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Part II

Environmental Protection Agency

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40 CFR Parts 63, 261, and 430 National Emissions Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production; Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards: Pulp, Paper, and Paperboard Category; Final Rule

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 63, 261, and 430

[FRL-5924-8]
RIN 2040-AB53

National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production; Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards: Pulp, Paper, and Paperboard Category

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rules.

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SUMMARY: This action promulgates effluent limitations guidelines and standards under the Clean Water Act (CWA) for a portion of the pulp, paper, and paperboard industry, and national emission standards for hazardous air pollutants (NESHAP) under the Clean Air Act (CAA) as amended in 1990 for the pulp and paper production source category.

EPA is also promulgating best management practices under the CWA for a portion of the pulp, paper, and paperboard industry, and new analytical methods for 12 chlorinated phenolic pollutants and for adsorbable organic halides (AOX). This action consolidates into 12 subcategories what had once been 26 subcategories of effluent limitations guidelines and standards for the pulp, paper, and paperboard industry, and revises the existing effluent limitations guidelines and standards for the Bleached Papergrade Kraft and Soda subcategory and the Papergrade Sulfite subcategory. The revised effluent limitations guidelines and standards require existing and new facilities within these two subcategories to limit the discharge of pollutants into navigable waters of the United States and to limit the introduction of pollutants into publicly owned treatment works. The NESHAP requires existing and new major sources within the pulp and paper production source category to control emissions using the maximum achievable control technology (MACT) to control hazardous air pollutants (HAP).

EPA is revising the effluent limitations guidelines and standards for the Bleached Papergrade Kraft and Soda subcategory and the Papergrade Sulfite subcategory primarily to reduce the discharge of toxic and nonconventional chemical compounds found in the effluents from these mills. Discharge of these pollutants into the freshwater, estuarine, and marine ecosystems may alter aquatic habitats, affect aquatic life, and adversely impact human health. Discharges of chlorinated organic compounds from chlorine bleaching, particularly dioxins and furans, are human carcinogens and human system toxicants and are extremely toxic to aquatic life. The final effluent limitations guidelines and standards for the Bleached Papergrade Kraft and Soda and Papergrade Sulfite subcategory are estimated to reduce the discharge of adsorbable organic halides (AOX) by 28,210 kkg/year; chloroform by 45 kkg/year; chlorinated phenolics by 47 kkg/year; and 2,3,7,8-TCDD (dioxin) and 2,3,7,8-TCDF (furan) by 125 gm/year. These reductions will permit all 19 dioxin/furan-related fish consumption advisories downstream of pulp and paper mills to be lifted.

EPA is revising the subcategorization scheme for the effluent limitations guidelines and standards because the new scheme better defines the processes typically found in U.S. mills and thus results in what ultimately will be a streamlined regulation that can be implemented more easily by the permit writer. With the exception of the new effluent limitations guidelines and standards for the Bleached Papergrade Kraft and Soda and Papergrade Sulfite subcategories, EPA is making no substantive changes to the limitations and standards applicable to the newly reorganized subcategories. Those portions of the existing pulp, paper, and paperboard effluent limitations guidelines and standards that are not substantively amended by this action are not subject to judicial review; nor is their effective date affected by this reorganization.

The HAPs emitted by facilities covered by the NESHAP include such compounds as methanol, chlorinated compounds, formaldehyde, benzene, and xylene. The health effects of exposure to these and other HAPs at pulp and paper mills can include cancer, respiratory irritation, and damage to the nervous system. The final NESHAP is expected to reduce baseline emissions of HAP by 65 percent or 139,000 Mg/yr.

The pollutant reductions resulting from these rules will achieve the primary goals of both the CAA and CWA, which are to ``enhance the quality of the Nation's air resources so as to promote the public health and welfare and productive capacity of its population'' and to ``restore and maintain the chemical, physical, and biological integrity of the Nation's waters,'' respectively. These rules will result in continued environmental improvement at reasonable cost by providing flexibility in when and how results are achieved and, for certain mills, by providing incentives to surpass baseline requirements.

Elsewhere in today's Federal Register, EPA is concurrently proposing NESHAP to control hazardous air pollutants from chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semi-chemical pulp mills.

In another proposed rule published in today's Federal Register, EPA is also proposing a regulation that would require mills enrolled in the Voluntary Advanced Technology Incentives Program being promulgated for the Bleached Papergrade Kraft and Soda subcategory to submit a plan specifying research, construction, and other activities leading to achievement of the Voluntary Advanced Technology effluent limitations, with accompanying dates for achieving these milestones. Second, EPA proposes to authorize Bleached Papergrade Kraft and Soda subcategory mills under certain circumstances to submit a certification based on process changes in lieu of monitoring for chloroform. Third, although not proposing totally chlorine-free (TCF) technologies for new source performance standards under the CWA for Bleached Papergrade Kraft and Soda subcategory at this time, EPA is requesting comments and data regarding the feasibility of TCF processes for this subcategory, especially the range of products made and their specifications. In that proposal EPA is also requesting comments and data regarding the effluent reduction performance of TCF processes for this subcategory.

DATES: In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the regulations shall become effective June 15, 1998. For compliance dates, see the SUPPLEMENTARY INFORMATION section under the heading ``Compliance Dates.''

ADDRESSES: Air Dockets. The Air Dockets are available for public inspection between 8 a.m. and 4 p.m., Monday through Friday except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street SW, Washington, DC 20460, Room M-1500, Waterside Mall; telephone: (202) 260-7548.

Water Docket. The complete public record for the effluent limitations guidelines and standards rulemaking is available for review, Monday through Friday except for federal holidays, at EPA's Water Docket, Room M2616, 401

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M Street SW, Washington, DC 20460. For access to Docket materials, call (202) 260-3027. The Docket staff requests that interested parties call between 9:00 am and 3:30 pm for an appointment before visiting the docket.

For additional information about the dockets, see section X.A below.

Background and support documents containing technical, cost, economic, and health information, as well as EPA's response to public comments, are available for public use. A listing and how to obtain these background documents is provided in section XI in this notice.

FOR FURTHER INFORMATION CONTACT: For questions regarding air emissions standards for chemical wood pulping mills, contact Ms. Penny Lassiter, Emissions Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone number (919) 541-5396; or Mr. Stephen Shedd, at the same address, telephone number (919) 541-5397. For information concerning the final air standards for mechanical pulping processes, secondary fiber pulping processes, and nonwood fiber pulping processes, contact Ms. Elaine

Manning, at the same Research Triangle Park address, telephone number (919) 541-5499. For questions on compliance, enforcement and applicability determinations, contact Ms. Maria Eisemann, Office of Enforcement and Compliance Assurance (2223A), U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, telephone number (202) 564-7106.

For questions regarding wastewater standards, contact Mr. Donald Anderson at the following address: Engineering and Analysis Division (4303), EPA, 401 M Street, S.W., Washington, D.C. 20460, telephone number (202) 260-7189; or Ms. Wendy D. Smith at the same address, telephone number (202) 260-7184.

For additional information on the economic impact analyses, contact Dr. William Wheeler, Office of Water, Engineering and Analysis Division (4303), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC, 20460, (202) 260-7905.

**[Preamble pertaining to RCRA]** (page 18533)

b. Resource Conservation and Recovery Act (RCRA)/Boilers and Industrial Furnaces (BIF). One of the options for controlling emissions from pulping process condensates is to steam strip HAPs, primarily methanol, from kraft pulping process condensate streams. After the HAPs are removed, the vent gas from the steam stripper is required to be sent to a combustion device for destruction. Several commenters pointed out that some mills may choose to concentrate the methanol in the steam stripper vent gas, using a rectification column, and burn the condensate as a fuel.

However, the concentrated methanol condensate that would be derived from the steam stripper overheads may be identified as hazardous waste under the Resource Conservation and Recovery Act (RCRA) because it exhibits the ignitability characteristic. See 40 CFR 261.21. Boilers burning such a hazardous waste fuel would ordinarily be required to comply with emission standards set out in 40 CFR Part 266 Subpart H (the so-called BIF regulation, i.e., standards for boilers and industrial furnaces burning hazardous waste). Several commenters recommended incorporating a ``clean fuels'' exclusion into the pulp and paper NESHAP so that the condensate can be burned for energy recovery without the combustion unit also being subject to the RCRA rules. The ``clean fuels'' exclusion is a recommendation from EPA's Solid Waste Task Force to allow recovery of energy from waste-derived fuels that are considered hazardous only because they exhibit the ignitability characteristics and do not contain significant concentrations of HAP. For background information see 61 FR at 17459-69 (April 19, 1996), where EPA proposed such an exclusion based on similarity of waste-derived fuels to certain fossil fuels.

The Agency proposed to exclude this practice from RCRA regulation in the March 8, 1996 notice and solicited comments on this determination (61 FR at 9396). All of the comments supported granting this exemption. As stated in the notice, EPA does not believe that RCRA regulation of the rectification and combustion of the condensate is appropriate or necessary. The rectification practice would not increase environmental risk, would reduce secondary environmental impacts, and would provide a cost savings. Moreover, the burning of condensate will not increase the potential environmental risk over the burning of the steam stripper vent gases prior to condensation. (See generally 61 FR at 9397.) Finally, consideration of risk would more appropriately be handled as part of the section 112(f) residual risk determination required for all sources after implementation of MACT standards. For these reasons, EPA will exclude specific sources at kraft mills that burn condensates derived from steam stripper overhead vent gases from

RCRA, including condensates from the steam stripper methanol rectification process. The scope of this exclusion is limited to that requested by commenters, combustion at the facility generating the stream. (Limitation of the scope of the exclusion to on-site burning also eliminates questions about whether RCRA regulation is needed to assure proper tracking and transport of the material.)

**[Rule language pertaining to RCRA]** (Page 18635)

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PART 261--[AMENDED]

1. The authority citation of part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, and 6938.

2. Section 261.4 is amended by adding paragraph (a) (15) to read as follows:

Sec. 261.4 Exclusions.

(a) * * *

(15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

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