



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JAN 30 2009

OFFICE OF CONGRESSIONAL AND  
INTERGOVERNMENTAL RELATIONS

The Honorable Edward J. Markey  
Chairman  
Committee on Energy and Commerce  
Subcommittee on Energy and Environment  
U.S. House of Representatives  
Washington D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of January 13, 2009, to the U.S. Environmental Protection Agency's (EPA's) former Administrator Stephen L. Johnson requesting information related to the regulation of the bi-products associated with coal-burning power plants.

EPA respects your role as Chairman and is committed to providing the Subcommittee with information necessary to satisfy its oversight activities to the extent possible, consistent with Constitutional and statutory obligations. We are coordinating with various offices and working diligently to identify, assemble, and review the documents and information requested in your letter. However, because of the extensive information requested, we will need additional time to fully respond to your questions. In the meantime, we are coordinating with your staff to provide a briefing to share information on this issue.

Again, let me assure you that we are working to respond to your request as expeditiously as possible. If you have further questions, please contact me or your staff may contact Amy Hayden in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0555.

Sincerely,

A handwritten signature in cursive script that reads "Joyce K. Frank".

Joyce K. Frank  
Acting Associate Administrator

**Responses to Congressman Edward J. Markey's January 13, 2009 letter related to the regulation of the by-products associated with coal-burning power plants.**

**1. Does EPA believe that coal ash and/or other by-products associated with coal-burning power plants should be designated a hazardous waste? If not, why not? If so, why has it not already done so? Please provide copies of all EPA studies, memos, draft proposals and other correspondence related to any deliberations associated with such designation, or alternate approaches to regulating these materials.**

Section 3001(b)(3)(A)(i) of the Resource Conservation and Recovery Act (RCRA) temporarily excluded certain large-volume wastes, including by-product wastes associated with the combustion of coal and other fossil fuels from being regulated as hazardous wastes under Subtitle C of RCRA, pending completion of a Report to Congress and a Regulatory Determination by the Administrator of the Environmental Protection Agency either to promulgate regulations under Subtitle C of RCRA or deem that such regulations are unwarranted. With this legislative mandate, EPA published its Part 1 Regulatory Determination for large-volume utility coal combustion wastes in the Federal Register in August 1993 (see 58 FR 42466). At that time, EPA determined that fly ash, bottom ash, boiler slag, and flue gas emission control dust from coal burning utilities did not warrant regulation as hazardous waste and, thus, remained excluded from regulation under Subtitle C of RCRA §261.4(b)(4). That Regulatory Determination addressed the large-volume utility coal combustion waste streams, but it did not cover co-management of all wastes generated at facilities that combust coal and other fossil fuels. Therefore, EPA conducted additional research regarding the co-management of the large-volume utility wastes with the remaining wastes generated at facilities that combust coal and other fossil fuels.

In May 2000, EPA issued its Part 2 Regulatory Determination ("Regulatory Determination on Wastes from the Combustion of Fossil Fuels" (65 FR 32214)), addressing the remaining wastes that had not been considered under its 1993 Regulatory Determination.<sup>1</sup> In the May 2000 Regulatory Determination, the Agency likewise concluded that these wastes did not warrant regulation as hazardous waste under Subtitle C of RCRA. However, EPA also determined that national non-hazardous waste regulations under RCRA Subtitle D were appropriate for coal combustion wastes disposed of in surface impoundments and landfills and used as fill in surface or underground mines. For disposal in landfills and surface impoundments, EPA based its determination on the following considerations: (1) the constituents present in these wastes include toxic metals that could present a danger to human health and the environment under certain conditions; (2) the Agency identified 11 documented cases of proven dangers to human

<sup>1</sup> The wastes addressed under this Regulatory Determination includes: (1) large-volume coal combustion wastes (i.e., fly ash, bottom ash, boiler slag and flue gas emission control dust) generated at electric utility and independent power producing facilities that are co-managed together with certain other coal combustion wastes; (2) coal combustion wastes generated at non-utilities; (3) coal combustion wastes generated at facilities with fluidized bed combustion technology; (4) petroleum coke combustion wastes; (5) wastes from the combustion of mixtures of coal and other fuels (i.e., co-burning of coal with other fuels where coal is at least 50% of the total fuel); (6) wastes from the combustion of oil; and (7) wastes from the combustion of natural gas.

health and the environment by the improper management of these wastes in landfills and surface impoundments; (3) lack of controls, such as liners and groundwater monitoring, at many sites; and (4) while there had been improvements in state regulatory programs, there also were gaps identified in state oversight. The 2000 Regulatory Determination is enclosed with this letter.

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The supporting technical documents, including the findings of the 1999 Report to Congress (RTC) "Wastes from the Combustion of Fossil Fuel," are quite voluminous and are accessible at: [http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/volume\\_2.pdf](http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/volume_2.pdf) and <http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/fsltech.htm>. They address the characterization of coal combustion waste (CCW), its management practices as of the mid-1990s, State regulatory programs, damage cases associated with the management of CCW, the economic and cost impact analysis of rulemaking, and human health and ecologic risk analysis of fossil fuel combustion (since superseded by a 2006 study).

Since the May 2000 Regulatory Determination, additional information and data became available, which EPA believed should be noticed for public comment as part of the Agency's evaluation regarding the development of regulations under Subtitle D of RCRA of CCW. Thus, this information was made available for public comment in its August 2007 Notice of Data Availability (NODA) (72 FR 49714; please see enclosure). This included an update of waste management practices—a joint U.S. Department of Energy (DOE) and EPA report entitled, *Coal Combustion Waste Management at Landfills and Surface Impoundments, 1994-2004*, a further assessment of damage cases, and a draft risk assessment.<sup>2</sup> In addition, the draft risk assessment was subject to peer review, which was completed in September 2008. The 2007 Notice of Data Availability, as well as its accompanying technical documents, the public comments, citizen and industry proposals for the regulation of coal combustion waste, and the results of the draft risk assessment's peer review, are all accessible at the NODA's docket, at [http://www.regulations.gov/search/search\\_results.jsp?css=0&&Ntk=All&Ntx=mode+matchall&Ne=2+8+11+8053+8054+8098+8074+8066+8084+8055&N=0&Ntt=epa-hq-rcra-2006-0796&sid=11F141358782](http://www.regulations.gov/search/search_results.jsp?css=0&&Ntk=All&Ntx=mode+matchall&Ne=2+8+11+8053+8054+8098+8074+8066+8084+8055&N=0&Ntt=epa-hq-rcra-2006-0796&sid=11F141358782).

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We are most willing to discuss any of these documents with you or your staff and provide paper copies of those documents if that will be helpful.

<sup>2</sup> The NODA also solicited comment on a February 2004 Petition for Rulemaking submitted by the Clean Air Task Force and the Hoosier Environmental Council, jointly with a number of citizens' groups to prohibit the placement or disposal of CCW into groundwater or surface water, and two suggested approaches for managing CCW in landfills and surface impoundments. One approach is a Voluntary Action Plan that was formulated by the electric utility industry; the other approach is a proposed framework prepared by a number of citizens' groups for federal regulation of CCW disposed of in landfills and surface impoundments under Subtitle D or RCRA.

**2. Does EPA believe it has sufficient legal authority under existing environmental statutes to regulate coal ash, heavy metals, and other hazardous wastes associated with coal-burning power plants? If so, why hasn't EPA used this authority? If not, what changes in the law would be needed to give EPA the authority to protect public health and the environment from these wastes?**

Yes, EPA believes that it currently has sufficient legal authority to regulate such wastes and does not believe that any changes to environmental statutes are required. However, we expect that, if EPA were to pursue regulation of CCW under Subtitle C, some may raise questions about the Agency's legal authority to reconsider its earlier Regulatory Determinations.

With respect to your second question, and as noted in our response above, following the May 2000 "Regulatory Determination on Wastes from the Combustion of Fossil Fuels" (65 FR 32214), EPA collected new data and performed additional analyses, including a draft risk assessment and further evaluation of possible damage cases on the management of CCW in landfills and surface impoundments, particularly since the information on which the May 2000 Regulatory Determination was made was based on information collected prior to 1995. The Agency believed that this additional information and data were important considerations in the development of regulations. EPA made this information available for public comment in its August 2007 NODA and received close to 400 comments. In addition, the draft risk assessment was subject to peer review, which was completed in September 2008. EPA is carefully analyzing the comments and recommendations we have received, including those from the peer reviewers, and will consider this information as we continue to follow up on the regulatory determination on the management of CCW in surface impoundments and landfills.

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**3. If coal ash and/or other by-products associated with coal-burning power plants was designated as hazardous waste, please detail the potential regulatory steps that would follow such designation.**

If the Agency were to decide to regulate CCW as hazardous under Subtitle C of RCRA, then we believe that we would need to revise the Regulatory Determination, which we think may be done at the same time that we propose to remove the existing regulatory exemption. However, as part of this effort, we believe that the Agency would need to describe the facts that cause the Agency now to believe that CCW needs to be regulated under Subtitle C, as opposed to Subtitle D. In addition, while RCRA does not specifically spell out the process by which we revise the Regulatory Determination, we would expect that based on recent cases in other contexts, the Agency would find it advisable to go through the same process we followed to establish it—in other words, "after public hearings and an opportunity for comment." That would require the Agency to develop a proposed regulation, including the needed supporting documentation; publish that proposal in the Federal Register for public comment and hold public hearings; analyze and respond to those comments; and then publish a final regulation. After EPA promulgated the federal rule, States authorized for the RCRA program would then have to adopt those regulations (or regulations no less stringent than the federal ones) and receive authorization from EPA.

4. Has EPA examined the manner in which these materials are stored? For example, last month's accident occurred in a storage pond. Given the dangers that these materials particularly pose to the surrounding water system, has EPA considered the wisdom of allowing them to be stored in this manner in the first place? Please provide copies of all EPA studies, memos, draft proposals and other correspondence related to any deliberations associated with the regulation of the types of facilities that can be used to store these materials.

EPA's May 2000 Regulatory Determination did not specifically address surface impoundment integrity. The discharge of fly ash and bottom ash transport water (i.e., the discharge from ash ponds) is regulated by National Pollutant Discharge Elimination System (NPDES) permits and EPA has issued national effluent limitations that apply to the discharge.

NPDES regulations issued under the authority of the Clean Water Act require that all NPDES permits include standard conditions that include the requirement to "...properly operate and maintain all facilities and systems of treatment and control (and related appurtenances)...to achieve compliance with the conditions of this permit" (See 40 CFR part 122.41(e)). In addition, best management practices can be included in NPDES permits as necessary to achieve limitations or to carry out the purpose and intent of the CWA (See 40 CFR part 122.44(k)). Given the TVA ash pond collapse, EPA is presently reviewing existing permits to assess if additional requirements or guidance are appropriate.

The national effluent limitations, issued by EPA in 1982 and codified at 40 CFR part 423, imposed an effluent limit of "zero discharge" for fly ash transport water from new facilities. As a result, nearly all generating units built after 1982 have avoided using storage ponds for fly ash by using ash handling systems that keep the fly ash dry. The dry fly ash is either disposed of in a landfill or sold for cement manufacturing or other uses. Some plants built before 1982 also use dry handling practices for fly ash, although placing the wet fly ash in storage ponds is commonplace at other plants. Bottom ash is typically stored in ponds at most plants; however, some plants handle the bottom ash with a dry process that avoids the need for a storage pond.

EPA is nearing the end of a multi-year study of the steam electric power generating industry to determine whether the national effluent limitations guidelines warrant revision. Upon concluding the study later this year, EPA will determine whether to initiate a rulemaking process. The study has expended substantial effort in reviewing discharges from coal-fired power plants, including ash ponds. EPA's review of operating practices and wastewater management technologies will include an assessment of technologies that enable some plants to manage their fly ash and bottom ash without the need for ash storage ponds.

EPA has compiled a substantial amount of documentation over the course of the study. Most of these documents were made available for public review as part of the docket for EPA's Final 2008 Effluent Guidelines Program Plan.<sup>3</sup> The documentation is rather voluminous. We would

<sup>3</sup> As required by Section 304(m) of the Clean Water Act, EPA publishes an Effluent Guidelines Program Plan presenting a schedule for the annual review and revision of promulgated effluent guidelines and for identifying industrial categories without effluent guidelines that might need to be regulated to prevent or control pollution. The Plan also presents the results of ongoing and completed industry studies. The Final 2008 Effluent Guidelines

welcome the opportunity for the EPA staff conducting the study to discuss with your staff the specific materials that have been compiled so we can best respond to your request for documents.

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Program Plan was published September 15, 2008 (73 FR 53218). The most recent status report for the detailed study of the steam electric power generating point source category was published August 2008 (<http://epa.gov/waterscience/guide/304m/2008/steam-detailed-200809.pdf>). The entire docket for the 2008 Plan is available at <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=EPA-HQ-OW-2006-0771>.