



U.S. GOVERNMENT ACCOUNTABILITY OFFICE

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Washington, DC 20548

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May 1, 2015

The Honorable James M. Inhofe
Chairman
The Honorable Barbara Boxer
Ranking Member
Committee on Environment and Public Works
United States Senate

The Honorable Fred Upton
Chairman
The Honorable Frank Pallone, Jr.
Ranking Member
Committee on Energy and Commerce
House of Representatives

Subject: *Environmental Protection Agency: Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities*

Pursuant to section 801(a)(2)(A) of title 5, United States Code, this is our report on a major rule promulgated by the Environmental Protection Agency (EPA) entitled "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities" (RIN: 2050-AE81). We received the rule on April 16, 2015. It was published in the *Federal Register* as a final rule on April 17, 2015, with an effective date of October 14, 2015. 80 Fed. Reg. 21,302.

The final rule regulates the disposal of coal combustion residuals (CCR) as solid waste under subtitle D of the Resource Conservation and Recovery Act. This rule finalizes national minimum criteria for existing and new CCR landfills and existing and new CCR surface impoundments and all lateral expansions consisting of location restrictions; design and operating criteria; groundwater monitoring and corrective action; closure requirements and post closure care; and recordkeeping, notification, and internet posting requirements. The rule requires any existing unlined CCR surface impoundment that is contaminating groundwater above a regulated constituent's groundwater protection standard to stop receiving CCR and either retrofit or close, except in limited circumstances. It also requires the closure of any CCR landfill or CCR surface impoundment that cannot meet the applicable performance criteria for location restrictions or structural integrity. Finally, those CCR surface impoundments that do not receive CCR after the effective date of the rule, but still contain water and CCR, will be subject to all applicable regulatory requirements, unless the owner or operator of the facility deters and installs a final cover system on these inactive units no later than 3 years from publication of the rule.

Enclosed is our assessment of EPA's compliance with the procedural steps required by section 801(a)(1)(B)(i) through (iv) of title 5 with respect to the rule. Our review of the procedural steps taken indicates that EPA complied with the applicable requirements.

If you have any questions about this report or wish to contact GAO officials responsible for the evaluation work relating to the subject matter of the rule, please contact Shirley A. Jones, Assistant General Counsel, at (202) 512-8156.

signed

Robert J. Cramer
Managing Associate General Counsel

Enclosure

cc: Nicole Owens
Director, Regulatory Management Division
Environmental Protection Agency

ENCLOSURE

REPORT UNDER 5 U.S.C. § 801(a)(2)(A) ON A MAJOR RULE
ISSUED BY THE
ENVIRONMENTAL PROTECTION AGENCY
ENTITLED
“HAZARDOUS AND SOLID WASTE MANAGEMENT SYSTEM;
DISPOSAL OF COAL COMBUSTION RESIDUALS
FROM ELECTRIC UTILITIES”
(RIN: 2050-AE81)

(i) Cost-benefit analysis

The Environmental Protection Agency (EPA) analyzed the costs and benefits of this final rule. EPA identified and estimated 12 regulatory costs: (1) groundwater monitoring; (2) bottom liner installation; (3) leachate collection system installation and management; (4) fugitive dust controls; (5) rain and surface water run-on/run-off controls; (6) disposal unit location restrictions (including water tables, floodplains, wetlands, fault areas, seismic zones, and karst terrain); (7) closure capping to cover units; (8) post-closure groundwater monitoring requirements; (9) impoundment structural integrity requirements; (10) corrective actions (CCR contaminated groundwater cleanup); (11) paperwork reporting/recordkeeping; and (12) impoundment closures and conversion to dry handling. Using a 7 percent discount rate, EPA estimated the annualized costs to be \$509 million, and using a 3 percent discount rate, to be \$735 million. Using a 7 percent discount rate, EPA estimated the total present value costs to be \$7.3 billion, and using a 3 percent discount rate, to be \$23.2 billion.

EPA also identified and estimated 11 monetized benefits: (1) CCR impoundment release prevention; (2) CCR landfill and impoundment groundwater contamination prevention; (3) induced increase in CCR beneficial uses (e.g., concrete, wallboard); (4) reduced incidence of cancer from CCR exposure; (5) avoided IQ losses from mercury; (6) avoided IQ losses from lead; (7) reduced need for specialized education; (8) nonmarket surface water quality benefits; (9) protection of threatened and endangered species near CCR impoundments; (10) improved air quality from induced changes to power plant emissions; and (11) reduced power plant groundwater withdrawals. EPA estimated the annualized monetized benefits to be \$294 million at a 3 percent discount rate and \$236 million at a 7 percent discount rate. EPA estimated the total present value monetized benefits to be \$8.7 billion at a 3 percent discount rate and \$3.4 billion at a 7 percent discount rate.

(ii) Agency actions relevant to the Regulatory Flexibility Act (RFA), 5 U.S.C. §§ 603-605, 607, and 609

EPA certified that this final rule will not have a significant economic impact on a substantial number of small entities.

(iii) Agency actions relevant to sections 202-205 of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. §§ 1532-1535

EPA determined that this final rule contains a federal mandate that may result in expenditures of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. EPA estimates the rule may affect 414 coal-fired electric utility plants,

and may have a nationwide average annualized cost of approximately \$509 million per year (at a 7 percent discount rate). Of this amount, average annualized costs to state and local governments total \$36 million, and the average annualized cost to the private sector totals approximately \$436 million per year. EPA initiated pre-proposal consultations with governmental entities affected by this rule. In developing the regulatory options for the CCR rule, EPA consulted with small governments according to EPA's interim small government consultation plan. EPA implemented a small government consultation process consisting of two consultation components: (1) a series of meetings in 2009 for purposes of acquiring technical input from state government officials, and (2) letters to 10 organizations representing elected state and local government officials to inform and seek input for the rule's development, as well as to invite them to a meeting held September 16, 2009, in Washington, D.C. to provide input on the rule.

(iv) Other relevant information or requirements under acts and executive orders

Administrative Procedure Act, 5 U.S.C. §§ 551 *et seq.*

On June 21, 2010, EPA published a proposed rule. 75 Fed. Reg. 35,128. EPA stated that it reviewed all the comments and additional data received. EPA responded to the comments in the final rule.

Paperwork Reduction Act (PRA), 44 U.S.C. §§ 3501-3520

EPA determined that this final rule contains information collection requirements under the Act. These information collection requirements will be submitted to the Office of Management and Budget (OMB) for review and have been assigned OMB Control Number 2050-0053. EPA estimates that the total number of respondents will be 486 and the total estimated burden will be approximately 358,957 hours with a total estimated annual cost of approximately \$64,007,121. EPA estimates the 3-year burden to be 1,076,871 hours with a 3-year total cost to be \$192,021,364 (composed of \$68,683,824 in labor costs and \$123,337,540 in operations and maintenance).

Statutory authorization for the rule

EPA stated that it promulgated this final rule under the authority of subsections (d) and (e) of section 1345 of title 33 and sections 6907(a)(3), 6912(a)(1), and 6944(a) of title 42, United States Code.

Executive Order No. 12,866 (Regulatory Planning and Review)

EPA determined that this final rule is economically significant under the Order because it is likely to have an annual effect on the economy of \$100 million or more. EPA estimated the total annual cost of this final rule to be \$509 million a year using a 7 percent discount rate. Accordingly, EPA submitted this final rule to OMB for review.

Executive Order No. 13,132 (Federalism)

EPA has concluded that this action may have federalism implications because it imposes substantial direct compliance costs on state and local governments, and the federal government will not provide the funds necessary to pay those costs. Based on its Regulatory Impact Analysis, EPA estimates that this final rule may impose a \$1.2 million annual cost on state and

local governments for implementation of the rule and \$36 million in annual direct compliance costs on 57 state and local governments. EPA consulted with state and local officials early in the process of developing the proposed action to permit them to have meaningful and timely input into its development. In developing the regulatory options described in this final action, EPA consulted with 10 national organizations representing state and local elected officials. EPA specifically solicited comment on the proposed action from state and local officials and received comments from over 200 entities representing state and local governments. EPA's Federalism Official certified that EPA met the Order's requirements in a meaningful and timely manner.