U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Office of Investigations Special Report

Response to EPA Administrator's Request for Investigation into Allegations of a Cover-up in the Risk Assessment for the Coal Ash Rulemaking

Report No. 10-N-0019

November 2, 2009

Abbreviations

CCW	Coal Combustion Waste
EPA	U.S. Environmental Protection Agency
ERAS	Economics and Risk Analysis Staff
FFC	Fossil Fuel Combustion
NODA	Notice of Data Availability
OIG	Office of Inspector General
OMB	Office of Management and Budget
ORCR	Office of Resource Conservation and Recovery
OSWER	Office of Solid Waste and Emergency Response
RCRA	Resource Conservation and Recovery Act
USWAG	Utility Solid Waste Activities Group
VAP	Voluntary Action Plan

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

OFFICE OF
INSPECTOR GENERAL

November 2, 2009

MEMORANDUM

SUBJECT: Office of Investigations Special Report: Response to EPA Administrator's Request for Investigation into Allegations of a Cover-up in the Risk Assessment for the Coal Ash Rulemaking
Report No. 10-N-0019

FROM: Wayne A. McElrath
Acting Assistant Inspector General for Investigations

TO: Administrator Lisa P. Jackson
U.S. Environmental Protection Agency

This is in response to your August 13, 2009, request that the Office of Inspector General (OIG) investigate allegations of a cover-up or other misconduct related to the risk assessment for coal ash raised during a *60 Minutes* interview. That interview specifically referred to questions pertaining to the U.S. Environmental Protection Agency's (EPA's) 2009 release of a 2002 constituent screening study. Based on your request, we reviewed EPA activities pertaining to the draft risk assessment supporting the rulemaking process for the disposal of coal ash in landfills and surface impoundments. While EPA has been involved in a wide range of coal ash-related activities, the scope of this review was restricted to the landfill and surface impoundment rulemaking and does not include activities related to minefilling or beneficial use.

To respond to your request, the OIG Office of Investigations identified for investigation and review two areas in the landfill and surface impoundment rulemaking process:

- control over release of scientific information during the rulemaking process, and
- undue outside influence affecting the rulemaking process.

Scope and Methodology

We performed our investigation from August 18, 2009, through October 15, 2009, focusing on EPA actions regarding the rulemaking for disposal of coal ash in landfills

and surface impoundments from May 2000 to September 2009. Specifically, we interviewed an Office of Research and Development scientist as well as 19 selected current and former Office of Solid Waste and Emergency Response (OSWER) senior managers, staff, and scientists[1] that we identified as having been involved in the rulemaking. We also interviewed a senior counsel of an environmental nonprofit organization that is publicly engaged in this matter and had filed a related Freedom of Information Act request. In addition, we obtained electronic documents for review for information relating to the coal combustion waste (CCW)[2] rulemaking process.

We closed this investigation based on our determination that there was no evidence of criminal activity or improper actions involving a cover-up in the risk assessment process for the coal ash rulemaking.

Background

Fossil fuel combustion (FFC) wastes result from the burning of fossil fuels such as coal, oil, and natural gas. These wastes include CCW, largely generated by coal combustion at coal-fired utilities. CCW is one of the largest waste streams in the United States; EPA estimated that approximately 131 million tons were generated in 2007. CCW typically contains a broad range of metals (such as arsenic, selenium, and cadmium) and is disposed of in landfills or surface impoundments, used as minefill, or beneficially used.[3]

EPA can regulate CCW pursuant to the Resource Conservation and Recovery Act (RCRA).[4] However, in what are referred to as the Bevill Amendments, Congress excluded certain large-volume wastes (generated primarily from FFC) from regulation under RCRA Subtitle C as hazardous waste until EPA completes a Report to Congress and makes a regulatory determination on whether Subtitle C regulations were warranted. (See RCRA Sections 3001(b)(3)(A)(i) and 8002(n)). EPA published the report to Congress in 1999, followed by a regulatory determination in May 2000 retaining the hazardous waste exemption under RCRA. EPA found that CCW disposal in landfills and surface impoundments warranted national regulation under Subtitle D (for nonhazardous solid wastes) but not Subtitle C (hazardous wastes).[5] In its 2000 determination, EPA recognized that CCW "could pose risks to human health and the environment if not properly managed" and stated that it would revise its determination if it found a need for regulation under Subtitle C as a result of public comment, further analysis, or

[1] We use the term *scientists* in this document to refer to environmental scientists, geologists, and engineers interviewed.

[2] In this report we use the term *CCW* to refer to the material that is also referred to as coal combustion residuals, coal ash, or fossil fuel combustion wastes.

[3] EPA uses the term *beneficial use* to refer to the practice of using coal ash in applications that conserve natural resources and reduce disposal costs, including, for example, as additions to cement and concrete products, waste stabilization, and use in construction products such as wallboard.

[4] We did not review EPA's CCW-related authorities or activities under other statutes (e.g., Clean Water Act).

[5] In the regulatory determination, EPA also found that minefilling warranted regulation under Subtitle D and/or possibly the Surface Mining Control and Reclamation Act but concluded no additional regulations were warranted for CCW to be used beneficially.

information. While EPA has conducted various rulemaking-related activities since the May 2000 regulatory determination, EPA has not issued a CCW rule for disposal in landfills and surface impoundments.

Summary of EPA Rulemaking Activities for CCW Disposal in Landfills and Surface Impoundments

Initiating Revised Risk Assessment Process

Between 2000 and 2006, EPA followed up on the May 2000 regulatory determination by addressing public comments and updating the damage cases and the draft quantitative risk assessment that had been prepared for the regulatory determination.[6] The revised CCW risk assessment provides information on human and ecological health risks that EPA can use to develop CCW management options. In February 2002, EPA started the updated risk assessment process by issuing a statement of work under an existing EPA contract for a CCW constituent screening study. In October 2002, an EPA contractor completed the CCW screening and constituent selection analysis to "identify CCW constituents, waste types, receptors, and exposure pathways with risks below the level of concern and eliminate those combinations from further analysis."[7] EPA then tasked the contractor to conduct a draft risk assessment based on those results but received an incomplete draft risk assessment report on June 30, 2003, reportedly due to severe budget constraints and the pending expiration of the contract. The responsible OSWER Work Assignment Manager recalled that OSWER had pushed forward to complete what could be done before the contract ended because OSWER had limited funding and resources. In 2005, the same contractor also completed a draft sensitivity analysis for the CCW risk assessment that would validate specific data and confirm that the results were scientifically accurate.

CCW Rulemaking Status, 2003-2006

While EPA continued to conduct CCW-related activities,[8] no evidence was identified of further specific activities on the risk assessment until late 2006. Two e-mails indicated that Office of Resource Conservation and Recovery (ORCR)[9] staff involved in the

[6] EPA stated in an August 29, 2007, Notice of Data Availability that "…because time constraints precluded the Agency from addressing public comments on the draft study, EPA did not use the draft risk assessment in making its Regulatory Determination; rather it relied on the damage cases identified." (72 Fed. Reg. 49717)

[7] Constituent Screening for Coal Combustion Wastes, Work Assignment 3-43, Contract No. 68-W-98-085, Oct. 2002 (page 1-2).

[8] CCW activities (2003-2006) also include the Resource Conservation Challenge to increase reuse and recycling of industrial materials and the associated Coal Combustion Products Partnership program; discussions with the Utility Solid Waste Activities Group about its voluntary action plan; a series of public meetings in spring 2004; work with Department of the Interior on minefilling regulations; further assessment of alleged damage cases; work on the rule's economic analysis; and coordination with Department of Energy on a CCW management report (published in 2006). EPA provides an FFC Waste Legislative and Regulatory Timeline at http://www.epa.gov/osw/nonhaz/industrial/special/fossil/regs.htm.

[9] OSWER's Office of Solid Waste changed its name to the Office of Resource Conservation and Recovery effective January 18, 2009.

rulemaking process believed that the former Deputy Assistant Administrator for OSWER had or would be suspending the rulemaking in the summer of 2005. In an interview, the ORCR Work Assignment Manager for the risk assessment confirmed that this Manager believed the rulemaking was suspended. However, the ORCR Director stated that the rulemaking process was not put on hold, and that EPA was pursuing the rulemaking process on a parallel basis while it explored nonregulatory options such as an industry voluntary action plan proposal. The ORCR Director stated that work on the rule did not stop because EPA was still conducting work on risk, damage cases, and the economic analysis for the rule, but that Director could not specifically answer who may have stopped working on any given activity in the July 2005 to March 2006 timeframe.[10]

When interviewed, the former Deputy Assistant Administrator for OSWER did not recall making a decision to stop the review process, but he stated that he did not have clear recollection of this time period. Regardless of whether ORCR or OSWER suspended or recommended suspension of work[11] on the rulemaking, because this was a Tier 1 rule, the ultimate decision as to whether the rulemaking process was to continue rested with the Deputy Administrator of the Agency. EPA guidance states that Tier 1 actions, such as this rule, "require a formal options selection step involving the Administrator or Deputy Administrator's Office." EPA did not officially announce a suspension or reversal of the 2000 determination committing it to issuing a rule.

Publication of Notice of Data Availability

By mid-2006, documents obtained showed further consideration by EPA of the rulemaking for disposal of CCW in landfills and surface impoundments. The ORCR Director stated that conclusions from a July 2006 briefing on the rulemaking for EPA's Deputy Administrator were that EPA should reassess its regulatory commitment and issue a Notice of Data Availability (NODA). OSWER staff were aware of the EPA Deputy Administrator's expectation that a NODA would be submitted to the Office of Management and Budget (OMB) by late September 2006 and that it would seek public comments as to how additional information should affect the Agency's decisions as it continued to follow up on its regulatory determination for CCW disposed of in landfills and surface impoundments.

EPA extended an internal deadline in response to citizen groups' complaints, voiced during an October 2006 meeting, that the groups did not receive equal consideration with industry in the rulemaking process and was requesting formation of a Federal Advisory Committee Act committee. While the Assistant Administrator for OSWER rejected the

[10] The Deputy who became the ORCR Director over the time period in question stated that while following up on the regulatory determination, OSWER was also addressing other programmatic obligations. For example, in addition to the CCW rulemaking efforts, the Director described other priorities, such as clean-up after September 11, 2001; court-mandated deadlines involving listings and the combustion rule; revision of the definition of solid waste; and running the hazardous waste clean-up program.

[11] The ORCR Director also recalled at one point recommending stopping work on the rule because the revised risk assessment did not appear to show significantly different results from the 1999 assessment, the Department of Energy/EPA survey showed practices improving, and the potential hurdles in the OMB review process due to the economic analysis were cause for concern.

Federal Advisory Committee Act request, an extension to January 31, 2007, was granted to allow the citizen groups to submit a draft proposal of a CCW rule. The Utility Solid Waste Activities Group (USWAG), an informal consortium of utility operating companies and others, also submitted its plan to EPA.

On March 15, 2007, EPA submitted the NODA and associated draft risk assessment to OMB for review and comment. EPA published the NODA in the Federal Register on August 29, 2007, and established the public docket. EPA included both the citizen groups' and USWAG's proposals in the docket for comment. EPA extended the NODA comment period twice (first to January 28, 2008, and again to February 11, 2008). The draft risk assessment dated August 2007 was included in the public docket in August 2007;[12] however, the 2002 constituent screening analysis and the 2005 sensitivity analysis referenced in that 2007 draft risk assessment were not included in the docket at that time. After the NODA comment period closed, EPA commissioned a peer review of the draft risk assessment that was completed in September 2008.

2009 Posting of 2002 Screening and Sensitivity Studies in the Docket

EPA received a memorandum dated September 25, 2008, providing peer review comments on the draft risk assessment, which noted that the 2002 constituent screening analysis and a 2005 sensitivity analysis were not available. After EPA received the memorandum and reviewed the information as well as a related Freedom of Information Act request in early 2009, an OSWER scientist determined that the screening document was not in the docket and informed the Chief of the Economics and Risk Analysis Staff in the Program Management, Communications, and Analysis Office (ERAS Chief) that EPA needed to correct the oversight. The ERAS Chief requested that the screening analysis be placed in the docket, and it was posted in the public docket on March 4, 2009.

For the 2005 sensitivity analysis, the same OSWER scientist in the Office of Superfund Remediation and Technology Innovation confirmed that the sensitivity analysis information should also have been included in the 2007 risk assessment and the docket. The ERAS Chief also recalled requesting its inclusion in the docket after being informed of its absence by the OSWER scientist; however, the ERAS Chief stated that after finding out much later that the sensitivity analysis had not been placed into the docket, the matter was discussed with the ORCR Director who gave permission to post it. While not currently posted, we were informed that the 2005 sensitivity analysis will be placed in the docket that will be created for the CCW proposed rule. We were also informed that EPA had been addressing errors found in the 2005 sensitivity analysis and is finalizing it as support for the rulemaking. According to the ERAS Chief, the revised sensitivity analysis will undergo OMB review and be placed in the docket for the proposed rule.

[12] The final draft risk assessment, Human and Ecological Risk Assessment of Coal Combustion Wastes (August 6, 2007), notes that "the full-scale risk assessment…was mostly conducted in 2003…."

Rulemaking Status in 2009

The Tennessee Valley Authority surface impoundment coal ash spill in late December 2008 increased attention on the disposal of CCW. The topic of CCW management was addressed during the Administrator's January 2009 confirmation hearing, where she stated that EPA would address the threat from huge piles of toxic coal ash stored at hundreds of other coal-fired power plants around the country and that regulation of coal ash was also being considered.

While EPA's regulatory agenda shows no legal deadlines for a proposed rule on standards for the management of coal combustion residuals generated by commercial electric power producers, it shows a proposed issuance date of December 2009.[13] In April 2009 congressional testimony, the Acting Assistant Administrator for OSWER stated that EPA is evaluating different approaches for regulating coal ash, including revising its May 2000 regulatory determination and considering whether to include impoundment integrity in its regulatory development. EPA also reconfirmed its commitment to issuing proposed regulations by December 2009.

Analysis of Findings

EPA has not published a proposed rule on CCW landfill and surface impoundments in the approximately 9 years since its regulatory determination on CCW disposal in landfills and surface impoundments. We found that this rulemaking moved slowly at times for various reasons. Resource constraints were raised as an issue related to the draft risk assessment report received in 2003. Some additional reasons provided by the ORCR Director included EPA's focus on other programmatic priorities, concerns about OMB approval, and exploration of nonregulatory options. We did not find evidence of criminal or improper activities causing delays during this rulemaking process. While this rulemaking may not always have been a high priority for EPA, our review also found that EPA is committed to issuing a proposed rule by December 2009.

Findings Regarding Control over Release of Scientific Information during the Rulemaking Process

We concluded that there is no evidence of any effort to improperly suppress the release of scientific information during the rulemaking process. The CCW risk assessment was initiated in support of the Agency's rulemaking process. While EPA received an initial draft of the risk assessment in 2003, at that time EPA considered it incomplete. The draft risk assessment was finalized for public comments in August 2007 and refers to the 2002 constituent screening study and 2005 sensitivity analysis. As described above, OSWER staff stated that the omission of the 2002 screening study from the NODA docket was an oversight that was corrected by entering it in the public docket in March 2009. While the responsible staff also determined that the 2005 sensitivity analysis should be posted, this

[13] EPA's Spring 2009 Semiannual Regulatory Agenda is available at http://www.epa.gov/regulations/search/regagenda.html.

did not occur. We were informed that the 2005 sensitivity analysis as well as a revised sensitivity analysis are to be included in the docket for the upcoming proposed rule. We found no evidence to suggest that the initial omission of these documents was intentional. We interviewed EPA scientists involved in the CCW rulemaking process to determine whether scientists were compelled to withhold scientific information or directed not to continue any related studies during the rulemaking process. Such restrictions would be beyond EPA's general restriction on sharing deliberative information with the general public. Interviews of EPA scientists involved in the rulemaking process did not reveal any directions to discontinue studies on CCW nor orders to withhold information relevant to the rulemaking.[14]

Findings Regarding Outside Influence Affecting the Rulemaking Process

We found no evidence of any undue outside influence affecting the rulemaking process. The rulemaking process provides for EPA's engagement with interested stakeholders as well as for interagency coordination and review by OMB. We reviewed documents and interviewed EPA staff to determine whether they perceived any undue influence or interference from outside of EPA during the rulemaking process. We defined a potential universe of outside influences as environmental organizations, State organizations, industry groups, and federal entities other than EPA. Based on interviews and document reviews, we determined that no undue influence from any outside party affected the CCW rulemaking process.

We did not identify any perceptions of undue outside influence since the 2000 regulatory determination in interviews with the former Deputy Assistant Administrator for OSWER; the ORCR Director; and staff, scientists, and an Agency attorney involved in the CCW rulemaking process. The ORCR Director explained that USWAG had at one time proposed that EPA sign a memorandum of understanding supporting a Voluntary Action Plan (VAP) as an alternative to regulation. While the former Deputy Assistant Administrator for OSWER indicated they might reconsider the rulemaking process if the VAP resulted in significant improvement, they had refused to commit to stopping work on the rule. EPA never formally reversed the 2000 Regulatory Determination and pursued the VAP approach and the rulemaking process on a parallel basis.

We further found no evidence of undue outside influence in the EPA CCW rulemaking during the OMB review process. OMB reviewed the CCW NODA and provided detailed comments on almost every aspect of the risk assessment process. The Director of the Economics, Methods, and Risk Analysis Division at the time confirmed that the majority of OMB comments dealt with the tone of EPA risk language and how EPA presented acceptable risks.[15]

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[14] We identified a potential issue related to EPA's promotion of beneficial use through its Coal Combustion Product partnership and have referred the question how EPA established a reasonable determination for these endorsements to the appropriate OIG office for evaluation.

[15] Changes between the document submitted to OMB and the final version can be found in the public docket (EPA-HQ-RCRA-2006-0796) at http://www.regulations.gov.

Conclusion

As noted above, we closed this investigation because we found no evidence warranting additional inquiry into the rulemaking process for CCW disposal in landfills or surface impoundments.

The estimated cost of this report – calculated by multiplying the project's staff days by the applicable daily full cost billing rates in effect at the time – is $222,612.

If you have any questions or need additional information, please do not hesitate to contact me at (202) 566-0875.

cc: Bill Roderick, Acting Inspector General
Mathy Stanislaus, Assistant Administrator, OSWER