines are warranted. Additionally, EPA is working to develop tools for directly assessing technological and economic achievability as part of the screening-level review in future annual reviews under section 301(d), 304(b), and 307(b) (*see* EPA-HQ-OW-2004-0032-2344). EPA solicits comment on how to best identify and use screening-level tools for assessing technological and economic achievability on an industry-specific basis as part of future annual reviews.

In summary, through its screening level review, EPA focused on those point source categories that appeared to offer the greatest potential for reducing hazard to human health or the environment, while assigning a lower priority to categories that the Agency believes are not good candidates for effluent guidelines or pretreatment standards revision at this time. This enabled EPA to concentrate its resources on conducting more in-depth reviews of certain industries prioritized as a result of the screening level analysis, as discussed below (*see* section V.A.3.b and c).

#### b. Further Review of Prioritized Categories

In the publication of the final 2006 Plan EPA identified two additional categories with potentially high TWPE discharge estimates for further investigation ("preliminary category review") in the 2007 annual review: Ore Mining and Dressing (Part 440) and Textile Mills (Part 410) (*i.e.*, EPA identified these categories with "(5)" in the column entitled "Findings" in Table V-1, Page 76657 of the final 2006 Plan). From its 2007 annual review, EPA is identifying the Centralized Waste Treatment (Part 437) and Waste Combustors (Part 444) categories for preliminary category reviews in the 2008 annual review.

In conducting these preliminary category reviews EPA uses the same types of data sources used for the detailed studies but in less depth. EPA typically performs a further assessment of the pollutant discharges before starting a detailed study of an industrial category. This assessment provides an additional level of quality assurance on the reported pollutant discharges and number of facilities that represent the majority of toxic-weighted pollutant discharges. EPA may also develop a preliminary list of potential wastewater pollutant control technologies before conducting a detailed study. EPA is not conducting a detailed study for these categories at this time because EPA needs additional information regarding these industries to determine whether a detailed study is warranted.

#### c. Detailed Study of Four Categories

In addition to conducting a screening-level review of all existing categories, EPA started or continued detailed studies of four categories: Steam Electric Power Generating (Part 423), Coal Mining (Part 434), Oil and Gas Extraction (Part 435) (only to assess whether to include coalbed methane extraction as a new subcategory), and Hospitals (Part 460) (which is part of the Health Services Industry detailed study). For these industries, EPA gathered and analyzed additional data on pollutant discharges, economic factors, and technology issues during its 2007 annual review. EPA examined: (1) Wastewater characteristics and pollutant sources; (2) the pollutants discharged from these sources and the toxic weights associated with these discharges; (3) treatment technology and pollution prevention information; (4) the geographic distribution of facilities in the industry; (5) any pollutant discharge trends within the industry; and (6) any relevant economic factors.

EPA is relying on many different sources of data including: (1) The 2002 U.S. Economic Census; (2) TRI and PCS data; (3) contacts with reporting facilities to verify reported releases and facility categorization; (4) contacts with regulatory authorities (states and EPA regions) to understand how category facilities are permitted; (5) NPDES permits and their supporting fact sheets; (6) monitoring data included in facility applications for NPDES permit renewals (Form 2C data); (7) EPA effluent guidelines technical development documents; (8) relevant EPA preliminary data summaries or study reports; (9) technical literature on pollutant sources and control technologies; (10) information provided by industry including industry conducted survey and sampling data; and (11) stakeholder comments (*see* DCN 04247). Additionally, in order to evaluate available and affordable treatment technology options for the coalbed methane extraction industry sector, EPA intends to submit an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for its review and approval prior to publication of the final 2008 Plan.

#### d. Public Comments

EPA's annual review process considers information provided by stakeholders regarding the need for new or revised effluent limitations guidelines and pretreatment standards. To that end, EPA established a docket for its 2007 annual review at the time of publication of the final 2006 Plan to provide the public with an opportunity to submit additional information to assist the Agency in its 2007 annual review. These public comments are in the supporting docket (EPA-HQ-OW-2006-0771, [www.regulations.gov](http://www.regulations.gov)) and summarized in the TSD for the preliminary 2008 Plan (*see* DCN 04247).

#### B. What Were EPA's Findings From its 2007 Annual Review for Categories Subject to Existing Effluent Guidelines and Pretreatment Standards?

##### 1. Screening-Level Review

In its 2007 screening level review, EPA considered hazard—and the other factors described in section A.3.a. above—in prioritizing effluent guidelines for potential revision. See Table V-1 in section V.B.4 of today's notice for a summary of EPA's findings with respect to each existing category; see also the TSD for the preliminary 2008 Plan ("TSD"). Out of the categories subject only to the screening level review in 2007, EPA is not identifying any for effluent guidelines rulemaking



at this time, based on the factors described in section A.3.a above and in light of the effluent guidelines rulemakings and detailed studies in progress.

In the 2007 annual review EPA listed the industrial categories currently regulated by existing effluent guidelines that cumulatively comprise 95% of the reported hazard (reported in units of toxic-weighted pound equivalent or TWPE). The TSD presents a summary of EPA's review of these eleven industrial categories (see DCN 04247).

## 2. Detailed Studies

In its 2007 annual review, EPA started or continued detailed studies of four industrial point source categories with existing effluent guidelines and pretreatment standards: Steam Electric Power Generating (Part 423), Coal Mining (Part 434), and Oil and Gas Extraction (Part 435) (only to assess whether to include coalbed methane extraction as a new subcategory), and Hospitals (Part 460) (which is part of the Health Services Industry detailed study). EPA is investigating whether the pollutant discharges reported to TRI and PCS for 2004 accurately reflect the current discharges of the industry. EPA is also analyzing the reported pollutant discharges, and technology innovation and process changes in these industrial categories. Additionally, EPA is considering whether there are industrial activities not currently subject to effluent guidelines or pretreatment standards that should be included with these existing categories, either as part of existing subcategories or as potential new subcategories. EPA will use these detailed studies to determine whether EPA should identify in the final 2008 Plan (or a future Plan) any of these industrial categories for possible revision of their existing effluent guidelines and pretreatment standards. EPA's reviews of three of these four categories are described below and its review of hospitals is described in section VII.B (Health Services Industry detailed study).

### a. Steam Electric Power Generating (Part 423)

The Steam Electric Power Generating effluent guidelines (40 CFR 423) apply to a subset of the electric power industry, namely those facilities "primarily engaged in the generation of electricity for distribution and sale which results primarily from a process utilizing fossil-type fuel (coal, oil, or gas) or nuclear fuel in conjunction with a thermal cycle employing the steam water system as the thermodynamic medium." See 40 CFR 423.10. EPA's

most recent revisions to the effluent guidelines and standards for this category were promulgated in 1982 (see November 19, 1982; 47 FR 52290).

EPA previously found that facilities in the Steam Electric Power Generating point source category collectively discharge relatively high amounts of toxic pollutants (as measured in toxic-weighted pound equivalents (TWPE)). See Tables 5-3 and 5-4 of the TSD for the final 2006 Plan, EPA-HQ-OW-2004-0032-2782, and Section 5.4.4.7 of the TSD for the final 2004 Plan, EPA-HQ-OW-2003-0074-1346 through 1351. The 2007 annual review again identified this category as the second-largest discharger of toxic pollutants (see DCN 04247). EPA also determined that PCS and TRI data provide an incomplete picture of the wastewaters generated by the regulated steam electric industry. For example, EPA anticipates greater amounts of nitrogen compounds, selenium, and other metals, most of which are not regulated by the effluent guidelines, and therefore, may not be reported to TRI or PCS, in steam electric wastewaters as a result of the increasing use of air pollution controls (see Interim Detailed Study Report for the Steam Electric Power Generating Point Source Category, November 2006, EPA-HQ-OW-2004-0032-2781). Consequently, EPA focused on supplementing its review of PCS and TRI data for this category with additional data collection as described below and in the supporting docket (see DCN 04247).

The detailed study for the Steam Electric Power Generating point source category is mainly focused on: (1) Characterizing the mass and concentrations of pollutants in wastewater discharges from coal-fired steam electric facilities; and (2) identifying the pollutants that comprise a significant portion of the category's TWPE discharge estimate and the corresponding industrial operation. Waste streams of particular interest include cooling water, fly ash and bottom ash wastes, coal pile runoff, and discharges from wet air pollution control devices [e.g., wet flue gas desulfurization (FGD)]. EPA's previous annual reviews have identified that: (1) The TWPE discharge estimate for this category is predominantly driven by the metals present in wastewater discharges; and (2) the waste streams contributing the majority of these metals are associated with ash handling and wet FGD systems (see EPA-HQ-OW-2004-0032-2781). Other potential sources of metals include coal pile runoff, metal/chemical cleaning wastes, coal washing, and certain low volume

wastes. EPA is collecting data for the detailed study through facility inspections, wastewater sampling, a data request that was sent to a limited number of companies, and various secondary data sources (see DCN 04711).

EPA is conducting wastewater sampling of ash ponds and FGD wastewater treatment systems at several steam electric facilities. Samples collected are being analyzed for metals and classical pollutants, such as total suspended solids and nitrogen. EPA selected the plants for sampling based on characteristics and process configurations of interest. Factors taken into consideration include the type of fuel, type of wet FGD systems in operation, fly ash handling practices, nitrogen oxides (NO<sub>x</sub>) controls (e.g., selective catalytic reduction systems), and wastewater treatment technologies. See the following document for information about the sample collection methodologies, analytes of interest, and laboratory analytical methods: "Generic Sampling and Analysis Plan for Coal-Fired Steam Electric Power Plants," DCN 04296.

EPA also collected facility specific information using a data request conducted under authority of CWA section 308 (see DCN 04711). EPA sent this data request to nine companies that operate a number of coal-fired power plants with wet FGD systems. The data request complements the wastewater sampling effort as it collects facility-specific information about wastewaters EPA is not sampling. Additionally, the data request collects detailed information about wastewater generation rates and management practices for wastewaters included in EPA's sampling program. The data request seeks information on selected wastewater sources, air pollution controls, wastewater management and treatment practices, water reuse/recycle, and treatment system capital and operating costs.

### b. Coal Mining (Part 434)

As discussed in the "Notice of Availability of Final 2006 Effluent Guidelines Program Plan" EPA is conducting a detailed study during the 2007 and 2008 annual reviews to evaluate the merits of comments by states, industry, and a public interest group that urged revisions to pollutant limitations in the Coal Mining effluent guidelines (40 CFR Part 434) (see December 21, 2006; 71 FR 76644-76667). The Interstate Mining Compact Commission, which represents mining agencies in 35 states, together with a few individual state agencies, and a few



mining companies, asked EPA to remove the current manganese limitations and allow permittees to employ best management practices as necessary to reduce manganese discharges based on the quality of receiving waterbodies.

The public interest group, the Environmental Law and Policy Center, asked EPA to place greater controls on coal mining discharges of sulfates, chlorides, mercury, cadmium, manganese, selenium, and other unspecified pollutants.

State and industry commentors cited the following factors in support of their comments: (1) New, more stringent coal mining reclamation bonding requirements on post-closure discharges; (2) evidence that current manganese limitations are more stringent than necessary to protect aquatic life; (3) perception that high cost of manganese treatment is causing permittees to default on their post-closure bonds; and (4) perception that treatment with chemical addition may complicate permit compliance, especially after a mine is closed. The public interest group referenced a study by EPA Region 5 on potential adverse impacts of the discharge of sulfates on aquatic life (*see* DCN 2487).

EPA initiated the Coal Mining Detailed Study in January 2007. The study follows the framework presented in the Detailed Study Plan, a draft of which the Agency placed into the docket (*see* DCN 2488) during the Fall of 2006. EPA revised and finalized the Detailed Study Plan in April 2007 to reflect public comments. The study will evaluate treatment technologies, costs, and pollutant discharge loads, as well as the effects of manganese and other pollutants on aquatic life. The study will also address the question of whether bonds are being forfeited because of the cost of manganese treatment by examining bonding and trust fund requirements, past bond forfeiture rates, future potential bond forfeiture rates, and the issues related to state assumption of long-term water treatment responsibilities for mines where the bonds have been forfeited. As outlined in the Detailed Study Plan, EPA has framed study questions based on public comment, identified data sources to help answer the study questions, developed a methodology for estimating treatment costs and discharge loads, and initiated data collection activities with the Interstate Mining Compact Commission, state agencies, and the Office of Surface Mining, Reclamation, and Enforcement within the U.S. Department of the Interior.

The Coal Mining Detailed Study consists of several interim products which will be summarized in the 2008 final report: An industry financial profile which will include information about the types and locations of mines, ownership, and revenues; a summary of state and federal permitting requirements; a summary of bonding and trust fund requirements for control of water discharges from post-mining sites; an analysis of bond forfeiture and the consequences for the states; an analysis of treatment technologies, costs, and pollutant discharge loads; and an environmental summary of the aquatic life effects of manganese and other pollutants.

During 2007, EPA plans to complete data collection, complete the industry financial profile, begin analysis of bonding and trust fund issues, and begin analysis of treatment costs and discharge loads. During 2008, EPA will complete analysis of bonding and trust fund issues, complete estimates of treatment costs and discharge loads, complete its analysis of bond defaults, complete the summary of environmental impacts, and complete the final report.

EPA will use the results of the Coal Mining Detailed Study, which will be summarized in the 2008 annual review, to help decide appropriate regulatory steps.

#### c. Oil and Gas Extraction (Part 435) (Only To Assess Whether To Include Coalbed Methane Extraction as a New Subcategory)

As discussed in the 2006 annual review, EPA is conducting a detailed study of the coalbed methane industry to determine whether to revise the effluent guidelines for the Oil and Gas Extraction category to include limits for this potential new subcategory (*see* December 21, 2006; 71 FR 76656). The coalbed methane (CBM) industrial sector is an important part of the Nation's domestic source of natural gas. In 2004, CBM accounted for about 10.4% of the total U.S. natural gas production and is expanding in multiple basins across the Nation. Currently, the Department of Energy's Energy Information Administration (EIA) expects CBM production to remain an important source of domestic natural gas over the next few decades. Based on Bureau of Land Management (BLM) and States' projections this will likely involve over 100,000 CBM wells. The growth in the CBM industrial sector can be explained by the decrease in drilling and transmission costs in getting the CBM to market, clarity of gas ownership, and the increase of long-term natural gas prices. *See* Section 6 of

the TSD for the final 2006 Plan, EPA-HQ-OW-2004-0032-2782, December 2006. EPA identified the CBM extraction industry as a potential new subcategory of the Oil and Gas Extraction category (40 CFR 435) in the 2006 annual review (*see* December 21, 2006; 71 FR 76656).

Coalbed methane (CBM) extraction requires removal of large amounts of water from underground coal seams before CBM can be released. CBM wells have a distinctive production history characterized by an early stage when large amounts of water are produced to reduce reservoir pressure which in turn encourages release of gas; a stable stage when quantities of produced gas increase as the quantities of produced water decrease; and a late stage when the amount of gas produced declines and water production remains low (*see* EPA-HQ-OW-2004-0032-1904). The quantity and quality of water that is produced in association with CBM development will vary from basin to basin, within a particular basin, from coal seam to coal seam, and over the lifetime of a CBM well.

Pollutants often found in these wastewaters include chloride, sodium, sulfate, bicarbonate, fluoride, iron, barium, magnesium, ammonia, and arsenic. Total dissolved solids (TDS) and electrical conductivity (EC) are bulk parameters used for quantifying the total amount of dissolved solids in a wastewater and that may also be used to quantify and control the amount of pollutants in CBM produced waters. Equally important in preventing environmental damage is controlling the sodicity of the CBM produced waters. Sodicity is often quantified as the sodium adsorption ratio (SAR), which is expressed as the ratio of sodium ions to calcium and magnesium ions, and is an important factor in controlling the produced water's suitability for irrigation and its potential for degrading soils. All of these parameters can potentially affect environmental impacts as well as potential beneficial uses of CBM produced water.

Impacts to surface water from discharges of CBM produced waters can be severe depending upon the quality of the CBM produced waters. Saline discharges have variable effects depending on the biology of the receiving stream. Some waterbodies and watersheds may be able to absorb the discharged water while others are sensitive to large amounts of low-quality CBM water. For example, large surface waters with sufficient dilution capacity or marine waters are less sensitive to saline discharges than smaller freshwater surface waters. Discharge of

these CBM produced waters may also cause erosion and in some cases irreversible soil damage from elevated TDS concentrations and SAR values. This may limit future agricultural and livestock uses of the water and watershed.

Currently, regulatory controls for CBM produced waters vary from State to State and permit to permit (*see* EPA-HQ-OW-2004-0032-2782, 2540). There is very limited permit information (*e.g.*, effluent limits, restrictions) in PCS and TRI for this industrial sector. Consequently, EPA is gathering additional information from State NPDES permit programs and industry on the current regulatory controls across the different CBM basins.

EPA indicated in the 2006 annual review that it will need to gather more specific information as part of a detailed review of the coalbed methane industry in order to determine whether it would be appropriate to conduct a rulemaking to potentially revise the effluent guidelines for the Oil and Gas Extraction category to include limits for CBM. In particular, EPA will need to collect technical, economic, and environmental data from a wide range of CBM operations (*e.g.*, geographical differences in the characteristics of CBM-produced waters, current regulatory controls, potential environmental impacts, availability and affordability of treatment technology options). Accordingly, EPA intends to submit an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for its review and approval under the Paperwork Reduction Act (PRA), 33 U.S.C. 3501, et seq. EPA is working with stakeholders in the design of this industry survey (*see* DCN 04247). EPA solicits comment on the potential scope and methodology of this ICR. *See* section IX.C for a list of questions that EPA will use to develop the ICR. EPA expects to distribute the ICR in late summer of 2008.

EPA is also collecting discharge related information from five site visit trips to support this detailed study (*see* DCN 04247), and collecting data from other secondary sources to supplement its current understanding of the CBM industrial sector. EPA is specifically gathering data on available and affordable beneficial use and treatment technology options, and potential impacts of CBM produced water discharges. A summary of the data collected for this detailed study is provided in the TSD for the 2007 annual review.

### 3. Results of Preliminary Category Reviews

During the 2006 annual review, EPA identified two categories with potentially high TWPE discharge estimates for preliminary category review: Ore Mining and Dressing (Part 440) and Textile Mills (Part 410) (*i.e.*, EPA identified these categories with “(5)” in the column entitled “Findings” in Table V-1, Page 76657 of the final 2006 Plan). EPA concluded its preliminary category review of the Textile Mills category in the 2007 annual review and has determined that the Textile Mills category is not among those industrial categories currently regulated by existing effluent guidelines that cumulatively comprise 95% of the reported hazard (reported in units of toxic-weighted pound equivalent or TWPE) (*see* DCN 04247). As such, it has a low priority for effluent guideline revision at this time. EPA has yet to complete its preliminary category review of the Ore Mining and Dressing category. Section IX of this notice and the TSD lists the data and information that EPA would like to collect on the pollutant discharges and potential treatment technology options for the Ore Mining and Dressing category in order to complete this preliminary category review.

Additionally and as noted above, EPA identified two additional categories for preliminary category review as a result of the 2007 annual review: Centralized Waste Treatment (Part 437) and Waste Combustors (Part 444). EPA applied less scrutiny to these categories in the 2002, 2004, and 2006 biennial planning cycles as EPA effluent guidelines and pretreatment standards for these categories were promulgated in 2000. As discussed in section V.A.3.a, EPA generally applies less scrutiny to industrial categories for which EPA has promulgated effluent guidelines or pretreatment standards within the past seven years of the current biennial review. However, because this seven year period has elapsed and because of the relative high hazard ranking of these categories, EPA plans to conduct a preliminary category review of both categories in its 2008 annual review. Section IX and the TSD list data and information that EPA would like to collect on the pollutant discharges and potential treatment technology options for these two categories in order to complete these preliminary category reviews.

EPA is not identifying any of these three categories (Ore Mining and Dressing, Centralized Waste Treatment, and Waste Combustors) for an effluent

guidelines rulemaking in this preliminary 2008 Plan. However, EPA is identifying these categories for new or on-going preliminary category reviews in the 2008 annual review (*i.e.*, these categories are marked with “(5)” in the “Findings” column in Table V-1 in section V.B.4 of today’s notice). The docket accompanying this notice presents a summary of EPA’s findings on these three industrial categories (*see* DCN 04247).

### 4. Summary of 2007 Annual Review Findings

In its 2007 annual review, EPA reviewed all categories subject to existing effluent guidelines and pretreatment standards in order to identify appropriate candidates for revision. Based on this review, and in light of effluent guidelines rulemakings and detailed studies currently in progress, EPA is not identifying any existing categories for effluent guidelines rulemaking. EPA is, however, conducting detailed studies for four existing categories: Steam Electric Power Generating, Coal Mining, Oil and Gas Extraction (only with respect to coalbed methane), and Hospitals (part of the Health Services Industry detailed study).

A summary of the findings of the 2007 annual review is presented below in Table V-1. This table uses the following codes to describe the Agency(s) findings with respect to each existing industrial category.

(1) Effluent guidelines or pretreatment standards for this industrial category were recently revised or reviewed through an effluent guidelines rulemaking, or a rulemaking is currently underway.

(2) Revising the national effluent guidelines or pretreatment standards is not the best tool for this industrial category because most of the toxic and non-conventional pollutant discharges are from one or a few facilities in this industrial category. EPA will consider assisting permitting authorities in identifying pollutant control and pollution prevention technologies for the development of technology-based effluent limitations by best professional judgment (BPJ) on a facility-specific basis.

(3) Not identified as a hazard priority based on data available at this time (*e.g.*, not among industries that cumulatively comprise 95% of reported hazard in TWPE units).

(4) EPA intends to continue a detailed study of this industry in its 2008 annual review to determine whether to identify the category for effluent guidelines rulemaking.

(5) EPA is continuing or initiating a preliminary category review because incomplete data are available to determine whether to conduct a detailed study or identify for possible revision. EPA typically performs a further assessment of the pollutant discharges before starting a detailed study of the industrial category. This assessment provides an additional level of quality assurance on the reported pollutant discharges and number of facilities that represent the majority of toxic-weighted pollutant discharges. EPA may also develop a preliminary list of potential wastewater pollutant control technologies before conducting a detailed study. See the appropriate section in the TSD (DCN 04247) for EPA's data needs for industries in this category.

TABLE V-1.—FINDINGS FROM THE 2007 ANNUAL REVIEW OF EFFLUENT GUIDELINES AND PRETREATMENT STANDARDS CONDUCTED UNDER SECTION 301(D), 304(B), 304(G), AND 307(B)

No.	Industry category (listed alphabetically)	40 CFR Part	Findings <sup>†</sup>
1	Aluminum Forming	467	(3)
2	Asbestos Manufacturing	427	(3)
3	Battery Manufacturing	461	(3)
4	Canned and Preserved Fruits and Vegetable Processing	407	(3)
5	Canned and Preserved Seafood Processing	408	(3)
6	Carbon Black Manufacturing	458	(3)
7	Cement Manufacturing	411	(3)
8	Centralized Waste Treatment	437	(5)
9	Coal Mining <sup>‡</sup>	434	(1) and (4)
10	Coil Coating	465	(3)
11	Concentrated Animal Feeding Operations (CAFO)	412	(1)
12	Concentrated Aquatic Animal Production	451	(1)
13	Copper Forming	468	(3)
14	Dairy Products Processing	405	(3)
15	Electrical and Electronic Components	469	(3)
16	Electroplating	413	(1)
17	Explosives Manufacturing	457	(3)
18	Ferroalloy Manufacturing	424	(3)
19	Fertilizer Manufacturing	418	(3)
20	Glass Manufacturing	426	(3)
21	Grain Mills	406	(3)
22	Gum and Wood Chemicals	454	(3)
23	Hospitals <sup>‡</sup>	460	(4)
24	Ink Formulating	447	(3)
25	Inorganic Chemicals <sup>‡‡</sup>	415	(1) and (3)
26	Iron and Steel Manufacturing	420	(1)
27	Landfills	445	(3)
28	Leather Tanning and Finishing	425	(3)
29	Meat and Poultry Products	432	(1)
30	Metal Finishing	433	(1)
31	Metal Molding and Casting	464	(3)
32	Metal Products and Machinery	438	(1)
33	Mineral Mining and Processing	436	(3)
34	Nonferrous Metals Forming and Metal Powders	471	(3)
35	Nonferrous Metals Manufacturing	421	(3)
36	Oil and Gas Extraction <sup>††</sup>	435	(1) and (4)
37	Ore Mining and Dressing	440	(5)
38	Organic Chemicals, Plastics, and Synthetic Fibers <sup>‡‡</sup>	414	(1) and (3)
39	Paint Formulating	446	(3)
40	Paving and Roofing Materials (Tars and Asphalt)	443	(3)
41	Pesticide Chemicals	455	(2)
42	Petroleum Refining	419	(3)
43	Pharmaceutical Manufacturing	439	(1)
44	Phosphate Manufacturing	422	(3)
45	Photographic	459	(3)
46	Plastic Molding and Forming	463	(3)
47	Porcelain Enameling	466	(3)
48	Pulp, Paper, and Paperboard	430	(2)
49	Rubber Manufacturing	428	(3)
50	Soaps and Detergents Manufacturing	417	(3)
51	Steam Electric Power Generating	423	(4)
52	Sugar Processing	409	(3)
53	Textile Mills	410	(3)
54	Timber Products Processing	429	(3)
55	Transportation Equipment Cleaning	442	(3)
56	Waste Combustors	444	(5)

<sup>‡</sup>Based on available information, hospitals consist mostly of indirect dischargers for which EPA has not established pretreatment standards. As discussed in Section VII.D, EPA is including hospitals in its review of the Health Services Industry, a potential new category for pretreatment standards. As part of that process, EPA will review the existing effluent guidelines for the few direct dischargers in the category.

<sup>†</sup>Note: The descriptions of the "Findings" codes are presented immediately prior to this table.

<sup>‡</sup> Note: Two codes (“(1)” and “(4)”) are used for this category as both codes are applicable to this category and do not overlap. The first code (“(1)”) refers to the recent effluent guidelines rulemaking (January 23, 2002; 67 FR 3370), which created two new subcategories [Coal Remining (Subpart G) and Western Alkaline Coal (Subpart H)]. The second code (“(4)”) refers to the on-going detailed study described above that is examining the issues identified by commenters to the preliminary 2006 Plan, which are different from those addressed in the previous rulemaking.

<sup>††</sup> Note: Two codes (“(1)” and “(4)”) are used for this category as both codes are applicable to this category and do not overlap. The first code (“(1)”) refers to the recent effluent guidelines rulemaking (January 22, 2001; 66 FR 6850), which established BAT limitations and NSPS for non-aqueous drilling fluids. The second code (“(4)”) refers to the on-going detailed study described above that is examining the issues identified by commenters to the preliminary 2006 Plan, which are different from those addressed in the previous rulemaking.

<sup>‡‡</sup> Note: Two codes (“(1)” and “(3)”) are used for this category as both codes are applicable to this category and do not overlap. The first code (“(1)”) refers to the on-going effluent guidelines rulemaking for the Chlorinated Hydrocarbon (CCH) manufacturing sector, which includes facilities currently regulated by the OCSPP and Inorganics effluent guidelines. The second code (“(3)”) indicates that the remainder of the facilities in these two categories do not represent a hazard priority at this time.

## VI. EPA's 2008 Annual Review of Existing Effluent Guidelines and Pretreatment Standards Under CWA Sections 301(d), 304(b), 304(g), and 307(b)

As discussed in section V and further in section VIII, EPA is coordinating its annual reviews of existing effluent guidelines and pretreatment standards under CWA sections 301(d), 304(b), 307(b), and 304(g) with the publication of preliminary Plans and biennial Plans under section 304(m). Public comments received on EPA's prior reviews and Plans helped the Agency prioritize its analysis of existing effluent guidelines and pretreatment standards during the 2007 review. The information gathered during the 2007 annual review, including the identification of data gaps in the analysis of certain categories with existing regulations, in turn, provides a starting point for EPA's 2008 annual review. See Table V-1 in section V.B.4 of today's notice. In 2008, EPA intends to again conduct a screening-level analysis of all 56 categories and compare the results against those from previous years. EPA will also conduct further review of the industrial categories currently regulated by existing effluent guidelines that cumulatively comprise 95% of the reported hazard (reported in units of toxic-weighted pound equivalent or TWPE). Additionally, EPA intends to continue detailed studies of the following categories with existing effluent guidelines and pretreatment standards: Steam Electric Power Generating (Part 423), Coal Mining (Part 434), Oil and Gas Extraction (Part 435) (only to assess whether to include coalbed methane extraction as a new subcategory) and Hospitals (Part 460) (which is part of the Health Services Industry detailed study). EPA is identifying three categories (Ore Mining and Dressing, Centralized Waste Treatment, and Waste Combustors) for a preliminary category review in the 2008 annual review. EPA invites comment and data on the four detailed studies, the three preliminary category reviews, and all remaining point source categories.

## VII. EPA's Evaluation of Categories of Indirect Dischargers Without Categorical Pretreatment Standards To Identify Potential New Categories for Pretreatment Standards

### A. EPA's Evaluation of Pass Through and Interference of Toxic and Non-conventional Pollutants Discharged to POTWs

All indirect dischargers are subject to general pretreatment standards (40 CFR 403), including a prohibition on discharges causing “pass through” or “interference.” See 40 CFR 403.5. All POTWs with approved pretreatment programs must develop local limits to implement the general pretreatment standards. All other POTWs must develop such local limits where they have experienced “pass through” or “interference” and such a violation is likely to recur. There are approximately 1,500 POTWs with approved pretreatment programs and 13,500 small POTWs that are not required to develop and implement pretreatment programs.

In addition, EPA establishes technology-based national regulations, termed “categorical pretreatment standards,” for categories of industry discharging pollutants to POTWs that may pass through, interfere with or otherwise be incompatible with POTW operations. CWA section 307(b). Generally, categorical pretreatment standards are designed such that wastewaters from direct and indirect industrial dischargers are subject to similar levels of treatment. EPA has promulgated such pretreatment standards for 35 industrial categories.

Historically, for most effluent guidelines rulemakings, EPA determines the potential for “pass through” by comparing the percentage of the pollutant removed by well-operated POTWs achieving secondary treatment with the percentage of the pollutant removed by wastewater treatment options that EPA is evaluating as the bases for categorical pretreatment standards (January 28, 1981; 46 FR 9408).

The term “interference” means a discharge which, alone or in conjunction with a discharge or

discharges from other sources, both: (1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and (2) therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with applicable regulations or permits. See 40 CFR 403.3(i). To determine the potential for “interference,” EPA generally evaluates the industrial indirect discharges in terms of: (1) The compatibility of industrial wastewaters and domestic wastewaters (e.g., type of pollutants discharged in industrial wastewaters compared to pollutants typically found in domestic wastewaters); (2) concentrations of pollutants discharged in industrial wastewaters that might cause interference with the POTW collection system, the POTW treatment system, or biosolids disposal options; and (3) the potential for variable pollutant loadings to cause interference with POTW operations (e.g., batch discharges or slug loadings from industrial facilities interfering with normal POTW operations).

If EPA determines a category of indirect dischargers causes pass through or interference, EPA would then consider the BAT and BPT factors (including “such other factors as the Administrator deems appropriate”) specified in section 304(b) to determine whether to establish pretreatment standards for these activities. Examples of “such other factors” include a consideration of the magnitude of the hazard posed by the pollutants discharged as measured by: (1) The total annual TWPE discharged by the industrial sector; and (2) the average TWPE discharge among facilities that discharge to POTWs. Additionally, EPA would consider whether other regulatory tools (e.g., use of local limits under Part 403) or voluntary measures would better control the pollutant discharges from this category of indirect dischargers. For example, EPA relied on a similar evaluation of “pass through potential” in its prior decision not to

promulgate national categorical pretreatment standards for the Industrial Laundries industry. See 64 FR 45071 (August 18, 1999). EPA noted in this 1999 final action that, "While EPA has broad discretion to promulgate such [national categorical pretreatment] standards, EPA retains discretion not to do so where the total pounds removed do not warrant national regulation and there is not a significant concern with pass through and interference at the POTW." See 64 FR 45077 (August 18, 1999).

EPA reviewed TRI data in order to identify industry categories without categorical pretreatment standards that are discharging pollutants to POTWs that may pass through, interfere with or otherwise be incompatible with POTW operations (see DCN 04247). This review did not identify any such industrial categories. EPA also evaluated stakeholder comments and pollutant discharge information in the previous annual reviews to inform this review. In particular, commenters on the 2004 and 2006 annual reviews raised concerns about discharges of emerging pollutants of concern such as endocrine disruptors and mercury discharges from dentists and health service facilities and urged EPA to consider establishing effluent guidelines and pretreatment standards for such discharges. In response to these comments, EPA investigated the Health Services Industry in its 2006 annual review and found that it did not have readily available information to make an informed decision on the potential for "pass through" or "interference." Consequently, EPA identified this industrial category for detailed study in its 2007 and 2008 annual reviews. EPA also solicits comment and data on all industrial sectors not currently subject to categorical pretreatment standards for its 2008 review. Finally, EPA solicits comment on methods for aggregating pollutant discharge data collected by pretreatment programs to further inform its future review of industry categories without categorical pretreatment standards.

#### B. Health Services Industry Detailed Study

The Health Services Industry includes establishments engaged in various aspects of human health (e.g. hospitals, dentists, long-term care facilities) and animal health (e.g., veterinarians). Health services establishments fall under SIC major group 80 "Health Services" and industry group 074 "Veterinary Services." According to the 2002 Census, there are over 475,000 facilities in the Health Services Industry

(see EPA-HQ-OW-2004-0032-1615). EPA is including the following sectors within the Health Services Industry in its detailed study: Offices and Clinics of Dentists; Doctors and Mental Health Practitioners; Nursing and Personal Care Facilities (long-term care facilities); Hospitals and Clinics; Medical Laboratories and Diagnostic Centers; and Veterinary Care Services (see August 29, 2005; 70 FR 51054).

All these sectors require services to be delivered by trained professionals for the purpose of providing health care and social assistance for individuals or animals. These entities may be free standing or part of a hospital or health system and may be privately or publicly owned. The services can include diagnostic, preventative, cosmetic, and curative health services.

The vast majority of establishments in the health services industries are not subject to categorical limitations and standards. In 1976, EPA promulgated 40 CFR 460 which only applies to direct discharging hospitals with greater than 1,000 occupied beds. Part 460 did not establish pretreatment standards for indirect discharging facilities.

In evaluating the health services industries to date, EPA has found little readily available information. Both PCS and TRI contain sparse information on health care service establishments. For 2002, PCS only has data for two facilities which are considered "major" sources of pollutants and only Federal facilities in the healthcare industry are required to report to TRI. In 1989, EPA published a Preliminary Data Summary (PDS) for the Hospitals Point Source Category (see EPA-HQ-OW-2004-0032-0782). Also, EPA's Office of Enforcement and Compliance Assistance (OECA) published a Healthcare Sector Notebook in 2005 (see EPA-HQ-OW-2004-0032-0729). In addition, industry and POTWs have conducted studies to estimate pollutant discharges for some portions of this industry (e.g., dentists) (see EPA-HQ-OW-2004-0032-0772).

Based on preliminary information, major pollutants of concern in discharges from health care service establishments include solvents, mercury, pharmaceuticals, endocrine-disrupting compounds (EDCs), and biohazards (e.g., items contaminated with blood) (see EPA-HQ-OW-2004-0032-0729). The majority of the mercury originates from the following sources: amalgam used in dental facilities and medical equipment, laboratory reagents, and cleaning supplies used in healthcare facilities (see EPA-HQ-OW-2004-0032-0038 and 2391). EPA found little to no

quantitative information on wastewater discharges of emerging pollutants of concern such as pharmaceuticals and EDCs but was able to identify some information on biohazards (see DCN 04274).

As described above, the Health Services Industry is expansive and contains approximately half a million facilities. Because of the size and diversity of this category and other resource constraints, EPA decided to focus its detailed study on certain subcategories of dischargers. EPA selected its focus areas, for the most part, to respond to stakeholder concerns. The focus areas are:

- *Dental mercury*: EPA is focusing its evaluation on mercury discharges from the offices and clinics of dentists due to the potential hazard and bioaccumulative properties associated with mercury.

- *Unused pharmaceuticals*: EPA is focusing its evaluation on unused or leftover pharmaceuticals from health service facilities due to the growing concern over the discharge of pharmaceuticals into water and the potential environmental effects.

Unused pharmaceuticals include dispensed prescriptions that patients do not use as well as materials that are beyond their expiration dates. It includes both human and veterinary drugs (including certain pesticides such as flea, tick, and lice controls). As a point of clarification, the term "unused pharmaceuticals" does not include excreted pharmaceuticals. In particular, EPA is evaluating disposed unused pharmaceutical practices from the following sectors:

- Physicians offices
- Nursing and personal care facilities (including long-term care facilities);
- Veterinary care services; and
- Hospitals and clinics.

The Agency notes that it has an overall interest in mercury reduction and on July 5, 2006, issued a report titled, "EPA's Roadmap for Mercury," (see DCN 03035). Among other things, EPA's report highlights mercury sources and describes progress to date in addressing mercury sources. Similarly, assessing pharmaceuticals in wastewater is part of the Agency's Strategic Plan (2006-2011) to meet its goals of clean and safe water, (see <http://www.epa.gov/ocfo/plan/plan.htm>). EPA is concerned about pharmaceuticals in the environment and is working on this issue in many different areas. Currently, the Agency is: (1) Developing analytical methods to measure pharmaceuticals in wastewater and biosolids; (2) studying the health and ecological effects of

pharmaceuticals on aquatic life and their occurrence in fish; and (3) engaged in determining the significance of consumer disposal of drugs to wastewater. Additionally, the Agency is considering amending its hazardous waste regulations to add hazardous pharmaceuticals to the universal waste system to facilitate its oversight of the disposal of pharmaceutical waste (40 CFR 273) (*see* RIN 2050-AG39, April 30, 2007; 72 FR 23170).

While stakeholders and EPA are concerned about EDC discharges, EPA has found only limited data on EDCs. In order to fill in some of these data gaps, in conjunction with its Health Services Industry detailed study, EPA is conducting a POTW study that, among other things, has the goal of developing wastewater analytical methods for certain pollutants, characterizing the presence of chemicals such as surfactants and pharmaceuticals in POTW wastewaters and evaluating POTW treatment technology effectiveness in reducing such pollutant discharges. To the extent that the results of the POTW studies become available during the term of this Health Services Industry detailed study, EPA will include relevant information in this study.

The Health Services Study is described in more detail in *EPA's Draft Detailed Study Plan for the Health Services Industry* (*see* DCN 05067) and *Overview of EPA's Detailed Study of the Health Services* (*see* DCN 05080). As explained there, EPA is researching the following questions/topics as they relate to disposal of mercury and unused pharmaceuticals into municipal sewer systems:

- What are the current industry practices in regards to disposal of unused pharmaceuticals and mercury? To what extent are each of these practices applied? What factors drive current practices?
  - Are there federal, state, or local requirements or guidance for disposal of unused pharmaceuticals and/or mercury? What are these requirements?
  - How are control authorities currently controlling (or not) disposal of unused pharmaceuticals and mercury via wastewater?
  - To what extent do POTWs report pass through or interference problems related to unused pharmaceuticals or mercury discharges?
  - What technologies are available: (1) As alternatives to wastewater disposal; and (2) to control pollutant discharges. Is there any qualitative or quantitative information on their efficiency?
  - What Best Management Practices (BMPs) are used as alternatives to

wastewater disposal and/or to control discharges and is there any qualitative or quantitative information on their efficiency?

- Is there any quantitative or qualitative information on the costs associated with identified technologies and/or BMPs?

#### 1. Dental Mercury

Across the United States, states and municipal wastewater treatment plants (publicly owned treatment works (POTWs)) are working toward the goal of reducing discharges of mercury into collection systems. Many studies have been conducted in an attempt to identify the sources of mercury entering these collection systems. According to the 2002 *Mercury Source Control and Pollution Prevention Program Final Report* prepared for the National Association of Clean Water Agencies (NACWA), dental clinics are the main source of mercury discharges to POTWs. The American Dental Association (ADA) estimated in 2003 that 50% of mercury entering POTWs was contributed by dental offices.

EPA estimates there are approximately 130,000 dental offices in the United States—almost all of which discharge their wastewater exclusively to POTWs. Mercury in dental wastewater originates from waste particles associated with the placement and removal of amalgam fillings. Most dental offices currently use some type of basic filtration system to reduce the amount of mercury solids passing into the sewer system. However, best management practices and the installation of amalgam separators may reduce discharges even further.

Some states, regions, and POTWs have already implemented or are considering alternatives to reduce mercury discharges from dental offices. For example, a number of states have enacted legislation requiring the installation and operation of amalgam separators or use of best management practices (*see* DCN 04668). EPA Region 5 published guidance for permitting dental mercury discharges (*see* DCN 05024). The ADA has also adopted and published best management practices for its members. On October 2, 2007, the ADA updated its best management practices to include the use of amalgam separators (*see* DCN 05087). *See* DCN 04668 for a compilation of the information EPA has collected to date on existing guidance and requirements for dental mercury.

In 2007, EPA has focused its efforts on collecting and compiling information on current mercury discharges from dental offices, best management practices

(BMPs), and control technologies such as amalgam separators. For control technologies and BMPs, EPA has looked at the frequency with which each is currently used; their effectiveness in reducing discharges to POTWs; and the capital and annual costs associated with their installation and operation (*see* DCN 04851 and 04852). EPA encourages all stakeholders to review the information collected to date and provide additional information, if available. EPA is particularly interested in quantitative information on the effectiveness and costs of implementing best management practices.

At this time, EPA does not know if its investigation will lead to the development of national, categorical pretreatment standards for dental mercury discharges. While this is a possibility, EPA is aware of a number of successful local programs and has identified that there are many opportunities for pollution prevention and adoption of BMPs without federal regulation. It appears that the dental industry is already actively working towards voluntarily reducing its mercury discharges.

#### 2. Unused Pharmaceuticals

Stakeholders have expressed concern over the discharge of pharmaceuticals into water and its environmental effects. Recent studies have indicated the presence of pharmaceuticals in waters of the U.S. *See* Pharmaceuticals, Hormones, and Other Organic Wastewater Contaminants in U.S. Streams, USGS Fact Sheet FS-027-02, June 2002 (*see* DCN 04854). Recent studies have also shown the presence of pharmaceuticals directly downstream of POTWs (*see* DCN 05071). To date, EPA has found little quantitative information on the origin of pharmaceuticals in municipal wastewaters. There is even less data on the quantity of pharmaceuticals entering and leaving wastewater treatment plants. The discharge of pharmaceuticals to these treatment plants, with few exceptions, is not currently regulated or monitored.

Health Services Industry facilities (*e.g.*, hospitals, veterinarians, doctors, and long-term care facilities) may dispose of unused, expired, and unwanted medications (“unused pharmaceuticals”) down the drain or toilet, which then may pass through the POTW and on to surface waters. Given this concern, EPA plans to collect information from the Health Services Industry to better understand pharmaceutical discharges to POTWs and to make informed decisions. POTWs are not specifically designed to remove the wide range of

pharmaceuticals, and often the treatment plant removal efficiencies are unknown. The full spectrum of pharmaceuticals occurring in POTW effluent is not yet known, and for those that are present, the POTW removal efficiency is a function of the treatment technology employed and will vary from drug to drug. As a result, unused pharmaceuticals may have the potential to cause interference or to pass through municipal wastewater treatment plants.

In order to obtain further quantitative information on unused pharmaceuticals in Health Service Industry wastewaters, EPA plans to send a data request to targeted long-term care facilities, hospitals, and veterinarians. EPA is interested in obtaining the records facilities keep to track disposal of unused pharmaceuticals and their quantities. EPA especially wants to know how much and how often unused pharmaceuticals are disposed of via the sink or toilet, and what drives such practices.

There are best management practices (BMPs) and alternatives to disposing of pharmaceuticals into POTWs via sinks and toilets. Alternative disposal options include hazardous waste incinerators, regulated medical waste incinerators, and non-hazardous landfills (i.e., trash). Also, there are pharmacy take back programs via the mail and physical drop off locations (e.g., reverse distribution brokers or centers). These take back programs are typically only available for pharmaceuticals that have not been sold and are not available to consumers. EPA is exploring the utility of take back programs and has given a grant to the University of Maine Center on Aging to devise, implement and evaluate a mail back plan for consumers to return unused over the counter and prescription medications. A network of 75 distribution points located at pharmacies will provide for mailer pick up and drop offs. Informational materials for pharmacists, staff and consumers regarding the mailers will be developed and distributed. In addition, the pilot will test the effectiveness of an educational campaign about the hazards to life, health, and the environment posed by improper storage and disposal of unused medications.

Many of the current disposal practices are driven by Federal requirements or guidance. In addition to Federal rules, there are state and local policies that influence disposal of unused pharmaceuticals. EPA will continue to evaluate disposal alternatives in context of the existing requirements which affect disposal decisions.

At this time, EPA does not have enough information to know if this

study will lead to the development of a national, categorical pretreatment standard for unused pharmaceuticals. While this is a possibility, EPA is gathering information on pollution prevention opportunities and BMPs that may provide a reasonable alternative to federal regulation. To aid EPA in its assessment of unused pharmaceuticals from the Health Services Industry, EPA requests comment on current practices. See section IX.

#### **VIII. The Preliminary 2008 Effluent Guidelines Program Plan Under Section 304(m)**

In accordance with CWA section 304(m)(2), EPA is publishing this preliminary 2008 Plan for public comment prior to this publication of the final 2008 Plan.

##### *A. EPA's Schedule for Annual Review and Revision of Existing Effluent Guidelines Under Section 304(b)*

###### 1. Schedule for 2007 and 2008 Annual Reviews Under Section 304(b)

As noted in section IV.B, CWA section 304(m)(1)(A) requires EPA to publish a Plan every two years that establishes a schedule for the annual review and revision, in accordance with section 304(b), of the effluent guidelines that EPA has promulgated under that section. This preliminary 2008 Plan announces EPA's schedule for performing its section 304(b) reviews. The schedule is as follows: EPA will coordinate its annual review of existing effluent guidelines under section 304(b) with its publication of the preliminary and final Plans under CWA section 304(m). In other words, in odd-numbered years, EPA intends to complete its annual review upon publication of the preliminary Plan that EPA must publish for public review and comment under CWA section 304(m)(2). In even-numbered years, EPA intends to complete its annual review upon the publication of the final Plan. EPA's 2007 annual review is the review cycle ending upon the publication of this preliminary 2008 Plan.

EPA is coordinating its annual reviews under section 304(b) with publication of Plans under section 304(m) for several reasons. First, the annual review is inextricably linked to the planning effort, because the results of each annual review can inform the content of the preliminary and final Plans, e.g., by identifying candidates for ELG revision for which EPA can schedule rulemaking in the Plan, or by calling to EPA's attention point source categories for which EPA has not promulgated effluent guidelines.

Second, even though not required to do so under either section 304(b) or section 304(m), EPA believes that the public interest is served by periodically presenting to the public a description of each annual review (including the review process employed) and the results of the review. Doing so at the same time EPA publishes preliminary and final plans makes both processes more transparent. Third, by requiring EPA to review all existing effluent guidelines each year, Congress appears to have intended that each successive review would build upon the results of earlier reviews. Therefore, by describing the 2007 annual review along with the preliminary 2008 Plan, EPA hopes to gather and receive data and information that will inform its reviews for 2008 and the final 2008 Plan.

##### 2. Schedule for Possible Revision of Effluent Guidelines Promulgated Under Section 304(b)

EPA is currently conducting rulemakings to potentially revise existing effluent guidelines and pretreatment standards for the following categories: Organic Chemicals, Plastics and Synthetic Fibers (OCPSF) and Inorganic Chemicals (to address discharges from Vinyl Chloride and Chlor-Alkali facilities identified for effluent guidelines rulemaking in the final 2004 Plan, now termed the "Chlorine and Chlorinated Hydrocarbon (CCH) manufacturing" rulemaking and Concentrated Animal Feeding Operations (rulemaking on BCT technology options for controlling fecal coliform and new source performance standards). EPA emphasizes that identification of the rulemaking schedules for these effluent guidelines does not constitute a final decision to revise the guidelines. EPA may conclude at the end of the formal rulemaking process—supported by an administrative record and following an opportunity for public comment—that effluent guidelines revisions are not appropriate for these categories. EPA is not scheduling any other existing effluent guidelines for rulemaking at this time.

##### *B. Identification of Potential New Point Source Categories Under CWA Section 304(m)(1)(B)*

The final Plan must also identify categories of sources discharging non-trivial amounts of toxic or non-conventional pollutants for which EPA has not published effluent limitations guidelines under section 304(b)(2) or new source performance standards (NSPS) under section 306. See CWA section 304(m)(1)(B); S. Rep. No. 99-50,



Water Quality Act of 1987, Leg. Hist. 31 (indicating that section 304(m)(1)(B) applies to “non-trivial discharges”). The final Plan must also establish a schedule for the promulgation of effluent guidelines for the categories identified under section 304(m)(1)(B), providing for final action on such rulemaking not later than three years after the identification of the category in a final Plan.<sup>4</sup> See CWA section 304(m)(1)(C).

EPA is currently conducting rulemakings to determine whether to establish effluent guidelines for three potential new categories (see September 2, 2004; 69 FR 53705). Two of these categories—Airport Deicing Operations and Drinking Water Treatment—were identified as potential new categories in the final 2004 Plan. EPA initiated rulemaking for the third category—Construction and Development—because it was directed to do so by a district court order. *NRDC et al. v. EPA*, No. 04–8307, order (C.D. Ca., December 6, 2006). Although EPA respectfully disagrees with this decision, and does not believe that it is required to promulgate effluent guidelines for this potential new category, EPA is conducting the rulemaking ordered by the court pending appeal of the Court’s decision. For the reasons discussed below, EPA is not at this time proposing to identify any other potential new categories for effluent guidelines rulemaking and therefore is not scheduling effluent guidelines rulemaking for any such categories in this preliminary Plan.

In order to identify industries not currently subject to effluent guidelines, EPA primarily used data from TRI and PCS. Facilities with data in TRI and PCS are identified by a four-digit SIC code (see DCN 04247). EPA performs a crosswalk between the TRI and PCS data, identified with the four digit SIC code, and the 56 point source categories with effluent guidelines or pretreatment standards to determine if a four-digit SIC code is currently regulated by existing effluent guidelines (see DCN 04247). EPA also relied on comments received on its previous 304(m) plans to identify potential new categories. EPA then assessed whether these industrial sectors not currently regulated by

effluent guidelines meet the criteria specified in section 304(m)(1)(B), as discussed below.

First, section 304(m)(1)(B) specifically applies only to “categories of sources” for which EPA has not promulgated effluent guidelines. Because this section does not define the term “categories,” EPA interprets this term based on the use of the term in other sections of the Clean Water Act, legislative history, and Supreme Court case law, and in light of longstanding Agency practice. As discussed below, these sources indicate that the term “categories” refers to an industry as a whole based on similarity of product produced or service provided, and is not meant to refer to specific industrial activities or processes involved in generating the product or service. EPA therefore identifies in its biennial Plan only those new industries that it determines are properly considered stand-alone “categories” within the meaning of the Act—not those that are properly considered potential new subcategories of existing categories based on similarity of product or service.

The use of the term “categories” in other provisions of the CWA indicates that a “category” encompasses a broad array of industrial operations related by similarity of product or service provided. For example, CWA section 306(b)(1)(A) provides a list of “categories of sources” (for purposes of new source performance standards) that includes “pulp and paper mills,” “petroleum refining,” “iron and steel manufacturing,” and “leather tanning and finishing.” These examples suggest that a “category” is intended to encompass a diversity of facilities engaged in production of a similar product or provision of a similar service. See also CWA section 402(e) and (f) (indicating that “categories” are comprised of smaller subsets such as “class, type, and size”). In the effluent guidelines program, EPA uses these factors, among others, to define “subcategories” of a larger industrial category.

The legislative history of later amendments to CWA section 304 indicates that Congress was aware that there was a distinction between “categories” and “subcategories” in effluent guidelines. See *Leg. Hist: Senate Committee on Environment and Public Works, A Legislative History of the Clean Water Act of 1977*, prepared by the Environmental Policy Division of the Congressional Research Service of the Library of Congress (Comm. Print 1978) at 455 (indicating that BAT calls for the examination of “each industry category or subcategory”). See also

*Chemical Manufacturers’ Association v. EPA*, 470 U.S. 116, 130 (1985) (interpreting this legislative history as “admonish[ing] [EPA] to take into account the diversity within each industry by establishing appropriate subcategories.”). Therefore, in light of Congress’ awareness of the distinction between categories and subcategories, EPA reasonably assumes that Congress’ use in 1987 of the term “categories” in section 304(m)(1)(B) was intentional. If Congress had intended for EPA to identify potential new subcategories in the Plan, it would have said so. Congress’ direction for EPA to identify new “categories of sources” cannot be read to constrain EPA’s discretion over its internal planning processes by requiring identification of potential new “subcategories” in the Plan. See *Norton v. Southern Utah Wilderness Alliance et al*, 124 S Ct. 2373, 2383 (2004) (finding that a statutory mandate must be sufficiently specific in order to constrain agency discretion over its internal planning processes).

Moreover, the distinction between a category and a subcategory has long been recognized by the Supreme Court. In *Chemical Manufacturers’ Association v. EPA*, the Court recognized that categories are “necessarily rough-hewn” (*id.* at 120) and that EPA establishes subcategories to reflect “differences among segments of the industry” based on the factors that EPA must consider in establishing effluent limitations. *Id.* at 133, n. 24. See also *Texas Oil and Gas Assn. v. EPA*, 161 F.3d 923, 939 (5th Cir. 1998) (“The EPA is authorized—indeed, is required—to account for substantial variation within an existing category \* \* \* of point sources.”). Indeed, the effluent guidelines considered by the Supreme Court in *Du Pont* case was divided into 22 subcategories, each with its own set of technology-based limitations, reflecting variations in processes and pollutants. *Id.* at 22 and nn. 9 and 10. See also *id.* at 132 (noting that legislative history “can be fairly read to allow the use of subcategories based on factors such as size, age, and unit processes.”).

EPA’s interpretation of the term “categories” is consistent with longstanding Agency practice. Pursuant to CWA section 304(b), which requires EPA to establish effluent guidelines for “classes and categories of point sources,” EPA has promulgated effluent guidelines for 56 industrial “categories.” Each of these “categories” consists of a broad array of facilities that produce a similar product or perform a similar service—and is broken down into smaller subsets, termed “subcategories,” that reflect variations

<sup>4</sup> EPA recognizes that one court—the U.S. District Court for the Central District of California—has found that EPA has a duty to promulgate effluent guidelines within three years for new categories identified in the Plan. See *NRDC et al. v. EPA*, 437 F.Supp.2d 1137 (C.D. Ca., 2006). However, EPA continues to believe that the mandatory duty under section 304(m)(1)(c) is limited to providing a schedule for concluding the effluent guidelines rulemaking—not necessarily promulgating effluent guidelines—within three years, and has appealed this decision.

in the processes, treatment technologies, costs and other factors associated with the production of that product that EPA is required to consider in establishing effluent guidelines under section 304(b). For example, the "Pulp, Paper and Paperboard point source category" (40 CFR part 430) encompasses a diverse range of industrial facilities involved in the manufacture of a like product (paper); the facilities range from mills that produce the raw material (pulp) to facilities that manufacture end-products such as newsprint or tissue paper. EPA's classification of this "industry by major production processes used many of the statutory factors set forth in CWA Section 304(b), including manufacturing processes and equipment (e.g., chemical, mechanical, and secondary fiber pulping; pulp bleaching; paper making); raw materials (e.g., wood, secondary fiber, non-wood fiber, purchased pulp); products manufactured (e.g., unbleached pulp, bleached pulp, finished paper products); and, to a large extent, untreated and treated wastewater characteristics (e.g., BOD loadings, presence of toxic chlorinated compounds from pulp bleaching) and process water usage and discharge rates."<sup>5</sup> Each subcategory reflects differences in the pollutant discharges and treatment technologies associated with each process. Similarly, the "Iron and Steel Manufacturing point source category" (40 CFR part 420) consists of various subcategories that reflect the diverse range of processes involved in the manufacture of iron and steel, ranging from facilities that make the basic fuel used in the smelting of iron ore (subpart A—Cokemaking) to those that cast the molten steel into molds to form steel products (subpart F—Continuous Casting). An example of an industry category based on similarity of service provided is the Transportation Equipment Cleaning Point Source Category (40 CFR Part 442), which is subcategorized based on the type of tank (e.g., rail cars, trucks, barges) or cargo transported by the tanks cleaned by these facilities, reflecting variations in wastewaters and treatment technologies associated with each.

Thus, EPA's first decision criterion asks whether a new industrial operation or activity in question is properly characterized as an industry "category" based on similarity of product produced or service provided, or whether it

simply represents a variation (e.g. new process) among facilities generating the same product and is therefore properly characterized as a potential new subcategory. If it is properly considered a stand-alone category in its own right, EPA addresses it pursuant to sections 304(m)(1)(B) and (C). If EPA determines that it is a potential new "subcategory," EPA reviews the activity in its section 304(b) annual review of the existing categories in which it would belong, in order to determine whether it would be appropriate to revise the effluent guidelines for that category to include limits for the new subcategory.

As a practical matter, this approach makes sense. There are constantly new processes being developed within an industry category—new ways of making paper or steel, new ways of cleaning transportation equipment, new ways of extracting oil and gas, for example. These new processes are closely interwoven with the processes already covered by the existing effluent guidelines for the category—they often generate similar pollutants, are often performed by the same facilities, and their discharges can often be controlled by the same treatment technology. Therefore, it is more efficient for EPA to consider industry categories holistically by looking at these new processes when reviewing and revising the effluent guidelines for the existing category. The opposite approach could lead to a situation when EPA would do a separate effluent guidelines rulemaking every time a new individual process emerges without considering how these new technologies could affect BAT for related activities. In revising effluent guidelines, EPA often creates new subcategories to reflect new processes. For example, the effluent guidelines for the pesticides chemicals category (40 CFR part 455) did not originally cover refilling establishments because this process was developed after the limitations were first promulgated. When EPA revised the effluent guidelines for the Pesticides Chemicals category, EPA included refilling establishments as a new subcategory subject to the effluent limits for this category. The issue is not whether a guideline should be developed for a particular activity, but whether the analysis should occur in isolation or as part of a broader review.

To ensure appropriate regulation of such new subcategories prior to EPA's promulgation of new effluent guidelines for the industrial category to which they belong, under EPA's regulations at 40 CFR part 125.3(c), a permit writer is required to establish technology-based effluent limitations for these processes

on a case by case, "Best Professional Judgment" (BPJ) basis, considering the same factors that EPA considers in promulgating categorical effluent limitations guidelines. These new processes are covered by these BPJ-based effluent guidelines until the effluent guidelines for the industrial category are revised to include limits for these new subcategories.

EPA's approach to addressing new industries is analogous to EPA's approach to addressing newly identified pollutants. When EPA identifies new pollutants associated with the discharge from existing categories, EPA considers limits for those new pollutants in the context of reviewing and revising the existing effluent guidelines for that category. For example, EPA revised effluent limitations for the bleached papergrade kraft and soda and papergrade sulfite subcategories within the Pulp, Paper, and Paperboard point source category (40 CFR 430) to add BAT limitations for dioxin, which was not measurable when EPA first promulgated these effluent guidelines and pretreatment standards and was not addressed by the pollutant control technologies considered at that time. See 63 FR 18504 (April 15, 1998).

In short, for the reasons discussed above, EPA believes that the appropriateness of addressing a new process or pollutant discharge is best considered in the context of revising an existing set of effluent guidelines. Accordingly, EPA analyzed similar industrial activities not regulated by existing regulations as part of its annual review of existing effluent guidelines and pretreatment standards.

The second criterion EPA considers when implementing section 304(m)(1)(B) also derives from the plain text of that section. By its terms, CWA section 304(m)(1)(B) applies only to industrial categories to which effluent guidelines under section 304(b)(2) or section 306 would apply, if promulgated. Therefore, for purposes of section 304(m)(1)(B), EPA would not identify in the biennial Plan any industrial categories comprised exclusively or almost exclusively of indirect discharging facilities regulated under section 307. For example, based on its finding that the Health Services Industry consists almost exclusively of indirect dischargers, EPA did not identify this industry in the 2008 Plan but instead will consider whether to adopt pretreatment standards for this industry in the context of its section 304(g)/307(b) review of indirect dischargers. Similarly, EPA would not identify in the Plan categories for which effluent guidelines do not apply, e.g.,

<sup>5</sup> U.S. EPA, 1997. *Supplemental Technical Development Document for Effluent Limitations Guidelines and Standards for the Pulp, Paper, and Paperboard Category*, Page 5-3, EPA-821-R-97-011, October 1997.

POTWs regulated under CWA section 301(b)(1)(B) or municipal storm water runoff regulated under CWA section 402(p)(3)(B).

Third, CWA section 304(m)(1)(B) applies only to industrial categories of sources that discharge toxic or non-conventional pollutants to waters of the United States. EPA therefore did not identify in the Plan industrial activities for which conventional pollutants, rather than toxic or non-conventional pollutants, are the pollutants of concern. In addition, even when toxic and non-conventional pollutants might be present in an industrial category's discharge, section 304(m)(1)(B) does not apply when those discharges occur in trivial amounts. EPA does not believe that it is necessary, nor was it Congressional intent, to develop national effluent guidelines for categories of sources that discharge trivial amounts of toxic or non-conventional pollutants and therefore pose an insignificant hazard to human health or the environment. See Senate Report Number 50, 99th Congress, 1st Session (1985); WQA87 Legislative History 31 (see DCN 03911). This decision criterion leads EPA to focus on those remaining industrial categories where, based on currently available information, new effluent guidelines have the potential to address a non-trivial hazard to human health or the environment associated with toxic or non-conventional pollutants.

Finally, EPA interprets section 304(m)(1)(B) to give EPA the discretion to identify in the Plan only those potential new categories for which an effluent guidelines rulemaking may be an appropriate tool. Therefore, EPA does not identify in the Plan all potential new categories discharging toxic and non-conventional pollutants. Rather, EPA identifies only those potential new categories for which it believes that effluent guidelines may be appropriate, taking into account Agency priorities, resources and the full range of other CWA tools available for addressing industrial discharges.

This interpretation is supported by the Supreme Court's decision in *Norton v. Southern Utah Wilderness Alliance et al.* (124 S. Ct. 2373, 2383 (2004)), which recognized the importance of agency discretion over its internal planning processes. Specifically, the Court in *Norton* held that a statute requiring an agency to "manage wilderness study areas . . . in a manner so as not to impair the suitability of such areas" was too broad to constrain the agency's discretion over its internal land use planning processes. See also *Fund for Animals et al. v. U.S. Bureau of Land*

*Management*, No. 04–5359, 2006 U.S. App. LEXIS 21206 (D.C. Cir., August 18, 2006); *Center for Biological Diversity v. Veneman*, 394 F.3d 1108 (9th Cir. 2005) (both cases following *Norton* line of reasoning to find that statutory mandate was not sufficiently specific to constrain agency discretion over its internal planning processes). In this case, the statutory mandate at issue—establish technology-based effluent limits that take into account a range of factors including "such other factors as the Administrator deems appropriate"—also lacks the specificity to constrain the Agency's discretion over its effluent guidelines planning process. See CWA section 304(b)(2)(B). This broad statutory mandate gives EPA the discretion to identify in its section 304(m) Plan only those industrial categories for which it determines that effluent guidelines would be "appropriate" and to rely on other CWA tools—such as site-specific technology based limitations developed by permit writers on a BPJ basis—when it determines that such tools would be a more effective and efficient way of increasing the stringency of pollution control through NPDES permits.

Congress specifically accorded EPA with the discretion to choose the appropriate tool for pressing the development of new technologies, authorizing EPA to develop technology-based effluent limitations using a site-specific BPJ approach under CWA section 402(a)(1), rather than pursuant to an effluent guidelines rulemaking. See CWA section 301(b)(3)(B). Significantly, section 301(b)(3)(B) was enacted contemporaneously with section 304(m) and its planning process, suggesting that Congress contemplated the use of *both* tools, with the choice of tools in any given 304(m) plan left to the Administrator's discretion. The Clean Water Act requirement that EPA develop an effluent guidelines plan—when coupled with the broad statutory mandate to consider "appropriate" factors in establishing technology-based effluent limitations and the direction to establish such limitations either through effluent guidelines or site-specific BAT decision-making—cannot be read to constrain the Agency's discretion over what it includes in its plan.

Moreover, because section 304(m)(1)(C) requires EPA to complete an effluent guidelines rulemaking within three years of identifying an industrial category in a 304(m) Plan,<sup>6</sup>

<sup>6</sup> EPA recognizes that a recent district court held that section 304(m)(1)(c) requires EPA to promulgate effluent guidelines within three years for new categories identified in the Plan—not

EPA believes that Congress intended to give EPA the discretion under section 304(m)(1)(B) to prioritize its identification of potential new industrial categories so that it can use available resources effectively. Otherwise, EPA might find itself conducting rushed, resource-intensive effluent guidelines rulemakings where none is actually needed for the protection of human health and the environment, or where such protection could be more effectively achieved through other CWA mechanisms. Considering the full scope of the mandates and authorities established by the CWA, of which effluent guidelines are only a part, EPA needs the discretion to promulgate new effluent guidelines in a phased, orderly manner, consistent with Agency priorities and the funds appropriated by Congress to execute them. By crafting section 304(m) as a planning mechanism, Congress has given EPA that discretion.

Like the land use plan at issue in *Norton*, EPA's plan is ultimately "a statement of choices and priorities." See *Norton v. Southern Utah Wilderness Alliance, et al.*, 124 S. Ct. 2373, 2383 (2004). By requiring EPA to publish its plan, Congress assured that EPA's priority-setting processes would be available for public viewing. By requiring EPA to solicit comments on preliminary plans, Congress assured that interested members of the public could contribute ideas and express policy preferences. EPA has given careful consideration and summarized its findings with respect to all industries suggested by commenters as candidates for inclusion in the Plan. Finally, by requiring publication of plans every two years, Congress assured that EPA would regularly re-evaluate its past policy choices and priorities (including whether to identify an industrial activity for effluent guidelines rulemaking) to account for changed circumstances. Ultimately, however, Congress left the content of the plan to EPA's discretion—befitting the role that effluent guidelines play in the overall structure of the CWA and their relationship to other tools for addressing water pollution.

simply to conclude rulemaking in three years. See *NRDC et al. v. EPA*, 437 F.Supp.2d 1137 (C.D. Ca., 2006). EPA disagrees with this interpretation and has appealed this decision. If upheld on appeal, this decision would limit EPA's discretion regarding whether or not to promulgate effluent guidelines for new categories identified in the Plan. However, it would not affect EPA's discretion under section 304(m)(1)(B) to identify new industries in the Plan in the first place.

## IX. Request for Comment and Information

### A. EPA Requests Information on the Steam Electric Power Generating Category (Part 423)

EPA solicits public comments on the following areas of interest to support the Steam Electric Power Generating Detailed Study.

- *Integrated gasification combined cycle (IGCC) facilities.* EPA solicits comment on the wastewaters that may be generated or otherwise affected by the coal gasification process. What are the sources and characteristics of wastewaters generated by coal gasification and related processes at IGCC plants? How do these wastewaters compare to those of traditional coal-fired steam electric processes?

- *Treatment technologies for wastewaters from wet FGD systems.* EPA solicits information and data regarding the costs and effectiveness of available wastewater treatment technologies (e.g., chemical precipitation) for wastewater from wet FGD systems (e.g., capital and annual costs, pollutant removals). To help evaluate efficacy of the treatment technologies, EPA seeks both influent and effluent data from full scale or pilot applications. Data submitted should include details on the date samples were collected and analyzed, laboratory analytical methods used, and a description of the wastewater treatment system and sample collection points.

- *Ash pond management.* EPA solicits information that would help identify best management practices for ash ponds. For example, EPA is aware of information suggesting that managing pyritic wastes in ash ponds should be avoided because it can contribute to lowering pH of the ash pond impoundment, potentially liberating metals in ash sediments and elevating the level of metals released to surface waters. In addition, introducing certain other wastes such as coal pile runoff can substantially affect ash pond pH, similarly producing conditions that favor releasing metals present in ash pond sediments and suspended particulates. EPA solicits information on best management practices for minimizing the potential for such wastes to adversely impact ash pond operation and discharges.

- *Environmental assessments/impacts.* EPA solicits information on environmental assessments that have been conducted for discharges from steam electric power plants. In particular, EPA seeks information linking the environmental assessments to discharges of metals (e.g., mercury, arsenic, selenium, boron, and

magnesium), ammonia and other nitrogen compounds, phosphorus, or biocide residuals (e.g., chlorinated or brominated compounds, or non-oxidizing chemical biocides). EPA also seeks more general information regarding the potential environmental hazard associated with discharges of these pollutants from steam electric power plants.

### B. EPA Requests Information on the Coal Mining Category (Part 434)

EPA would appreciate any information to help address the following questions.

- To what degree are manganese discharges from coal mines causing environmental impairment? How would impacts change if the manganese limits were removed or made less stringent?

- How many companies have defaulted on their bonds because of post-mining manganese treatment costs?

- What is the potential for companies to default on their bonds in the future if the current manganese limit remains unchanged?

- To what extent have states had to assume long-term water treatment responsibilities for mines where the bonds have been forfeited? How are states managing these responsibilities?

- What is the prevalence of metals other than manganese, and other contaminants such as sulfates and chloride, in untreated mining wastewater? To what extent are other metals and contaminants removed by current manganese treatment practices? How significant are the impacts from other metals and contaminants?

- How successful are trust funds as alternatives to bonds for long-term manganese control from post-mining sites?

- To what extent are water discharge permits for post-mining operations based on state water quality standards rather than on EPA effluent limitations and guidelines?

### C. EPA Requests Information on the Coalbed Methane Sector of the Oil and Gas Extraction Category (Part 435)

EPA is researching the following questions and topics as they relate to the quantity and toxicity of pollutants discharged and the environmental impacts of these discharges to support the Oil and Gas Extraction/Coal Bed Methane detailed study.

- What pollutants are typically discharged in CBM produced water?

- What is the toxicity of these pollutants to human health and the environment?

- What is the range of pollutant concentrations and CBM produced water flow rate?

- What CBM produced water pollutants are typically controlled through permit limits and what is the range of these permit limits?

- What are the observed and potential impacts of CBM produced water discharges on aquatic environments and communities, riparian zones, and other wetlands?

- How does the composition of CBM produced water change when discharged to normally dry draws or ephemeral streams?

- What is the potential for CBM produced water discharges to mobilize metals, soil nutrients, pesticides and other organic contaminants to surface waters?

- What CBM produced water pollutants are typically controlled through permit limits and what is the range of effluent limits?

- What are measures that can mitigate potential impacts to uses of surface waters for irrigation?

EPA is researching the following questions and topics as they relate to the potential technology options and beneficial use practices for this industrial sector.

- What are the current industry treatment technologies and beneficial use practices for CBM produced water?

- What are the potential beneficial use applications of CBM produced water and what are the corresponding criteria for such uses?

- What are the performances of these treatment technologies and beneficial use practices for reducing the potential impacts of CBM produced water discharges?

- What is the range of incremental annualized compliance costs associated with these technologies and practices? How do these costs differ between existing and new sources?

- What is the demonstrated use and economic affordability (e.g., production losses, firm failures, employment impacts resulting from production losses and firm failures, impacts on small businesses) of these technologies across the different CBM basins?

- What are the types of non-water quality environmental impacts (including energy impacts) associated with the current industry treatment technologies and beneficial use practices for CBM produced water?

EPA is researching the following questions and topics as they relate to the expansion of CBM exploration and development and the affordability of potential technology options for this industrial sector.

- What is the near-term and long-term growth rate for this industry sector? Which CBM basins are likely to experience the most growth within the next ten years?

- What are the current industry drilling and infrastructure expansion plans for CBM exploration and development?

- What is the predicted range of CBM reserves across the different basins for different natural gas prices?

- What are the potential impacts on developing CBM reserves and operator profitability and rates of return on investment in response to any increased costs associated with potential industry treatment technologies and beneficial use practices for CBM produced water discharges?

- What is the difference between potential impacts on existing sources versus new sources?

- What percentage of CBM operators are considered small entities?

EPA is researching the following questions and topics as they relate to current regulatory controls.

- How do NPDES permit programs regulate CBM produced water discharges (e.g., individual permits, general permits)?

- What is the BPJ basis for existing technology-based effluent limits for CBM produced water discharges?

- To what extent and how do current regulatory controls ensure the beneficial use of CBM produced water?

What other statutes might affect the ability to discharge, treat, or beneficially use CBM produced water (e.g., SDWA, RCRA)?

#### D. EPA Requests Comments and Information on the Following as It Relates to Its Health Services Study

##### 1. Dental Mercury

- In state and localities that have not established dental mercury guidance or requirements, what, if anything, do dental offices currently do to reduce mercury discharges associated with dental amalgam? Also, what annual costs are associated with these activities?

- EPA assumes that, at a minimum, all dental facilities have chairside traps and/or vacuum pump filters, and that they dispose of amalgam collected in these traps/filters as solid waste (i.e., not subsequently rinsed down the drain). EPA solicits comment on this assumption.

- To what extent are the ADA recommended BMPs currently utilized in the dental industry? What is the effectiveness in reducing dental mercury associated with these BMPs and what are the annual costs?

- EPA solicits data on the effectiveness of BMP or amalgam separators in reducing mercury in POTW influent, effluent, and/or sludge. EPA is particularly interested in obtaining data from studies that measured mercury concentrations in POTW influent, effluent, and/or sludge before and after BMP or amalgam separation implementation.

- EPA solicits information on the cost and burden to POTWs of implementing state or local BMP or amalgam separator requirements. EPA is also interested in obtaining information on how POTWs have implemented such standards.

- EPA solicits comment on any known interference or pass through problems associated with dental mercury discharges.

- EPA solicits additional information on the effectiveness of voluntary local programs for reducing mercury discharges from dental facilities.

##### 2. Unused Pharmaceuticals

- EPA solicits identification of any policies, procedures or guidelines that govern the disposal of unused pharmaceuticals from hospitals; offices of doctors and mental health practitioners; nursing, long-term care, re-habilitation, and personal care facilities; medical laboratories and diagnostic service facilities; and veterinary care facilities.

- EPA solicits information on the most likely sub-sectors within the Health Service sector that would accumulate unused pharmaceuticals for management and disposal.

- When applicable, to what extent are unused pharmaceuticals disposed according to the Resource Conservation and Recovery Act (RCRA)?

- EPA solicits comment and data on: (1) The main factors that drive current disposal practices; and (2) any barriers preventing the reduction or elimination of unused pharmaceuticals to POTWs and/or surface waters. In particular, EPA solicits comment on the extent that the Controlled Substances Act (21 U.S.C. 801 et. seq.) complicates the design of an efficacious solution to drug disposal?

- EPA solicits quantitative information or tracking sheets for the past year on the disposal of unused pharmaceuticals via the toilet, drain, or sewer.

- EPA solicits data on how control authorities are currently controlling disposal of unused pharmaceuticals via wastewater.

- EPA solicits information on any technologies or BMPs that are available to control or eliminate the disposal of unused pharmaceuticals to POTWs.

- EPA solicits qualitative and quantitative data on the effectiveness and annualized costs of the technologies or BMPs that health service facilities use to control or eliminate the discharge of unused pharmaceuticals from their wastewater. EPA is also interested in obtaining information on the current costs (including labor) associated with disposal of unused pharmaceuticals via the drain or toilet.

- EPA solicits any studies or information on the potential for unused pharmaceuticals disposed in non-hazardous landfills to contaminate underground resources of drinking water.

#### E. Preliminary Category Reviews for the 2008 Annual Review

EPA requests information on the industries for which it is continuing or initiating preliminary category reviews: Ore Mining and Dressing, Centralized Waste Treatment, and Waste Combustors (i.e., industrial point source categories with existing effluent guidelines identified with “(5)” in the column entitled “Findings” in Table V-1 in section V.B.4 of today’s notice). EPA will need to collect more information for the 2008 annual review. Specifically, EPA hopes to gather the following information:

- What toxic pollutants are discharged from these industries in non-trivial amounts on an industry and per-facility basis?

- What raw material(s) or process(es) are the sources of these pollutants?

- What technologies or management practices are available (technically and economically) to control or prevent the generation and/or release of these pollutants.

#### F. Data Sources and Methodologies

EPA solicits comments on whether EPA used the correct evaluation factors, criteria, and data sources in conducting its annual review and developing this preliminary Plan. EPA also solicits comment on other data sources EPA can use in its annual reviews and biennial planning process. Please see the docket for a more detailed discussion of EPA’s analysis supporting the reviews in this notice (see DCN 04247).

#### G. BPJ Permit-Based Support

EPA solicits comments on whether and if so how, the Agency should provide EPA Regions and States with permit-based support instead of revising effluent guidelines (e.g., when the vast majority of the hazard is associated with one or a few facilities). EPA solicits comment on categories for which the

Agency should provide permit-based support.

*H. Identification of New Industrial Categories and Sectors*

EPA solicits comment on the methodology for grouping industrial sectors currently not subject to effluent guidelines or pretreatment standards for review and prioritization, and the factors and measures EPA should consider for determining whether to identify such industries for a rulemaking. EPA solicits comment on other data sources and approaches EPA can use to identify industrial sectors currently not subject to effluent guidelines or pretreatment standards for review and prioritization.

*I. Implementation Issues Related to Existing Effluent Guidelines and Pretreatment Standards*

As a factor in its decision-making, EPA considers opportunities to eliminate inefficiencies or impediments to pollution prevention or technological innovation, or opportunities to promote innovative approaches such as water quality trading, including within-plant trading. Consequently, EPA solicits comment on implementation issues related to existing effluent guidelines and pretreatment standards.

*Notice of Availability of Preliminary 2008 Effluent Guidelines Program Plan*

*J. EPA's Evaluation of Categories of Indirect Dischargers Without Categorical Pretreatment Standards To Identify Potential New Categories for Pretreatment Standards*

EPA solicits comments on its evaluation of categories of indirect dischargers without categorical

pretreatment standards. Specifically, EPA solicits wastewater characterization data (e.g., wastewater volumes, concentrations of discharged pollutants), current examples of pollution prevention, treatment technologies, and local limits for all industries without pretreatment standards. EPA also solicits comment on whether there are industrial sectors discharging pollutants that cause interference issues that cannot be adequately controlled through the general pretreatment standards.

Dated: October 18, 2007.

**Benjamin H. Grumbles,**

*Assistant Administrator for Water.*

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**BILLING CODE 6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

**[FRL-8488-8]**

**Clean Water Act Section 303(d): Availability of 20 Total Maximum Daily Loads (TMDL) in Louisiana**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of availability.

**SUMMARY:** This notice announces the availability for comment of the administrative record files for 20 TMDLs and the calculations for these TMDLs prepared by EPA Region 6 for waters listed in the Red and the Terrebonne Basins of Louisiana, under section 303(d) of the Clean Water Act (CWA). These TMDLs were completed in response to a court order in the lawsuit styled *Sierra Club, et al. v. Clifford, et al.*, No. 96-0527, (E.D. La.).

**DATES:** Comments must be submitted in writing to EPA on or before November 29, 2007.

**ADDRESSES:** Comments on the 20 TMDLs should be sent to Diane Smith, Environmental Protection Specialist, Water Quality Protection Division, U.S. Environmental Protection Agency Region 6, 1445 Ross Ave., Dallas, TX 75202-2733 or e-mail: [smith.diane@epa.gov](mailto:smith.diane@epa.gov). For further information, contact Diane Smith at (214) 665-2145 or fax 214.665.7373. The administrative record files for the 20 TMDLs are available for public inspection at this address as well. Documents from the administrative record files may be viewed at <http://www.epa.gov/earth1r6/6wq/npdes/tmdl/index.htm>, or obtained by calling or writing Ms. Smith at the above address. Please contact Ms. Smith to schedule an inspection.

**FOR FURTHER INFORMATION CONTACT:** Diane Smith at (214) 665-2145.

**SUPPLEMENTARY INFORMATION:** In 1996, two Louisiana environmental groups, the Sierra Club and Louisiana Environmental Action Network (plaintiffs), filed a lawsuit in Federal Court against the EPA, styled *Sierra Club, et al. v. Clifford, et al.*, No. 96-0527, (E.D. La.). Among other claims, plaintiffs alleged that EPA failed to establish Louisiana TMDLs in a timely manner. EPA proposes 15 of these TMDLs pursuant to a consent decree entered in this lawsuit.

**EPA Seeks Comment on 20 TMDLs**

By this notice EPA is seeking comment on the following 20 TMDLs for waters located within Louisiana basins:

Subsegment	Waterbody name	Pollutant
100404	Cypress Bayou Reservoir	Dissolved Oxygen.
100405	Black Bayou (including Black Bayou Reservoir)	Dissolved Oxygen.
120202	Bayou Black—Intracoastal Waterway to Houma	Nutrients and Dissolved Oxygen.
120204	Lake Verret and Grassy Lake	Nutrients and Dissolved Oxygen.
120304	Intracoastal Waterway—Houma to Larose	Nutrients and Dissolved Oxygen.
120401	Bayou Penchant—Bayou Chene to Lake Penchant	Dissolved Oxygen.
120403	Intracoastal Waterway—Bayou Boeuf Lake Penchant	Dissolved Oxygen.
120404		Dissolved Oxygen.
120405	Lake Hache, Lake Theriot	Nutrients and Dissolved Oxygen.
120406	Lake de Cade	Nutrients and Dissolved Oxygen.
120604	Bayou Blue—Intracoastal Waterway to boundary between segments 1206 and 1207.	Dissolved Oxygen.
120708	Lost Lake, Four League Bay	Nutrients and Dissolved Oxygen.
120709	Bayou Petite Cailou—From Houma Navigation Canal to Terrebonne Bay.	Nutrients and Dissolved Oxygen.

EPA requests that the public provide to EPA any water quality related data and information that may be relevant to the calculations for the 20 TMDLs. EPA will review all data and information

submitted during the public comment period and revise the TMDLs where appropriate. EPA will then forward the TMDLs to the Louisiana Department of Environmental Quality (LDEQ). The

LDEQ will incorporate the TMDLs into its current water quality management plan.