analysis at the time of the publication of the final rule describing the impact of the rule on small entities and steps taken to minimize the impact. Small entities include small businesses, organizations and governmental jurisdictions.

Small Entities

For purposes of the Regulatory Flexibility Act requirements with respect to this final rule, PBGC considers a small entity to be a plan with fewer than 100 participants. This is consistent with certain requirements in title I of ERISA [7] and the Internal Revenue Code,[8] as well as the definition of a small entity that the Department of Labor (DOL) has used for purposes of the Regulatory Flexibility Act.[9] Using this proposed definition, about 64 percent (16,500 of 25,600) of plans covered by title IV of ERISA in 2011 were small plans.[10]

Further, while some large employers may have small plans, in general most small plans are maintained by small employers. Thus, PBGC believes that assessing the impact of the rule on small plans is an appropriate substitute for evaluating the effect on small entities. The definition of small entity considered appropriate for this purpose differs, however, from a definition of small business based on size standards promulgated by the Small Business Administration (13 CFR 121.201) pursuant to the Small Business Act. In its proposed rule, therefore, PBGC requested comments on the appropriateness of the size standard used in evaluating the impact of the proposed rule on small entities. No comments were received on this issue.

Certification

On the basis of its definition of small entity, PBGC certifies under section 605(b) of the Regulatory Flexibility Act that the amendments in this final rule will not have a significant economic impact on a substantial number of small entities. Accordingly, as provided in section 605 of the Regulatory Flexibility Act, sections 603 and 604 do not apply. This certification is based on the fact that the change in the large-plan flat-rate premium due date will have no impact on any small plans.

Paperwork Reduction Act

The information requirements under this final rule have been approved by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*) (OMB control number 1212–0009; expires October 31, 2015). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

The only changes PBGC is making in its premium information collection in connection with this final rule are that PBGC will give notice that estimated flat-rate filings are discontinued for plan years starting in 2014. (PBGC will also notify private-sector premium filing software developers of the change so that it can be reflected in their products.) [11]

PBGC needs the information in a premium filing to identify the plan for which the premium is paid to PBGC, to verify the amount of the premium, to help PBGC determine the magnitude of its exposure in the event of plan termination, to help PBGC track the creation of new plans and the transfer of plan assets and liabilities among plans, and to keep PBGC's inventory of insured plans up to date. PBGC receives premium filings from about 25,700 respondents each year and estimates that the total annual burden of the collection of information will be about 8,900 hours and $59,250,000.[12]

List of Subjects in 29 CFR Part 4007

Employee benefit plans, Penalties, Pension insurance, Reporting and recordkeeping requirements.

In consideration of the foregoing, PBGC amends 29 CFR part 4007 as follows:

PART 4007—PAYMENT OF PREMIUMS

■ 1. The authority citation for part 4007 continues to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1303(A), 1306, 1307.

§ 4007.8 [Amended]

■ 2. In § 4007.8, paragraphs (f), (g), (h), and (i) are removed and reserved.

§ 4007.11 [Amended]

■ 3. In § 4007.11:
■ a. Paragraph (a) introductory text is amended by removing the words "due dates for large plans are prescribed" and adding in their place the words "due date for large plans is prescribed".
■ b. Paragraphs (a)(3)(i) and (iii) are removed and reserved.
■ c. Paragraph (a)(3)(ii) is amended by removing the words "for the variable-rate premium required by § 4006.3(b) of this chapter for single-employer plans".

Issued in Washington, DC, this 20 day of December 2013.

Joshua Gotbaum,

Director, Pension Benefit Guaranty Corporation.

[FR Doc. 2013–31109 Filed 1–2–14; 8:45 am]

BILLING CODE 7709–02–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9, 260 and 261

[EPA–HQ–RCRA–2010–0695; FRL–9904–84–OSWER]

RIN 2050–AG60

Hazardous Waste Management System: Conditional Exclusion for Carbon Dioxide (CO_2) Streams in Geologic Sequestration Activities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA or the Agency) is revising the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) to conditionally exclude carbon dioxide (CO_2) streams that are hazardous from the definition of hazardous waste, provided these hazardous CO_2 streams are captured from emission sources, are injected into Underground Injection Control (UIC) Class VI wells for purposes of geologic sequestration (GS), and meet certain other conditions. EPA is taking this action because the Agency believes that the management of these CO_2 streams, when meeting certain conditions, does not present a

[7] See, *e.g.*, ERISA section 104(a)(2), which permits the Secretary of Labor to prescribe simplified annual reports for pension plans that cover fewer than 100 participants.

[8] See, *e.g.*, Code section 430(g)(2)(B), which permits plans with 100 or fewer participants to use valuation dates other than the first day of the plan year.

[9] See, *e.g.*, DOL's final rule on Prohibited Transaction Exemption Procedures, 76 FR 66637, 66644 (Oct. 27, 2011).

[10] See PBGC 2011 pension insurance data table S–31, *http://www.pbgc.gov/documents/pension-insurance-data-tables-2011.pdf.*

[11] The more comprehensive changes to PBGC's premium information collection arising from the separate final rule that PBGC anticipates issuing—dealing with aspects of the July 23 proposal other than the large-plan flat-rate premium due date—will be addressed in that separate final rule.

[12] This burden estimate reflects both a decrease in burden attributable to the change in the large-plan flat-rate premium due date under this final rule and an increase in burden attributable to a re-estimate of the existing premium filing burden. The increase in burden due to re-estimation is about 31,300 hours, and the decrease due to the due date change is about 17,000 hours, a net increase of about 14,300 hours from the currently approved burden (about 163,600). PBGC assumes that about 95 percent of the work is contracted out at $350 per hour, so the 17,000-hour decrease attributable to the final rule is equivalent to about 850 hours of in-house labor and about $5,650,000 of contractor costs.

substantial risk to human health or the environment, and therefore additional regulation pursuant to RCRA's hazardous waste regulations is unnecessary. EPA expects that this amendment will substantially reduce the uncertainty associated with identifying these CO_2 streams under RCRA subtitle C, and will also facilitate the deployment of GS by providing additional regulatory certainty.

DATES: This final rule is effective on March 4, 2014.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–RCRA–2010–0695. All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, such as Confidential Business Information (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* or in hard copy at the OSWER Docket, 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 OSWER Docket is (202) 566–0270.

FOR FURTHER INFORMATION CONTACT: Melissa Kaps, Office of Resource Conservation and Recovery (5304P), Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460; telephone number: 703–308–6787; fax number: 703–308–0514; email address: *kaps.melissa@epa.gov.*

SUPPLEMENTARY INFORMATION:

A. Does this action apply to me?

This final rule applies to generators, transporters, and owners or operators of treatment, storage, and disposal facilities engaged in the management of carbon dioxide streams that would otherwise be regulated as hazardous wastes under the RCRA subtitle C hazardous waste regulations as part of geologic sequestration activities. This includes entities in the following industries: operators of carbon dioxide injection wells used for geologic sequestration; and certain industries identified by their North American Industry Classification System (NAICS) code: oil and gas extraction facilities (NAICS 211111); utilities (NAICS 22); transportation (NAICS 48–49); and manufacturing (NAICS 31–33). More detailed information on the potentially affected entities is presented in Section VI of this preamble. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Preamble Outline

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I. National Technology Transfer and Advancement Act
J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations
K. Congressional Review Act

I. Statutory Authority

These regulations are promulgated under the authority of sections 2002, 3001–3009 and 3013 of the Solid Waste Disposal Act (SWDA) of 1970, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. 6912, 6921–6929, 6934.

II. Abbreviations, Acronyms, and Definitions

A. Abbreviations and Acronyms

AoR Area of Review
CAA Clean Air Act
CCS Carbon Capture and Storage
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
CO_2 Carbon Dioxide
EOR/EGR Enhanced Oil or Gas Recovery
EPA Environmental Protection Agency
GHG Greenhouse Gas
GS Geologic Sequestration
HSWA Hazardous and Solid Waste Amendments
RCRA Resource Conservation and Recovery Act
SDWA Safe Drinking Water Act
TC Toxicity Characteristic
TCLP Toxicity Characteristic Leaching Procedure
UIC Underground Injection Control
USDW Underground Source of Drinking Water

B. Definitions Used in This Preamble

Authorized representative: The person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility.

Carbon dioxide (CO_2) stream: Carbon dioxide that has been captured from an emission source (e.g., power plant), plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process.

Enhanced Oil or Gas Recovery (EOR/EGR): Typically, the process of injecting a fluid (e.g., water, brine, or CO_2) into an oil or gas bearing formation to recover residual oil or natural gas. The injected fluid thins (decreases the viscosity) or displaces small amounts of extractable oil and gas, which is then available for recovery. This is also known as secondary or tertiary recovery.

Supercritical CO_2: Carbon dioxide that is above its critical temperature (31.1 °C, or 88 °F) and pressure (73.8 bar, or 1070 psi). Supercritical substances have physical properties intermediate to those of gases and liquids.

III. Proposed Rule

A. Summary of Proposed Rule

On August 8, 2011, EPA published a proposed rule that would conditionally exclude from the definition of hazardous waste certain carbon dioxide (CO_2) streams that are to be injected into Underground Injection Control (UIC) Class VI wells for purposes of geologic sequestration (GS). 76 FR 48073. The proposed rule was based upon EPA's determination that the management of these CO_2 streams in accordance with the proposed conditions would provide no reduced protection to human health

and the environment, and, therefore, additional regulation pursuant to the Resource Conservation and Recovery Act's (RCRA) hazardous waste regulations would be unnecessary.

Specifically, EPA proposed to amend 40 CFR 261.4 by adding an exclusion from the definition of hazardous waste for CO_2 streams that would otherwise be regulated as hazardous waste under RCRA subtitle C that met all of the following conditions: (1) Transportation of the CO_2 stream must be in compliance with applicable Department of Transportation (DOT) requirements; (2) injection of the CO_2 stream must be in compliance with the applicable requirements for UIC Class VI wells; (3) no other hazardous wastes may be mixed with, or otherwise co-injected with, the CO_2 stream; and (4) generators and UIC Class VI well owners or operators claiming the exclusion must sign a certification statement that the conditions of the exclusion were met. The proposed rule also would have required retention of the signed certification on-site for no less than three years, and required the certification be made available within 72 hours of request by the Regional Administrator (or state Director, if located in an authorized state).

EPA proposed this rule because the Agency expected that this amendment to the RCRA hazardous waste rules would substantially reduce the uncertainty associated with defining and managing these CO_2 streams under RCRA subtitle C and also would facilitate the deployment of GS by providing additional regulatory certainty.

Several other Agency activities are related to carbon capture and storage (CCS), including an EPA final rule that created a new class of injection wells (Class VI) for GS of CO_2 under the Safe Drinking Water Act (SDWA) UIC Program. December 10, 2010 (75 FR 77230). During the development of that UIC Class VI final rule, EPA was made aware that the participants in the CCS industry were asking for clarification on how the RCRA hazardous waste requirements apply to CO_2 streams that are geologically sequestered.

In addition, in February 2010, President Obama created the Interagency Task Force on Carbon Capture and Storage to develop a comprehensive and coordinated federal strategy to speed the commercial development and deployment of clean coal technologies. The task force consisted of 14 executive departments and federal agencies, and it was co-chaired by EPA and the U.S. Department of Energy. On August 12, 2010, the task force delivered a series of recommendations to the President on overcoming the barriers to the widespread, cost-effective deployment of CCS within 10 years. One of those recommendations was that EPA address RCRA applicability to CO_2 that is captured from an emission source for purposes of sequestration.[1]

GS is the process of injecting CO_2 captured from an emission source (e.g., a power plant or industrial facility) into deep subsurface rock formations in order to isolate the CO_2 permanently. GS is a key component of CCS, which is a set of climate change mitigation technologies. CCS can be described as a three-step process, beginning with the capture and compression of the CO_2 stream from fossil-fuel power plants or other industrial sources, after which the CO_2 stream is transported (usually in pipelines as a supercritical fluid[2]) to an on-site or off-site location, where it is then injected underground for purposes of sequestration.[3] Additional background information on the GS of CO_2 streams can be found in the August 8, 2011 proposed rule, as well as in the UIC Class VI final rule and record for that rule published on December 10, 2010 (75 FR 77230).

In developing the August 8, 2011 proposed rule, EPA looked at how CO_2 is captured, transported, and injected in CCS activities. For CO_2 capture, transport, and injection, EPA reviewed and compared regulations and requirements from other statutes and programs (e.g., DOT, SDWA) which might apply to each of these activities if the CO_2 stream is also regulated as hazardous waste. The Agency considered how these existing regulations and requirements control releases of hazardous constituents that might be present in the CO_2 streams.

First, regarding the generator requirements, EPA reviewed the subtitle C regulatory requirements applicable to RCRA generators, including requirements for tanks and containers and recordkeeping and reporting, among others. EPA also reviewed the available information on CO_2 capture processes and estimates of CO_2 capture rates. EPA concluded that, because of the large volumes of CO_2 projected to be captured, on-site storage of CO_2 in pressure vessels was unlikely. Rather, EPA stated its expectation that the process of capturing and compressing CO_2 prior to delivery to a UIC Class VI facility, which would likely occur via a pipeline will not involve storage at the generator facility (i.e., at the CO_2 source), but rather will occur in a continuous fashion (capture process → compression/dehydration → pipeline insertion). Because there would not be any substantive[4] RCRA subtitle C generator requirements applicable to such a continuous delivery scenario, the regulation of the movement of captured CO_2 streams from the point of capture to either an on-site UIC Class VI well or to an off-site DOT-regulated pipeline, would not be significantly different under the presence or absence of the conditional exclusion. EPA also stated its view that other programs provided equivalent notice and reporting requirements to the RCRA requirements. Thus, EPA concluded that additional regulation pursuant to RCRA subtitle C would not provide additional protections over existing regulatory requirements for generators of CO_2 streams.

Second, with respect to transportation, EPA examined existing requirements for pipeline and non-pipeline transportation. In the preamble to the proposed rule, EPA specifically discussed the DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) requirements in 49 CFR Part 195, which apply to pipeline facilities used for transporting hazardous liquids or supercritical CO_2. EPA's review indicated that DOT's regulations addressed risks posed by pipelines in a way that is consistent with RCRA's goal of preventing releases in order to protect human health and the environment. EPA concluded that applicable DOT requirements (which apply to supercritical CO_2 streams regardless of whether or not these materials meet the definition of hazardous waste) will ensure that CO_2 streams are managed in a manner that addresses the potential risks to human health and the environment that these materials may pose, prior to arrival at a Class VI injection well facility. Therefore, EPA concluded that RCRA offers no additional protection, and did not propose any specific conditions beyond that of compliance with applicable DOT regulations. EPA assessed the DOT hazardous materials regulations applicable to non-pipeline transportation and reached similar conclusions. EPA also addressed issues surrounding on-site pipelines that may not be regulated by DOT pipelines and

[1] Report of the Interagency Task Force on Carbon Capture and Storage, August 2010, p. 12.

[2] Ibid., p. 61.

[3] Carbon Dioxide Capture and Storage. Intergovenrmental Panel on Climate Change (IPCC), 2005, p. 3.

[4] "Substantive" was used to describe requirements directly related to storage, transportation, treatment, or disposal and not notification or biennial reporting.

the lack of a manifest under the proposed conditional exclusion. See 76 FR 48083, August 8, 2011.

Third, EPA discussed the UIC Class VI injection well requirements, which are specifically designed to ensure that the CO_2 (and any incidental associated substances derived from the source materials and the capture process) will be isolated within the injection zone. EPA concluded that the elimination of exposure routes through these requirements, which are implemented through a SDWA UIC permit, will ensure protection of human health and the environment such that RCRA subtitle C regulation would be duplicative and unnecessary.

In addition, to further ensure protection of human health and the environment, EPA proposed to limit the scope of the exclusion by including a condition that no other hazardous waste can be mixed with, or otherwise co-injected with, the CO_2 streams. Thus, if hazardous waste is mixed with the CO_2 stream, that stream would not be eligible for the conditional exclusion under the proposed rule. Rather, that stream would need to be managed as a RCRA hazardous waste, and, if well injection is selected as the means of disposal, injected into a UIC Class I hazardous well.

B. Authority for Conditional Exclusion From RCRA Subtitle C Requirements

As explained in the proposed rule, RCRA provides EPA with authority to issue conditional exclusions from the hazardous waste regulations. EPA has previously interpreted RCRA section 3001(a) to authorize the issuance of "conditional exemptions" from the requirements of subtitle C, where it determines that "a waste might pose a hazard only under limited management scenarios, and other regulatory programs already address such scenarios." 62 FR at 6636 (February 12, 1997); 66 FR at 27222–27223 (May 16, 2001). The final rule takes a similar approach to those earlier rules.

Section 3001(a) provides the Agency with flexibility to consider the need for regulation in deciding whether to list or identify a waste as hazardous. Specifically, RCRA section 3001(a) requires that EPA, in determining whether to list a waste as a hazardous waste, or to otherwise identify a waste as a hazardous waste, decide whether a waste "should be subject to" the requirements of subtitle C. Hence, RCRA section 3001 authorizes EPA to determine when subtitle C regulation is appropriate. EPA has consistently interpreted section 3001 of RCRA to give it broad flexibility in fashioning criteria for hazardous wastes to enter or exit the subtitle C regulatory system. EPA's longstanding regulatory criteria for determining whether wastes pose hazards that require regulatory control incorporate the idea that a waste that is otherwise hazardous may not present a hazard if already subject to adequate regulation. (See, e.g., 40 CFR 261.11(a)(3)(x), which requires EPA to consider action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste.)

EPA's interpretation is further supported by the text of RCRA sections 1004(5), and 3002–3004, and RCRA's legislative history. This interpretation has also been upheld upon judicial review. See, e.g., *Military Toxics Project* v. *EPA*, 146 F.3d 948 (D.C. Cir. 1998) (upholding conditional exemption for storage of military munitions, based on EPA determination that such wastes are subject to binding standards that meet or exceed RCRA standards, in addition to an institutional oversight process).

The statutory definition of hazardous waste, section 1004(5)(B), informs EPA's interpretation that EPA may consider good management practices in determining the need to regulate waste as hazardous under RCRA. That section defines a "hazardous waste" as "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may * * * (B) pose a substantial present or potential hazard to human health or the environment *when improperly treated, stored, transported, or disposed of, or otherwise managed.*" (Emphasis added.) EPA has interpreted the statutory definition as incorporating the idea that a waste that is otherwise hazardous does not require regulation under RCRA so long as it is properly managed. For example, EPA's standards for listing hazardous wastes require consideration of a waste's potential for mismanagement. See 40 CFR 261.11(a)(3)(vii) (incorporating the language of RCRA section 1004(5)(B) and requiring EPA to consider "plausible types of improper management").

The statute also directs EPA to regulate hazardous waste generators (RCRA § 3002(a)), transporters (RCRA § 3003(a)) and treatment, storage and disposal facilities (RCRA § 3004(a)) "as may be necessary to protect human health and the environment." By extension, the decision of when a waste should be subject to the regulatory requirements of subtitle C is a question of whether such regulatory controls are necessary to protect human health and the environment.

Thus, where a waste might pose a hazard only under limited management scenarios, and other regulatory programs already address such scenarios, EPA is not required to classify a waste as hazardous waste subject to regulation under subtitle C. At least three decisions by the U.S. Court of Appeals for the D.C. Circuit provide support for this approach to regulating wastes as hazardous waste only where necessary to protect human health and the environment. In *Military Toxics Project* v. *EPA*, 146 F.3d 948 (D.C. Cir. 1998), the court upheld a conditional exemption whereby the storage and transportation of certain military munitions are not considered hazardous waste subject to regulation under RCRA subtitle C, provided the munitions are stored and transported in compliance with regulations issued by the Department of Defense and the Department of Transportation, respectively. See 40 CFR 266.203, 266.205. The court ruled that EPA's interpretation of RCRA as authorizing a conditional exemption is "a permissible construction of the statute." 146 F.3d at 958. The court cited its own precedent as recognizing " 'that Congress intended the agency to have substantial room to exercise its expertise in determining the appropriate grounds for listing,' " id. (citing *NRDC* v. *EPA*, 25 F.3d 1063, 1070 (D.C. Cir. 1994)), and concluded that, although the military munitions rule "does not involve the listing regulations at issue in *NRDC* v. *EPA*, we think the principle at work there also supports the conditional exemption at issue here." Id.

In *NRDC* v. *EPA*, the court held that EPA appropriately used its discretion in relying on several existing regulatory frameworks governing used oil in determining not to list certain used oils as a hazardous waste. NRDC, 25 F.3d at 1071. Similarly, in *Edison Electric Institute* v. *EPA*, 2 F.3d 438 (D.C. Cir. 1993), the court upheld a temporary exemption from subtitle C for petroleum-contaminated media based on the fact that the potential hazards of such materials are already controlled under the underground storage tank regulations under RCRA subtitle I. In reaching its decision, the court considered the fact that the subtitle I standards could prevent threats to human health and the environment to be an important factor supporting the exemption. Id. at 453.

The legislative history of RCRA subtitle C also supports this interpretation, stating that "the basic thrust of this hazardous waste title is to

identify what wastes are hazardous in what quantities, qualities, and concentrations, *and the methods of disposal which may make such wastes hazardous.*" H. Rep. No. 94–1491, 94th Cong., 2d Sess. 6 (1976), reprinted in A Legislative History of the Solid Waste Disposal Act, as Amended, Congressional Research Service, Vol.1, 567 (1991) (emphasis added). Finally, as discussed above, in finalizing this conditional exemption from RCRA, EPA is in part relying on the regulatory controls for Class VI wells, under the UIC program of the SDWA, 42 U.S.C. 300f *et seq.* EPA notes that such reliance is also consistent with the direction provided in section 1006(b) of RCRA, which directs EPA to integrate the provisions of RCRA, for purposes of administration and enforcement and to avoid duplication, to the maximum extent practicable, with those of certain other statutes, including the SDWA, to the extent that it can be done in a manner that is consistent with the goals and policies of both RCRA and the other relevant statute(s).

IV. Changes to the Proposed Rule

EPA is finalizing the conditional exclusion largely as proposed on August 8, 2011, with some revisions. The following is a summary of the changes to the proposed rule.

EPA slightly modified the regulatory language for the condition that the CO_2 stream be transported in compliance with applicable DOT requirements (see § 261.4(h)(1) in today's final rule), by adding reference to state pipeline regulations that may be applicable (in lieu of the DOT regulations) in certain situations. Several commenters had noted that in cases where CO_2 pipelines start and stop within the same state (i.e., intrastate pipelines), these pipelines would be regulated by the state rather than by DOT. EPA consulted with DOT and confirmed that with respect to the DOT regulations in 49 CFR part 195 (which apply to pipeline facilities used in the transportation of hazardous liquids or supercritical CO_2), while some states have adopted regulations that apply to the transportation of supercritical CO_2 and are certified by DOT to directly regulate these intrastate pipelines, many states do not have such a certification, and DOT remains the direct regulator of both interstate and intrastate pipelines in those states. EPA notes that state pipeline regulations are required to be at least as stringent as the federal DOT requirements; therefore, compliance with either the applicable DOT regulations or the applicable certified state regulations has the same effect under the proposed conditional exclusion. Because the proposed condition at § 261.4(h)(1) only referred to compliance with applicable DOT regulations, EPA decided to modify the wording of the condition to add language that also refers to compliance with "pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. § 60105" to reflect situations where a pipeline facility must comply with state, rather than federal, regulation. Again, EPA is making this change in order to more accurately describe how pipeline facilities are already regulated under applicable pipeline regulations (be they State or Federal). EPA also made a conforming change to the related certification language so as to mirror the revised condition in § 261.4(h)(1).

The proposed exclusion required generators and UIC Class VI well owners or operators who claim the conditional exclusion to sign a certification statement that the conditions of the exclusion were met. EPA had proposed specific language for the certification statement. In today's final rule, the certification statement has been revised so that there are now two separate certification statements—one for CO_2 stream generators and another for UIC Class VI well owners or operators. This change was in response to commenters who were concerned about persons certifying to circumstances outside of their control. Under the final rule, the certification statement that the generator would sign is specific to the activities within the generator's control; likewise, the certification statement that the UIC Class VI well owner or operator would sign is specific to the activities within the owner or operator's control.

These revisions do not change how the conditional exclusion is implemented under today's final rule. A CO_2 stream must meet all the conditions to qualify for and maintain the exclusion from the hazardous waste regulations, and a violation of a condition at any point in the management of a CO_2 stream (that is otherwise hazardous) would result in that CO_2 stream being subject to all applicable subtitle C regulatory requirements, from the point of generation.

Furthermore, the final rule now requires that the signed certification statement must be readily accessible on the facility's publicly-available Web site, if such Web site exists, to serve as a public notification, in addition to being kept on-site for no less than three years. For further discussion on the changes to the certification statement, see section V.D. of this preamble.

V. Summary of Comments and Responses to Major Comments

In response to the proposed rule, EPA received 29 distinct comments. The commenters represented a variety of organizations, including electric utilities, energy companies, the oil and gas industry, environmental groups, two states, and the public.

Nearly all commenters supported EPA's decision to clarify the regulatory scheme applicable to CO_2 management for CCS. Many commenters generally supported EPA's proposed conditional exclusion. Other commenters stated that a conditional exclusion is not necessary because the CO_2 streams are not subject to RCRA regulation, but suggested certain changes be made should EPA proceed with a conditional exclusion. Below is a detailed discussion of the major comments received, as well as EPA's response to those comments. EPA also notes that a more comprehensive response to comment document was prepared and placed in the docket associated with today's final rule.

A. Definition of Solid Waste

In the proposed rule, EPA stated that a supercritical CO_2 stream injected into a permitted UIC Class VI well for purposes of GS is a RCRA solid waste, because it is a "discarded material" within the plain meaning of the term in RCRA § 1004(27). That is, a supercritical CO_2 stream is a solid waste when it is to be discarded through abandonment by disposing of the material in a UIC Class VI well (see 40 CFR 261.2(a)(2)(i) and (b)(1)). While some commenters agreed that EPA correctly identified supercritical CO_2 injected into a Class VI well for GS as a solid waste, a number of commenters disagreed, stating that supercritical CO_2 streams that are to be injected into a UIC Class VI well are not a solid waste, and therefore cannot be a hazardous waste. These commenters generally supported excluding supercritical CO_2 streams from RCRA regulation, but stated that these streams were already excluded. Commenters presented several reasons for this.

Some commenters argued that CO_2 is not a contained gas and, therefore, does not meet the RCRA statutory definition of solid waste. Some commenters also noted that CO_2 is a commodity that has commercial/beneficial uses, including use in enhanced oil or gas recovery (EOR/EGR) and manufacturing operations and, therefore, argued that it should not be classified as a waste. In fact, one commenter noted that *storage* (as in Carbon Capture and *Storage*) implies possible future use. Still other

commenters cited dictionary definitions of the terms used in EPA regulations, concluding that CO_2 sent to Class VI facilities is not *discarded, abandoned,* or *recycled.*

EPA disagrees that CO_2 streams sent to UIC Class VI wells for purposes of GS are not solid waste. As was stated in the preamble to the proposed rule, GS is an option to reduce CO_2 emissions to the atmosphere by injecting the CO_2 streams into deep subsurface geologic formations, with the express purpose of isolating the CO_2 so that it does not return to the atmosphere. August 8, 2011 (76 FR at 48075). Therefore, EPA views these CO_2 streams as "discarded material" within the plain meaning of the term in RCRA § 1004(27). The fact that the sequestration of CO_2 streams into deep geologic formations is at times labeled as "long-term containment" or "long-term storage" does not change this view.

In addition, several commenters pointed out that with the exception of demonstration and related projects, most if not all of the CO_2 that is geologically injected today is used for EOR/EGR, and in that application, it is purchased and transacted as a valuable commodity. EPA acknowledges that the underground injection of CO_2 has largely been (and continues to be) for the purpose of EOR/EGR, and does not disagree that CO_2 can and does have a variety of commercial and manufacturing uses,[5] but this does not affect the regulatory status of CO_2 streams when they are *to be injected into UIC Class VI wells for the purpose of GS.* As EPA noted in the preamble to the proposed rule, this conditional exclusion is not intended to affect the regulatory status of CO_2 streams that are injected into wells other than UIC Class VI wells. EPA reiterates that these issues are beyond the scope of this final rule, and EPA did not develop information for inclusion in the proposal on well classes other than UIC Class VI wells. However, in the interest of public transparency and in light of the several public comments on this issue, EPA does note that (based on the limited information provided in the public comments) should CO_2 be used for its intended purpose as it is injected into UIC Class II wells for the purpose of EOR/EGR, it is EPA's expectation that such an injection process would not generally be a waste management activity. EPA would encourage persons to consult with the appropriate regulatory authority to address any fact-specific questions they may have regarding the status of CO_2 in situations that are beyond the scope of this final rule.

As stated above, some commenters said that these CO_2 streams are not "contained gases" and therefore are not solid wastes under the RCRA statutory definition of solid waste.[6] More specifically, these commenters argued that these carbon dioxide streams are "uncontained gases" and as such were statutorily excluded from RCRA by Congress, while others said that Congress "never envisioned regulation" of a gas such as CO_2 under RCRA. As EPA noted in the proposed rule, the CO_2 streams are delivered by pipeline and injected into UIC Class VI wells for GS in a supercritical state, which EPA stated at proposal was ". . . rather unique in that it has properties intermediate between a liquid and a gas." 76 FR at 48078. The scientific term used to describe or define this supercritical state (i.e., when a substance is at or above its critical temperature and critical pressure) is as a "supercritical fluid."[7][8] The RCRA statutory definition of solid waste specifically refers to "*other discarded material, including* solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities . . ." While EPA has indeed interpreted the meaning of specific terms listed, including "contained gaseous material," the RCRA definition of solid waste encompasses "other discarded material" and does not speak to materials such as supercritical fluids. Like the listed "solid, liquid, semisolid, or contained gaseous material" specifically referenced, CO_2 streams sequestered for purposes of GS are "other discarded material" from industrial and commercial operations and, therefore, are of a similar kind to the other types of wastes specifically referenced by the definition. They are, therefore, RCRA statutory solid wastes.

B. Definition of Hazardous Waste

Under EPA's existing RCRA subtitle C regulations, generators are required to determine whether a solid waste exhibits a RCRA characteristic by testing the waste or applying their knowledge of the hazard characteristic of a waste, in light of the materials or processes used. In the proposed rule, EPA discussed the applicability of the RCRA hazardous waste regulations to supercritical CO_2 streams. 76 FR at 48077–78. Specifically, EPA stated that because there are no hazardous waste listings that apply to the supercritical CO_2 streams being considered here, a CO_2 stream could only be defined as a hazardous waste if it exhibits one or more of the hazardous waste characteristics as defined in 40 CFR part 261, subpart C. EPA also discussed issues specifically related to applying the Toxicity Characteristic (TC) to supercritical CO_2 streams and requested comment on the RCRA characterization issue.

Some commenters responded and said that even if these supercritical CO_2 streams were RCRA solid wastes, it should not be assumed that they are a hazardous waste, and that the very consideration of a conditional exclusion unnecessarily suggests that these streams could be hazardous. Many commenters argued that EPA has not demonstrated that the supercritical CO_2 streams would exhibit any of the RCRA characteristics, and asserted that the supercritical CO_2 streams would not exhibit any of the RCRA hazardous waste characteristics, or that the RCRA characteristic regulations do not otherwise apply to supercritical CO_2 streams. With respect to the TC specifically, commenters said that there is no record evidence that sequestered CO_2 streams are managed in municipal solid waste landfills (the waste management scenario EPA originally considered when establishing the TC) and in fact the conditional exclusion is premised on the material being managed only in a UIC Class VI well. Therefore, these commenters argued there is no basis for applying the TC to sequestered CO_2 streams.

EPA appreciates these commenters' concerns regarding the application of the hazardous waste regulations to supercritical CO_2 streams being sequestered. EPA believes these concerns exist as a result of the unique circumstances associated with addressing the applicability of RCRA to CCS at such an early stage in the

[5] For example, urea yield boosting, enhanced oil recovery, food processing and packaging, beverage carbonation, wine making.

[6] "The term "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or *contained gaseous material* resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923)." [emphasis added]. RCRA § 1004(27).

[7] See, for example, the definition of supercritical fluid in *Kirk-Othmer Concise Encylopedia of Chemical Technology, 5th edition.*

[8] Carbon dioxide becomes a supercritical fluid at a temperature of approximately 31.3 degrees C, and a pressure of 1,070 pounds per square inch (psi).

development of CCS. However, it is important to note that EPA did not set out in this rulemaking to conclude that those supercritical CO_2 streams that are solid wastes would, as a class, exhibit a RCRA characteristic. Indeed, EPA indicated in the proposed rule that it could not unequivocally conclude that supercritical CO_2 streams will *never* exhibit *any* RCRA hazardous waste characteristic and commenters provided no information to the contrary. Alternatively, EPA acknowledges that some RCRA hazardous characteristics are unlikely to apply to a waste composed of >90% CO_2, such as ignitability (i.e., RCRA Waste Code D001). Thus, in light of the early state of data development in this area, EPA intends to bring additional clarity to the regulatory regime through this rule, by establishing a conditional exclusion from the definition of hazardous waste that would apply in the event a generator determines that its CO_2 streams exhibit a RCRA hazardous characteristic.

EPA notes that it is not required to affirmatively demonstrate, as part of this rulemaking, that a particular CO_2 stream, or a portion of all CO_2 streams, necessarily qualifies as RCRA hazardous waste. Rather, under the conditional exclusion concept, EPA considers whether RCRA subtitle C regulation is necessary to protect human health and the environment. As explained in today's rule, after consideration of public comment, EPA has reached the conclusion that management of CO_2 streams under existing standards, including the UIC requirements for Class VI wells, as well as DOT standards, will protect human health and the environment from potential risks associated with CO_2 streams (including associated constituents that might be present). This conclusion is based on EPA's analysis of those other regulatory programs directly. EPA's analysis and conclusions are independent of, and thus unaffected by, the question of whether a stream is classified as a hazardous waste under EPA's RCRA regulations.

Finally, EPA notes that the conditional exclusion has a limited effect on the regulated community directly and the exclusion imposes no affirmative obligations upon them. Generators of non-hazardous waste CO_2 streams are not subject to the RCRA subtitle C regulations, and they are not obligated to make use of this conditional exclusion (although they still may choose to do so in situations where, for example, the generator may be uncertain regarding the hazardous waste status of the CO_2 stream). Moreover, because use of the conditional exclusion is voluntary, even those generators who characterize their streams as RCRA hazardous waste may continue to manage their streams as RCRA hazardous wastes from the point of generation. The only effect is upon those persons who choose to comply with the terms of the conditional exclusion.

C. Justification for Conditional Exclusion

In the proposed rule, EPA discussed at length the protections provided by the UIC Class VI well program and EPA's conclusion that regulation under RCRA would not provide additional protections to human health and the environment for CO_2 streams injected for purposes of GS. See 76 FR 48083–86. Two commenters claimed that EPA's conclusions in this respect were not adequately supported. The commenters stated that, by including a condition prohibiting the mixing or co-injection of hazardous waste into the CO_2 stream, EPA was implying that UIC Class I hazardous waste wells are more appropriate for hazardous wastes and therefore offer greater safeguards than UIC Class VI wells for hazardous CO_2 streams. These commenters also stated that EPA should offer an analysis on a point-by-point basis showing that the requirements for UIC Class VI wells are at least as protective as UIC Class I hazardous waste wells. Finally, the commenters said that EPA should not conditionally exclude CO_2 streams from subtitle C regulation without a better understanding of their composition, their potentially hazardous characteristics in all plausible environments, and without identifying allowable contaminants and setting limits for their concentration in these streams.

EPA does not agree that the hazardous waste mixing prohibition implies that UIC Class VI wells offer lesser safeguards than UIC Class I hazardous waste wells, for CO_2 streams that are the subject of this conditional exclusion. This conditional exclusion is limited to a specific, unique waste—CO_2 streams that are hazardous waste themselves (i.e., that exhibit a characteristic of hazardous waste due to the presence of impurities)—therefore, EPA needed to make clear that any other type of hazardous waste injection must continue to occur in UIC Class I hazardous waste wells.

EPA also disagrees that it needs to compare the UIC Class I hazardous waste and Class VI requirements point-by-point in order to demonstrate that the requirements for UIC Class VI wells are at least as protective as UIC Class I hazardous waste wells for CO_2 streams. As discussed in Section III.B in this preamble, determining whether a conditional exclusion is appropriate includes consideration of whether a waste may not present a hazard because it is already subject to adequate regulation. In determining whether existing regulation is adequate, EPA does not necessarily need to show that each existing requirement has a corresponding analogue in the RCRA subtitle C regulations. The UIC Class VI requirements are designed to ensure that the CO_2 streams (which may include low concentrations of hazardous constituents) remain isolated in the injection zone and confined by confining zones in an appropriate, well-characterized geologic setting that is continuously monitored to ensure that the CO_2 streams remain in the injection zone. EPA views the elimination of exposure routes through these requirements as determinative in its evaluation of whether the RCRA subtitle C regulatory requirements for hazardous waste disposal provide any substantial, additional protection for CO_2 streams which exhibit a characteristic of hazardous waste and are disposed in UIC Class VI wells. Moreover, in some instances, a point-by-point comparison may not even be appropriate. For example, the UIC Class VI requirements are designed for the unique characteristics of CO_2, including its large volume and its buoyancy relative to other fluids in the subsurface, unlike the typical fluids injected into UIC Class I hazardous waste wells. Finally, EPA also notes that the commenters, despite their general criticism that EPA did not undertake a particular enough analysis of the respective regulatory regimes, did not actually reject EPA's ultimate conclusion that the UIC Class VI requirements are sufficiently protective, nor did they provide any evidence of gaps in protection or other deficiencies in the analysis that only a more particularized analysis would reveal.

Regarding the comment that EPA did not evaluate the "potentially hazardous characteristics" of CO_2 streams "in all plausible environments," EPA notes that the commenters did not identify the plausible environments to which they were referring. EPA's response is that the scope of its evaluation of the adequacy of existing regulatory requirements (and therefore the scope of the conditional exclusion) is limited to the management of supercritical CO_2 streams from capture at a CO_2 source to injection into a UIC Class VI well.

EPA agrees with the commenter that obtaining more data on the composition

of CO_2 streams that will be injected into UIC Class VI wells is important, but disagrees that the conditional exclusion should not be promulgated unless EPA identifies specific contaminants that may be injected and at what concentrations. As explained above, EPA has concluded that the injection of CO_2 streams, including incidental associated substances derived from the source materials and the capture process,[9] can be performed in a protective manner at a permitted UIC Class VI well. This is the case regardless of the precise contaminants, and their concentrations, because the UIC Class VI permitting requirements will take into account the physical and chemical characteristics of the CO_2 streams before any injection may occur, as part of establishing the appropriate conditions for the successful confinement of CO_2 in a manner that is protective of USDWs. EPA therefore has not altered its conclusion that the conditional exclusion is appropriate, and sees no need to delay further action on the conditional exemption to gather additional data.

Nevertheless, EPA emphasizes that the UIC Class VI regulations themselves require that the chemical composition and physical characteristics of the CO_2 streams be known as part of the initial permitting process, as well as during operation of the well, in order to ensure that these CO_2 streams can be injected in a manner that is protective of human health and the environment. EPA expects that this will provide a full understanding of the properties of the CO_2 streams being injected, including specific contaminants and their concentrations. As discussed in more detail below in Section V.G. of this preamble EPA intends to monitor any data on the chemical composition and physical characteristics of the CO_2 streams being injected by the UIC Class VI permitting program, and to use that information to determine whether changes to the conditional exclusion may be appropriate.

D. Certification Statement

One of the conditions for the proposed exclusion was that generators and UIC Class VI well owners or operators who claim the exclusion must sign a certification statement that all of the conditions of the exclusion were met. EPA had proposed specific language for a certification statement, where the same language would be used for the generator and the UIC Class VI well owner or operator. EPA requested comment on the certification statement and, particularly, on whether it would appropriately ensure compliance with the conditional exclusion.

While the commenters did not generally have concerns with signing a certification statement, some commenters were concerned that the certification as proposed would require signatories to attest to certain activities that were outside of their control. For example, several commenters thought it inappropriate for the CO_2 generator to have to certify to the injection well's owner or operator's compliance with the UIC Class VI rules. EPA agrees, and, in today's final rule, the certification statement has been revised so that there are now two separate certification statements worded slightly differently—one for generators and another for UIC Class VI well owners or operators claiming this exclusion. As revised, the generator certification statement reads as set forth in 40 CFR 261.4(h)(4)(i), and the UIC Class VI well owner or operator certification reads as set forth in 40 CFR 261.4(h)(4)(ii).

EPA is making these revisions to better reflect actions over which each party has control. EPA emphasizes that these revisions do not change how the conditional exclusion is implemented—that a CO_2 stream that is hazardous must meet all the conditions in § 261.4(h)(1)–(4) to qualify for and maintain the exclusion from the hazardous waste regulations. Thus, as discussed in the proposed rule, a violation of a condition at any point in the management of a CO_2 stream (that is otherwise hazardous) would result in that CO_2 stream being subject to all applicable subtitle C regulatory requirements from the point of generation. See 76 FR at 48087.

One additional note regarding situations where both the capture and the injection of CO_2 streams is occurring at the same site, such that the CO_2 streams are not being sent off-site either in a pipeline or via transportation such as by truck. EPA clarifies that § 261.4(h)(1) requires compliance with DOT (and state analogue) requirements only as these requirements independently apply (i.e., "as applicable"). Thus, EPA would not consider this condition to have been violated merely because no pipeline or other transportation were used. Similarly, EPA does not intend for a generator in this situation to be prevented from signing the certification statement as drafted, because of the references to applicable DOT and state regulations.

As proposed, the certification statements would only be required of generators and UIC Class VI well owners or operators. EPA had requested comment on whether or not transporters or pipeline owners and operators also should sign a certification statement. One commenter stated that this certification would help ensure that pipeline owners and operators or other transporters do not purposefully mix hazardous wastes into the CO_2 stream. Several other commenters, however, asserted that this certification was unnecessary because transport through pipelines or by other means must meet applicable transport requirements for all materials moved, and therefore, certification that they meet these requirements only for a specific material (i.e., CO_2 to be sequestered) provides no additional protection and is unnecessary.

EPA agrees with those commenters who said that a certification by the transporter is not necessary. If EPA were to require such a certification, consistent with the approach described above, it would be limited to the conditions within the control of pipeline owners and operators or other transporters, which is compliance with applicable DOT requirements and to not mix hazardous waste into the CO_2 streams. Regarding compliance with DOT requirements, EPA agrees that if persons transporting supercritical CO_2 must comply with the applicable transportation requirements for all supercritical CO_2 being moved, it seems unnecessary to require that they certify compliance with DOT for a specific material (i.e., supercritical CO_2 streams to be sequestered). In addition, EPA does not have information, nor did commenters provide any new information, indicating that CO_2 pipeline owners and operators or other transporters would mix hazardous waste into CO_2 streams being delivered to UIC Class VI facilities.

One commenter pointed out that it is unlikely that these CO_2 streams will be transported other than by pipelines (except where small quantities are involved in some experimental wells, which are likely to be food grade CO_2 according to this commenter). As EPA discussed at proposal, PHMSA requires that pipeline owners and operators ensure that supercritical CO_2 streams be chemically compatible with the pipeline and any commodities in the pipeline and will not corrode the pipeline and pipeline system. 76 FR at 48087. EPA expects that pipeline owners and operators engaged in delivering supercritical CO_2 have strong disincentives to mix any hazardous

[9] EPA reiterates that CO_2 streams by definition may contain "incidental associated substances derived from the source materials and the capture process."

waste into their pipeline system, both in order to honor their contractual arrangement with customers, and also to maintain their equipment. For these reasons, EPA does not see the need for a transporter certification, and is not changing its proposed approach and transporters and pipeline owners and operators will not be required to sign a certification statement as a condition of the exclusion. However, EPA will continue to monitor compliance issues going forward and may revisit this condition as appropriate as part of its adaptive approach (discussed in Section V.G. in this preamble).

Finally, EPA proposed that the signed certification statement must be kept on-site for no less than three years and be made available upon request within 72 hours of a written request from either EPA or the state. In the proposed rule, EPA discussed how the certification plays an important role in ensuring that the conditions in the exclusion are met and its desire to safeguard the efforts of facilities to comply with the rule by designing a regulatory scheme both enforceable and structured to ensure compliance. EPA specifically requested comment on whether any new monitoring, recordkeeping, or reporting requirements were necessary to ensure compliance with the proposed conditional exclusion.

EPA received a few diverse comments on this provision. One commenter stated that requiring the certification to be kept on-site is not sufficient, citing the fact that the RCRA Enhanced Public Participation Rule would not apply.[10] Instead, this commenter suggested that EPA require the certification to be submitted to the UIC Program Director and be made publicly available on the regulator's Web site. Another commenter stated that requiring production within 72 hours was too short and that the certification requirement should reflect "modern electronic filing systems where a paper copy may not be held in a file drawer. Making an electronic document available and submitting it electronically should both be allowed."

In the final rule, EPA has kept the original proposed on-site retention time of no less than three years for the signed certification statement, but has added a provision for the statement to be posted prominently on the signatory's corporate Web site, if such Web site exists. As EPA made clear in the proposed rule, one of its key concerns with the certification statement was to ensure compliance with the terms of the conditional exclusion. Posting the signed certification statements on-line will promote compliance and accountability by providing efficient access by regulatory authorities and interested members of the public (consistent with the intent of the RCRA Enhanced Public Participation Rule cited by one commenter) to the exclusion certifications and the identities of the responsible officials. Moreover, EPA expects that posting the certifications on-line will simplify the reporting obligation for the regulated community because accessible internet posting obviates the need for a regulatory agency to request a hard copy.

EPA notes that it is not requiring the creation of any new corporate or other Web site. Entities without a Web site thus would not be required to post their certifications on-line. EPA expects, however, that most, if not all, affected entities already operate external Web sites to communicate to the public and, therefore, the posting requirement will be useful to regulators, the public, and the regulated community. The public disclosure of information is an increasingly common and important regulatory tool.[11] In 2010, the Office of Management and Budget (OMB) issued guidance with principles to assist agencies in using information disclosure to achieve regulatory objectives,[12] and EPA believes that regulatory information disclosure can cost-effectively improve compliance and accountability.

Finally, in today's final rule EPA is not requiring that the signed certification statement be submitted to the UIC Program Director as suggested by one commenter. EPA does not believe that an additional submission requirement will be necessary because the signed certification statement will in most circumstances be directly accessible on the injection facility's Web site. EPA also notes that as part of the process of obtaining a UIC Class VI permit, owners and operators who plan to claim the conditional exclusion may choose to submit the certification to the UIC Program Director to provide the necessary clarity on the status of the CO_2 streams under RCRA.[13]

E. On-Site Pipelines

In the proposed rule, EPA stated that some pipelines used to transport CO_2 might not be subject to the DOT requirements and requested information on how these pipelines are currently regulated, including any design and operating standards that apply to such pipelines. EPA also assumed that, in the typical case, captured CO_2 will not be stored at the generator facility but would be transferred in a continuous manner either to an on-site or off-site UIC Class VI well. While EPA did not propose to apply RCRA subtitle C requirements to these pipelines as a condition of the proposed exclusion, it did request comment on the appropriateness of applying the RCRA subtitle C standards to these non-DOT regulated pipelines. Several commenters responded and said that EPA should not apply the subtitle C requirements to non-DOT regulated pipelines as a condition of this rule. These commenters referenced the Pressure Piping standards set by the American Society of Mechanical Engineers (ASME)[14] and noted that non-DOT regulated CO_2 pipelines on-site are designed, constructed and maintained in accordance with these standards.

According to ASME, such standards promote safety, reliability, productivity, and efficiency in industries that rely on engineering components or equipment. While EPA acknowledges that ASME standards are not by themselves regulatory requirements,[15] these standards (e.g., ASME B31) are designed to ensure that the piping and associated

[10] The commenter is referring to regulations promulgated on December 11, 1995, that improve the process for permitting RCRA hazardous waste treatment, storage, or disposal facilities by providing earlier opportunities for public involvement in the process and expanding public access to information throughout the permitting process and the operational lives of facilities. 60 FR 63417.

[11] Cass R. Sunstein, Informational Regulation and Informational Standing: Akins and Beyond, 147 U. Pa. L. Rev. 613, 613 (1999).

[12] Memorandum for the Heads of Executive Departments and Agencies—Disclosure and Simplification as Regulatory Tools (Cass R. Sunstein, OMB; June 18, 2010). *http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/disclosure_principles.pdf*

[13] The UIC Program Director may also request certain information prior to the issuance of a permit for the construction of a new Class VI well (or the conversion of an existing Class I, Class II, or Class V well to a Class VI well). 40 CFR 146.82(a)(21). Additionally, an owner or operator may choose to submit a signed certification statement in conjunction with other Class VI permit application information on the chemical and physical characteristics of the CO_2 stream required under 40 CFR 146.82(a)(7), to inform Class VI permit decisions.

[14] The B31 Code for pressure piping, developed by American Society of Mechanical Engineers (ASME) covers Power Piping, Fuel Gas Piping, Process Piping, Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids, Refrigeration Piping and Heat Transfer Components and Building Services Piping.

[15] According to ASME, standards are considered voluntary and serve as guidelines. ASME publishes its standards, accredits users of standards to ensure that they are capable of manufacturing products that meet those standards, and provides stamps that accredited manufacturers place on their products, indicating that a product was manufactured according to a standard.

equipment meet certain quality and safety criteria. In addition, that these ASME B31 standards have been incorporated by reference in various federal and state regulatory programs illustrates the high degree of confidence and acceptance placed on these standards. Ultimately, EPA did not find a compelling reason to require RCRA subtitle C standards to on-site piping associated with supercritical CO_2 streams.

F. Definition of Carbon Dioxide Stream

EPA proposed adding a definition for the term *carbon dioxide stream* to the hazardous waste regulations in 40 CFR 260.10. EPA is finalizing that definition without change: *Carbon dioxide stream* is defined as "carbon dioxide that has been captured from an emission source (e.g., a power plant), plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process." EPA explained that the proposed definition was intended to work in concert with the definition of "carbon dioxide stream" in the UIC Class VI regulations at 40 CFR 146.81(d). EPA also requested comment on the types and characteristics of substances that are added to CO_2 streams to enable or improve the injection process.

Most commenters agreed with the proposed definition. One commenter stated the definition as written is critical to ensure that the conditional exclusion is practicable, as any captured CO_2 stream will contain some substances from the source materials and the capture process. One commenter asked EPA to confirm that "incidental associated substances" means other substances captured together with the CO_2 from a gas stream and that the numerical values provided in the proposed rule preamble (as estimates of possible hazardous constituent concentrations in CO_2 streams) were not intended to establish any numerical threshold of "incidental associated substances." EPA confirms that "incidental associated substances derived from the source materials and the capture process" is intended to refer to those substances that are captured together with the CO_2. EPA also confirms that it did not intend that the numerical concentrations of hazardous constituents described in the proposal's discussion of RCRA characterization issues[16] define what constitutes "incidental associated substances" in the proposed rule or in today's final conditional exclusion.

One commenter requested that EPA revise the term "emission source" to make it plural ("sources") in order to recognize that CO_2 streams can come from more than one source, otherwise the definition ". . . could be interpreted as requiring the CO_2 stream to come from a single source to qualify for the exemption." EPA never intended to limit the conditional exclusion to CO_2 streams from a single source but rather believes the existing language also would include CO_2 streams generated from two or more independently-produced CO_2 streams, provided that the conditions of the exclusion are met for all streams for which it is being claimed. Thus, we are not making this change.

This same commenter also requested that EPA delete the term "incidental" from the proposed definition, arguing that if a substance qualifies as an "associated substance derived from the source materials and the capture process," then it should be eligible for the exclusion regardless of the quantity in which it exists in the stream. The commenter stated that the word "incidental" connotes a volume limitation, and its use in the definition suggests that if such "associated substances" are present at sufficient volume, then they will no longer qualify as being "incidental," resulting in elimination of the exclusion.

EPA disagrees with the suggestion that "incidental" be deleted. In order to provide the regulatory clarity sought through this rule, it is critical that there be a consistent definition of *carbon dioxide stream* in both today's final rule and the UIC Class VI final rule. This consistent definition is important because the applicability of the UIC Class VI requirements and the applicability of the conditional exclusion are linked in instances where the exclusion is being claimed. EPA is concerned that employing different definitions will result in confusion as to which streams are subject to both rules. In any event, EPA finds it unlikely that the applicability of the conditional exclusion will turn on how 'incidental' is interpreted; that is, in any instance where it has been determined that a "*carbon dioxide stream*" (as defined in either rule) can be safely and legally injected into a UIC Class VI well, the conditional exclusion is applicable, provided the other specified conditions are met.

EPA also requested comment on the types and characteristics of substances that are added to CO_2 streams to enable or improve the injection process. One commenter stated that, at their GS injection site, they do not add any substances to improve the injectivity of the CO_2 stream. Another commenter said that it may be necessary to add substances to the CO_2 streams to improve injectivity, including substances to reduce viscosity, inhibit reactions with brine or formation rocks, or otherwise improve permeability. While this commenter did not provide information on what these substances might include, EPA emphasizes that any addition of substances to CO_2 streams to enable or improve the injection process would be occurring as part of the UIC Class VI permitted activity (subject to that program's oversight) and thus ultimately implemented in a manner to prevent the endangerment of Underground Sources of Drinking Water.

G. Adaptive Approach

EPA did not receive any significant comments on the adaptive approach, and no commenters disagreed with this approach; however, we believe it is important to reiterate what was presented in the preamble to the proposed rule, which was that after the conditional exclusion is promulgated any new information would be reviewed and used to inform whether changes should be made to the conditional exclusion, which could require additional rulemaking. August 8, 2011 (76 FR at 48088). This approach is consistent with the approach EPA described for considering changes to the UIC Class VI final rule, in order to incorporate new research, data, and information about GS and associated technologies. See December 10, 2010 **Federal Register** (75 FR at 77240–41, 77243, and 77257).

One example of where EPA has acknowledged it plans to consider new information that may have relevance to the overall protectiveness and/or implementation of this conditional exclusion is related to the composition of CO_2 streams. As described in Section V.C. of this preamble, one commenter cited EPA's lack of information on the nature of CO_2 streams as a concern, and EPA has stated that it intends to look at data generated on the chemical and physical characteristics of the CO_2 streams that are to be injected into UIC Class VI wells, to inform its consideration of whether changes should be made to the conditional exclusion.

Another commenter expressed concern that the conditional exclusion may actually create uncertainty, rather than reduce it, and that any exclusion ". . . needs to address carbon dioxide

[16] See 76 FR at 48079.

streams for the full range of scenarios under which the uses of captured anthropogenic carbon dioxide streams are likely to occur." This commenter stated that EPA should not assume that the producer of CO_2 streams will always send their CO_2 streams through a dedicated pipeline to a single UIC Class VI well for geologic sequestration, and requested that EPA explain how the conditional exclusion would be implemented under a variety of hypothetical situations, involving CO_2 streams from anthropogenic and natural sources that may be co-mingled in the same CO_2 pipeline, for delivery either to one or more UIC Class II wells (for EOR), UIC Class VI wells (for GS), or to both types of wells.

EPA appreciates the commenter's request, and notes that currently there is a lack of sufficient information to inform the agency on how to best address the "full range of scenarios" presented by the commenter because many of such scenarios are still under development. EPA notes that the purpose of developing this final rule was to provide for the option of a conditional hazardous waste exclusion that could be used, where necessary,[17] to provide clarity as to the applicability of RCRA subtitle C, and in particular with respect to removing barriers to initiating near-term CCS projects.[18]

These examples illustrate why EPA is committed to an adaptive approach on CCS generally, so that the Agency may identify and address additional information and respond, including via rulemaking, should that be necessary. EPA emphasizes that the adaptive approach is not limited to the examples cited above, and where additional information may increase protectiveness, streamline implementation, or otherwise inform the requirements for GS injection of CO_2, EPA may need to evaluate whether changes are necessary. Thus, the Agency commits to reviewing, in a manner similar to the adaptive approach planned for the UIC Class VI rule, new research, data, and information related to today's conditional exclusion.

[17] EPA also notes that this conditional exclusion is voluntary, and regulated parties are not obligated to make use of this conditional exclusion. For example, generators of non-hazardous waste CO_2 streams are not subject to the RCRA subtitle C regulations, and they are not obligated to make use of this conditional exclusion.

[18] See Executive Summary, Report of the Interagency Task Force on Carbon Capture and Storage, August 2010.

VI. State Authorization

A. Applicability of the Rule in Authorized States

Under Section 3006 of RCRA, EPA may authorize qualified states to administer their own hazardous waste programs in lieu of the federal program within the state. Following authorization, EPA retains enforcement authority under Sections 3008, 3013, and 7003 of RCRA, although authorized states have primary enforcement responsibility. The standards and requirements for state authorization are found at 40 CFR Part 271.

Prior to enactment of the Hazardous and Solid Waste Amendments of 1984 (HSWA), a state with final RCRA authorization administered its hazardous waste program entirely in lieu of EPA administering the federal program in that state. The federal requirements no longer applied in the authorized state, and EPA could not issue permits for any facilities in that state, since only the state was authorized to issue RCRA permits. When new, more stringent federal requirements were promulgated, the state was obligated to enact equivalent authorities within specified time frames. However, the new federal requirements did not take effect in an authorized state until the state adopted the federal requirements as state law.

In contrast, under RCRA Section 3006(g) (42 U.S.C. 6926(g)), which was added by HSWA, new requirements and prohibitions imposed under HSWA authority take effect in authorized states at the same time that they take effect in unauthorized states. EPA is directed by the statute to implement these requirements and prohibitions in authorized states, including the issuance of permits, until the state is granted authorization to do so. While states must still adopt HSWA related provisions as state law to retain final authorization, EPA implements the HSWA provisions in authorized states until the states do so.

Authorized states are required to modify their programs only when EPA enacts federal requirements that are more stringent or broader in scope than existing federal requirements. RCRA Section 3009 allows states to impose standards more stringent than those in the federal program (see also 40 CFR 271.1). Therefore, authorized states may, but are not required to, adopt federal regulations that are considered less stringent than previous federal regulations.

B. Effect on State Authorization

The provisions in today's notice are promulgated pursuant to non-HSWA authority, and would eliminate the hazardous waste requirements for those CO_2 streams that would otherwise meet the RCRA definition of hazardous waste, when these streams are managed in accordance with certain conditions. Therefore, this exclusion is less stringent than the federal program, and states are not required to adopt this provision.[19] Nevertheless, while states do not have to adopt this provision, EPA strongly encourages them to do so, because this amendment will substantially reduce the uncertainty associated with defining and managing these CO_2 streams under RCRA subtitle C, which will remove the uncertainty regarding the type of permit needed for the GS of CO_2 streams.

EPA notes that in situations involving the interstate transportation of conditionally-excluded waste, the exclusion must be authorized in the state where the waste is generated, any states through which the waste passes, and the state where the UIC Class VI injection well is located, in order for that conditionally-excluded waste to be managed as excluded from subtitle C from point of generation to injection in a UIC Class VI well. A state that has not adopted the conditional exclusion may impose state requirements, including the uniform hazardous waste manifest requirement (where applicable)[20] if characteristically-hazardous CO_2 streams are being transported through that state. EPA recommends in situations where the conditional exclusion is being asserted, involving one or more states that have not yet adopted this rule, that persons engaged in the transaction consult with these states to ensure no additional requirements apply.

[19] Some states incorporate the federal regulations by reference, or have specific state statutory requirements that their state program can be no more stringent than the federal regulations. In those cases, the conditional exclusion would be adopted by these states, consistent with state laws and administrative procedures (unless explicit action is taken by such a state to decline the revisions, as specified under that state's laws).

[20] As discussed in the proposed rule (see 76 FR at 48083), the off-site movement of hazardous waste through pipelines does not require the use of a hazardous waste manifest under the federal subtitle C hazardous waste regulations.

VII. Statutory and Executive Order (EO) Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because it raises novel legal or policy issues. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

In addition, EPA prepared a revised analysis of the potential cost impacts associated with the final rule. This revised analysis is presented in the following support document: *Assessment of the Potential Costs, Benefits, and Other Impacts—Hazardous Waste Management System: Conditional Exclusion for Carbon Dioxide (CO_2) Streams in Geologic Sequestration Activities: Final Rule (Assessment document).* A copy of this document is available in the docket for today's action. The findings from this analysis are briefly summarized below.

Entities that may be directly affected by the final rule include CO_2 generators and sequestration facilities that have UIC Class VI wells. These entities are likely to experience net cost savings as a result of the rule. Entities transporting the CO_2 stream that would otherwise be hazardous under subtitle C of RCRA must continue to meet the baseline DOT requirements and are expected to experience no increased costs, or cost savings. Increased costs associated with the review of selected CO_2 exclusion certification statements are expected for EPA and state governments.

Our revised analysis for the final rule incorporates modified estimates regarding the high-end number of potentially affected facilities and the percent of CO_2 streams that may be RCRA hazardous.[21] Market dynamics affecting the capture, compression, and sequestration of CO_2 streams have changed since the Agency prepared the *Assessment* document for the proposed action. The total number of CO_2 capture facilities potentially affected by the final rule remains uncertain. However, based upon current market conditions and the existing regulatory framework (i.e., lack of Federal legislation), it appears unlikely that there would be any significant expansion in CCS management for CO_2 over the next several years. As a result, we have made a downward revision to our high-end estimate of the number of facilities potentially affected by the final rule. The preamble to the proposed rule discussed the Agency's high level of uncertainty regarding the percent of CO_2 streams that may be characterized as RCRA subtitle C hazardous waste. Available information at the time indicated that it was possible that some CO_2 streams might meet the definition of hazardous waste, but the Agency considered this information to be insufficient to make a justifiable point estimate or reasonable range. Reflecting this uncertainty, we applied a broad range of 10 percent to 90 percent for CO_2 streams that may be RCRA hazardous waste. The proposed rule requested that commenters provide characterization data relevant to whether CO_2 streams meet the definition of RCRA hazardous waste and indicated that the Agency would continue to research and assess this issue. In response to our request, EPA received no new information or data that would indicate what percentage of captured CO_2 streams would be defined as a RCRA hazardous waste. Therefore, there remains a degree of uncertainty as to what percentage of CO_2 streams might be defined as a RCRA hazardous waste. However, within this uncertainty, EPA has considered all available information and now believes that the high-end estimate of 90 percent is likely to be a significant overestimate. Therefore, in an effort to present a more realistic and conservative estimate of cost savings, we are dropping the high-end 90 percent hazardous waste scenario for our final rule *Assessment.*

Based on these considerations, the final rule is estimated to result in undiscounted total net cost savings ranging from $4.96 million/year to $7.23 million/year. Applying a 3 percent discount rate, total net savings were found to range from $4.68 million/year to $6.83 million/year. Application of a 7 percent discount rate resulted in total net savings ranging from $4.24 million/year to $6.19 million/year. These figures represent more than an eighty percent reduction from estimates presented for the proposal. Similar to the proposal, impacts to sequestration facilities that have UIC Class VI wells represented less than one half of one percent of the total annualized net cost savings, in all cases examined. The revised estimates for EPA and state government annualized costs associated with the review of selected CO_2 exclusion certification statements are negligible (i.e., < $1,000/year).

These cost savings are expected to occur without any discernible increase in negative impacts to human health and the environment, as discussed above.

B. Paperwork Reduction Act

The Office of Management and Budget (OMB) has preapproved the information collection requirements contained in this rule under the provisions of the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2050–0207. The EPA ICR number is 2421.04.

This final rule is an important part of the Agency's efforts to establish a regulatory framework for GS. The certifications included in the rule (as well as the requirement for posting such certification on the signatories corporate Web site, if such Web site exists) are required for entities wishing to take advantage of the flexibility provided by the conditional exclusion. The certification statements would be used to hold generators and UIC Class VI well owner/operators accountable for knowing the conditions applicable to them (e.g., during an on-site inspection). The certification statements also would be used by generators and owner/operators to demonstrate that they are aware of, and complying with, the conditions.

We believe that the certifications are a practical way to assure compliance because they hold a single person at each facility accountable for compliance (i.e., the authorized representative). Because of this, the representative has a personal incentive to make sure that the facility complies with the conditions. The final rule requires that the certification be renewed every year, and be posted on the signatories corporate Web site, if such Web site exists, that the generator or UIC Class VI well owner/operator claims the RCRA conditional exclusion, in order to ensure that the certification remains current. EPA estimates the total annual burden to respondents (i.e., the private sector and state governments) under the new paperwork requirements to be 38 hours and $3,765. There are no capital costs. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 4.8 hours per respondent. EPA estimates there to be 7 private entity respondents and 1 state government respondent that will respond once per year. In addition, EPA estimates an annual burden savings

[21] For a complete discussion of these changes see: "Assessment of the Potential Costs, Benefits, and Other Impacts—Hazardous Waste Management System: Conditional Exclusion for Carbon Dioxide (CO_2) Streams in Geologic Sequestration Activities: Final Rule."

under the existing paperwork requirements of 103 hours and $8,497. This results in a net annual savings of 65 hours and $4,733. The bottom-line burden savings to respondents over three years is estimated to be 195 hours and $14,199. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR Part 9. In addition, EPA is amending the table in 40 CFR part 9 of currently approved OMB control numbers for various regulations to list the regulatory citations for the information requirements contained in this final rule.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business, based on the size standards of the Small Business Administration (SBA), that is primarily engaged in the generation, capture, storage, transportation, and GS of excluded hazardous CO_2 streams, as defined by NAICS codes 211111, 221112, 322121, 324110, 324199, 325120, 325193, 325311, and 327310, with total corporate employment ranging from 500 to 1,500 persons [22]; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant *adverse* economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the proposed rule on small entities" 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if it relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule. This rule is projected to reduce the burden on regulated entities by conditionally excluding, from the RCRA subtitle C hazardous waste management requirements, hazardous CO_2 streams that are captured, transported, and injected into UIC Class VI wells and meet certain other conditions. We, therefore, have concluded that today's rule will relieve regulatory burden for all affected small entities.

D. Unfunded Mandates Reform Act

This action contains no Federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531–1538 for State, local, or tribal governments or the private sector. As explained above, this exclusion is less stringent than the current RCRA federal program, and states are not required to adopt it. Thus, the action imposes no enforceable duties on State, local or tribal governments. Moreover, private sector regulated entities are not required to use the conditional exclusion, and may continue to manage their hazardous CO_2 streams in accordance with the full RCRA hazardous waste regulations. Therefore, this action is not subject to the requirements of sections 202 or 205 of the UMRA. This action is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This rule will not impose any requirements on States, or any other level of government. As explained above, today's final rule conditionally excludes CO_2 streams that would otherwise be RCRA hazardous from the definition of hazardous waste, where such streams, in accordance with the rule, are captured from emission sources and injected into UIC Class VI wells for purposes of GS. However, States would not be required to adopt this rule. Thus, Executive Order 13132 does not apply to this action.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). No tribal governments are known to generate CO_2 streams, or own or operate UIC Class VI wells subject to the final rule. Furthermore, we have identified no existing CO_2 pipelines that cross tribal lands. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to EO 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in EO 12866, and because the Agency does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The only effect of this action will be to conditionally exclude CO_2 streams that otherwise would be RCRA hazardous from the definition of hazardous waste, where such streams are captured from emission sources and injected into UIC Class VI wells for purposes of GS. This conditional exclusion would allow for the GS of CO_2, while maintaining protection of human health and the environment, and would not significantly disrupt the supply, distribution, or use of energy.[23]

[22] 211111 (500 persons), 221112 (500 persons), 322121 (750 persons), 324110 (1,500 persons), 324199 (500 persons), 325120 (1,000 persons), 325193 (1,000 persons), 325311 (1,000 persons), and 327310 (750 persons).

[23] As noted earlier in the preamble, where CO_2 streams are beneficially used for EOR/EGR in other than UIC Class VI wells—even where some sequestration may occur in the process of recovering oil or gas—these activities are beyond the scope of this final rule.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order (EO) 12898 (59 FR 7629, February 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. The only effect of this action will be to conditionally exclude CO_2 streams that would otherwise be RCRA hazardous from the definition of hazardous waste, where such streams are captured from emission sources and injected into UIC Class VI wells and meet other specified conditions. Existing regulations governing the generation, transportation, and injection of CO_2 streams in UIC Class VI wells are expected to protect human health and the environment, making additional regulation under RCRA subtitle C unnecessary. (See Section V.C. in this preamble for further discussion.)

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A Major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective March 4, 2014.

List of Subjects

40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

40 CFR Part 260

Environmental protection, Hazardous waste, Recycling, Reporting and recordkeeping requirements.

40 CFR Part 261

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous waste, Reporting and recordkeeping requirements.

Dated: December 17, 2013.

Gina McCarthy,

Administrator.

For the reasons set out in the preamble, Parts 9, 260 and 261 of title 40, Chapter I of the Code of Federal Regulations are amended as follows:

PART 9—OMB APPROVALS UNDER THE PAPERWORK REDUCTION ACT

■ 1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 *et seq.*, 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.*, 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345(d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 *et seq.*, 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

■ 2. In § 9.1, add the following section in numerical order under the undesignated center heading "Identification and Listing of Hazardous Waste" to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

40 CFR citation	OMB control No.
* * * * * * *	
Identification and Listing of Hazardous Waste	
* * * * * * *	
261.4(h)(4)	2050–0207
* * * * * * *	

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PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

■ 3. The authority citation for Part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921–6927, 6930, 6934, 6935, 6937, 6938, 6939, and 6974.

Subpart B—Definitions

■ 4. Section 260.10 is amended by adding in alphabetical order the definition of "Carbon dioxide stream" to read as follows:

§ 260.10 Definitions.

* * * * *

Carbon dioxide stream means carbon dioxide that has been captured from an emission source (e.g., power plant), plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process.

* * * * *

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

■ 5. The authority citation for Part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6924(y), and 6938

■ 6. Section 261.4 is amended by adding paragraph (h) to read as follows:

§ 261.4 Exclusions.

* * * * *

(h) *Carbon dioxide stream injected for geologic sequestration.* Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for Class VI Underground Injection Control wells, including the requirements in 40 CFR Parts 144 and 146 of the Underground Injection Control Program of the Safe Drinking Water Act, are not a hazardous waste, provided the following conditions are met:

(1) Transportation of the carbon dioxide stream must be in compliance with U.S. Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. 60101 et seq.) and regulations (49 CFR Parts 190–199) of the U.S. Department of Transportation, and pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable.

(2) Injection of the carbon dioxide stream must be in compliance with the applicable requirements for Class VI Underground Injection Control wells, including the applicable requirements in 40 CFR Parts 144 and 146;

(3) No hazardous wastes shall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and

(4)(i) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under this paragraph (h), must have an authorized representative (as defined in 40 CFR 260.10) sign a certification statement worded as follows:

I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 40 CFR 261.4(h) has not been mixed with hazardous wastes, and I have transported the carbon dioxide stream in compliance with (or have contracted with a pipeline operator or transporter to transport the carbon dioxide stream in compliance with) Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. 60101 et seq.) and regulations (49 CFR Parts 190–199) of the U.S. Department of Transportation, and the pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable, for injection into a well subject to the requirements for the Class VI Underground Injection Control Program of the Safe Drinking Water Act.

(ii) Any Class VI Underground Injection Control well owner or operator, who claims that a carbon dioxide stream is excluded under paragraph (h) of this section, must have an authorized representative (as defined in 40 CFR 260.10) sign a certification statement worded as follows:

I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 40 CFR 261.4(h) has not been mixed with, or otherwise co-injected with, hazardous waste at the Underground Injection Control (UIC) Class VI permitted facility, and that injection of the carbon dioxide stream is in compliance with the applicable requirements for UIC Class VI wells, including the applicable requirements in 40 CFR Parts 144 and 146.

(iii) The signed certification statement must be kept on-site for no less than three years, and must be made available within 72 hours of a written request from the Administrator, Regional Administrator, or state Director (if located in an authorized state), or their designee. The signed certification statement must be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in 40 CFR 260.10) annually prepare and sign a new copy of the certification statement within one year of the date of the previous statement. The signed certification statement must also be readily accessible on the facility's publicly-available Web site (if such Web site exists) as a public notification with the title of "Carbon Dioxide Stream Certification" at the time the exclusion is claimed.

[FR Doc. 2013–31246 Filed 1–2–14; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R09–OAR–2013–0668; FRL–9902–71–Region 9]

Revisions to the California State Implementation Plan, Antelope Valley Air Quality Management District, Mojave Desert Air Quality Management District, Monterey Bay Unified Air Pollution Control District, and South Coast Air Quality Management District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking direct final action to approve revisions to the Antelope Valley Air Quality Management District (AVAQMD), Mojave Desert Air Quality Management District (MDAQMD), Monterey Bay Unified Air Pollution Control District (MBUAPCD), and South Coast Air Quality Management District (SCAQMD) portion of the California State Implementation Plan (SIP). These revisions concern volatile organic compound (VOC) emissions from architectural coatings, liquefied petroleum gas transfer, and ignition of barbecue charcoal. We are approving three local rules and rescinding one local rule that regulate these emission sources under the Clean Air Act (CAA or the Act).

DATES: This rule is effective on March 4, 2014 without further notice, unless EPA receives adverse comments by February 3, 2014. If we receive such comments, we will publish a timely withdrawal in the **Federal Register** to notify the public that this direct final rule will not take effect.

ADDRESSES: Submit comments, identified by docket number EPA–R09–OAR–2013–0668, by one of the following methods:

1. Federal eRulemaking Portal: *www.regulations.gov.* Follow the on-line instructions.
2. Email: *steckel.andrew@epa.gov.*
3. Mail or deliver: Andrew Steckel (Air–4), U.S. Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105–3901.

Instructions: All comments will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that