

**WEST VIRGINIA
SECRETARY OF STATE
NATALIE E. TENNANT
ADMINISTRATIVE LAW DIVISION**

Form #3

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2009 JUL 30 PM 2:50

SECRETARY OF STATE
STATE OF WEST VIRGINIA

**NOTICE OF AGENCY APPROVAL OF A PROPOSED RULE
AND
FILING WITH THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE**

AGENCY: WV Department of Environmental Protection, DWWM TITLE NUMBER: 33

CITE AUTHORITY: WV Code - § 22-18-6

AMENDMENT TO AN EXISTING RULE: YES NO

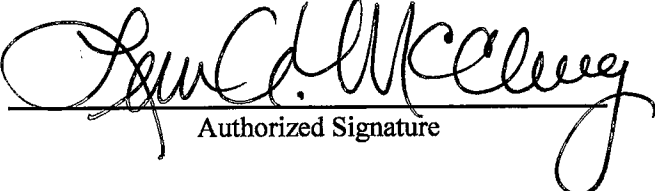
IF YES, SERIES NUMBER OF RULE BEING AMENDED: 20

TITLE OF RULE BEING AMENDED: Hazardous Waste Management System

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: _____

TITLE OF RULE BEING PROPOSED: _____

THE ABOVE PROPOSED LEGISLATIVE RULE HAVING GONE TO A PUBLIC HEARING OR A PUBLIC COMMENT PERIOD IS HEREBY APPROVED BY THE PROMULGATING AGENCY FOR FILING WITH THE SECRETARY OF STATE AND THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE FOR THEIR REVIEW.


Authorized Signature

QUESTIONNAIRE

(Please include a copy of this form with each filing of your rule: Notice of Public Hearing or Comment Period; Proposed Rule, and if needed, Emergency and Modified Rule.)

DATE: July 30, 2009

TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

FROM: (Agency Name, Address & Phone No.) Department of Environmental Protection, DWWM
601 57th Street, SE
Charleston, WV 25304
304-926-0495

LEGISLATIVE RULE TITLE: 33 CSR 20 Hazardous Waste Management System

1. Authorizing statute(s) citation WV Code §22-18-6

2. a. Date filed in State Register with Notice of Hearing or Public Comment Period:
June 12, 2009

b. What other notice, including advertising, did you give of the hearing?
Class I legal ad in the Charleston Gazette and the Charleston Daily Mail
Agency mailing list
Agency website

c. Date of Public Hearing(s) *or* Public Comment Period ended:
July 21, 2009, 6:30 pm

d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.

Attached _____ No comments received X

- e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing: (be exact)

July 30, 2009

- f. **Name, title, address and phone/fax/e-mail numbers** of agency person(s) to receive all *written correspondence* regarding this rule: (Please type)

Scott G. Mandirola, Acting Director
Division of Water and Waste Management
601 57th Street, SE

Charleston, WV 25304

Telephone: 304-926-0499, extension 1058
Fax: 304-926-0497

- g. **IF DIFFERENT FROM ITEM 'f'**, please give **Name, title, address and phone number(s)** of agency person(s) who wrote and/or has responsibility for the contents of this rule: (Please type)

Carroll Cather, Environmental Resources Specialist
Permitting Section
Division of Water and Waste Management

601 57th Street, SE
Charleston, WV 25304
Telephone: 304-926-0499, extension 1317
Fax: 304-926-0497

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

- a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

N/A

b. Date of hearing or comment period:

N/A

c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

N/A

d. Attach findings and determinations and reasons:

Attached N/A

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
BRIEFING DOCUMENT**

Rule Title: "Hazardous Waste Management System" 33CSR20

A. AUTHORITY: WV Code §22-18-6

B. SUMMARY OF RULE:

This rule regulates the generation, treatment, storage and disposal of hazardous waste. The rule proposed for 2010 adopts and incorporates by reference the federal regulations set forth in 40 CFR Parts 260 through 279 that are in effect as of June 1, 2009, with the exception of two federal amendments that are undergoing reconsideration by USEPA. The two federal rules currently under reconsideration are the "Revisions to the Definition of Solid Waste "(October 30, 2008, Federal Register Vol. 73, No. 211) and the "Expansion of RCRA Comparable Fuel Exclusion" (December 19, 2008, Federal Register Vol. 73, No. 245). Two federal rule amendments are adopted by this rule: Academic Laboratory Waste Rule (December 1, 2008, Federal Register Vol. 73, No. 231), and Amendment to Hazardous Waste Code F019 (June 4, 2008, Federal Register Vol. 73, No. 108).

C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE:

This rule is proposed to adopt and incorporate by reference two changes to federal regulations 40 CFR Parts 260 through 279, enabling the State hazardous waste program to maintain consistency with the federal program. The first federal rule allows alternative requirements for hazardous waste determination and accumulation of unwanted materials at laboratories owned by colleges and universities, and other affiliated entities. The second federal rule expands the exclusion for F019 waste code, sludges generated from the chemical conversion coating of aluminum using a zinc phosphating process. The F019 waste code exclusion only applies to the automobile or light truck manufacturing industry. This rule has minor technical changes, and corrections.

D. FEDERAL COUNTERPART REGULATIONS - INCORPORATION BY REFERENCE/DETERMINATION OF STRINGENCY:

The proposed revisions are consistent with the federal counterpart regulation and therefore no determination of stringency is required.

E. CONSTITUTIONAL TAKINGS DETERMINATION:

In accordance with §22-1A-1 and 3(c), the Secretary has determined that this rule will not result in taking of private property within the meaning of the Constitutions of West Virginia and the United States of America.

F. CONSULTATION WITH THE ENVIRONMENTAL PROTECTION ADVISORY COUNCIL:

At its meeting on June 3, 2009, the Environmental Protection Advisory Council discussed the proposed rule. See attached minutes for Council's discussion.

West Virginia Department of Environmental Protection

ADVISORY COUNCIL MEETING MINUTES

Wednesday, June 3, 2009
601 57th Street, SE, Charleston, West Virginia
West Virginia Room – 3rd Floor

IN ATTENDANCE:

Members of the Council:

Lisa Dooley
Jackie Hallinan
Larry Harris
Karen Price
Bill Raney
Rick Roberts

DEP:

Raymond Franks II	General Counsel
Kristin Boggs	Associate General Counsel
Kathy Cosco	Chief Communications Officer
Tom Clarke	Director, Division of Mining & Reclamation
James Martin	Chief, Office of Oil & Gas
Robert Bates	Division of Water & Waste Management
Bill Brannon	Division of Water & Waste Management
Carroll Cather	Division of Water & Waste Management
Ellen Herndon	Division of Water & Waste Management
Jeff Knepper	Division of Water & Waste Management
Teresa Koon	Division of Water & Waste Management
Sudhir Patel	Division of Water & Waste Management
Yogesh Patel	Division of Water & Waste Management
Bill Timmermeyer	Division of Water & Waste Management
Ken Politan	Division of Mining & Reclamation
Jim Mason	Division of Air Quality

Others:

Don Garvin	Interested Citizen
Steve Hannah	Interested Citizen
Dave Yaussy	Interested Citizen

OLD BUSINESS:

Raymond Franks called the meeting to order at 1:45 p.m. Mr. Franks noted that two members of the Council had pointed out a minor discrepancy in the April minutes as circulated, and that for expediency's sake the error would be corrected following the meeting and the April and June minutes each moved for approval at the September meeting.

Mr. Franks provided to the Council information it had requested at the April meeting regarding ongoing projects in the Office of Abandoned Mine Lands and recruiting potential for environmental inspectors. The Council agreed to review the information and discuss it in more detail at the September meeting.

NEW BUSINESS:

Mr. Franks turned the meeting over to Kristin Boggs for presentation and discussion of the 2010 proposed Legislative Rules:

DIVISION OF WATER & WASTE MANAGEMENT – WATER RULES

47CSR10 – NPDES Rule: Promulgated last in 2008. The proposed revisions reflect changes made to the Federal rule regarding Concentrated Animal Feeding Operations (CAFOs), which became effective in November 2008. EPA gave DEP two years to revise the State rules and start issuing permits. The revisions include a clarified definition of CAFO, a detailed explanation of the permitting process and the process for permit exemption, and an explanation of the required nutrient management plan. Technical revisions and corrections are made throughout.

47CSR26 – Water Pollution Control Permit Fee Schedules: Promulgated last in 2000. The proposed revisions reflect the CAFO changes made in the NPDES Rule. The fees for CAFOs will be as follows: \$300 for the initial application; \$300 for permit renewal; \$50 for permit modification; and \$50 for the annual permit fee. Technical revisions and corrections are made throughout.

47CSR12 – Requirements re Groundwater Standards: Promulgated last in 2002. The proposed revisions reflect updates and additions made to EPA's 2006 edition of the Drinking Water Standards & Health Advisories. Technical revisions and corrections are made throughout.

47CSR59 – Monitoring Well Rule. Promulgated last in 1994. The proposed revisions add new language to incorporate "high" and "low" risk boreholes, experience requirements for those persons applying for monitoring well driller certificates, recertification and training requirements for monitoring well drillers, and definitions. Technical revisions and corrections are made throughout.

47CSR60 – Monitoring Well Design Standards. Promulgated last in 1996. The proposed revisions bring this rule in conformance with the 47CSR59 *Monitoring Well Rule* definition changes, and "high" and "low" borehole requirements. Technical revisions and corrections are made throughout.

DIVISION OF WATER & WASTE MANAGEMENT – WASTE MANAGEMENT RULES

33CSR1 – *Solid Waste Management Rule*: Promulgated last in 2006. The proposed revisions include removing the requirement that free day tonnage count toward monthly/daily totals and clarifying the definition of pick-up truck. Technical revisions and corrections are made throughout.

33CSR20 – *Hazardous Waste Management System*: Promulgated last in 2009. The proposed rule reflects the annual incorporation-by-reference (IBR) revisions made by DEP to its hazardous waste rule. The proposed revisions include changes to the academic laboratory waste provisions to allow alternative requirements for hazardous waste determination and accumulation of unwanted materials at labs owned by and affiliated with colleges and universities. Other proposed revisions are directed at the hazardous waste code 019 provisions, which expand the exclusion for sludges generated from the chemical conversion coating of aluminum using a zinc phosphating process. The F019 waste code exclusion only applies to the automobile or light truck manufacturing industry. This IBR specifically excludes two federal amendments that are currently undergoing reconsideration by the EPA, *i.e.*, revisions to the definition of solid waste and expansion of RCRA comparable fuel exclusion. Technical revisions and corrections are made throughout.

Mr. Franks asked whether the Council had any questions about the seven DWWM rules. Mr. Raney inquired about the impetus for the change in the monitoring well rules, since they have not been revised in several years. Ms. Boggs responded that the changes in the rules reflect changes in technology and practice over time. There were no further questions from the Council.

OFFICE OF OIL AND GAS RULE

35CSR4 – *Oil & Gas Wells and Other Wells*: Promulgated last in 2001. The proposed revisions include updating the permit fees to reflect the 2005 statutory change, clarifying general requirements for pit and impoundment construction, and adding a new section setting forth requirements for constructing pits and impoundments that exceed a certain size. Technical revisions and corrections are made throughout.

Mr. Franks asked whether the Council had any questions about the OOG rule. Dr. Harris expressed concern that the current statutory bond amount may not suffice given the larger pits associated with Marcellus wells. Mr. Martin explained that the bond is a performance bond, not designed to cover any specific area of the well operation. Dr. Harris then asked about protections for surface owners whose water supply is impaired from drilling operations, in response to which Mr. Martin pointed out the statutory and regulatory remedies. There were no further questions from the Council.

DIVISION OF MINING & RECLAMATION RULE

47CSR30 – *Mining NPDES Rule*: Promulgated last in 2009. The proposed revisions include deleting the certification language for NPDES maps and decreasing from two years to one the raw mine drainage water quality data required for abandonment of a deep mine. Technical revisions and corrections are made throughout.

Mr. Franks asked whether the Council had any questions about the DMR rule. Ms. Dooley inquired whether the changes were substantive or merely technical. Ms. Boggs explained that although the changes appeared merely technical, they had real-world effects upon licensed professional engineers and surveyors, whom the rule required to swear to the contents of a NPDES map under penalty of perjury. Engineers and surveyors could not obtain insurance for such an oath, because they did not create the maps and were therefore subjecting themselves to criminal penalties for work that was not entirely within their control. There were no further questions from the Council.

DIVISION OF AIR QUALITY RULES

45CSR8 – *Ambient Air Quality Standards*: Promulgated last in 2009. The proposed revisions include deletion of redundant measurement method language for lead and addition of new national primary and secondary ambient air quality standards for lead.

45CSR14 – *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration*: Promulgated last in 2009. The proposed revisions incorporate the New Source Review Program for Particulate Matter Less Than 2.5 Micrometers. Other miscellaneous revisions and corrections are also included, so that the rule comports with federal counterpart language.

45CSR16 – *Standards of Performance for New Stationary Sources*: Promulgated last in 2009. The proposed rule reflects the annual IBR revisions to New Source Performance Standards, including Stationary Spark-Ignition Internal Combustion Engines, Fossil Fuel-Fired Steam Generators and Industrial-Commercial-Institutional Steam Generating Units, Stationary Combustion Turbines, Nonroad Spark Ignition Engines, Alternative Work Practice To Detect Leaks From Equipment, Petroleum Refineries and Performance Specification 16 for Predictive Emissions Monitoring Systems, Amendments to Testing and Monitoring Provisions, and Nonmetallic Mineral Processing Plants. The IBR exclusion for the vacated Clean Air Mercury Rule has been removed.

45CSR19 – *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution Which Cause or Contribute to Nonattainment*: Promulgated last in 2005. The proposed revisions incorporate the New Source Review Program for Particulate Matter Less Than 2.5 Micrometers, Reasonable Possibility in Recordkeeping, Ethanol Production Facilities, and 8-Hour Ozone National Ambient Air Quality Standard provisions. Other proposed revisions to the rule remove references to pollution control projects and clean units per the 2005 decision by the United State Court of Appeals for the District of Columbia Circuit that vacated the parallel federal provisions. Other miscellaneous revisions and/or corrections are also included, so that the rule comports with federal counterpart language.

45CSR25 – *Control of Air Pollution from Hazardous Waste Treatment, Storage and Disposal Facilities*: Promulgated last in 2009. The proposed rule reflects the annual IBR revisions to the Hazardous Waste rule.

45CSR33 – *Acid Rain Provisions and Permits*: Promulgated last in 2006. The proposed rule

reflects the annual IBR revisions, including Air Pollution Control, Transport of Emissions of Nitrogen Oxide and Sulfur Dioxide; Amendments to Monitoring Provisions; Revisions to Acid Rain Program Rules, and Revisions to the Continuous Monitoring Rule for the Acid Rain Program.

45CSR34 – *Emission Standards for Hazardous Air Pollutants*: Promulgated last in 2009. The proposed rule reflects the annual IBR revisions to the Hazardous Air Pollutant rule. Excluded from incorporation by reference are the national emission standards for hazardous air pollutants affecting non-major (area) sources of hazardous air pollutants for Iron and Steel Foundries, Plating and Polishing Operations, Ferroalloys Production Facilities, and Metal Fabrication and Finishing Source Categories.

Mr. Franks asked whether the Council had any questions about the seven DAQ Rules, and there were none.

On general comment, Dr. Harris inquired about water quality standards for mercury, citing a newspaper report that DEP supported less stringent standards based on data that State residents consume relatively fewer fish per capita. Mr. Clarke explained the factual context of the reported quote and the method by which EPA developed the point three (0.3) standard. With respect to the rules presentation, Dr. Harris suggested a return to the practice of providing Council with written summaries of the proposed rules, along with justifications for the proposed changes. The suggestion was well-received.

Mr. Franks then opened the floor to questions from the general public. Don Garvin, Legislative Coordinator for the West Virginia Environmental Council, inquired about acid rain standards, to which Mr. Mason responded that the State's standards with respect to acid rain derive from Title VI of the federal Clean Air Act.

Dr. Harris then asked whether the downturn in the energy market has caused any decrease in the number of permit applications to drill gas wells in the Marcellus Shale. Mr. Martin responded that the economy has had some effect on the number of permit applications overall, and that he could later provide Dr. Harris with more precise statistics.

Mr. Garvin complimented the Agency and the Office of Oil & Gas on finally requiring pits to be lined. Mr. Raney then thanked DEP staff for their hard work on the rules.

With no further comments forthcoming from the Council or public, Mr. Franks reminded everyone that the next meeting is scheduled for Wednesday, September 23, 2009. On motion from Mr. Raney, seconded by Mr. Roberts, Mr. Franks declared the meeting adjourned at 2:45 p.m.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 33CSR20 - "Hazardous Waste Management System"
 Type of Rule: X Legislative Interpretive Procedural
 Agency: Division of Water and Waste Management
 Address: 601 57th Street SE
Charleston, WV 25304

Phone Number: 926-0499 Ext. 1317 Email: Carroll.D.Cather@wv.gov

Fiscal Note Summary

Summarize in a clear and concise manner what impact this measure will have on costs and revenues of state government.

The proposed revisions to this rule should cause no additional impact on costs and revenues of state government.

Fiscal Note Detail

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of Breakdown by fiscal year, including long-range effect.

FISCAL YEAR			
Effect of Proposal	2010 Increase/Decrease (use "-")	2011 Increase/Decrease (use "-")	2012 (Upon Full Implementation)
1. Estimated Total Cost	\$ 0	\$ 0	\$ 0
Personal Services	0	0	0
Current Expenses	0	0	0
Repairs & Alterations	0	0	0
Assets	0	0	0
Equipment	0	0	0
Other	0	0	0
2. Estimated Total Revenues	0	0	0

Rule Title: 33CSR20 - "Hazardous Waste Management System"

3. **Explanation of above estimates (including long-range effect):**
Please include any increase or decrease in fees in your estimated total revenues.

The proposed revisions to this rule will have a minimal effect on the costs to the Division of Water and Waste Management because they impose no additional requirements beyond current federal requirements. Costs are covered under previous cost estimates.

MEMORANDUM

Please identify any areas of vagueness, technical defects, reasons the proposed rule **would not** have a fiscal impact, and/or any special issues **not** captured elsewhere on this form.

Date: June 10, 2009

Signature of Agency Head or Authorized Representative


Randy C. Huffman, Secretary

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2009 JUL 30 PM 2:51

SECRETARY OF STATE
STATE OF WEST VIRGINIA

TITLE 33
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT

SERIES 20
HAZARDOUS WASTE MANAGEMENT SYSTEM

§33-20-1. General.

1.1. Scope. -- This rule establishes and adopts a program of regulation for the generation, treatment, storage, and disposal of hazardous waste to the extent necessary for the protection of the public health and safety and the environment.

1.2. Authority. -- This rule is promulgated pursuant to the West Virginia Hazardous Waste Management Act, W. Va. Code, §22-18-6.

1.3. Filing Date. -- ~~May 5, 2009~~.

1.4. Effective Date. -- ~~June 1, 2009~~.

1.5. Incorporation by Reference. -- Whenever either federal statutes or regulations or state statutes or rules are incorporated by reference into this rule, the reference is to that statute or regulation in effect on June 1, 2008 2009 unless otherwise noted in the text of this rule. This incorporation by reference is not intended to replace or abrogate federal authorities granted the Resource Conservation and Recovery Act of 1976.

1.5.a. In applying the federal requirements incorporated by reference throughout this rule, the following exceptions or substitutions apply, unless the context clearly requires otherwise or the referenced rule cannot be delegated to the state:

1.5.a.1. "West Virginia Department of Environmental Protection" will be substituted for "Environmental Protection Agency."

1.5.a.2. "Secretary of the West Virginia Department of Environmental Protection" will be substituted for "Administrator," "Regional Administrator," and "Director." In those sections that are not adopted by reference or that are not delegable to the state, "Administrator", "Regional Administrator", and "Director" will have the meaning defined in 40 CFR §260.10.

1.5.a.3. Whenever the regulations require publication in the "Federal Register" compliance will be accomplished by publication in the "West Virginia Register," a part of the "State Register" created pursuant to the provisions of W. Va. Code, §29A-2-2 for those areas applicable and delegable to the state.

1.5.a.4. Whenever in the federal regulation reference is made to the Resource Conservation and Recovery Act of 1976 §3010, as amended (42 U.S.C. §6930), the reference is to section 4. The notification requirements of the Resource Conservation and Recovery Act of 1976 §§3010 remain in effect and will be satisfied by compliance with section 4.

1.6. Cross Reference. -- Whenever a reference is cited in a provision incorporated by reference which cross reference was not incorporated by reference, the provisions of the applicable state law and rules, if any, control to the extent of any conflict or inconsistency. Where state rules are present and there is a question, the state rules govern. Where there are no state rules present, federal regulations govern. For example, cross

reference to 40 CFR part 264 subpart O -- Incinerators, which was not incorporated by reference, would need to be referenced to the applicable West Virginia Department of Environmental Protection, Office Division of Air Quality rule, 45CSR25, "Control of Air Pollution from Hazardous Waste Treatment, Storage and Disposal Facilities."

1.7. Inconsistencies with the West Virginia Code. -- In the event a provision of the Code of Federal Regulations incorporated by reference herein includes a section that is inconsistent with the West Virginia Code, the West Virginia Code controls to the extent federal law does not preempt the state law. In the event a provision of the Code of Federal Regulations incorporated by reference herein is beyond the scope of authority granted to the Department of Environmental Protection pursuant to statute or is in excess of the statutory authority, the provision will be and remain effective only to the extent authorized by the West Virginia Code.

1.8. Provisions Applied Prospectively. -- The provisions of this rule are to be applied prospectively. All orders, determinations, demonstrations, rules, permits, certificates, licenses, waivers, bonds, authorizations and privileges that have been issued, made, granted, approved or allowed to become effective by the Secretary, and that are in effect on the date this rule becomes effective, will continue in effect according to their terms unless modified, suspended or revoked in accordance with the law.

1.9. This rule references the provisions of the West Virginia Department of Environmental Protection, Office Division of Air Quality rule, 45CSR25, "Control of Air Pollution from Hazardous Waste Treatment, Storage and Disposal Facilities" that is in effect on the date that this rule becomes effective.

1.10. This rule excludes the following federal rules from incorporation by reference: "Revisions to the Definition of Solid Waste" in Federal Register Vol. 73, No. 211, dated

October 30, 2008, and "Expansion to RCRA Comparable Fuel Exclusion" in Federal Register Vol. 73, No. 245, dated December 19, 2008.

§33-20-2. Hazardous Waste Management System: General.

2.1. 40 CFR Part 260. -- The provisions of 40 CFR §260 are hereby adopted and incorporated by reference with the modifications, exceptions, and additions set forth in this section.

2.1.a. The definitions of terms used in this rule will have the meaning ascribed to them in 40 CFR §§260, 261, 262, 263, 264, 265, 266, 267, 268, 270, 273 and 279 with the exceptions, modifications and additions set forth in this section.

2.1.a.1. "Full regulation" means those rules applicable to generators of greater than one thousand (1,000) kilograms of non-acutely hazardous waste in a calendar month and/or who treat, store or dispose of hazardous waste at their facility.

2.1.a.2. "Stage" or "staging" means the temporary placement of off-site generated recyclable materials within a recycling facility for a period of time no longer than three (3) days. Placement of recyclable materials for longer than three (3) days is considered "storage."

2.1.b. This rule excludes any and all changes to 40 CFR §260 resulting from Federal Rule "Revisions to the Definition of Solid Waste," in Federal Register Vol. 73, No. 211, dated October 30, 2008.

2.2. 40 CFR §260.2. B -- The provisions of 40 CFR §260.2 are excepted from incorporation by reference. Availability of information provided under this rule is controlled by the provisions of W. Va. Code §22-18-12.

2.3. 40 CFR §260.21(d). B -- The provisions of 40 CFR §260.21(d) are excepted from incorporation by reference.

2.4. Petitions for Waste Exclusions.

2.4.a. Any person seeking to exclude a waste at a particular generating facility from 40 CFR §261.3 or 40 CFR part 261, subpart D, as incorporated by this rule, may petition the Secretary for an exclusion following the procedures established in 40 CFR §260.20 and 40 CFR §260.22. The Department of Environmental Protection will utilize EPA guidance in evaluating delisting petitions.

2.4.b. An initial non-refundable fee of one thousand dollars (\$1,000.00) shall accompany all petitions submitted under this rule. The petitioner shall execute an agreement with the Secretary providing for the recovery of all reasonable costs incurred by the Department of Environmental Protection attributable to the review and investigation of the petition in excess of the initial fee submitted with the petition.

2.4.b.1. Recoverable costs will be determined by the number of hours worked under the agreement by the primary Department of Environmental Protection employee multiplied by two and one-half (2.5) times the hourly rate of that employee and then adding direct expenses incurred by that employee. Costs related to independent contractors retained by the Department of Environmental Protection to assist in the review and investigation of petitions will be included as direct expenses.

2.4.b.2. Within thirty (30) calendar days of receiving a petition under this section, the Department of Environmental Protection shall send the petitioner an itemized list of estimated costs it expects to incur as a result of reviewing and investigating the petition. The list will include anticipated outside contractor costs.

2.4.b.3. If, upon review of the itemized list of estimated costs submitted by

the Department of Environmental Protection, the petitioner determines not to continue the petition process, the petitioner, if he wishes to withdraw the petition, shall submit a certified letter to the Secretary withdrawing the petition. If the letter is submitted within ten (10) days of the date of receipt of the Department of Environmental Protection's list of estimated costs, the petitioner will not be liable for any costs incurred in excess of the initial application fee.

2.4.c. Where the Administrator of the EPA has granted a petition to exclude hazardous waste from 40 CFR §261.3 or 40 CFR part 261, subpart D, pursuant to 40 CFR §260.22, the Secretary shall accept the determination and amend this rule accordingly, provided:

2.4.c.1. Petitioner submits a copy of the petition submitted to the Administrator, including all demonstrative information, and a copy of the Administrator's approval granting the exclusion pursuant to 40 CFR §260.20(e); and

2.4.c.2. No scientifically supportable reasons for denying the petition are advanced that had not been presented to the Administrator.

2.5. Petitions to amend the regulations to include additional wastes as universal wastes.

2.5.a. Persons desiring to include a waste as a universal waste shall petition the Secretary for an inclusion after having received approval from the Administrator of the Environmental Protection Agency. The petition will include:

2.5.a.1. A copy of the petition submitted to the Administrator of the Environmental Protection Agency pursuant to 40 CFR §260.23, including all demonstration information;

2.5.a.2. A copy of the Administrator's approval granting the petition under 40 CFR §260.23 and 40 CFR §260.20

and 40 CFR part 273; and

2.5.a.3. Any additional information that may be required for the Secretary to evaluate the petition.

2.5.b. Within one hundred twenty (120) days of the filing of the petition the Secretary shall decide whether to approve or to deny the petition and so advise the petitioner. Where a decision to deny a petition is made, the Secretary shall notify the petitioner of the action in writing, setting forth the reasons therefor.

2.5.c. The Secretary shall not deny a petition to include a waste as a universal waste that has been approved by the Administrator, unless scientifically supportable reasons for the denial are advanced that had not been presented to the Administrator.

2.5.d. Any person may petition the Secretary to include a waste as a universal waste as follows:

2.5.d.1. Submit a petition to the Secretary demonstrating that regulation under the universal waste regulations of 40 CFR part 273 is appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the Hazardous Waste Program. The petition shall also include information required by 40 CFR §260.20(b) and include as many of the factors listed in 40 CFR §273.81 as are appropriate for the waste or category of waste addressed in the petition.

2.5.d.2. The Secretary shall grant or deny a petition using the factors listed in 40 CFR §273.81. The decision will be based on the weight of evidence showing that regulation under 40 CFR part 273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the Hazardous Waste Program.

2.5.d.3. The decision of the Secretary will be in writing and state the reasons to either grant or deny the petition. Any petitioner aggrieved by the decision of the Secretary may appeal the decision to the Environmental Quality Board in accordance with the provisions of W. Va. Code §22-18-20.

§33-20-3. Identification and Listing of Hazardous Waste.

3.1. 40 CFR Part 261. -- The provisions of 40 CFR part 261 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

3.1.a. In order for a mixture of a waste and one or more hazardous wastes identified in 40 CFR §261.3(a)(2)(iv) to be exempt from the definition of hazardous waste, the owner or operator shall comply with the following:

3.1.a.1. Provide a certification in writing to the Secretary that groundwater monitoring ~~complying that either complies~~ with either 40 CFR part 265, subpart F or that is agency approved by the Secretary is or will be in place at the wastewater treatment facility identified in 40 CFR §261.3(a)(2)(iv). A time schedule for the installation of groundwater monitoring shall be included. This requirement does not apply to wastewater treatment units or containers.

3.1.a.2. Before claiming an exemption, the owner or operator of each wastewater treatment facility receiving mixtures of wastes under 40 CFR §261.3(a)(2)(iv) shall notify the Secretary of the receipt of the wastes on a form prescribed by the Secretary.

3.1.a.3. Annually submit to the Secretary a list of hazardous wastes that are expected to be present in the mixture to be exempted.

3.2. The provisions of 40 CFR §261.5

(f)(3)(iv) and (v) and 40 CFR §261.5(g)(3)(iv) and (v) are excepted from incorporation by reference. Conditionally exempt small quantity generators shall notify the Secretary of their hazardous waste activity in accordance with section 4 of this rule.

3.3. This rule excludes any and all changes to 40 CFR part 261 resulting from Federal Rules: "Revisions to the Definition of Solid Waste" and "Expansion of RCRA Comparable Fuel Exclusion."

§33-20-4. Notification of Hazardous Waste Activity Regulations.

4.1. Applicability. Any person ~~that~~ who engages in a hazardous waste activity in the State of West Virginia shall notify the Secretary of these activities when that activity begins, unless those activities are exempted from the requirements of this rule.

4.1.a. Any person as described in subsection 4.1 ~~that~~ who has notified the EPA or is subject to the requirements to notify EPA as specified in volume 45, number 39 of the Federal Register, dated February 26, 1980, pages 12746 through 12754, is subject to the provision of section 4 of this rule.

4.1.b. The purpose of section 4 is to provide a means for the State of West Virginia to utilize the information provided by all who complied with the notification requirements of EPA as described in ~~subdivision~~ subsection 4.1.a above or all who initiated hazardous waste activities subsequent to the requirements of EPA as referenced above in ~~subdivision~~ subsection 4.1.a to notify the Secretary of their hazardous waste activities.

4.2. Notification. Any person ~~that~~ who notified EPA of hazardous waste activities as referenced above in subsection 4.1 shall provide a copy of that notification to the Secretary.

4.2.a. Any person involved in hazardous waste activities ~~that~~ who did not

comply with the notification requirements of EPA, as referenced above in subsection 4.1, but is subject to those requirements shall notify the Secretary in writing of his or her hazardous waste activities within thirty (30) days of the effective date of this rule. Notification may be accomplished by the use of EPA Form 8700-12, RCRA Subtitle C Site Identification Form, or the provision of the same information in any other manner selected by the notifier.

4.2.b. Any person exempted from the federal notification requirements as specified in 40 CFR §§261.6(b) and 261.5, but subject to West Virginia notification requirements, shall notify the Secretary in writing of his or her hazardous waste activities on the date of initiation of these activities. Notification may be accomplished by use of EPA Form 8700-12 or the provision of the same information in any other manner selected by the notifier.

4.2.c. One notification form is required for each generator.

4.2.d. A notification form is required for each storage, treatment, disposal, or other facility. However, if one facility site includes more than one storage, treatment, or disposal activity, only one notification form for the entire facility site is required.

4.2.e. Generators that store, treat, or dispose of hazardous waste on-site shall file a notification form for generation activities, as well as storage, treatment, and disposal activities, unless those activities are exempted from the requirements of this rule.

4.2.f. New generators and those initiating activities subsequent to the EPA notification period referenced in ~~subdivision~~ subsection 4.1.a shall comply with the EPA identification number requirements and shall provide a copy of their application for an EPA identification number to the Administrator.

§33-20-5. Standards Applicable to Generators of Hazardous Waste.

5.1. 40 CFR Part 262. -- The provisions of 40 CFR part 262 are hereby adopted and incorporated by reference with the modifications, exceptions and additions contained in this section.

5.2. 40 CFR §262.10(g). -- The provisions of 40 CFR §262.10(g) will be excepted from incorporation.

5.2.a. A person who generates a hazardous waste as defined by 40 CFR part 261 is subject to the compliance requirements and penalties prescribed in W. Va. Code §22-18-1 et seq. if he or she does not comply with the requirements of this rule. This rule in no way abrogates the enforcement authority of the Resource Conservation and Recovery Act of 1976 §3008.

5.2.b. All references to 40 CFR §262.10(g) will be deemed references to subsection 5.2 of this rule and the its subdivisions herein, as appropriate.

5.3. 40 CFR §262.10(j). -- The provisions of 40 CFR §262.10(j) (1) and (2) including Table 1 will be excepted from incorporation.

5.4. 40 CFR Part 262, Subpart E. -- The provisions of 40 CFR part 262, subpart E -- Exports of Hazardous Waste are hereby adopted and incorporated by reference. The substitution of terms in subdivision subsection 1.5.a above does not apply to the provisions of this subsection. In addition to the requirements contained therein, any person subject to the provisions of subpart E shall file with the Secretary copies of all documentation, manifests, exception reports, annual reports or records submitted to EPA, the Administrator or the Regional Administrator as required by and within the time frames set forth in subpart E.

5.5. 40 CFR Part 262, Subpart H. -- The provisions of 40 CFR part 262, subpart H -- Transfrontier Shipments of Hazardous Waste for Recovery within the OECD are hereby adopted and incorporated by reference. The

substitution of terms in subdivision subsection 1.6.a above does not apply to the provisions of this subsection. In addition to the requirements contained therein, any person subject to the provisions of subpart H shall file with the Secretary copies of all documentation, manifests, exception reports, annual reports or records submitted to EPA, the Administrator or the Regional Administrator as required by and within the time frames set forth in subpart H.

5.6. 40 CFR Part 262, Subpart I. -- The provisions of 40 CFR part 262, subpart I -- New York State Public Utilities will be excepted from incorporation.

5.7. 40 CFR Part 262, Subpart J. -- The provisions of 40 CFR part 262, subpart J -- University Laboratories XL Project -- Laboratory Environmental Management Standard will be excepted from incorporation.

§33-20-6. Standards Applicable to Transporters of Hazardous Waste.

6.1. 40 CFR Part 263. -- The provisions of 40 CFR part 263 are hereby adopted and incorporated by reference, insofar as those regulations relate to the transportation of hazardous waste by air and water.

6.2. The use of railroads for the transportation of hazardous waste is regulated by the West Virginia Public Service Commission rules, "Rules and Regulations Governing the Transportation of Hazardous Waste by Rail," 150CSR11. The use of the state highways for the transportation of hazardous waste is regulated under by the West Virginia Division of Highways at 157CSR7, "Transportation of Hazardous Wastes Upon the Roads and Highways" 157 CSR-7.

§33-20-7. Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

7.1. 45CSR25, Office Division of Air Quality, -- The standards in section 7 this

section apply to owners and operators of all facilities that treat, store or dispose of hazardous waste, except as otherwise provided by law. In addition to the standards in section 7 of this rule, 45CSR25, "Control of Air Pollution from Hazardous Waste Treatment, Storage and Disposal Facilities," applies to management facilities that may emit hazardous waste or the constituents thereof into the atmosphere, including incineration facilities, except as otherwise provided by law. For purposes of ~~section 7~~ this section, the following persons are considered to be incinerating hazardous waste:

7.1.a. Owners or operators of hazardous waste incinerators; and

7.1.b. Owners or operators of boilers or industrial furnaces used to destroy wastes.

7.2. 40 CFR Part 264. -- The provisions of 40 CFR part 264 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

7.3. Required Receipt of Identical Notification. -- The provisions of 40 CFR §§264.12(a)(1) and (2) are retained by the Environmental Protection Agency; however, the Secretary shall receive identical notification.

7.4. Releases from Solid Waste Management Unit. -- The provisions of 40 CFR part 264, subpart F -- Releases from solid waste management units are incorporated by reference with the following modifications, exceptions and additions.

7.4.a. For purposes of 40 CFR §264.92, reference to the "Regional Administrator" will be to the "~~Environmental Quality Board~~" Secretary of the Department of Environmental Protection. The ~~Environmental Quality Board~~ Secretary establishes groundwater protection standards pursuant to the authority granted ~~the board~~ him or her in W. Va. Code §22-12-4.

7.4.b. For purposes of 40 CFR §264.94 and subparagraphs thereof, the ~~Environmental Quality Board~~ State rule on groundwater protection standards, ~~46CSR12~~ 47CSR12, will apply as required pursuant to the authority granted the ~~Environmental Quality Board~~ Secretary in W. Va. Code, §22-12-4.

7.4.c. The provisions of 40 CFR §264.99(g) are incorporated by reference with the following modifications:

7.4.c.1. The Secretary shall specify in the facility permit the frequencies for collecting samples required under 40 CFR §264.99(g). This frequency shall not be less than once annually.

7.5. Financial Requirement. -- The provisions of 40 CFR part 264, subpart H -- Financial Requirements are adopted and incorporated by reference with the following modifications:

7.5.a. The provisions of 40 CFR §§264.149 and 264.150 are excepted from incorporation by reference.

7.6. Provisions Relating to Incinerators. -
- The provisions of 40 CFR §§264.341, 264.342, 264.343, 264.344, 264.345 and 264.347(a) relating to incinerators are excepted from incorporation by reference. Consult the rules of the ~~Office~~ Division of Air Quality regarding emissions from incinerators. The ~~Office~~ Division of Air Quality retains its authority to enforce the air monitoring items listed in 40 CFR §264.347(a) related to incinerating hazardous waste. The Secretary retains authority to enforce 40 CFR §§264.347(b)(c)(d).

7.6.a. Consult the ~~Office~~ Division of Air Quality, 45CSR25, "Control of Air Pollution from Hazardous Waste Treatment, Storage and Disposal Facilities."

7.7. 40 CFR Part 264, Subparts AA, BB, CC and 40 CFR §264.1080(f); and 40 CFR §264.1080(g). -- The provisions of 40 CFR

§264.1080(f); and 40 CFR §264.1080(g) are hereby adopted and incorporated by reference and the remaining provisions of 40 CFR part 264, subparts AA, BB, and CC are excepted from incorporation by reference. Consult the rules of the Office Division of Air Quality regarding air emissions from process vents, equipment leaks, tanks, surface impoundments and containers.

§33-20-8. Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.

8.1. 40 CFR Part 265. -- The provisions of 40 CFR part 265 are adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

8.2. 40 CFR §§265.12(a), 265.149 and 265.150. -- The provisions of 40 CFR §§265.12(a)(1) and (2), 265.149, and 265.150 are excepted from incorporation by reference. The Secretary shall receive identical notification.

8.3. 40 CFR §§265.341, 265.345, 265.347(a), 265.352. -- The provisions of 40 CFR §§265.341, 265.345, 265.347(a) and 265.352 relating to incinerators are excepted from incorporation by reference. Consult the rules of the Office Division of Air Quality regarding emissions from incinerators. The Office Division of Air Quality retains its authority to enforce the air monitoring items listed in 40 CFR §265.347(a) related to incinerating hazardous waste. The Secretary retains authority to enforce 40 CFR §§265.347(b)(c)(d).

8.4. Thermal Treatment. -- The provisions of 40 CFR Part 265, Subpart P -- Thermal Treatment are incorporated by reference except for the provisions of 40 CFR §265.375 and 40 CFR §265.383 that are excepted from incorporation by reference. Consult the rules of the Office Division of Air Quality regarding emissions from thermal treatment units.

8.5. 40 CFR Part 265 Subparts AA, BB, CC and 40 CFR §265.1080(f); and 40 CFR §265.1080(g). -- The provisions of 40 CFR §265.1080(f); and 40 CFR §265.1080(g) are hereby adopted and incorporated by reference and the remaining provisions of 40 CFR part 265, subparts AA, BB, and CC are excepted from incorporation by reference. Consult the rules of the Office Division of Air Quality regarding air emission standards for process vents, air emission standards for equipment leaks, and air emission standards for tanks, surface impoundments and containers.

§33-20-9. Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities.

9.1 40 CFR Part 266. -- The provisions of 40 CFR part 266 are hereby adopted and incorporated by reference. Consult the rules of the Office Division of Air Quality regarding Subpart H of this part.

§33-20-10. Land Disposal Restrictions.

10.1. 40 CFR Part 268. -- The provisions of 40 CFR part 268 are hereby adopted and incorporated by reference with the modifications, exceptions and additions set forth in this section.

10.2. 40 CFR §§268.5, 268.6, 268.10 - 13, 268.42(b) and 268.44. -- The provisions of 40 CFR §§268.5, 268.6, 268.10, 268.11, 268.12, 268.13, 268.42(b) and 268.44 are excepted from incorporation by reference.

10.3. Definition of Administrator in 40 CFR §268.40(b). The term "Administrator" in 40 CFR §268.40(b) will retain its meaning as defined in 40 CFR §260.10.

§33-20-11. The Hazardous Waste Permit Program and Standardized Permit.

11.1. 40 CFR Part 270. -- The provisions of 40 CFR part 270 and 40 CFR part 267 are hereby adopted and incorporated by reference with the modifications, exceptions and

additions set forth in this section.

11.2. 40 CFR §270.2 Definitions.

11.2.a. Definition of "RCRA permit"
-- For purposes of this section, the term "RCRA permit" means "West Virginia Hazardous Waste Management Permit." The following additional requirements will apply to obtain a Hazardous Waste Management Permit in West Virginia. All references in 40 CFR part 270 and 40 CFR part 267 to 40 CFR part 124 will be deemed to be references to the applicable provisions of subsections 11.4 through 11.17 of this rule. To the extent of any inconsistency with 40 CFR part 270 and 40 CFR part 267, the specific provisions contained herein will control.

11.2.b. This rule excludes any and all changes to 40 CFR part 270 resulting from Federal Rule "Revisions to the Definition of Solid Waste".

11.3. Application Fees.

11.3.a. Any person who applies for a permit for the construction or operation of a hazardous waste management facility, or both, shall submit as part of the application a money order or cashier's check payable to "The Hazardous Waste Management Fund" of the state treasury. Persons required to obtain a permit-by-rule pursuant to this rule are not required to pay a permit application fee.

11.3.b. The fee will be determined by the schedule set forth in Table 1. If the cumulative total of application fees imposed under this section equals or exceeds fifty thousand dollars (\$50,000) then the person required to pay the fees may, at the person's option, elect to submit the fee payments in installments over a three (3) year period. The installments submitted to the Department of Environmental Protection may not be less frequent than annually and the amount submitted annually may not be less than one-third (1/3) of the total amount due.

11.3.c. The fee for permit renewal is the same as for an initial permit.

11.4. Pre-application Public Meeting and Notice

11.4.a. Applicability. The requirements of this subsection will apply to West Virginia Hazardous Waste Management Part B permit applicants seeking initial permits for hazardous waste management units. The requirements of this section will also apply to West Virginia Hazardous Waste Management Part B permit applicants seeking renewal of permits for those units, when the renewal application is proposing a significant change in facility operations. For the purposes of this section, a "significant change" is any change that would qualify as a Class 3 permit modification (See 40 CFR §270.42 for a description of permit modifications). The requirements of this section do not apply to permit modifications under 40 CFR §270.42 or to applications that are submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

11.4.b. Prior to the submission of a West Virginia Hazardous Waste Management Part B permit application for a facility, the applicant shall hold at least one meeting with the public in order to solicit questions from the community and inform the community of proposed hazardous waste management activities. The applicant shall post a sign-in sheet or otherwise provide a voluntary opportunity for attendees to provide their names and addresses.

11.4.c. The applicant shall submit a summary of the meeting, along with the list of attendees and their addresses developed under subsection 11.4.b, and copies of any written comments or materials submitted at the meeting, to the permitting agency as a part of the Part B application, in accordance with 40 CFR §270.14(b).

11.4.d. The applicant shall provide public notice of the pre-application meeting at

least thirty (30) days prior to the meeting. The applicant shall maintain, and provide to the permitting agency upon request, documentation of the notice.

11.4.d.1. The applicant shall provide public notice in all of the following forms:

11.4.d.1.A. A newspaper advertisement. The applicant shall publish a notice, fulfilling the requirements ~~in paragraph~~ of subdivision 11.4.d.2, in a newspaper of general circulation in the county or equivalent jurisdiction that hosts the proposed location of the facility. In addition, the Secretary shall instruct the applicant to publish the notice in newspapers of general circulation in adjacent counties or equivalent jurisdictions, where the Secretary determines that publication is necessary to inform the affected public. The notice shall be published as a display advertisement.

11.4.d.1.B. A visible and accessible sign. The applicant shall post a notice on a clearly marked sign at or near the facility, fulfilling the requirements ~~in paragraph 11.5.d.2~~ of subdivision 11.4.d.2. If the applicant places the sign on the facility property, then the sign shall be large enough to be readable from the nearest point where the public would pass by the site.

11.4.d.1.C. A broadcast media announcement. The applicant shall broadcast a notice, fulfilling the requirements ~~in paragraph~~ of subdivision 11.4.d.2, at least once on at least one local radio station or television station. The applicant may employ another medium with prior approval of the Secretary.

11.4.d.1.D. A notice to the permitting agency. The applicant shall send a copy of the newspaper notice to the permitting agency, and the Secretary shall forward copies to the appropriate units of State and local government having jurisdiction over the area where the facility is or is proposed to be located; and to each State agency having any

authority under State law with respect to the construction or operation of the facility.

11.4.d.2. The notices required under ~~paragraph~~ subdivision 11.4.d.1 shall include:

11.4.d.2.A. The date, time, and location of the meeting;

11.4.d.2.B. A brief description of the purpose of the meeting;

11.4.d.2.C. A brief description of the facility and proposed operations, including the address or a map (e.g., a sketched or copied street map) of the facility location;

11.4.d.2.D. A statement encouraging people to contact the facility at least seventy-two (72) hours before the meeting if they need special access to participate in the meeting; and

11.4.d.2.E. The name, address, and telephone number of a contact person for the applicant.

11.5. Public Notice Requirements at the Application Stage.

11.5.a. Applicability. The requirements of this subsection apply to all West Virginia Hazardous Waste Management Part B permit applicants seeking initial permits for hazardous waste management units. The requirements of this section also apply to Hazardous Waste Management Part B permit applicants seeking renewal of permits for these units upon the expiration of the existing permit. The requirements of this section do not apply to permit modifications under 40 CFR §270.42 or permit applications submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

11.5.b. Notification. The Secretary shall provide public notice as required ~~in subsection 11.5~~ by this section when a Part B

permit application has been submitted. The Secretary shall provide public notice to:

11.5.b.1. The applicant;

11.5.b.2. All persons on a mailing list developed under subparagraph 11.11.d.1.D; and

11.5.b.3. The appropriate units of State and local government having jurisdiction over the area where the facility is proposed to be located; and to each State agency having any authority under State law with respect to the construction or operation of the facility, that a Part B permit application has been submitted to the Secretary and is available for review.

11.5.b.4. Any person otherwise entitled to receive notice under subdivision subsection 11.5.b may waive the right to receive notice for any classes and categories of permits.

11.5.c. The notice will be published within a reasonable period of time after the application is received by the Secretary. The notice shall include:

11.5.c.1. The name and telephone number of the applicant's contact person;

11.5.c.2. The name and telephone number of the permitting agency's contact office and a mailing address to which information, opinions, and inquiries shall be directed throughout the permit review process;

11.5.c.3. An address to which people can write in order to be put on the facility mailing list;

11.5.c.4. The location where copies of the permit application and any supporting documents can be viewed and copied;

11.5.c.5. A brief description of the facility and proposed operations, including the address or a map (e.g., a sketched or

copied street map) of the facility location on the front page of the notice; and

11.5.c.6. The date that the application was submitted.

11.5.d. Concurrent with the notice required under subdivision subsection 11.5.b, the Secretary shall place the permit application and any supporting documents in a location accessible to the public in the vicinity of the facility or at the permitting agency's office.

11.6. Information Repository.

11.6.a. Applicability. The requirements of this section apply to all applicants seeking West Virginia Hazardous Waste Management Permits for hazardous waste management units.

11.6.b. The Secretary shall assess the need, on a case-by-case basis, for an information repository. When assessing the need for an information repository, the Secretary shall consider a variety of factors, including: the level of public interest; the type of facility; the presence of an existing repository; and the proximity to the nearest copy of the administrative record. If the Secretary determines, at any time after submittal of a permit application, that there is a need for a repository, then the Secretary shall notify the facility that it must establish and maintain an information repository.

11.6.c. The information repository shall contain all documents, reports, data, and information deemed necessary by the Secretary to fulfill the purposes for which the repository is established. The Secretary shall have the discretion to limit the contents of the repository.

11.6.d. The information repository shall be located and maintained at a site chosen by the facility. If the Secretary finds the site unsuitable for the purposes and persons for which it was established due to problems with the location, hours of availability, access, or other relevant

considerations, then the Secretary shall specify a more appropriate site.

11.6.e. The Secretary shall specify requirements for informing the public about the information repository. At a minimum, the Secretary shall require the facility to provide a written notice about the information repository to all individuals on the facility mailing list.

11.6.f. The facility's owner/operator shall be responsible for maintaining and updating the repository with appropriate information throughout a time period specified by the Secretary. The Secretary shall close the repository at his or her discretion, based on the factors listed in subdivision subsection 11.6.b.

11.7. Application for a Permit.

11.7.a. Any person who requires a permit under this rule shall complete, sign, and submit to the Secretary an application for each permit required under this rule. Applications are not required for hazardous waste permits by rule pursuant to 40 CFR §270.60. The Secretary shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit. Permit applications shall comply with the signature and certification requirements of 40 CFR §270.11.

11.7.b. The Secretary shall review for completeness every application. Each application submitted by a new hazardous waste management facility shall be reviewed for completeness by the Secretary within thirty (30) days of its receipt. Each application submitted by an existing hazardous waste management facility (both Part A and Part B of the application), shall be reviewed for completeness within sixty (60) days of receipt. Upon completing the review, the Secretary shall notify the applicant in writing whether the application is complete. If the application is incomplete, the Secretary shall list the information necessary to make the application complete. When the application is for an existing hazardous waste management facility, the Secretary shall specify in the notice of

deficiency a date for submitting the necessary information. The Secretary shall notify the applicant that the application is complete upon receiving this information. After the application is completed, the Secretary shall request additional information from the applicant, but only when necessary to clarify, modify or supplement previously submitted material. Request for additional information shall not render an application incomplete.

11.7.c. If the applicant fails or refuses to correct deficiencies in the application, the permit shall be denied and appropriate enforcement actions will be taken ~~under the applicable statutory provisions of W. Va. Code §22-18-1 et seq.~~ pursuant to W. Va. Code §§22-18-15, 22-18-16, and 22-18-17.

11.7.d. If the Secretary decides that a site visit is necessary for any reason in conjunction with the processing of an application, he or she shall notify the applicant and a date will be scheduled.

11.7.e. The effective date of an application is the date on which the Secretary notifies the applicant that the application is complete as provided for in subdivision subsection 11.7.b above.

11.7.f. For each application, the Secretary shall, no later than the effective date of the application, prepare and mail to the applicant a project decision schedule. The schedule shall specify target dates by which the Secretary intends to:

11.7.f.1. Prepare a draft permit;

11.7.f.2. Give public notice;

11.7.f.3. Complete the public comment period, including any public hearing;

11.7.f.4. Issue a final permit.

11.8. Modification, Revocation and Reissuance, or Termination of Permits.

11.8.a. Permits shall be modified,

revoked and reissued, or terminated either at the request of an interested person (including the permittee) or upon the Secretary's initiative. However, permits shall only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR §§270.41 or 270.43. All requests shall be in writing and shall contain facts or reasons supporting the request.

11.8.b. If the Secretary decides the request is not justified, he or she shall send the requester a brief written response giving a reason for the decision. Denials of requests for modification, revocation and reissuance, or termination are not subject to public notice, comment or hearings. Denials by the Secretary may be appealed to the Environmental Quality Board in accordance with section 16 of this rule.

11.8.b.1. If the Secretary initially decides to modify or revoke and reissue a permit under 40 CFR §§270.41 or 270.42 (c), he or she shall prepare a draft permit under pursuant to section 11.9 below, incorporating the proposed changes. The Secretary may request additional information and, in the case of a modified permit, may require the submission of an updated application. In the case of a revoked and reissued permit, the Secretary shall require the submission of a new application.

11.8.b.2. In a permit modification under this section, only those conditions to be modified will be reopened when a new draft permit is prepared. When a permit is revoked and reissued under this section, the entire permit is reopened. During any revocation and reissuance proceeding, the permittee shall comply with all conditions of the existing permit until a new final permit is reissued.

11.8.b.3. "Classes 1 and 2 Modifications" as defined in 40 CFR §§270.42 (a) and (b) are not subject to the requirements of this section.

11.8.c. If the Secretary decides to terminate a permit under 40 CFR §270.43, he

or she shall issue a Notice of Intent to Terminate. A Notice of Intent to Terminate is a type of draft permit that follows the same procedures as any draft permit prepared under subsection 11.9 below.

11.9. Draft Permits.

11.9.a. Once an application is complete, the Secretary shall decide whether to prepare a draft permit or to deny the application.

11.9.b. If the Secretary decides to deny the permit application, he or she shall issue a Notice of Intent to Deny. A Notice of Intent to Deny the permit application is a type of draft permit that follows the same procedures as any draft permit prepared under this section. If the Secretary's final decision is that the initial decision to deny the permit application was incorrect, he or she shall withdraw the Notice of Intent to Deny and proceed to prepare a draft permit.

11.9.c. If the Secretary decides to issue a draft permit, he or she shall prepare a draft permit that contains the following information:

11.9.c.1. All conditions under 40 CFR §§270.30 and 270.32;

11.9.c.2. All compliance schedules under 40 CFR §270.33;

11.9.c.3. All monitoring requirements under 40 CFR §270.31; and,

11.9.c.4. Standards for treatment, storage, and/or disposal and other permit conditions under 40 CFR §270.30.

11.9.d. All draft permits prepared by the Secretary under this section shall be accompanied by a fact sheet and shall be based on the administrative record, publicly noticed, and made available for public comment.

11.10. Fact Sheet

11.10.a. A fact sheet shall be prepared for every draft permit for a hazardous waste management facility that the Secretary finds is the subject of wide-spread public interest or raises major issues. The fact sheet will briefly set forth the principal facts and the significant factual, legal, and methodological and policy questions considered in preparing the draft permit. The Secretary shall send the fact sheet to the applicant and to anyone who requests it.

11.10.b. The fact sheet shall include when applicable:

11.10.b.1. A brief description of the type of facility or activity that is the subject of the draft permit;

11.10.b.2. The type and quantity of waste, fluids, or pollutants that are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged;

11.10.b.3. A brief summary of the basis for the draft permit conditions, including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record;

11.10.b.4. Reasons why any requested variances or alternatives to required standards do or do not appear justified;

11.10.b.5. A description of the process for reaching a final decision on a draft permit including:

11.10.b.5.A. The beginning and the ending dates of the comment period and the address where comments will be received;

11.10.b.5.B. Procedures for requesting a hearing and the nature of that hearing; and

11.10.b.5.C. Any other procedures by which the public participates in the final decision.

11.10.b.6. Name and telephone number of a person to contact for additional information.

11.11. Public Notice of Permit Actions and Public Comment Period.

11.11.a. Scope. The Secretary shall give public notice if the following actions have occurred:

11.11.a.1. A draft permit has been prepared; and

11.11.a.2. A hearing has been scheduled.

11.11.b. No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under subsection 11.8 above. Written notice of that denial shall be given to the requester and to the permittee.

11.11.c. Timing. Public notice of the preparation of a draft permit (including a Notice of Intent to Deny a Permit Application) required under ~~subdivision~~ subsection 11.11.a will allow at least forty-five (45) days for public comment. Public notice of a public hearing shall be given at least thirty (30) days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit, and the two notices may be combined.)

11.11.d. Public notice of activities described in ~~subdivision~~ subsection 11.11.a shall be given by the following methods:

11.11.d.1. By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this paragraph may waive his or her rights to receive notice for any classes and categories of permits):

11.11.d.1.A. The applicant;

11.11.d.1.B. Any other

agency that the Secretary knows has issued or is required to issue a RCRA, UIC, PSD or other permit under the Clean Air Act or West Virginia Code §22-5-1 et. seq.; NPDES, 33 U.S.C. §1344; or sludge management permit for the same facility or activity;

11.11.d.1.C. Federal and State agencies with jurisdiction over fish, shell fish and wildlife resources and over coastal zones management plans, the advisory council on historic preservation, and the state historic preservation office, as applicable;

11.11.d.1.D. Persons on a mailing list developed by:

11.11.d.1.D.1. Including those who request in writing to be on the list;

11.11.d.1.D.2. Soliciting persons for "area lists" from participants in past permit proceedings in that area; and

11.11.d.1.D.3. Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in the such publications as regional and state funded newsletters, environmental bulletins, or state law journals. The Secretary shall update the mailing lists from time to time by requesting written indications of continued interest from those listed. The Secretary shall delete from the lists the name of any person who fails to respond to the request.

11.11.d.1.E. To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and

11.11.d.1.F. To each State agency having any authority under State law with respect to the construction or operation of the facility.

11.11.d.2. Publication of a notice in a daily or weekly major local newspaper of general circulation and broadcast over local radio stations;

11.11.d.3. In a manner constituting legal notice to the public under State laws; and

11.11.d.4. Any other method reasonably calculated to give actual notice of the action in question to the persons potentially effected affected by it, including press releases or any other forum or medium to elicit public participation.

11.11.e. All public notices issued under this section will contain the following minimum information:

11.11.e.1. Name and address of the office processing the permit action for which notice is being given;

11.11.e.2. Name and address of the permittee or the permit applicant and, if different, of the facility or activity regulated by the permit;

11.11.e.3. A brief description of the business conducted at the facility or activity described in the permit application or the draft permit;

11.11.e.4. Name, address and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit, fact sheet, and the application; and

11.11.e.5. A brief description of the comment procedures required by subsections 11.12 and 11.13 and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final decision.

11.11.e.6. The location of the administrative record, the times that the record will be open for public inspection; and

11.11.e.7. Any additional information considered necessary or proper.

11.11.f. Public notices for hearings. In addition to the general public notice described in ~~subdivision~~ subsection 11.11.e, the public notice of a hearing will contain the following information:

11.11.f.1. Reference to the date of previous public notices relating to the permit;

11.11.f.2. Date, time, and place of the hearing; and

11.11.f.3. A brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

11.11.g. In addition to the general public notice described in ~~subdivision~~ subsection 11.11.e, all persons identified in ~~subparagraphs~~ 11.11.d.1.A, 11.11.d.1.B, and 11.11.d.1.C shall be mailed a copy of the fact sheet, the permit application, and the draft permit, as applicable.

11.12. Public Comments and Requests for Public Hearings.

11.12.a. During the public comment period provided under ~~subsection~~ 11.11, any interested person may submit written comments on the draft permit and may request a public hearing, if a hearing has not already been scheduled.

11.12.b. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in ~~subsection~~ 11.16 below.

11.13. Public Hearings.

11.13.a. The Secretary shall hold a public hearing whenever he or she finds, on the basis of requests, a significant degree of public interest in a draft permit.

11.13.b. The Secretary shall also hold

a public hearing at his or her discretion, whenever, for instance, a hearing might clarify one or more issues involved in the permit decision.

11.13.c. The Secretary shall hold a public hearing whenever he or she receives written notice of opposition to a draft permit and a request for a hearing within forty-five (45) days of public notice under ~~subdivision~~ 11.11.c. Whenever possible, the Secretary shall schedule a hearing under this section at a location convenient to the nearest population center to the proposed facility.

11.13.d. Public notice of the hearing will be given as specified in ~~subsection~~ 11.11.

11.13.e. Whenever a public hearing will be held, the Secretary shall designate a presiding officer for the hearing who will be responsible for its scheduling and orderly conduct.

11.13.f. Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits shall be set upon the time allowed for oral statements, and the submission of statements in writing will be required. The public comment period under ~~subsection~~ 11.11 shall automatically be extended to the close of any public hearing under this section. The hearing officer may also extend the comment period by so stating at the hearing.

11.13.g. A tape recording or written transcript of the hearing shall be made available to the public.

11.14. Reopening of the Public Comment Period.

11.14.a. If any data, information, or arguments submitted during the public comment period appear to raise substantial new questions concerning a permit, the Secretary shall take one or more of the following actions:

11.14.a.1. Prepare a new draft

permit, appropriately modified, under subsection 11.9.

11.14.a.2. Prepare a revised fact sheet under subsection 11.10 and reopen the comment period.

11.14.a.3. Reopen or extend the comment period under subsection 11.11 to give interested persons an opportunity to comment on the information or arguments submitted.

11.14.b. Comments filed during the reopened comment period shall be limited to the substantial new questions that caused its reopening. The public notice under subsection 11.11 shall define the scope of the reopening.

11.14.c. Public notice of any of the above actions will be issued under subsection pursuant to section 11.11 above.

11.15. Issuance and Effective Date of Permit.

11.15.a. After the close of the public comment period on a draft permit, the Secretary shall issue a final permit decision. The Secretary shall notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. The notice shall include reference to the procedures for appealing a decision on the permit. For purposes of this section the final permit decision means a final decision to issue, deny, modify, or revoke and reissue, or terminate a permit.

11.15.b. A final permit decision will become effective thirty (30) days after the service of Notice of Decision unless:

11.15.b.1. A later effective date is specified in the decision; or

11.15.b.2. Review is requested or evidentiary hearing is requested; or

11.15.b.3. No comments requested change in the draft permit, in which

case the permit will become effective immediately upon issuance.

11.16. Response to Comments.

11.16.a. At the time that any final permit decision is issued, the Secretary shall issue a response to comments. This response will:

11.16.a.1. Specify which provisions, if any, of the draft permit have been changed in the final permit decision and the reasons for the change; and

11.16.a.2. Briefly describe and respond to all comments on the draft permit or the permit application raised during the public comment period or during any hearing.

11.16.b. The response to comments shall be available to the public.

11.17. Administrative Record.

11.17.a. The provisions of a draft permit prepared under subsection 11.9 shall be based on the administrative records consisting of:

11.17.a.1. The application and any supporting data furnished by the applicant;

11.17.a.2. The draft permit or notice of intent to deny the application or to terminate the permit;

11.17.a.3. The fact sheet;

11.17.a.4. All documents cited in the fact sheet; and

11.17.a.5. Other documents contained in the supporting file for the draft permit.

11.17.b. The Secretary shall base final permit decisions on the administrative record consisting of:

11.17.b.1. Administrative record for the draft permit;

11.17.b.2. All comments received during the public comment period provided under subsection 11.11 (including any extension or reopening under subsection 11.14);

11.17.b.3. The tape or transcript of any hearing(s) held under subsection 11.13;

11.17.b.4. Any written material submitted at the hearing;

11.17.b.5. The response to comments required by subsection 11.16 that identify and support any change made in the draft permit and any new material placed in the record under that subsection;

11.17.b.6. Other documents contained in the supporting file for the permit;

11.17.b.7. An addendum to the fact sheet if needed; and

11.17.b.8. The final permit.

11.17.c. The administrative record shall be complete on the date the final permit is issued.

11.17.d. Material readily available at the issuing agency office or published material that is generally available and that is included in the administrative record under subdivisions subsections 11.17.a and 11.17.b need not be physically included with the rest of the record, as long as it is specifically referred to in the fact sheet or in the addendum to the fact sheet.

11.18. Public Access to Information.

11.18.a. Any records, reports, or information and any permit, permit applications, and related documentation within the Secretary's possession shall be available to the public for inspection and copying; provided, however, that upon a satisfactory showing to the Secretary that those records,

reports, permit documentation, or information, or any part thereof would, if made public, divulge methods or processes or activities entitled to protection as trade secrets, the Secretary shall consider, treat, and protect those records as confidential.

11.18.b. It shall be the responsibility of the person claiming any information as confidential under the provisions of this subsection to clearly mark each page containing that information with the word "CONFIDENTIAL" and to submit an affidavit setting forth the reasons that the person believes that the information is entitled to protection.

11.18.c. Any document submitted to the Secretary that contains information for which claim of confidentiality is made must be submitted in a sealed envelope marked "CONFIDENTIAL" and addressed to the Secretary. The document shall be submitted in two (2) separate parts. The first part shall contain all information that is not deemed by the person preparing the report as confidential and shall include appropriate cross-references to the second part, which contains data, words, phrases, paragraphs or pages and appropriate affidavits containing or relating to information that is claimed to be confidential.

11.18.d. No information shall be protected as confidential information by the Secretary unless it is submitted in accordance with the provisions of subdivision subsection 11.18.c above, and no information that is submitted in accordance with the provision of subdivision subsection 11.18.c shall be afforded protection as confidential information unless the Secretary finds that the protection is necessary to protect trade secrets. The person who submits information claimed to be confidential shall receive written notice from the Secretary as to whether the information has been accepted as confidential or not.

11.18.e. All information that meets the tests of subdivision subsection 11.18.d shall be marked with the term "ACCEPTED" and shall be protected as confidential

information. If the person fails to satisfactorily demonstrate to the Secretary that information in the form presented meets the criteria of ~~subdivision~~ subsection 11.18.d, the Secretary shall mark the information "REJECTED" and promptly return it to the person who submitted the information. The Secretary shall retain a copy of the information for reference.

11.18.f. Nothing contained herein shall be construed to restrict the release of relevant confidential information during situations declared to be emergencies by the Secretary.

11.18.g. Nothing in subsection 11.18 shall be construed as limiting the disclosure of information by the Department to any officer, employee or authorized representative of State or Federal government concerned with effecting the purposes of this subsection.

11.18.h. Persons interested in obtaining information pursuant to this subsection shall submit a request in accordance with the Environmental Quality Board rule 46 CSR 8. Freedom of Information Act, W. Va. Code § 29B-1-1, et seq.

11.19. 40 CFR §270.12. The provisions of 40 CFR §270.12 are excepted from incorporation by reference. Availability of information provided under this rule is controlled by the provision of W. Va. Code, §22-18-12 and subsection 11.18 of this rule.

11.20. 40 CFR §270.24. The provisions of 40 CFR §270.24 are excepted from incorporation by reference. Consult the rules of the Office Division of Air Quality regarding emissions from process vents.

11.21. 40 CFR §§270.60(b) and 270.64. The provisions of 40 CFR §§270.60(b) and 270.64 are hereby adopted and incorporated by reference. Consult the rules of the Office Division of Water Resources and Waste Management and ~~the Environmental Quality Board~~ regarding additional requirements for underground injection wells.

11.22. 40 CFR §270.155. The provisions of 40 CFR §270.155 relating to the administrative appeal of a decision to approve or deny a Remedial Action Plan (RAP) application are hereby modified for the purposes of this rule as follows: Any commenter on the draft RAP or notice of intent to deny, or any participant in any public hearing(s) on the draft RAP, may appeal the Secretary's decision to approve or deny the RAP application to the Environmental Quality Board ~~under subsections 11.4 through 11.17 pursuant to W. Va. Code §22-18-20.~~ Any person who did not file comments or did not participate in any public hearing(s) on the draft RAP may petition for administrative review only to the extent of the changes from the draft to the final RAP decision. Appeals of a RAP may be made to the same extent as for final permit decisions under section 11 of this rule. The Secretary shall give public notice of any grant of review of a RAP by the Environmental Quality Board through the same means used to provide notice under subsections 11.4 through 11.17 above.

§33-20-12. Deed and Lease Disclosure; Notice in Deed to Property.

12.1. Recording Requirement. -- The owner of the property on which a hazardous waste management facility is located shall record, in accordance with State law, a notation on the deed or lease to the facility property -- or on some other instrument that is normally examined during title search -- that will in perpetuity notify any potential purchaser of the property that:

12.1.a. The land has been used to manage hazardous wastes; and

12.1.b. Its use is restricted under 40 CFR §264.117(c).

12.2. Upon actual transfer of property that contains hazardous wastes that have been stored, treated, or disposed of, the previous owner shall notify the Secretary in writing of the transfer.

12.3. Other Requirements. -- Nothing contained in this section will relieve any person from complying with the requirements on deed and lease disclosures set forth in W. Va. Code, §22-18-21.

§33-20-13. Universal Waste Rule.

13.1. 40 CFR Part 273. -- The provisions of 40 CFR part 273 are hereby adopted and incorporated by reference with the modifications, exceptions and additions contained in this section.

13.2. 40 CFR §§273.20, 273.40, 273.56 - - The provisions of 40 CFR §§273.20, 273.40, and 273.56 relating to exports are hereby adopted and incorporated by reference. The substitution of terms in ~~subdivision~~ subsection 1.6.a does not apply to the provisions of this subsection. In addition to the requirements contained therein, any person subject to the provisions of 40 CFR part 273 shall file with the Secretary copies of all documentation, manifests, exception reports, annual reports or records submitted to EPA, the Administrator or the Regional Administrator as required by 40 CFR part 273.

13.3. 40 CFR §273.70 -- The provisions of 40 CFR §273.70 "Imports" are hereby adopted and incorporated by reference. Persons managing universal waste that is imported to West Virginia are subject to the requirements of this rule.

13.4. 40 CFR §§273.80 and 273.81 -- The provisions of 40 CFR §§273.80 and 273.81 are excepted from incorporation by reference. Consult the provisions of ~~subdivision~~ subsection 2.5.d above to petition to include a waste as a universal waste.

§33-20-14. Standards for the Management of Used Oil.

14.1. 40 CFR Part 279. -- The provisions of 40 CFR part 279 are hereby adopted and incorporated by reference, with the exception contained in this section. Consult the rules of

the ~~Office~~ Division of Air Quality regarding the burning of used oil.

14.2. 40 CFR §279.82(b). -- The term "EPA" at 40 CFR §279.82(b) will have ~~the meaning of~~ mean United States Environmental Protection Agency.

§33-20-15. Standards for Hazardous Waste Recycling.

15.1 The provisions of 40 CFR §261.6 are hereby adopted and incorporated by reference, with the modifications contained in this section.

15.2 Standards Applicable To All Hazardous Waste Recycling Activities.

15.2.a Any residual material resulting from a recycling process shall be evaluated in accordance with section 3 of this rule to determine whether it is subject to regulation as a hazardous waste.

15.2.b Any facility that treats hazardous waste without recycling it, or that treats hazardous waste prior to recycling it, is subject to regulation under section 11 above. Generators that treat hazardous waste in containers or tanks in compliance with 40 CFR§262.34 are exempt from regulation under section 11 for that treatment activity.

15.2.c Owners or operators of facilities with hazardous waste management units that recycle hazardous wastes are subject to section 7 of this rule.

15.3 Hazardous Waste Recycling At Off-Site Facilities.

15.3.a. Owners or operators of facilities that receive recyclable materials, stage recyclable materials, and recycle them without storing them before they are recycled are subject to:

15.3.a.1. The requirements of subsection 15.2 of this rule;

15.3.a.2. The generator requirements of section 5 of this rule; and

15.3.a.3. Financial Requirements -- Prior to staging any material, owners or operators shall demonstrate financial assurance for closure of the facility by:

15.3.a.3.A. Maintaining a closure cost estimate that meets the requirements of 40 CFR § 265.142 and that has been approved by the Secretary; and

15.3.a.3.B. Establishing financial assurance in accordance with 40 CFR§ 265.143.

15.3.b. Owners or operators of facilities that store recyclable materials before they are recycled are subject to section 11 of this rule and to all applicable provisions of sections 1, 3, and 5.

§33-20-16. Appeal Rights.

Any person aggrieved or adversely affected by the failure or refusal of the Secretary to act within a reasonable time on an application for a permit or by the issuance or denial of or by the terms and conditions of a permit granted by the Secretary under the provisions of this rule, may appeal to the Environmental Quality Board in accordance with the provisions of W. Va. Code §§22-18-22 and 22B-1-1 et seq.

TABLE 1
TABLE 1
PERMIT APPLICATION FEE SCHEDULE

STORAGE

EPA CODE ACTIVITY	FEE	FEE
S01 Container	<100 tons capacity \$2,500.00	>100 tons capacity \$3,750.00
S02 Tank	<100 tons capacity \$2,500.00	>100 tons capacity \$3,750.00
S04 Surface Impoundment	<1,000 tons capacity \$10,000.00	>1,000 tons capacity \$12,500.00
S05 Drip Pad	\$2,500.00	
S03 Waste Pile	<100 tons capacity \$5,000.00	>100 tons capacity \$7,500.00
S06 Waste Pile (Containment Bldg.)	<100 tons capacity \$5,000.00	>100 tons capacity \$7,500.00

DISPOSAL

EPA CODE ACTIVITY	FEE	FEE
D80 Landfill	<1,000 tons/year \$15,000.00	>1,000 tons/year \$25,000.00
D81 Land Application	<1,000 tons/year \$15,000.00	>1,000 tons/year \$25,000.00
D83 Surface Impoundment	<1,000 tons/year \$15,000.00	>1,000 tons/year \$25,000.00

**TABLE 1
PERMIT APPLICATION FEE SCHEDULE
(CONTINUED)**

TREATMENT

EPA CODE ACTIVITY	FEE	FEE
T01 Tank	<100 tons capacity \$2,500.00	>100 tons capacity \$3,750.00
T02 Surface Impoundment	<1,000 tons/year \$10,000.00	>1,000 tons/year \$12,500.00
T03 Incinerator	<1,000 tons/year \$5,000.00	>1,000 tons/year \$7,500.00
T80 thru T93 Boiler/Industrial Furnace	<1,000 tons/year \$5,000.00	>1,000 tons/year \$7,500.00
T04 Other	\$5,000.00	\$7,500.00
T-94 Containment Bldg. Treatment	\$5,000.00	\$7,500.00

EMERGENCY PERMITS

EPA CODE ACTIVITY	FEE
State and Federal	Nil
Others	\$500.00

**TABLE 1
PERMIT APPLICATION FEE SCHEDULE
(CONTINUED)**

MISCELLANEOUS

EPA CODE ACTIVITY	FEE
Permit Modification under 40 CFR, 270.42 (Class I)	\$ 500.00
Permit Modification under 40 CFR, 270.42 (Class II and III) HWIR Staging Pile	\$ 1,250.00
Modification under 40 CFR, 270.41	\$ 2,500.00
Post-Closure Care Permit	\$15,000.00
Closure Plans	\$ 1,500.00

33CSR20

HAZARDOUS WASTE MANAGEMENT SYSTEM

RESPONSE TO COMMENTS

On June 12, 2009, the Division of Water and Waste Management (DWWM) commenced a thirty-day public comment period and subsequently held a public hearing on July 21, 2009 to accept oral comments on proposed revisions to legislative rule 33CSR20. Written comments were also accepted through 7:00 p.m. on Tuesday, July 21, 2009. No commenter submitted written comments regarding proposed revisions to rule 33CSR20, and no commenter provided verbal comments.

BEFORE THE WEST VIRGINIA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF:

PROPOSED 2010 RULES
33CSR20 - related to the
Hazardous Waste Management
System

TRANSCRIPT OF PROCEEDINGS had or testimony
adduced in the above-entitled matter, on the on the 16th
day of July, 2009, commencing at 6:13 p.m. and concluding
at 6:16 p.m., at 601 57th Street, S.E., Charleston, Kanawha
County, West Virginia, pursuant to notice to all interested
parties.

BEFORE: TOM ALUISE
Public Information Office.

ORIGINAL

NANCY MCNEALY
CERTIFIED COURT REPORTER
Post Office Box 13415
Charleston, West Virginia 25360-0415
(304) 988-2873 FAX (304) 988-1419

I N D E X

Reporter's Certificate.....Page 5

1 MR. ALUISE: Good evening. My name is Tom
2 Aluise and I am with the West Virginia Department of
3 Environmental Protection's Public Information Office.
4 Welcome to the public hearing on proposed rule changes to
5 33CSR20, related to the Hazardous Waste Management System.

6 Each year this rule adopts U.S. EPA changes
7 to the federal regulations in 40 CFR 250 through 279,
8 enabling the State hazardous waste program to maintain
9 consistency with the federal program. This year's rule
10 incorporates two changes to those federal regulations. The
11 first change is a federal rule that allows alternative
12 requirements for hazardous waste determination and
13 accumulation of unwanted materials at laboratories owned by
14 colleges and universities and other affiliated entities.

15 The second change is a federal rule that
16 expands the exclusion for hazardous waste code F019,
17 sludges generated from the chemical conversion coating of
18 aluminum using a zinc phosphating process. The F019 waste
19 code exclusion only applies to the automobile or light
20 truck manufacturing industry. Rule 33CSR20 also has minor
21 technical and language corrections throughout.

22 Two additional changes to 40 CFR Parts 260
23 through 279 were not incorporated into this rule because
24 EPA is currently reconsidering those rules. The two

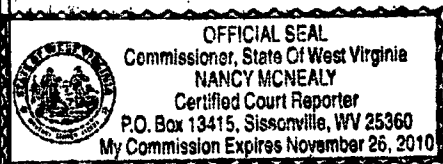
BEFORE THE WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF WEST VIRGINIA,
COUNTY OF KANAWHA, to wit:

I, **NANCY MCNEALY**, Certified Verbatim Court Reporter and Commissioner of West Virginia, do hereby certify that the foregoing is, to the best of my skill and ability, a true and accurate transcript of all the proceedings as set forth in the caption hereof.

Given under my hand this 23rd day of July,
2009.

My commission expires November 26, 2010.



Certified Verbatim Reporter
Commissioner of West Virginia

with Indian Tribal Governments (65 FR 67249, November 9, 2000) do not apply to this rule. In addition, This rule does not impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Public Law 104-4).

This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, section 12(d) (15 U.S.C. 272 note).

XII. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report 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 this rule in the Federal Register. This rule is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: May 12, 2008.

Lois Rossi,

Director, Registration Division, Office of Pesticide Programs.

■ Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

■ 1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 321(q), 346a and 371.

■ 2. In §180.960, the table is amended by adding alphabetically the following polymer to read as follows:

§ 180.960 Polymers; exemptions from the requirement of a tolerance.

* * * * *

Polymer	CAS No.
2-oxepanone, homopolymer, minimum number average molecular weight (in amu) 52,000.	24980-41-4

[FR Doc. E8-11980 Filed 6-3-08; 8:45 am]
BILLING CODE 6560-50-S

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 261 and 302

[EPA-HQ-RCRA-2006-0984, FRL-8575-4]
RIN 2050-AG15

Hazardous Waste Management System: Identification and Listing of Hazardous Waste; Amendment to Hazardous Waste Code F019

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is amending the list of hazardous wastes from non-specific sources (called F-wastes) by modifying the scope of the EPA Hazardous Waste No. F019 (Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process). The Agency is amending the F019 listing to exempt wastewater treatment sludges from zinc phosphating, when such phosphating is used in the motor vehicle manufacturing process, provided that the wastes are not placed outside on the land prior to shipment to a landfill for disposal, and the wastes are placed in landfill units that are subject to or meet the specified landfill design criteria. This final action on the F019 listing does not affect any other wastewater treatment sludges either from the chemical conversion coating of aluminum, or from other industrial sources. Additionally, this rule amends the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) list of Hazardous Substances and Reportable Quantities so that the F019 listing description is consistent with the amendment to F019 under regulations for hazardous wastes from non-specific sources.

DATES: This final rule is effective on July 7, 2008.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-RCRA-2006-0984. All documents in the docket are listed in the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly

available only in hard copy. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the OSWER Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW., Washington, DC 20460. The EPA/DC 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 Reading Room is (202) 566-1744 and the telephone number for the RCRA Docket is (202) 566-0270.

FOR FURTHER INFORMATION CONTACT: For general information, review our Web site at <http://www.epa.gov/epaoswer/hazwaste>. For information on specific aspects of the rule, contact James Michael of the Office of Solid Waste (3304P), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, (E-mail address and telephone number: michael.james@epa.gov, (703) 308-8610).

SUPPLEMENTARY INFORMATION:

General Information

Who Is Potentially Affected by This Final Rule?

This final rule could directly affect businesses that generate certain wastes from the manufacturing of motor vehicles in the (1) automobile manufacturing industry and (2) light truck/utility vehicle manufacturing industry (NAICS codes 336111 and 336112, respectively). Other motor vehicle manufacturing industries (e.g., heavy duty truck or motor home manufacturing) are not affected by this rule. The wastes affected by this final rule are wastewater treatment sludges generated from the chemical conversion coating of aluminum using a zinc phosphating process and are currently listed as EPA Hazardous Waste No. F019 (see 40 CFR 261.31). These wastes will not be subject to the F019 listing, provided the wastes are not placed outside on the land prior to the shipment to a landfill for disposal and are either: disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted, licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in § 258.40, § 264.301, or § 265.301. Impacts on potentially affected entities are summarized in Section VI of this Preamble. The "Regulatory Impact Analysis" (RIA) for this action presents an analysis of potentially affected entities and is available in the docket

established in support of this final rule. Entities potentially affected by this action are at least 7 current F019 generators within these two industries, consisting of four auto and three light truck/utility vehicle plants, and up to 42 other facilities in these two industries that may begin applying aluminum parts and could potentially generate regulated F019 waste without this final rule (based on 2005 Biennial Report data).¹ This action might also affect the 19 auto and light truck plants with prior F019 de-listings issued between 1997 and 2007, because this action could supplant their delisting status and conditions, depending upon the extent of state government voluntary adoption of this final rule.

To determine whether your facility is affected by this action, you should examine 40 CFR Parts 260 and 261 carefully, along with the final regulatory language amending Chapter I of the Code of Federal Regulations (CFR). This language is found at the end of this Federal Register notice. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding section entitled FOR FURTHER INFORMATION CONTACT.

Preamble Outline

- I. Legal Authority
- II. List of Acronyms
- III. Summary of This Action
- IV. Summary of the Proposed Action
 - A. Summary of Risk Assessment Approach Used

- B. Proposed Landfill Liner Design Options
- C. Proposed Options for Recordkeeping and Storage
- V. Rationale for This Final Rule and Response to Comments
 - A. Landfill Liner Conditions
 - B. The Need for Storage Requirements
 - C. Recordkeeping Requirements
 - D. Scope and Applicability of the Exemption
 - E. Applicability to Recycled Waste
 - F. Interrelationship Between the Exemption and Delistings
 - G. Waste Analysis
 - H. Other Issues
- VI. State Authorization
- VII. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Designation and List of Hazardous Substances and Reportable Quantities
- VIII. Relationship to Other Rules—Clean Water Act
- IX. Statutory and Executive Order Reviews
 - A. Executive Order 12866: Regulatory Planning and Review
 - B. Paperwork Reduction Act
 - C. Regulatory Flexibility Act
 - D. Unfunded Mandates Reform Act
 - E. Executive Order 13132: Federalism
 - F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
 - G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks
 - H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use
 - 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. Legal Authority

The hazardous waste regulations are promulgated under the authority of Sections 2002 and 3001(b) and (f), 3004(d)-(m) and 3007(a) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), as amended, most importantly by the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. 6912, 6921(b), 6924(d)-(m) and 6927(a). These statutes combined are commonly referred to as the "Resource Conservation and Recovery Act" (RCRA) and will be referred to as such for the remainder of this Notice.

Because EPA is amending the national listing of F019, EPA believes the appropriate statutory authority is that found in section 3001(b), rather than the authority in section 3001(f). RCRA section 3001(f) pertains solely to the exclusion of a waste generated at a particular facility in response to a petition. Accordingly, neither the procedures nor the standards established in that provision, or in EPA's regulations at 40 CFR 260.22 are applicable to this rulemaking.

Section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9602(a) is the authority under which the CERCLA aspects of this rule are promulgated.

II. List of Acronyms

ACRONYMS

Acronym	Definition
CBI	Confidential Business Information.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act.
CFR	Code of Federal Regulations.
DRAS	Delisting Risk Assessment Software.
EPA	Environmental Protection Agency.
ICR	Information Collection Request.
IWEM	Industrial Waste Management Evaluation Model.
MSWLF	Municipal Solid Waste Landfill.
NAICS	North American Industrial Classification System.
NTTAA	National Technology and Transfer Act.
OMB	Office of Management and Budget.
OSWER	Office of Solid Waste and Emergency Response.
PRA	Paperwork Reduction Act.
RCRA	Resource Conservation and Recovery Act.
RFA	Regulatory Flexibility Act.
RQ	Reportable Quantity.
UMRA	Unfunded Mandates Reform Act.

¹ EPA, in partnership with the States, biennially collects information regarding the generation, management, and final disposition of hazardous

wastes regulated under RCRA. See the 2005 Biennial Report on the EPA Web site at <http://www.epa.gov/epaoswer/hazwaste/data/br05/index.htm>.

www.epa.gov/epaoswer/hazwaste/data/br05/index.htm.

III. Summary of This Action

In this notice, EPA is promulgating regulations that amend the list of hazardous wastes from non-specific sources under 40 CFR 261.31 by modifying the scope of EPA Hazardous Waste No. F019. The revised listing will now read:

F019—Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. Wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process will not be subject to this listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a landfill for disposal and are either: disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted, licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in § 258.40, § 264.301 or § 265.301. For the purposes of this listing, motor vehicle manufacturing is defined in § 261.31(b)(4)(i) of this section and paragraph § 261.31(b)(4)(ii) of this section describes the recordkeeping requirements for motor vehicle manufacturing facilities.

The Agency is amending the F019 listing to exempt the wastewater treatment sludge generated from zinc phosphating, when zinc phosphating is used in the automobile assembly process, provided the waste are not placed outside on the land prior to shipment to a landfill for disposal and the waste is disposed in a landfill unit subject, or otherwise meeting, certain liner requirements. Wastes that meet these conditions will be exempted from the listing from their point of generation, and will not be subject to any RCRA Subtitle C management requirements for generation, storage, transport, treatment, or disposal (including the land disposal restrictions). The Agency is also requiring that the generator maintain records on site to show that the waste meets the conditions of the listing.

For the purposes of the F019 listing, motor vehicle manufacturing is defined to include the manufacture of automobiles and light trucks/utility vehicles (including light duty vans, pick-up trucks, minivans, and sport utility vehicles). The motor vehicle manufacturing industry incorporates aluminum into vehicle parts and bodies for the purpose of making them lighter-weight and thus more capable of increasing gas mileage. However, when aluminum is incorporated into the body of an automobile, the conversion coating step in the manufacturing process

resulted in the generation of an RCRA-listed hazardous waste (F019) in the form of a wastewater treatment sludge from the conversion coating process. Wastewaters from the conversion coating of steel in the same industry do not generate a listed hazardous waste. By removing the regulatory controls under RCRA, EPA is facilitating the use of aluminum in motor vehicles. The Agency believes that the incorporation of aluminum will be advantageous to the environment since lighter-weight vehicles are capable of achieving increased fuel economy and associated decreased exhaust air emissions. These modifications to the F019 listing will not affect any other wastewater treatment sludges either from the chemical conversion coating of aluminum, or from other industrial sources.

The Agency is also promulgating conforming changes to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) list of Hazardous Substances and Reportable Quantities under 40 CFR 302.4 so that the F019 listing description is consistent with the changes to the F019 listing.

IV. Summary of the Proposed Action

On January 18, 2007 (72 FR 2219), the Agency proposed to amend the list of hazardous wastes from non-specific sources (called F-wastes) under 40 CFR 261.31 by modifying the scope of the EPA Hazardous Waste No. F019 (Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process). Specifically, the Agency proposed to amend the F019 listing to exempt wastewater treatment sludge generated from zinc phosphating, when zinc phosphating is used in the automobile assembly process and provided the waste is disposed in a landfill unit subject to certain liner design criteria. A summary of the proposed listing amendment is presented below. More detailed discussions are provided in the preamble to the proposed rule and in the background documents included in the docket for this rule.

A. Summary of Risk Assessment Approach Used

The Agency's risk assessment evaluated risks to human health and the environment from a landfill disposal scenario. (See the "Technical Support Document: Assessment of Potential Risks from Managing F019 Waste from the Motor Vehicle Manufacturing

Industry" in the docket for this rulemaking for a detailed description of the analysis that the Agency performed, hereinafter referred to as the Technical Support Document.) EPA initially evaluated the potential risks posed by the volumes of F019 waste from the automobile manufacturers that might be disposed of in an unlined nonhazardous waste landfill, and then evaluated potential risks from disposal in landfills that use different liner technologies. The risk evaluation used several environmental fate, transport, and exposure/risk models: the Delisting Risk Assessment Software (DRAS), version 2.0, the Industrial Waste Management Evaluation Model (IWEM),² and EPA's Composite Model for Leachate Migration with Transformation Products (EPACMTP). See the Technical Support Document for a detailed description of the use of these models and their peer review.

EPA's Regional Offices, and certain states, use the DRAS model to determine whether to grant requests for delistings under 40 CFR 260.22. The RCRA regulations provide a form of relief for listed wastes through a site-specific process known as "delisting." Under this process, any person may petition EPA to remove its waste from regulation under the lists of hazardous wastes contained in Part 261. EPA has granted delistings to a number of motor vehicle manufacturing facilities that generate F019 wastes.

EPA used the DRAS model to calculate the levels of constituents in a waste that would not exceed the 10⁻⁵ risk level for carcinogens (i.e., less than or equal to an increased probability of developing cancer that is one in one hundred thousand).³ For non-carcinogens, EPA used a "hazard quotient" (HQ) less than or equal to 1.0; the hazard quotient is the ratio of an individual's chronic daily exposure to a standard, such as the chronic reference dose.⁴ Using the DRAS model, EPA evaluated risks from potential exposures

² IWEM is the groundwater modeling component of the *Guide for Industrial Waste Management*, used for recommending appropriate liner system designs for the management of RCRA Subtitle D industrial waste.

³ These risk levels are consistent with those discussed in EPA's hazardous waste listing determination policy (see the discussion in a proposed listing for wastes from the dye and pigment industries, December 22, 1994; 59 FR 66072).

⁴ The reference dose is "an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure for a chronic duration (up to a lifetime) to the human population (including sensitive subpopulations) that is likely to be without an appreciable risk of deleterious effects during a lifetime." See EPA's Integrated Risk Information System (IRIS).

to waste constituents resulting from releases to groundwater, air (both waste particles and volatile emissions), and surface water. See the Technical Support Document for a complete description of the scenario that was modeled using DRAS, the human health and ecological exposure pathways, and the data sources the Agency used as model inputs. For the purposes of this national rulemaking, EPA chose to adopt a conservative modeling approach in order to assure continued protection of human health and the environment. While this process was used to determine if these wastes would pose a risk if disposed of in unlined landfills, the Agency notes that facilities can petition for a separate site-specific delisting of their F019 wastestreams based on their chemical composition.

To identify waste constituents, EPA reviewed information from 13 motor vehicle manufacturing facilities' delisting petitions. This included information on the specific chemicals used in the conversion coating process, and the analytical data received from the 13 facilities' delisting petitions. The Agency evaluated the chemicals that were detected in the F019 sludge from the analyses conducted by the petitioners for approximately 240 chemical constituents. EPA's evaluation assumed that the waste volume equaled the volume resulting from 20 to 30 years of disposal into a landfill (90,000 cubic yards).

Based on the assessment of the groundwater pathway using DRAS, the Agency determined that two constituents (arsenic and nickel) had maximum detected values that, in certain scenarios, exceeded the 10^{-5} risk level or an HQ of 1. The DRAS modeling for unlined landfills yielded an estimated HQ of 3 for nickel, and an estimated individual excess lifetime cancer risk for arsenic of three in one hundred thousand. Thus, using conservative modeling and exposure assumptions, the Agency found that the projected levels for these two constituents could exceed these risk levels by up to a factor of three.

The potential risks found by the DRAS modeling were from the groundwater exposure pathway, therefore, units with liner systems should dramatically lessen releases to groundwater. DRAS does not have an option to model the impact of liners on landfill releases. To examine the potential impact of liners, the Agency compared the levels calculated by the Industrial Waste Management Evaluation Model (IWEM), for clay-

lined and composite-lined landfills.⁵ The initial IWEM evaluation clearly showed that the use of a composite-lined landfill would result in risk levels for the two key constituents of concern, below 10^{-5} for arsenic and an HQ of less than 1 for nickel. EPA also referred to the modeling performed for lined landfills in the recent listing rule for dye and pigment production wastes to show that composite-lined landfills provided significant protection compared to an unlined unit (February 24, 2005, 70 FR 9138).

The IWEM results for a clay-lined unit also indicated that a single clay liner offers added protection compared to an unlined unit. For nickel, the risk level achieved by a single clay liner was approximately 3-fold less than the risk level for an unlined unit. For arsenic, the risk level achieved by a single clay liner was approximately 7-fold less than the level for an unlined unit. Given that the DRAS results for these two constituents exceeded these levels by only a factor of 3, EPA concluded that disposal in a landfill with a single clay liner would also be sufficiently protective.

B. Proposed Landfill Liner Design Options

Based on the modeling results, EPA proposed two landfill design options under which F019 sludge from motor vehicle manufacturers would not be hazardous. Under option one, EPA proposed that the landfill unit must meet the liner requirements for municipal solid waste landfills (MSWLFs) in 40 CFR 258.40 or other liner designs containing a composite liner.⁶ Under option two, the Agency proposed to also allow disposal in state-permitted municipal and industrial solid waste landfills, provided the landfill unit includes at least a single clay liner (this option would also allow disposal in the types of landfill units allowed under option one, i.e., units equipped with composite liners). The Agency sought comment on whether option two would provide any significant regulatory relief over option one. MSWLFs are required to have composite liners (or performance based equivalents), except for "existing" units (i.e., generally units that existed prior to

⁵ A composite liner as defined in § 258.40 consists of a combination of a synthetic liner and an underlying compacted soil/clay liner.

⁶ Disposal in hazardous waste landfills would also be allowed, because the regulations in §§ 264.301 and 265.301 include composite liners. Federal regulations for municipal solid waste landfills require that new units (and lateral expansions of existing units) meet design criteria for composite liners and leachate collection systems (or other approved performance standards).

1993). Thus, EPA believes that most MSWLF units are likely to have composite liners (or equivalents). The Agency solicited comment on whether option two would be straightforward to implement or whether it will raise implementation or compliance issues for the waste generator, such as the availability of state standards for liners in older landfills, and on any issues that might be raised for recordkeeping and documentation.

C. Proposed Options on Recordkeeping and Storage

In the proposal, EPA noted that disposal in a landfill subject to or meeting the landfill design requirements was a condition of the exemption, so that if a generator does not fulfill this condition, the sludges would be F019 listed wastes and subject to the applicable Subtitle C requirements. The Agency encouraged generators to properly store the wastes that are claimed to be nonhazardous wastes to ensure that improper releases do not occur. Generators wishing to qualify for the exemption from the F019 listing would be required to maintain records to show that their wastes are placed in a landfill unit that meets the specified liner requirements. The Agency proposed a flexible performance standard that would allow the generator to demonstrate that shipments of waste were received by an appropriate landfill unit through various means. The proposal stated that a generator could use contracts with landfills and shipping documents to demonstrate that the landfill owner/operator used units that met the liner design requirements: The generator could also use bills of lading, manifests, or invoices documenting delivery. The proposed regulatory text (§ 261.31(b)(4)(iii)) specified the necessary records.

The Agency requested comment on whether the proposed recordkeeping requirements should be made conditions of the exemption, rather than established as separate recordkeeping requirements. In addition, the Agency sought comment on whether additional requirements or conditions would be necessary to ensure that the waste is not improperly disposed or released prior to disposal. The Agency also asked for comment on possible regulatory language that might be used to specify that the waste be stored so as to minimize releases to the environment. The Agency sought any information as to the current and likely sludge management practices at motor vehicle manufacturers. The Agency noted that, if such information indicated generators are already handling the waste to

minimize releases, the Agency would consider this when deciding whether storage conditions are necessary.

V. Rationale for This Final Rule and Response to Comments

While all of the commenters generally supported the exemption, they differed over the types of management and landfill conditions that are necessary for the exempt waste. Some commenters also suggested that the Agency expand the scope of the exemption in various ways. After reviewing the comments, the Agency has decided to promulgate the final rule with limited revisions to the proposed regulation. This section will describe the revisions to the rule, which encompass the Agency's decision on a number of options presented in the proposal. This section also provides responses to the key comments received on the proposal. More details of the Agency's responses are contained in the document entitled "Response to Comments Document: Amendment to Hazardous Waste Listing Code F019 (Final Rule)", which is in the docket for this rulemaking.

A. Landfill Liner Conditions

The proposed exemption was conditioned on the disposal of the waste in a landfill meeting certain liner design requirements. The proposal presented two options for the landfill liner design. Under option one, the landfill unit would have a liner system that meets, or is subject to, the design requirements for an MSWLF (§ 258.40) or a Subtitle C waste landfill (§§ 264.301 and 265.301). Option two would also allow the generator the option of disposing the waste in a state permitted/authorized Subtitle D landfill (municipal or industrial) that is equipped with a single clay liner. The Agency sought comment on whether the second option would provide significant additional regulatory relief, and whether it would provide any special compliance or implementation issues.

Most commenters stated that the exemption should allow disposal of the exempt waste in any clay-lined landfill, and not be restricted to disposal in landfills that would typically have composite liners. Some commenters specifically supported the second option, arguing that this would provide more flexibility for possible disposal sites, which might be important for generators in remote locations. Commenters noted that this would not raise any special implementation, compliance, or recordkeeping problems, because generators would rely on state permitting authorities to identify adequate landfills. Other commenters

stated that the regulatory language of the exemption should not conflict with, but rather acknowledge, existing state regulations, e.g., it should allow disposal in a landfill unit "meeting state regulatory liner requirements." Another commenter stated that disposal should be limited to "permitted Subtitle C or D landfills."

The Agency has decided to adopt the second landfill liner option in the final rule. That is, the regulations will specify that the waste is exempt, provided the wastes are either disposed in a permitted Subtitle D (municipal or industrial) landfill unit that is equipped with at least a single clay liner, or in a unit that is subject to, or otherwise meets, the liner requirements for MSWLFs (§ 258.40) or hazardous waste landfills (§ 264.301 or § 265.301). The modeling performed for the proposed rule demonstrated that disposal of the waste in a landfill equipped with either a composite liner or a clay liner would be protective. The Agency believes that a clay liner is sufficiently protective and provides added regulatory flexibility for generators. As described in the proposed rule, the protective factor provided by a clay-lined unit compared to an unlined unit was sufficient to reduce risks from an unlined unit to below 10^{-5} risk level or an HQ of 1.

The Agency also notes that the modeling performed for clay-lined landfills in the recent listing for dye and pigment production wastes (February 24, 2005, 70 FR 9138) showed that the clay-lined units provided a similar level of risk reduction for metals released from a landfill (i.e., the clay-lined unit reduced risks for metals by a factor of 3.2 to 3.8 compared to an unlined unit).⁷ These results provide further support that the margin of protection offered by a single clay liner is sufficient.

The final rule will require the generator to document that the wastewater treatment sludge went to a permitted landfill that was equipped with at least a single clay liner. As discussed in the proposed rule, the generators may obtain information on the landfill units in question from the state permitting authorities (or the receiving landfill, if the facility has adequate documents, such as a permit to operate). It is the responsibility of the generator to document the adequacy of

⁷The modeling results for clay-lined units, while not specifically cited in the proposal, were included in the risk document for the Dyes and Pigments waste listing that was placed into the docket to support the conclusion that liners reduce risks for the exempt waste to below 10^{-5} for carcinogens or an HQ of less than or equal to 1 for non-carcinogens.

the receiving landfill's design and to keep records that demonstrate that the landfill condition for disposal was met.

B. The Need for Storage Requirements

In the proposed rule, the Agency requested comment on the option of adding storage conditions to the exemption. The Agency also sought further information on the sludge management practices of the motor vehicle manufacturers generating F019 waste. The proposal presented some possible regulatory language that would require proper storage of sludges before disposal. Most commenters stated that storage conditions were unnecessary for the exempt sludge prior to shipment off site for disposal. Commenters stated that it was "standard industry-wide practice" for dewatering equipment and containers to be inside buildings, and for containers to be routinely covered when moved outside for shipment off site to prevent precipitation from entering the containers. These commenters also stated that requirements to constantly cover and uncover containers could cause, rather than prevent, spills. Two commenters, however, supported the concept of some storage conditions. One simply stated they concurred with the proposed regulatory language for storage. The other commenter suggested that the exempt waste should be regulated as hazardous until disposed in a landfill to ensure safe handling.

The Agency does not believe there is a need for detailed storage conditions or regulation of the waste as hazardous prior to disposal. The Agency has decided that detailed storage requirements or conditions are not necessary, given the known management practices for the waste. As noted in the proposed rule, during visits to vehicle manufacturing sites, the Agency found that dewatering equipment and containers were kept inside buildings, reducing any potential for releases. This is consistent with the comments provided by automobile manufacturers on the proposed rule. The Agency also expects, as commenters stated, that containers are kept covered when moved outside for transport off site to prevent the entrance of precipitation. The Agency has no information to suggest that such sludges have been stored improperly or that releases have occurred from on-site management of either F019 waste, or the formerly F019 wastes that were delisted. None of the 19 delistings that have been granted for this waste have imposed any special storage requirements for the delisted waste. Furthermore, as comments submitted by state authorities

noted, the exempt waste remains subject to regulation as an industrial solid waste.

Based on the analysis described in section IV.A of this notice, the Agency believes that the waste in question carries risk below the 10^{-5} risk level or an HQ of 1 when properly disposed. The Agency evaluated potential releases of the sludge to air, surface water, and groundwater that may arise from the disposal of the waste in a landfill for 20 to 30 years, and found no significant risk, provided disposal occurs in units equipped with certain liner designs. This waste does not present any apparent acute risk (e.g., fire/explosion hazard, or highly toxic chemicals), and the relatively high water content of the sludge would also reduce the likelihood of any air dispersal of the sludge on site.

However, the Agency recognizes that commenters have some concerns over management practices for the waste prior to disposal. In lieu of detailed storage conditions, the Agency has decided to include regulatory language specifying that the waste must not be placed outside on the land prior to disposal. Given that the exemption is conditioned upon the ultimate disposal in an appropriate landfill, EPA believes that a requirement that the generator not place the waste on the land prior to disposal is implicit in that condition, and therefore the inclusion of this specific direction is reasonable. Such a prohibition addresses any potential risks from management of the waste on the land prior to shipment offsite. In the proposal, the storage conditions the Agency offered as an option included more specific requirements for how the waste must be stored prior to disposal. However, as noted above, generators appear to be managing the waste appropriately at this time, so a simpler direction prohibiting on land placement prior to disposal is sufficient.

The Agency believes that placement outside on the land in an uncontrolled manner creates a potential for release of toxic constituents from the waste. Also, the Agency's risk analysis indicated that the F019 waste at issue may present risks above the 10^{-5} risk level (or an HQ of one) if disposed in an unlined land-based unit. The prohibition on land placement prior to disposal ensures that the waste is properly handled to avoid placement in an uncontrolled land area (which is analogous to an unlined landfill). Therefore, the Agency is adding language to the conditions of the exemption in § 261.31(a) that specifies that the generator cannot place the waste outside on the land prior to shipment for disposal at a landfill. The Agency is also deleting the language in

§ 261.31(b)(ii) from the proposed regulation, because the language is not needed; the conditions for the exemption are fully specified in the listing description in § 261.31(a). EPA has made minor changes to the regulation to make the exemption language consistent with the removal of the proposed language in § 261.31(b)(ii) and the renumbering of the recordkeeping requirements, originally proposed as § 261.31(b)(iii), as § 261.31(b)(ii) in the final rule.

Generators that do not meet the conditions (i.e., no outside placement on the land and disposal of the waste in a landfill unit that meets certain liner design criteria) would be subject to enforcement action. In such cases, the wastewater treatment sludges may be considered to be F019 listed hazardous waste from the point of their generation, and EPA could choose to bring an enforcement action under RCRA section 3008(a) for violations of hazardous waste regulatory requirements occurring from the time the wastewater treatment sludges are generated. Furthermore, if any releases of the waste occurred that threaten human health or the environment, the releases could potentially be addressed through enforcement orders, such as orders under RCRA sections 3013 and 7003. States could choose to take an enforcement action for violations of state hazardous waste requirements under state authorities.

Based on the information available, the Agency believes that the condition of no land placement allows the motor vehicle manufacturers to dispose of this waste as nonhazardous, while continuing their current waste management practices. Storage in roll-off boxes and similar containers, as well as storage inside buildings, would clearly fulfill the condition of no outside land placement. Therefore, the Agency believes that the condition will not impose any additional burden on the generators.

C. Recordkeeping Requirements

As noted in the proposal, generators claiming the exemption must be able to demonstrate that the conditions of the exemption are being met and bear the burden of proof to demonstrate compliance (analogous to other exemptions, see 40 CFR 261.2(f)). Therefore, it is important that generators retain sufficient records to document the disposal site for the exempt waste. The proposed rule included regulatory text (§ 261.31(b)(4)(iii)) that specified the records necessary for a generator claiming the exemption. EPA requested comment on whether the proposed

recordkeeping requirements should also be made conditions of the exemption, rather than established as a separate regulatory provision. If the recordkeeping provisions were made conditions of the exemption, then failure to comply may result in enforcement actions for violating RCRA standards for storing hazardous waste.

Most commenters stated that the recordkeeping requirement should be a separate regulatory requirement, and not a condition of the exemption itself. They noted that the full Subtitle C requirements should only apply when the waste is not sent to an appropriate landfill, and not when the generator may have failed to comply with ancillary recordkeeping requirements. One of these commenters assumed that, in addition to the need to document the waste volume generated and disposed off site, the information would also include the identity of the landfill where the sludge was disposed. Another commenter encouraged the Agency to make the recordkeeping requirements a condition of the exemption to reinforce the concept that the exemption is conditioned on proper management.

The Agency believes that a recordkeeping requirement, rather than a condition, will be sufficient motivation to ensure that the waste is properly disposed. The Agency believes that full Subtitle C requirements should not apply if the generator complied with the disposal conditions, i.e., the waste was sent to an appropriate landfill, but the generator simply lacked adequate records. This avoids cases where the lack of recordkeeping leads to the waste being hazardous, regardless of the actual disposal site. Failure to comply with recordkeeping requirements could result in enforcement action by EPA under section 3008 of RCRA (or by an authorized state under similar state authorities), which authorizes the imposition of substantial civil penalties. Also, as noted by one commenter, the generator should be able to demonstrate that their waste was properly disposed of just as they would for any other solid waste.

However, the Agency recognizes the need for adequate records for enforcement authorities to confirm that the exempt waste was properly disposed. The proposed recordkeeping requirements in § 261.31(b)(4)(iii) would require generators to maintain documentation sufficient to prove that the waste meets the disposal condition, including the volume of waste generated and disposed off site. The Agency agrees with the one commenter's assumption that this information would include the identity of the landfill(s) where the

sludge was disposed. The Agency has decided to more specifically describe the type of information needed in order to clarify the requirement. The recordkeeping requirement in the final rule will include: The volume of waste generated and disposed of off site; documentation showing when the waste volumes were generated and sent off site; the name and location of the receiving facility; and documentation confirming receipt of the waste by the receiving facility. The Agency believes that these requirements will ensure that there is sufficient information available to document the quantity of waste generated and identify the landfill that received the waste, without the need to establish the recordkeeping requirements as conditions to the exemption. The Agency expects that generators will typically retain records for shipments of solid waste to off-site landfills that will contain the information included in the recordkeeping requirement.

D. Scope and Applicability of the Exemption

The proposed rule exempts waste from one industrial sector (automobile manufacturers) that uses a specific aluminum conversion process (zinc phosphating). Several commenters urged EPA to expand the exemption to include other generators in other industries. Commenters argued that other sectors related to automobile manufacturing (categories under NAICS code 336 such as travel trailer manufacturers and parts manufacturers) and other industrial sectors (aerospace industry) use the same conversion coating processes. One commenter also suggested that the amendment to the listing be expanded to include auto manufacturing processes beyond the zinc phosphating process. This commenter suggested that the exemption be expanded to include processes "where neither hexavalent chromium nor cyanide is used in the chemical conversion coating process." The commenter believes that this language would better reflect EPA's intent in the original F019 listing.

The Agency is not expanding the scope of the exemption in the final rule to include other manufacturing categories. As described in the proposal, the Agency has a wealth of data from the automobile manufacturing/assembly facilities derived from the delisting petitions for 13 motor vehicle manufacturing facilities. These data include material safety data sheets and the analytical data compiled from the analyses of the F019 sludge samples from these facilities. The sludge samples

were analyzed for approximately 240 chemicals, which yielded a large data base for the proposed rule (e.g., for a key constituent nickel, 106 samples were analyzed for nickel content and 193 were analyzed for leachable nickel). In comparison, the commenters did not provide any documentation to support their contention that the phosphating process used by the other generators cited is the same as that found at motor vehicle manufacturing facilities. Furthermore, commenters did not provide any analytical data to show that the associated wastestreams are the same or "virtually identical." Therefore, the Agency has no basis to consider expanding the exemption.

Finally, the Agency clearly noted in the preamble to the proposed rule that it was not reopening any other aspect of the F019 listing: "EPA is not reopening any aspect of the F019 listing other than those specifically identified in this proposal, and will not respond to any comments that address issues beyond the specific proposals outlined in this notice." See 72 FR 2223. Therefore, the Agency did not entertain any more general revisions to the F019 listing to exclude waste from processes where neither hexavalent chromium nor cyanide is used. In addition, the Agency has no data to indicate that hexavalent chromium and cyanide are the only constituents of concern in various conversion coating processes. In fact, although the F019 waste from the automotive manufacturers did not contain significant levels of hexavalent chromium or cyanide, the Agency found that the levels of nickel and arsenic are of some concern.

E. Applicability to Recycled Waste

In the proposed rule, the Agency stated that it was not aware of any recycling or reclamation of F019 sludges, and believed that current market conditions do not support such recycling for the purpose of recovering the metal content of the waste. The Agency requested comment on whether its understanding was accurate, and whether recycling of F019 waste is economically feasible. The comments the Agency received on this question confirmed that F019 wastes from automotive manufacturing are not currently recycled for metal recovery. However, commenters noted that, if the waste was not a listed hazardous waste, potential avenues of recycling, reclamation or other beneficial use of the sludge could develop in the marketplace, such as use as an admixture for concrete. Commenters urged the Agency to modify the

exemption to include wastes that are recycled in some fashion.

The Agency has no documented information to indicate a market exists for recovering the metals in F019 waste from motor vehicle manufacturers. Some commenters appear to believe that the amended listing would allow beneficial uses of the sludge to develop. However, the Agency notes that the exemption requires the sludge to be disposed in a landfill that meets the specified liner conditions, and the requirement that the generator not place the waste on the land prior to disposal. Therefore, using the sludge as an admixture for concrete would not meet this condition, and the use of F019 sludge in this way may subject the materials to regulation as "use constituting disposal" (see 40 CFR 266.20).

The exemption being promulgated by the Agency in this final rule does not eliminate the possibility of legitimate reuse of the sludge, whether or not the sludge carries the F019 listing code. However, the Agency did not attempt to evaluate the legitimacy of potential recycling uses of the F019 sludge, and the final rule does not address such uses. The Agency is evaluating revisions to the definition of solid waste that may relate to the legitimate reclamation of various wastes. See the proposed rules published March 26, 2007 (72 FR 14172) and October 28, 2005 (68 FR 61588). However, these proposed actions are currently limited to reclamation activities and would not apply to recycling of materials that are used to produce products that are applied to or placed on the land.

F. Interrelationship Between the Exemption and Delistings

In the proposal, the Agency discussed the interrelationship between the proposed exemption and F019 listings (which is complicated by the overlay of state authorizations). The Agency indicated that if the revisions to the F019 listing are adopted by authorized state programs, then the existing delistings would not be needed to exclude the waste from the listing, provided the waste is not placed on the land prior to shipment to a landfill, and the landfill unit meets the specified liner requirements. That is, the subject sludge would never become an F019 waste if the exemption conditions are met, so a delisting is not needed. The Agency suggested that a facility with a delisting "may wish to seek to have its delisting withdrawn" to avoid confusion over implementation of the exemption. One commenter requested that the Agency confirm that facilities

with delistings are not required to withdraw them, and that these delistings would remain in effect until they are withdrawn under the applicable administrative procedures. The commenter was concerned that there may be circumstances under which facilities may wish to continue to manage their wastes pursuant to their delistings.

As the Agency stated in the proposal, a facility has the option of continuing to manage its waste as nonhazardous if it complies with the applicable delisting conditions, rather than the conditions set out in the exemption. The Agency agrees with the commenter that a facility with a delisting (which is codified in Appendix IX to part 261) is not required to withdraw it. This delisting would remain in effect unless it is withdrawn through the applicable administrative procedures (e.g., § 260.20 would apply for a Federal delisting). However, the generators in this situation are encouraged to explore the need for existing delistings with state authorities, given the broad coverage of the exemption, and the applicability of state regulations. See the discussion below in Section VI. State Authorization for additional information on the authorization process.

G. Waste Analysis

One commenter noted that EPA did not conduct leaching tests of the F019 wastes at multiple pH values, as suggested in the guidance manual for delisting petitions. The commenter stated that EPA did not explain why multiple pH testing was not conducted for the proposed F019 listing modification, when such multiple pH testing was required for the approval of delisting petitions for wastes that have been stabilized with chemical reagents. The commenter pointed out that the exempted F019 waste may be disposed of in a variety of different landfills with varying pH environments.

In response, the Agency notes that the exemption for these F019 wastes is not being promulgated as a delisting; rather it is an amendment to the listing, thus the delisting guidance is not directly germane. Furthermore, the document cited by the commenter is only guidance suggested for delisting petitions. In fact, testing at multiple pHs was not deemed necessary for the numerous delistings issued for specific F019 wastes generated by vehicle manufacturers. In any case, the amendment to the F019 listing is based on a wealth of data generated for 13 delistings (see the proposed rule at 72 FR 2226 for the 13 facilities). These data included extensive leaching data obtained using

the Toxicity Characteristic Leaching Procedure (TCLP), which the Agency evaluated using the maximum detected levels in our risk analysis. For example, the data set included 163 TCLP results for nickel, from which the maximum value was used.

The Agency has used the Toxicity Characteristic Leaching Procedure (TCLP) extensively to evaluate the leaching mobility for waste constituents. The TCLP is the method specified for evaluating wastes for the hazardous waste Toxicity Characteristic (§ 261.24). In addition, the Agency has used the TCLP extensively in evaluating wastes for listing as a hazardous waste.⁸ The TCLP test procedure is documented in EPA's compendium of analytical and sampling methods that have been evaluated and approved for use in complying with the RCRA regulations.⁹ The Agency has used other extraction methods in some listing determinations. For example, the Agency has used another extraction method, the *Synthetic Precipitation Leaching Procedure* (SPLP, SW-846 method 1312) in cases where disposal in MSWLFs was unlikely and disposal in on-site industrial landfills was the most probable scenario (see the Inorganic Chemical Manufacturing listing, September 14, 2000; 65 FR 55684). However, in the case of the F019 amendment, there is no indication that the segment of the vehicle manufacturing industry at issue will dispose of the exempt waste in on-site landfills. To the contrary, industry commenters stated that it was extremely unlikely that they would construct landfills on site for disposal of this waste.¹⁰ In addition, the SPLP is a relatively dilute acid solution and is generally considered less aggressive than the TCLP for metal extraction (e.g., see the data for lead debris, 63 FR 70189, December 18, 1998), although

⁸ For example, see the determinations for Petroleum Refining wastes at 63 FR 42110, August 6, 1998, and Chlorinated Aliphatics Production wastes at 65 FR 67068, November 8, 2000.

⁹ See EPA publication SW-846, entitled *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*.

¹⁰ Disposal in an off-site industrial landfill, while possible, appears less likely than disposal in a municipal solid waste landfill if only because of the relatively low number of off-site industrial landfills compared to the large number of municipal landfills. As of 2005, EPA estimates that about 1,854 municipal landfills were operating (<http://www.epa.gov/epaoswer/non-hw/muncpl/facts.htm>) vs. perhaps 10 to 20 off-site commercial industrial landfills (see *Cost and Economic Impact Analysis of the CESQC Rulemaking*, USEPA, June 1996 available at <http://www.epa.gov/epaoswer/hazwaste/sqg/cost/ria.pdf>). Furthermore, the Agency expects that off-site modern commercial industrial landfills are likely to have liner systems with composite liners in any case.

this depends on the form of the chemicals in the waste and the waste matrix.

Use of leaching tests other than the TCLP have been considered by the Agency for special wastes, such as stabilized waste that may have relatively high pH and wastes containing high levels of specific chemicals (e.g., mercuric sulfide, see the listing for Chlorinated Aliphatics Production wastes cited above). In the case of the F019 waste at issue, numerous samples of the waste were evaluated by testing their pH; the data show that the median pH of the samples tested was 7.78, or close to neutrality (see summary data in the docket). Due to the lack of any special characteristics of the F019 waste, the Agency does not believe the waste requires any special leaching testing. Therefore, while the TCLP test may be more representative of a MSWLF environment, EPA believes that the testing for the F019 exemption is sufficient, considering the nature of the waste (wastewater treatment sludge), the large number and variety of waste samples that were analyzed in support of the delisting petitions, and the plausible disposal in a MSWLF.

However, the Agency recognizes the possible limitations of the TCLP test data. Extending the exemption to industrial landfills (i.e., landfills that do not accept municipal waste) adds some additional uncertainty to the analysis, due to the potential for somewhat different leaching environments. Moreover, the regulatory programs in place for nonhazardous industrial waste vary from state to state.¹¹ Therefore, the authorized states that adopt this exemption have the option to consider the need for any further limitations on the specific landfill conditions they may deem appropriate, depending on their existing regulatory program for industrial solid waste.

H. Other Issues

One commenter suggested that the Agency revise the regulatory language to clarify that waste meeting the exemption conditions is still subject to regulation as a hazardous waste if the waste exhibits any of the hazardous waste characteristics specified in Subpart C of 40 CFR part 261 (§§ 261.20 through 261.24). Commenters also encouraged the Agency to clarify that the exempt waste is not subject to

¹¹ See the report by Association of State and Territorial Solid Waste Management Officials (ASTSWMO), "Non-Municipal, Subtitle D Waste Survey," March 1996, and the EPA report, "State Requirements for Industrial Non-Hazardous Waste Management Facilities," October 1995.

regulation as a hazardous waste at the point of generation.

The Agency agrees with both of the commenters' suggestions and the Agency is modifying the listing description in the final rule to reflect these changes. The preamble to the proposed rule made it clear that the exempt waste would still be subject to the hazardous waste characteristics (see 72 FR 2229). In addition, the Agency's intent was to have the exemption apply from the point of generation, as evidenced by the preamble to the proposed rule that states: "Wastes that meet this condition would be exempted from the listing from their point of generation, and would not be subject to any RCRA Subtitle C management requirements for generation, storage, transport, treatment, or disposal (including the land disposal restrictions)" (see 72 FR 2221). Therefore, the final rule will specify that the wastes "will not be subject to this listing at the point of generation," if the wastes are managed according to the conditions of the exemption.

VI. State Authorization

Under section 3006 of RCRA, EPA may authorize a qualified state to administer and enforce a hazardous waste program within the state in lieu of the federal program, and to issue and enforce permits in the state. Following authorization, the state requirements authorized by EPA apply in lieu of equivalent Federal requirements and become Federally-enforceable as requirements of RCRA. EPA maintains independent authority to bring enforcement actions under RCRA sections 3007, 3008, 3013, and 7003. Authorized states also have independent authority to bring enforcement actions under state law.

A state may receive authorization by following the approval process described in 40 CFR part 271. Part 271 of 40 CFR also describes the overall standards and requirements for authorization. After a state receives initial authorization, new Federal regulatory requirements promulgated under the authority in the RCRA statute do not apply in that state until the state adopts and receives authorization for equivalent state requirements. The state must adopt such requirements to maintain authorization. In contrast, under RCRA section 3006(g), (42 U.S.C. 6926(g)), new Federal requirements and prohibitions imposed pursuant to the 1984 Hazardous and Solid Waste Amendments (HSWA) take effect in authorized states at the same time that they take effect in unauthorized states. Although authorized states still are

required to update their hazardous waste programs to remain equivalent to the Federal program, EPA carries out HSWA requirements and prohibitions in authorized states, including the issuance of new permits implementing those requirements, until EPA authorizes the state to do so. Authorized states are required to modify their programs only when EPA promulgates Federal requirements that are more stringent or broader in scope than existing Federal requirements.

RCRA section 3009 allows the states to impose standards more stringent than those in the Federal program. See also 40 CFR 271.1(i). Therefore, authorized states are not required to adopt Federal regulations, either HSWA or non-HSWA, that are considered less stringent.

This rule is promulgated pursuant to non-HSWA authority. The changes in this rule are less stringent than the current Federal requirements. Therefore, states will not be required to adopt and seek authorization for these changes. EPA will implement the changes to the exemptions only in those states which are not authorized for the RCRA program. Nevertheless, EPA believes that this rule has considerable merit, and the Agency thus strongly encourages states to amend their programs and become Federally-authorized to implement these rules.

VII. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Designation and List of Hazardous Substances and Reportable Quantities

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) defines the term "hazardous substance" to include RCRA listed and characteristic hazardous wastes. When EPA adds a hazardous waste under RCRA, the Agency also will add the waste to its list of CERCLA hazardous substances. EPA also establishes a reportable quantity, or RQ, for each CERCLA hazardous substance. EPA provides a list of the CERCLA hazardous substances along with their RQs in Table 302.4 at 40 CFR 302.4. If a person in charge of a vessel or facility that releases a CERCLA hazardous substance in an amount that equals or exceeds its RQ, then that person must report that release to the National Response Center (NRC) pursuant to CERCLA section 103. That person also may have to notify state and local authorities.¹²

¹² See section 304(a) of the Emergency Planning and Community Right to Know Act (EPCRA) and 40 CFR 355.40.

Since this rule is amending the scope of the EPA Hazardous Waste No. F019 under 40 CFR 261.31 listing to exclude wastewater treatment sludges from zinc phosphating, when such phosphating is used in the motor vehicle manufacturing process, and if the wastes are disposed in a landfill meeting certain liner design criteria, the Table 302.4 at 40 CFR 302.4 is also amended to adopt the same definition and scope.

VIII. Relationship to Other Rules—Clean Water Act

This action's final regulatory changes will not: (1) increase the amount of discharged wastewater pollutants at the industry or facility levels; or (2) interfere with the ability of industrial generators and recyclers of electroplating residuals to comply with the Clean Water Act requirements (e.g., Metal Finishing Effluent Guidelines, 40 CFR Part 433).

IX. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735), the Agency must determine whether this regulatory action is "significant" and therefore subject to formal review by the Office of Management and Budget (OMB) and to the requirements of the Executive Order, which include assessing the costs and benefits anticipated as a result of this regulatory action. The Order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, although the annual effect of this rule is expected to be less than \$100 million, the Agency has determined that this rule is a significant regulatory action because this rule contains novel policy issues. As such, this action was submitted to OMB for

review. Changes made in response to OMB suggestions or recommendations are documented in the docket to this rule.

The following is a summary of EPA's "Regulatory Impact Analysis" (RIA), which is also available from the docket for this action. The scope of this F019 rule is limited to the (1) automobile manufacturing industry (NAICS 336111) and (2) the light truck/utility vehicle manufacturing industry (NAICS 336112). The Agency defined this scope in relation to 19 recent (since 1997) delisting final determinations for these two motor vehicle manufacturing industries in EPA Regions 4, 5, 6 and 7.¹³ Under the current F019 listing description, motor vehicle manufacturers become F019 sludge generators if they use aluminum parts on vehicle bodies which undergo the chemical conversion (zinc phosphating) process. Motor vehicle manufacturers began in the early 1970's, to substitute lighter weight aluminum parts for heavier steel parts to achieve national vehicle fleet fuel efficiency and vehicle pollutant emission reduction objectives. As promulgated, the elimination of RCRA Subtitle C hazardous waste regulatory requirements for waste transport, waste treatment/disposal, and waste reporting/recordkeeping in this rule, is expected to provide \$0.5 to \$1.3 million per year in regulatory cost savings to 7 facilities in these two industries which generate about 2,500 tons per year of F019 sludge, but are not yet delisted. Although this final action considered alternative RCRA Subtitle D non-hazardous waste landfill liner specifications (i.e., liner design criteria) as possible conditions for exemption of F019 sludge from RCRA Subtitle C regulation, the RIA does not distinguish landfill liner types in this cost savings

¹³ The Federal Register (FR) citations for the 19 F019 delisting determinations are: GM in Lake Orion, Michigan (62 FR 55344, October 24, 1997); GM in Lansing, Michigan (65 FR 31096, May 16, 2000); BMW in Greer, South Carolina (66 FR 21877, May 2, 2001); Nissan in Smyrna, Tennessee (67 FR 42187, June 21, 2002); GM in Pontiac, Michigan, GM in Hamtramck, Michigan, GM in Flint, Michigan, GM Grand River in Lansing, Michigan, Ford in Wixom, Michigan, Ford in Wayne, Michigan (68 FR 44852, July 30, 2003); DaimlerChrysler Jefferson North in Detroit, Michigan (69 FR 8828, February 26, 2004); GM in Lordstown, Ohio (69 FR 60557, October 12, 2004); Ford in Dearborn, Michigan (70 FR 21153, April 25, 2005); GM in Janesville, Wisconsin (70 FR 71002, November 25, 2005); and GM Saturn in Spring Hill, Tennessee (70 FR 76168, December 23, 2005); GM Ft. Wayne Assembly in Ft. Wayne, Indiana (28 Indiana Register 3350, July 1, 2008); GM Arlington Truck Assembly Plant in Arlington, Texas (72 FR 43, January 3, 2007); AutoAlliance International Inc (Ford/Mazda joint venture) in Flat Rock, Michigan (72 FR 17027, April 6, 2007); and Ford Motor Company Kansas City Assembly Plant in Claycomo, Missouri (72 FR 31185, June 6, 2007).

estimate. Secondary impacts of the proposed rule may also include potential future RCRA regulatory cost avoidance for up to 42 other facilities in these two industries that are not currently generating F019 sludge, but which may begin applying aluminum parts in vehicle assembly. Furthermore, by reducing regulatory costs, EPA anticipates that this rule may also induce other motor vehicle manufacturing facilities in the United States to begin using aluminum in manufacturing of vehicles sooner than they might otherwise do, thereby possibly accelerating future achievement of fuel efficiency objectives. The RIA presents a simplistic scenario of this possibility for the purposes of illustrating potential future vehicle fuel savings and the associated benefits.

B. Paperwork Reduction Act

The information collection requirements in this rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The information collection requirements are not enforceable until OMB approves them. An Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR number 1189.21 and a copy may be obtained by going to <http://www.regulations.gov> and entering docket ID EPA-HQ-RCRA-2006-0984. EPA under 40 CFR 261.31(b)(4)(iii), adds a recordkeeping requirement for generators. The rule will require generators wanting to demonstrate compliance with the provisions of this rule to maintain on site for a minimum of three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or meets the landfill design criteria set out in the listing description. An enforcement action by the Agency can extend the record retention period (§ 268.7(a)(8)) beyond the three years.

EPA estimates that the total annual respondent burden for the new paperwork requirements in the rule is approximately 35 hours per year and the annual respondent cost for the new paperwork requirements in the rule is approximately \$2,600. However, in addition to the new paperwork requirements in the rule, the Agency also estimated the burden and cost that generators could expect as a result of complying with the existing RCRA hazardous waste information collection requirements for the exempted materials (e.g., preparation of hazardous waste manifests, biennial reporting). Taking

both the new rule and existing RCRA requirements into account, EPA expects the rule will result in a net reduction in national annual paperwork burden to the 7 initially affected NAICS 336111 and 336112 facilities of approximately 440 hours and \$32,400. As summarized in the Economics Background Document and in the prior sub-section of this notice, EPA expects this net cost savings to be further supplemented by annual cost savings to these same facilities from reduced waste management costs, by the expected shift of sludge management from RCRA Subtitle C hazardous waste management, to RCRA Subtitle D nonhazardous waste management. The net cost to EPA of administering the rule is expected to be negligible, since facilities are not required under this rule to submit any information to the Agency for review and approval. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust existing systems to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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 are listed in 40 CFR Part 9. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the Federal Register to display the OMB control number for the approved information collection requirements contained in this final rule.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*, 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 this rule on small entities potentially subject to this action, "small entity" is defined as: (1) The for-profit small business size standards set by the Small Business Administration (SBA), in reference to the two six-digit NAICS code industries affected by this action: (1) NAICS 336111 automobile manufacturing SBA standard of less than 1,000 employees, and (2) NAICS 336112 light truck and utility vehicle manufacturing SBA standard of less than 1,000 employees; (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 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 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 the rule relieves regulatory burden, or otherwise has a positive economic effect on small entities subject to the rule.

According to the most recent U.S. Census Bureau "Economics Census" data for these two NAICS codes—for data year 2002 published in December 2004 and May 2005, respectively—there were 176 NAICS 336111 establishments operated in 2002 by 161 companies, of which 154 establishments (88%) had less than 1,000 employees (<http://www.census.gov/prod/ec02/ec0231i336111t.pdf>), and there were 97 NAICS 336112 establishments operated in 2002 by 69 companies, of which 62 establishments (64%) had less than 1,000 employees (<http://www.census.gov/prod/ec02/ec0231i336112t.pdf>). These census statistics reveal that both industries

consist of large fractions of small establishments according to the SBA definitions, but the census data do not reveal the fraction of companies which are small (which is the more relevant measure). However, it may be inferred that there are large fractions of small companies in both industries, because of the high degree of parity between establishment counts and companies counts of 0.96 for NAICS 336111 (i.e., 154:to:161), and of 0.71 for NAICS 336112 (i.e., 69:to:97). This action does not directly affect small governmental jurisdictions (i.e., a government of a city, county, town, school district or special district with a population of less than 50,000), or small organizations (i.e., any not-for-profit enterprise which is independently owned and operated and is not dominant in its field).

Because this action is designed to lower the cost of waste management for these industries, this rule will not result in an adverse economic impact effect on affected entities. For more information regarding the economic impact of this rule, please refer to the "Regulatory Impact Analysis" available from the EPA Docket. EPA therefore concludes that this rule will relieve regulatory burden for all size entities, including small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal Agencies to assess the effects of their regulatory actions on state, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA must prepare a written analysis, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to state, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small

governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials to have meaningful and timely input in the development of regulatory rules, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that this rule does not include a Federal mandate that may result in expenditures of \$100 million or more for state, local, or tribal governments, in the aggregate, or the private sector in any one year. This is because this rule imposes no enforceable duty on any state, local, or tribal governments. EPA also has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. In addition, as discussed above, the private sector is not expected to incur costs exceeding \$100 million. Therefore, this rule is not subject to the requirements of sections 202 and 205 of UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that 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."

This final rule 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 directly affects primarily generators of hazardous waste sludges in the NAICS 3361 motor vehicle manufacturing industry group. There are no state and local government bodies that incur direct compliance costs by this rulemaking. State and local government implementation expenditures are expected to be less than \$500,000 in any one year. Thus, the requirements of Section 6 of the Executive Order do not apply to this final rule.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and state and local governments, EPA specifically solicited comment on the proposed rule from state and local officials.

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

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This final rule does not have tribal implications, as specified in Executive Order 13175. This rule does not significantly or uniquely affect the communities of Indian tribal governments, nor does it impose substantial direct compliance costs on them. Thus, Executive Order 13175 does not apply to this rule.

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

The Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that EPA determines (1) is "economically significant" as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children; and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to the Executive Order because it is not economically significant as defined in E.O. 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

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

This rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (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. This final rule reduces regulatory burden as explained in our "Economics Background Document," and may possibly induce fuel efficiency and energy savings in the national motor vehicle fleet. It thus should not adversely affect energy supply, distribution or use.

I. National Technology Transfer and Advancement Act

As noted in the proposed rule, Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104-113, section 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. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This rulemaking does not involve technical standards. Therefore, EPA is not considering 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 12898, "Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Population" (February 11, 1994), is designed to address the environmental and human health conditions of minority and low-income populations. EPA is committed to addressing environmental justice concerns and has assumed a leadership role in environmental justice initiatives to enhance environmental quality for all citizens of the United States. The Agency's goals are to ensure that no segment of the population, regardless of race, color, national origin, income, or net worth bears disproportionately high and adverse human health and environmental impacts as a result of EPA's policies, programs, and activities. Our goal is to ensure that all citizens live in clean and sustainable communities. In response to Executive Order 12898, and to concerns voiced by many groups outside the Agency, EPA's Office of Solid Waste and Emergency Response (OSWER) formed an Environmental Justice Task Force to

analyze the array of environmental justice issues specific to waste programs and to develop an overall strategy to identify and address these issues (OSWER Directive No. 9200.3-17).

The Agency's risk assessment did not identify risks from the management of the zinc phosphating sludge generated by the motor vehicle manufacturing industry, provided that the waste is disposed in a landfill that is subject to or meets the landfill design criteria set out in this rule. Therefore, EPA believes that any populations in proximity to the landfills used by these facilities should not be adversely affected by common waste management practices for the wastewater treatment sludge.

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 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 July 7, 2008.

List of Subjects

40 CFR Part 261

Environmental protection, Hazardous materials, Recycling, Waste treatment and disposal.

40 CFR Part 302

Environmental protection, Air pollution control, Chemicals, Emergency Planning and Community Right-to-Know Act, Extremely hazardous substances, Hazardous chemicals, Hazardous materials, Hazardous materials transportation, Hazardous substances, Hazardous wastes, Intergovernmental relations, Natural resources, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control, Water supply.

Dated: May 29, 2008.

Stephen L. Johnson,
Administrator.

■ For the reasons set out in the preamble, title 40, chapter I of the Code

of Federal Regulations is amended as follows:

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

§ 261.31 Hazardous wastes from non-specific sources.

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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

■ 2. Section 261.31 is amended as follows:

(a) * * *

■ a. In the table in paragraph (a) by revising the entry for F019.

■ b. By adding paragraph (b)(4).

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. Wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process will not be subject to this listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a landfill for disposal and are either: disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted, licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in § 258.40, § 264.301 or § 265.301. For the purposes of this listing, motor vehicle manufacturing is defined in paragraph (b)(4)(i) of this section and (b)(4)(ii) of this section describes the recordkeeping requirements for motor vehicle manufacturing facilities.	(T)

(b) * * *

(4) For the purposes of the F019 listing, the following apply to wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process.

(i) Motor vehicle manufacturing is defined to include the manufacture of automobiles and light trucks/utility vehicles (including light duty vans, pick-up trucks, minivans, and sport utility vehicles). Facilities must be engaged in manufacturing complete vehicles (body and chassis or unibody) or chassis only.

(ii) Generators must maintain in their on-site records documentation and

information sufficient to prove that the wastewater treatment sludges to be exempted from the F019 listing meet the conditions of the listing. These records must include: the volume of waste generated and disposed of off site; documentation showing when the waste volumes were generated and sent off site; the name and address of the receiving facility; and documentation confirming receipt of the waste by the receiving facility. Generators must maintain these documents on site for no less than three years. The retention period for the documentation is automatically extended during the course of any enforcement action or as

requested by the Regional Administrator or the state regulatory authority.

PART 302—DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

■ 3. The authority citation for part 302 continues to read as follows:

Authority: 42 U.S.C. 9602, 9603, and 9604; 33 U.S.C. 1321 and 1361.

■ 4. In § 302.4, Table 302.4 is amended by revising the entry for F019 in the table to read as follows:

§ 302.4 Designation of hazardous substances.

TABLE 302.4.—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

[Note: All comments/notes are located at the end of this table]

Hazardous substance	CASRN	Statutory code†	RCRA waste No.	Final RQ pounds (Kg)
F019 Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. Wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process will not be subject to this listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a landfill for disposal and are either: disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted, licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in § 258.40, § 264.301 or § 265.301. For the purposes of this listing, motor vehicle manufacturing is defined in § 261.31(b)(4)(i) and § 261.31(b)(4)(ii) describes the recordkeeping requirements for motor vehicle manufacturing facilities.			F019	10 (4.54)

† Indicates the statutory source defined by 1, 2, 3, and 4, as described in the note preceding Table 302.4.

* * * * *
 [FR Doc. E8-12483 Filed 6-3-08; 8:45 am]
 BILLING CODE 6560-50-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 648

[Docket No. 070717341-8549-02]

RIN 0648-AV41

Fisheries of the Northeastern United States; Recreational Management Measures for the Summer Flounder, Scup, and Black Sea bass Fisheries; Fishing Year 2008

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule; correction.

SUMMARY: On May 23, 2008, NMFS published a final rule implementing the recreational management measures for the 2008 summer flounder, scup, and black sea bass fisheries. The final rule contains several errors throughout the preamble. This document corrects those errors.

DATES: Effective June 23, 2008.

FOR FURTHER INFORMATION CONTACT: Michael Ruccio, Fishery Policy Analyst, (978) 281-9104.

SUPPLEMENTARY INFORMATION: The final rule for the 2008 recreational management measures for summer flounder, scup, and black sea bass was published in the *Federal Register* on May 23, 2008 (73 FR 29990). There were several errors throughout the preamble text.

Corrections

In final rule FR Doc. E8-11601, on page 29991 of the May 23, 2008, issue of the *Federal Register*, make the following corrections:

1. On page 29991, in column 3, under the Black Sea Bass Management Measures caption, the first sentence is corrected to read as follows:

"Table 3 contains the coastwide Federal measures for black sea bass in effect for 2007 and codified."

2. On page 29992, in column 1, under the Comments and Responses caption, the second sentence is corrected to read as follows:

"One individual submitted comments regarding several species such as mackerel, red hake, and marlin which are outside the scope of this rulemaking."

3. On page 29992, in column 1, under the Comment 1 caption, the first sentence is corrected to read as follows:

"Some of the comments received allege that state-by-state conservation equivalency violates National Standard 2 of the Magnuson-Stevens Act, which requires conservation and management actions to be based upon the best available scientific information."

4. On page 29992, in column 2, in the 27th line, the sentence is corrected to read as follows:

"In addition, NMFS encouraged states to take a more conservative approach to both improve conservation equivalency's performance and to offset uncertainty in the assessment of potential measures effectiveness."

5. On page 29992, in column 3, the first full paragraph should read:

"The use of MRFSS data was challenged, along with other aspects of the agency's actions, in 2006 in the case *United Boatmen, et al., v. Gutierrez*³, the Secretary of Commerce (Secretary). The plaintiffs alleged that MRFSS was a gravely flawed tool and unsuitable for use in setting the summer flounder TAL. NMFS responded that MRFSS, while admittedly having limitations, has been upheld under National Standard 2 as the best available scientific information. The defendants' brief cited three separate cases wherein MRFSS had been upheld as the best available scientific information relative to National Standard 2. In this case, the judge found in favor of the Secretary on all points, adding further support to the adequacy of MRFSS data for use in fisheries management as the best available science."

6. On page 29993, in column 3, the last full paragraph is corrected to read as follows:

"For these reasons, NMFS believes that implementing conservation equivalency, as recommended by the Council and Commission for 2008, does not violate National Standard 4 or National Standard 2 of the Magnuson-Stevens Act."

7. On page 29994, in column 1, in the first full paragraph, the fourth sentence is corrected to read as follows:

"National Standard 6 directs FMPs to have a suitable buffer, in favor of conservation, to deal with uncertainty, which may also be stated as a conservative approach."

8. On page 29995, in column 2, in the 13th line the sentence is corrected to read as follows:

"As such, it is a more conservative approach than applied in previous years, and presents a higher likelihood that the 2008 recreational harvest limit will not be exceeded on either a state-

by-state basis or coastwide, and that the subsequent mortality objectives will be met for the 2008 fishing year."

9. On page 29996, in column 1, in the first full paragraph, the first sentence is corrected to read as follows:

"NMFS acknowledges that state-by-state conservation equivalency has not performed ideally, since the summer flounder recreational harvest limit has been exceeded in 5 of the 7 years where it has been utilized."

10. On page 29997, in column 1, the first full paragraph is corrected to read as follows:

"A summary of the comments received and NMFS' responses thereto is contained in the preamble of this rule. None of those comments addressed specific information contained in the IRFA economic analysis. One comment received stated that NMFS had not conducted an economic analysis for the 2008 recreational management measures and some commenters generally indicated that the management measures implemented by this rule may have an economic impact. See response to Comment 7 in the Comment and Responses section for more information. No changes have been made from the proposed rule as a result of the comments received by NMFS."

11. On page 29998, in column 2, in the 13th line from the bottom, the sentence is corrected to read as follows:

"Conservation equivalency is generally expected to mitigate the economic impact in states with lower required percent reductions for 2008 compared to the coastwide reduction of 33.2 percent."

Authority: 16 U.S.C. 1801 *et seq.*

Dated: May 29, 2008.

Samuel D. Rauch III,
 Deputy Assistant Administrator for
 Regulatory Programs, National Marine
 Fisheries Service.

[FR Doc. 08-1317 Filed 5-30-08; 2:51 pm]
 BILLING CODE 3510-22-S



Federal Register

Monday,
December 1, 2008

Part II

Environmental Protection Agency

40 CFR Parts 261 and 262
**Standards Applicable to Generators of
Hazardous Waste; Alternative
Requirements for Hazardous Waste
Determination and Accumulation of
Unwanted Material at Laboratories Owned
by Colleges and Universities and Other
Eligible Academic Entities Formally
Affiliated With Colleges and Universities;
Final Rule**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 261 and 262

[EPA-HQ-RCRA-2003-0012; FRL-8743-9]

RIN 2050-AG18

Standards Applicable to Generators of Hazardous Waste; Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material at Laboratories Owned by Colleges and Universities and Other Eligible Academic Entities Formally Affiliated With Colleges and Universities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA or the Agency) is finalizing an alternative set of generator requirements applicable to laboratories owned by eligible academic entities, as defined in this final rule. The rule provides a flexible and protective set of regulations that address the specific nature of hazardous waste generation and accumulation in laboratories at colleges and universities, as well as other eligible academic entities formally affiliated with colleges and universities. This final rule is optional and colleges and universities and other eligible academic entities formally affiliated with a college or university have the choice of managing their hazardous wastes in accordance with the new alternative regulations as set forth in this final regulation or remaining subject to the existing generator regulations.

DATES: This final rule is effective December 31, 2008.

ADDRESSES: EPA has established a docket for this action under Docket ID No. RCRA-2003-0012. All documents

in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, i.e., 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 through <http://www.regulations.gov> or in hard copy at the EPA RCRA 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 RCRA Docket is (202) 566-0270.

FOR FURTHER INFORMATION CONTACT: For further information regarding specific aspects of this notice, contact Kristin Fitzgerald, Office of Solid Waste, (703) 308-8286, Fitzgerald.Kristin@epa.gov; Patricia Mercer, Office of Solid Waste, (703) 308-8408, Mercer.Patricia@epa.gov; or Jessica Biegelson, Office of Solid Waste, (703) 308-0026, Biegelson.Jessica@epa.gov. Mail inquiries may be directed to the Office of Solid Waste, (5304P), 1200 Pennsylvania Avenue NW., Washington, DC 20460.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Entities Potentially Affected by This Rule

The rule establishes a new Subpart K within 40 CFR part 262. Entities potentially affected by this final action are colleges and universities; non-profit research institutes that are either owned by or have a formal written affiliation

agreement with a college or university; and teaching hospitals that are either owned by or have a formal written affiliation agreement with a college or university, that generate hazardous waste in laboratories. Today's final rule refers to these collectively as "eligible academic entities." This final action is optional for eligible academic entities. That is, eligible academic entities that are large quantity generators (LQGs), small quantity generators (SQGs), or conditionally exempt small quantity generators (CESQGs) may choose to have their laboratories be subject to 40 CFR part 262, Subpart K in lieu of the existing generator regulations. In States authorized to implement the RCRA program, Subpart K would only be available as an option once it has been adopted by the State in which the eligible academic entity is located.

Only eligible academic entities can participate under Subpart K for the laboratories they own. The following are examples of entities that are not eligible because they do not satisfy the definition of "eligible academic entity:" government facilities; commercial research and development (R&D) facilities; non-profit research institutes that are not owned by nor have a formal written affiliation agreement with a college or university; non-teaching hospitals; and teaching hospitals that are not owned by nor have a formal written affiliation agreement with a college or university. To determine whether the laboratories owned by an eligible academic entity are covered by this action, interested parties should examine 40 CFR part 262, Subpart K carefully. If there are questions regarding the applicability of the rule to a particular entity, consult your State, EPA Regional office, or the person(s) listed in the section of this preamble entitled, **FOR FURTHER INFORMATION CONTACT.**

NAICS CODES OF ENTITIES POTENTIALLY AFFECTED BY THIS FINAL RULE

NAICS codes	Description of NAICS code
Colleges & Universities	
6112, 61121, 611210	Junior Colleges.
6113, 61131, 611310	Colleges, Universities, and Professional Schools.
6115, 61151	Technical and Trade Schools.
611519	Other Technical and Trade Schools.
61161, 611610	Fine Arts Schools.
Teaching Hospitals	
54194, 541940	Veterinary Services (Animal Hospitals).
622	Hospitals.
6221, 62211, 622110	General Medical and Surgical Hospitals.
6222, 62221, 622210	Psychiatric and Substance Abuse Hospitals.
6223, 62231, 622310	Specialty (except Psychiatric and Substance Abuse) Hospitals.

NAICS CODES OF ENTITIES POTENTIALLY AFFECTED BY THIS FINAL RULE—Continued

NAICS codes	Description of NAICS code
Non-profit Research Institutes	
5417, 54171, 541710	Research and Development in the Physical, Engineering, and Life Sciences.
54172, 541720	Research and Development in the Social Sciences and Humanities.

LIST OF ACRONYMS

APA	Administrative Procedures Act.
ACE	American Council on Education.
AAMC	Association of American Medical Colleges.
AIRI	Association of Independent Research Institutes.
BR	Biennial Report.
BMPs	Best Management Practices.
CAA	Central Accumulation Area.
CAS	Chemical Abstract Service.
CESQG	Conditionally Exempt Small Quantity Generator.
CFR	Code of Federal Regulations.
C2E2	Campus Consortium for Environmental Excellence.
CSHEMA	Campus Safety Health and Environmental Management Association.
EH&S	Environmental Health and Safety.
HHMI	Howard Hughes Medical Institute.
HSWA	Hazardous and Solid Waste Amendments of 1984.
ICR	Information Collection Request.
LDR	Land Disposal Restrictions.
LMP	Laboratory Management Plan.
LQG	Large Quantity Generator.
NACUBO	National Association of College and University Business Officers.
NTTAA	National Technology Transfer Advancement Act.
OMB	Office of Management and Budget.
OSHA	Occupational Safety and Health Administration.
PRA	Paperwork Reduction Act.
Project XL	eXcellence and Leadership.
R&D	Research and Development.
RCRA	Resource Conservation and Recovery Act.
RFA	Regulatory Flexibility Act.
SAA	Satellite Accumulation Area.
SQG	Small Quantity Generator.
SWDA	Solid Waste Disposal Act.
TSDF	Treatment, Storage or Disposal Facility.
UMRA	Unfunded Mandates Reform Act.

Outline

I. Statutory Authority

II. Background

A. History and Summary of the Proposed Rule

B. Rationale of the Final Rule

C. Summary of the Final Rule

D. Effective Date of the Final Rule

III. Detailed Discussion of the Final Rule

A. Scope of Eligible Academic Entities Covered Under the Final Rule

1. Hazardous Waste Generation Data

2. Laboratories Owned by Teaching Hospitals

3. Laboratories Owned by Non-profit Research Institutes

4. Laboratories Owned by Eligible Academic Entities that are Conditionally Exempt Small Quantity Generators (CESQGs)

5. Facilities with Laboratories Not Eligible to Participate in Subpart K

a. Government Research Laboratories

b. Commercial R&D Laboratories

6. Non-laboratory Facilities at Eligible Academic Entities

B. Discussion of Definitions

1. Definitions that Have Not Changed from the Proposed Rule

2. Definitions that Have Changed from the Proposed Rule

3. Definitions that Are New

C. Specific Requirements of the Alternative Regulations

1. Notification

2. Labeling Standards

3. Container Standards

4. Training Requirements

5. Removal Frequency of Unwanted Materials

a. Reactive Acutely Hazardous Unwanted Materials

b. Transferring Unwanted Materials or Hazardous Wastes from the Laboratory to an On-site CAA or On-site TSDF

c. On-site Consolidation Areas

6. Making the Hazardous Waste Determination

7. Laboratory Clean-outs

a. Summary of the Proposed Laboratory Clean-out Provisions

b. Changes Made to the Laboratory Clean-out Provisions

c. Changes Not Made to the Laboratory Clean-out Provisions

d. Clarifications About the Laboratory Clean-out Provisions

8. Laboratory Management Plan

a. Part I of the LMP

b. Part II of the LMP

9. How CESQGs Comply with Subpart K and How They Differ from LQGs and SQGs

10. Off-site Consolidation

a. Off-site Consolidation by CESQGs

b. Off-site Consolidation by CESQGs, SQGs, and LQGs

11. Topics that Are Outside the Purview of this Rulemaking

D. Reporting and Recordkeeping

1. Reporting to the Biennial Report for Eligible Academic Entities that are LQGs

2. Recordkeeping

E. Implementation and Enforcement

IV. State Authorization

A. Applicability of Rules in Authorized States

B. Effect on State Authorization

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

1. Introduction to the Economic Assessment for the Final Rule

2. Baseline Specification
3. Analytical Methodology, Primary Data Sources, and Key Assumptions
4. Key Analytical Limitations
5. Findings
- B. Paperwork Reduction Act
- C. Regulatory Flexibility Act
- D. Unfunded Mandates Reform Act
- E. Executive Order 13132: Federalism
- F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks
- H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Usage
- 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 §§ 2002, 3001, 3002, and 3004 of the Solid Waste Disposal Act (SWDA) of 1970, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. 6921, 6922, 6923, and 6924.

II. Background

A. History and Summary of the Proposed Rule

This rulemaking is a culmination of many years of investigation and participation by EPA in efforts designed to better understand the challenges that the academic community faces when managing hazardous wastes generated in laboratories under the hazardous waste regulations. As discussed at length in the preamble to the proposed rule (see 71 FR 29715), these efforts include two Reports to Congress; a project under EPA's eXcellence and Leadership program (Project XL) with three colleges and universities in New England; a pilot project led by the Howard Hughes Medical Institute (HHMI) to develop and implement a performance-based approach to the management of laboratory waste at ten colleges and universities; and a public meeting on June 18, 2003, sponsored by EPA to discuss the management of hazardous waste in research and/or academic laboratories. (See the announcement of the public meeting at 68 FR 33121, June 3, 2003. The comments submitted to EPA in response to the public meeting are included in the docket for today's rulemaking.)

As a result of these and other efforts, on May 23, 2006, EPA proposed

alternative generator requirements applicable to college and university laboratories that generate hazardous waste (71 FR 29712¹). This preamble will refer to the alternative generator requirements as "Subpart K," because it establishes a new Subpart K of 40 CFR part 262. The proposed rule provided a flexible and protective set of regulations that addressed the specific nature of hazardous waste generation and accumulation in college and university laboratories. The proposed rule was optional and colleges and universities had the choice of managing their hazardous wastes in accordance with the proposed alternative Subpart K requirements or remaining subject to the existing generator regulations. Although the applicability of the proposed rule was limited to colleges and universities, the Agency requested comment on whether it would be appropriate to expand the applicability of the final rule to other organizations that also have research or teaching laboratories. In addition, since the Agency assumed that CESQGs would not want to be subject to the increased burden of Subpart K, the proposed rule was limited to colleges and universities that are SQGs and LQGs. However, we solicited comments on whether CESQGs should be allowed to be subject to Subpart K.

Throughout the years of working with academic institutions, EPA has heard consistently that the greatest challenge that academic institutions face in managing their laboratory hazardous wastes under the existing generator regulations is making the RCRA hazardous waste determination at the point of generation pursuant to 40 CFR 262.11 (i.e., determining whether their solid waste is hazardous waste and assigning the proper hazardous waste code(s) in the laboratory at the time the hazardous waste is generated). This is largely because the individuals in the laboratory generating the hazardous waste and other materials are students, who are often not trained to make a hazardous waste determination. We, therefore, proposed to remove the responsibility for the hazardous waste determination from the students in the laboratory and place it in the hands of trained environmental health and safety (EH&S) professionals. While the hazardous waste remains in the laboratory, we proposed that it would be referred to as "unwanted material," since the hazardous waste

determination had not yet been made and some portion of the unwanted materials may be unused and therefore still usable, or may not be hazardous waste when discarded. We proposed that while in the laboratory, the P-listed commercial chemical products that were listed for reactivity would be referred to as "reactive acutely hazardous unwanted materials." In lieu of making the hazardous waste determination at the point of generation, the Agency proposed that the hazardous waste determination must be made prior to removing the unwanted materials from the laboratory (but not at the time the unwanted materials are first generated), or within four calendar days of arriving at an on-site central accumulation area (CAA) or on-site interim status or permitted treatment, storage, or disposal facility (TSDF).

The Agency also proposed that the unwanted materials would be regulated in the laboratory by performance-based container labeling and container management standards. These performance-based standards for the management of unwanted materials in the laboratory were coupled with a requirement for a Laboratory Management Plan (LMP). This combination provided flexibility by allowing the college or university to specify in its LMP how it would comply with the performance-based standards. The Agency co-proposed two options regarding the enforceability of the contents of the individual LMPs that colleges and universities developed. One option was that the contents of the LMP would be enforceable; the second option was that the contents of the LMP would not be enforceable.

Additionally, we proposed that all containers of unwanted materials would have to be removed from the laboratory on a regular basis, not to exceed six months. However, if a laboratory accumulated more than 55 gallons of unwanted material before the regularly scheduled removal, then all containers of unwanted material would have to be removed from the laboratory within ten calendar days. Likewise, if a laboratory accumulated more than 1 quart of reactive acutely hazardous unwanted material prior to the regularly scheduled removal, then the reactive acutely hazardous unwanted materials would have to be removed from the laboratory within ten calendar days.

Finally, to address the problem of laboratories keeping old, unneeded, or expired chemicals (i.e., "legacy chemicals"), the Agency proposed regulatory provisions that would give colleges and universities incentives for conducting laboratory clean-outs: a

¹ Please see page 29716 of the preamble to the proposed rule for information on other EPA efforts to improve hazardous waste management at colleges and universities through compliance assistance centers and more.

laboratory clean-out could occur over a 30 day period, even if the 55-gallon limit of unwanted material was exceeded; and the hazardous waste generated during a laboratory clean-out would not have to be counted toward the college or university's generator status. However, we proposed that colleges and universities could only utilize the clean-out incentives once per 12 months per laboratory.

The comment period for the proposed rule was originally due to close on August 21, 2006. However, EPA received a request from the National Association of College and University Business Officers (NACUBO), on behalf of the American Council on Education (ACE), the Campus Safety Health and Environmental Management Association (CSHEMA), and the Campus Consortium for Environmental Excellence (C2E2) to extend the comment period for 45 days. On August 21, 2006, EPA extended the public comment period by 30 days (see 71 FR 48500). The comment period for the proposed rule closed on September 20, 2006.

The Agency received 111 comments on the proposed rule. Approximately two-thirds of the comments were from colleges and universities, or trade groups that represent colleges and universities. In general, colleges and universities were very supportive of the Agency's effort to address the challenges they face in complying with the RCRA hazardous waste regulations in their laboratories. However, many of these commenters also suggested specific changes to the rule. Thirteen States also submitted comments. Some States expressed support for the rule, while others were very skeptical of the need for the rule. Most of the rest of the comments were from organizations that were not eligible to participate in Subpart K, as proposed. These commenters, which included non-profit research organizations, commercial companies that conduct research and manufacture pharmaceuticals and other products, as well as several Federal governmental agencies, requested that the Agency expand the scope of the final rule to allow them to be subject to Subpart K. The more significant comments on the proposal are addressed later in this preamble, in section III, but all are addressed in the Response to Comments Document for today's final rule found in the docket at <http://www.regulations.gov> (EPA-HQ-RCRA-2003-0012).

B. Rationale of the Final Rule

In the proposal, the Agency discussed how the hazardous waste generation

and management practices at college and university laboratories differ from both industrial production and industrial laboratory operations in several meaningful ways (see 71 FR 29714). These differences, which were confirmed by many of the commenters, provide the rationale for today's final rule.

Specifically, the Agency identified four primary differences between laboratory operations at colleges and universities and typical industrial production facilities. First, laboratories at colleges and universities have a large number of points of generation (i.e., points where waste is originally generated), such as multiple laboratory benches within a single laboratory and laboratories located at several areas on a single campus. Second, these laboratories tend to generate relatively small volumes of each hazardous waste at each of these points of generation. Third, the hazardous wastes generated in these laboratories tend to vary over time, as areas of research change. In contrast, industrial generators tend to have a different hazardous waste generation pattern; they tend to generate a smaller number of predictable wastestreams in large quantities at relatively few generation points. Fourth, and of particular note, is that most individuals involved in hazardous waste generation activities at college and university laboratories are students. Students are inherently transient, which makes it more difficult to train them. This fourth difference sets college and university laboratories apart not only from typical industrial production facilities, but also from non-academic, government and commercial R&D laboratories. At both industrial production facilities and non-college or university, commercial laboratories, employees who generate hazardous waste are professionally trained in managing hazardous wastes and are held accountable due to their employee status.

The proposal addressed challenges faced by colleges and universities that result from these differences, and proposed to establish a new, optional Subpart K under 40 CFR part 262 for making the hazardous waste determination, and accumulating and removing unwanted materials from laboratories at colleges and universities. Comments from colleges and universities and their trade associations confirm EPA's conclusion that differences in hazardous waste generation and management activities at laboratories at academic institutions warrant this alternative set of requirements. Because of these

differences, the alternative generator requirements found in Subpart K are directed at the management of unwanted materials in the laboratory and not in other areas on the same site where hazardous waste may be generated or managed.

Therefore, today EPA is finalizing an alternative set of generator regulations for the management of hazardous waste generated in laboratories at specific types of academic facilities (i.e., eligible academic entities). Based on comments received on the proposed rule, as well as additional analysis, the Agency is finalizing the rule with some changes from the proposal. The Agency believes that today's final rule is better suited to the circumstances specific to these laboratories, and that it promotes environmental protection and public health through safer management of laboratory hazardous wastes.

C. Summary of the Final Rule

This section provides a brief overview of today's final rule and describes the major ways in which today's rule differs from the proposal. For a detailed description and justification of the changes in today's final rule, see Section III of today's preamble.

The final rule establishes a set of alternative generator regulations for laboratories owned by eligible academic entities under a new Subpart K in 40 CFR part 262. Eligible academic entities may choose to be subject to Subpart K in lieu of the existing generator requirements for the management of the hazardous waste generated in the laboratories that they own. Laboratories operating under Subpart K must comply with the performance-based standards, while the unwanted materials remain in the laboratory. The eligible academic entity also must develop an LMP that reasonably addresses the nine elements that are required to be part of the LMP and that describes how the eligible academic entity will comply with the performance-based standards. The final rule also provides incentives for eligible academic entities to conduct laboratory clean-outs of old, unneeded chemicals.

One of the major changes from the proposed rule found in today's final action is the Agency's decision to expand the applicability of the rule. Specifically, the scope of the final rule includes colleges and universities, non-profit research institutes that are owned by or have a formal written affiliation agreement with a college or university, and teaching hospitals that are owned by or have a formal written affiliation agreement with a college or university.

In addition, although the proposed rule specifically precluded laboratories

at colleges or universities that are CESQGs from choosing to be subject to Subpart K, the final rule allows laboratories that are owned by eligible academic entities that are CESQGs, SQGs or LQGs to operate under Subpart K. We also have modified the definition of laboratory, so that additional areas within an eligible academic entity, such as photo laboratories, field laboratories, and art studios are considered laboratories. In addition, chemical stockrooms and preparatory laboratories and other areas that provide a support function to research and teaching laboratories, are allowed to operate under Subpart K.

EPA recognizes that the details of hazardous waste management operations vary widely among campuses and some eligible academic entities have developed programs consistent with the existing generator regulations that have proven to be successful. Thus, these institutions may be reluctant to change from the generator regulations under which they are currently operating. Therefore, today's final rule, like the proposal, remains an optional, alternative set of requirements to the existing generator regulations and eligible academic entities may continue to manage their laboratory hazardous wastes under the current hazardous waste generator regulations. Eligible academic entities that would like the additional flexibility of today's rule may choose to manage their laboratory hazardous wastes according to the set of generator regulations we are finalizing today.

Public comments received on the proposed rule confirmed that the primary difficulty with managing laboratory hazardous wastes under current regulations is making the hazardous waste determination at the point of generation. As with the proposal, the final rule addresses this challenge by providing flexibility with regard to where and when the hazardous waste determination can be made (i.e., in the laboratory before it is removed from the laboratory, or within four calendar days of arriving at an on-site CAA, or on-site TSDF), provided all unwanted materials (as defined by the rule) that are generated in the laboratory are managed according to the requirements promulgated in today's rule.

EPA continues to stress that today's final rule does not alter or move the point of generation of any hazardous waste, but merely allows the hazardous waste determination to be made at an on-site CAA or on-site TSDF; or in the laboratory, but at a point in time after the initial generation of the waste. The

point of generation of the hazardous waste continues to be the location and time at which the hazardous waste is first generated. Therefore, the applicability of the land disposal restrictions (LDRs) to hazardous wastes generated in the laboratory are not affected by today's rule and continue to "attach" at the point of generation of the hazardous waste. In addition, RCRA's statutory inspection and enforcement authorities continue to apply in the laboratory, even though under Subpart K the hazardous wastes are referred to as "unwanted materials," while they remain in the laboratory.

Today's final rule maintains the proposed requirement that unwanted materials must be removed from the laboratory primarily on a time basis, and secondarily on a volume basis. That is, we are requiring that eligible academic entities conduct removals of unwanted materials from the laboratory on a regular basis, not to exceed six months, although we have included some additional flexibility. If a laboratory accumulates more than 55 gallons of unwanted material (including reactive acutely hazardous unwanted material) before the regularly scheduled removal, then all unwanted materials (including reactive acutely hazardous unwanted material) must be removed within ten calendar days. And if a laboratory accumulates more than 1 quart of reactive acutely hazardous unwanted material before the regularly scheduled removal, then the reactive acutely hazardous unwanted material must be removed from the laboratory within ten calendar days.

Another key issue identified by the academic community that we addressed in the proposal focused on incentives for discarding unneeded or expired chemicals that can accumulate in college and university laboratories and chemical store rooms. The academic community contends that the existing generator regulations result in discouraging laboratory clean-outs (because the increased quantities of hazardous waste generated can change the eligible academic entity's generator status) and therefore, laboratories often hold on to expired chemicals, some of which become dangerous over time. EPA believes that revising the regulations to encourage laboratories to remove legacy chemicals will result in greater protection of human health and the environment, as well as increased environmental compliance. Thus, an important part of this final rule is the laboratory clean-out provisions: once per 12 months per laboratory, a laboratory will have 30 days to conduct a clean-out and will not have to count

the hazardous waste that consists of unused commercial chemical products (either listed or characteristic) generated during those 30 days towards the eligible academic entity's generator status.

As in the proposed rule, today's final rule pairs a performance-based approach for management of unwanted materials in the laboratory with a requirement for the eligible academic entity to develop and implement an LMP. We believe that a performance-based approach will allow eligible academic entities greater flexibility by allowing them to tailor their laboratory waste management program with respect to container labeling, container management, and training, while ensuring better environmental results. Like the proposal, under today's final rule, the LMP must describe how an eligible academic entity will meet the required provisions (i.e., the performance-based standards) by reasonably addressing all the required elements. However, unlike the proposal, the LMP under today's final rule must include two distinct parts (Parts I and II). The eligible academic entity must comply with the specific contents it includes in Part I of its LMP, while Part II will comprise the institution's best management practices (BMPs). Thus, EPA and authorized States may take enforcement action against an institution if it fails to meet the specifics of Part I of its LMP. However, EPA and authorized States may not take enforcement action if an institution's actions vary from the specific procedures contained in Part II of its LMP, but may take enforcement action if the institution fails to reasonably address all the required elements in Part II of its LMP.

In summary, the Agency believes that today's rule will lead to the safe management of unwanted materials and greater environmental protection by requiring that the RCRA hazardous waste determination be performed by trained personnel, rather than by untrained students. We also believe that today's final rule will promote the protection of human health and the environment by ensuring that all unwanted materials which may, in whole or in part, be RCRA hazardous wastes, are safely managed while in the laboratory prior to the time that the hazardous waste determination is made. In addition, EPA believes that the requirement to develop and implement an LMP will improve the coordination and integration of hazardous waste management procedures and enhance environmental awareness among researchers and students at eligible

academic entities, leading to a transfer of good environmental management practices to the larger community.

D. Effective Date of the Final Rule

This final rule is effective on December 31, 2008 section 3010(b) of RCRA allows EPA to promulgate a rule with an effective date shorter than six months where the Administrator finds that the regulated community does not need additional time to come into compliance with the rule. This rule is optional for those eligible academic entities that choose to follow it. For those entities, this rule provides an alternative set of requirements that are intended to provide them flexibility from current applicable regulations. Therefore, the Agency finds that the regulatory community does not need six months to come into compliance.

III. Detailed Discussion of the Final Rule

Today, EPA is publishing a final rule establishing alternative regulations (40 CFR part 262, Subpart K) for the management of unwanted materials generated in laboratories in eligible academic entities. This section discusses in detail the major features of the final rule and the rationale for the changes made from the proposal to today's final rule.

In today's final rule and preamble, we introduce and use several new terms. We are including here a brief description of how we will use the terminology in today's preamble. First, we will use the terms "choose to become subject to," "participate under," "operate under" and "opt in" to Subpart K interchangeably. Second, the regulations require that in order to be eligible to opt into Subpart K, a non-profit research institute must be owned by or have a formal written affiliation agreement with a college or university, and a teaching hospital must be owned by or have a formal written affiliation agreement with a college and university. In the preamble, we will generally refer to eligible academic entities other than colleges and universities as non-profit research institutes and teaching hospitals that are owned by or formally affiliated with a college or university.

Third, many eligible academic entities have multiple EPA Identification Numbers for different sections of the same "campus," typically because the sections of the eligible academic entity are separated by public roads. When referring to the individual sections of an eligible academic entity, we will use the term "site" or "EPA Identification Number." When referring collectively to all the sections of the eligible academic

entity, we will use the term, "campus," or "eligible academic entity," or "institution." As an example, when an eligible academic entity opts into Subpart K for its laboratories, it must notify the Agency for each EPA Identification Number on a campus that is opting in.

A. Scope of Eligible Academic Entities Covered Under the Final Rule

EPA proposed that this alternative set of generator regulations would apply only to laboratories at colleges and universities. As discussed in section II.A of today's preamble, EPA has had a long history of interaction with colleges and universities. From these interactions, the Agency has learned about the unique hazardous waste generation pattern in teaching and research laboratories at colleges and universities. However, EPA recognized that there may be additional types of facilities with laboratories that may fit the rationale for Subpart K. Thus, while the proposal was limited to colleges and universities, EPA solicited comment on whether to expand the scope of the final rule to other institutions that fit the rationale of Subpart K.

Public comments from trade groups, such as the Association of American Medical Colleges (AAMC), the Association of Independent Research Institutes (AIRI), the Campus Safety Health and Environmental Management Association (CSHEMA), and individual comments submitted by non-profit research institutes, teaching hospitals, private research and development companies, governmental research laboratories, and colleges and universities with teaching hospitals and/or non-profit research institutes all asserted that their research laboratories fit the hazardous waste generation pattern rationale of today's rule. That is, these commenters assert that given the nature of research, research laboratories share the same hazardous waste generation patterns, regardless of what type of institution they are found in. In addition, EPA has conducted site visits in various research laboratories at teaching hospitals and private R&D companies, among others, and has seen similar hazardous waste generation patterns and activities of these laboratories.

Based on the comments EPA received and additional research by EPA regarding the presence of students in laboratories at institutions other than colleges and universities, we have expanded the scope of the final rule to include specific additional entities that fit all aspects of the rationale for this rule. This rationale includes not only a

hazardous waste generation pattern that is similar to that found at college and university laboratories, but also a significant student population. EPA did not expand the scope of the final rule to include certain entities because they did not fit all aspects of the rationale for this rule. Therefore, today's final rule allows colleges and universities, teaching hospitals that are owned by or have a formal written affiliation agreement with a college or university, and non-profit research institutes that are owned by or have a formal written affiliation agreement with a college or university, to opt into Subpart K. This expansion includes laboratories at facilities that we and many commenters believe are closely integrated with laboratories at colleges and universities. Collectively, we are calling the entities that are eligible to opt into today's final rule, "eligible academic entities." Details on these entities are contained in the following sections. (For information regarding changes to the definition of laboratory, see section III.B.2 and § 262.200.)

1. Hazardous Waste Generation Data

In the preamble to the proposed rule, we stated that 9% of the hazardous waste generated at college and university LQGs was from laboratories. We received several comments from colleges and universities asserting that we erred in our estimates and that at their campuses, laboratory hazardous waste constituted a much higher percentage of their total hazardous waste. The Agency sent follow-up letters to several commenters requesting additional information in support of their comments. In response to our inquiries, many of the commenters supplied detailed information about their hazardous waste generation and one commenter provided a detailed analysis of our methodology for determining the percentage of laboratory hazardous waste, including specific suggestions on how to improve the methodology for the final rule. The follow-up letters and the responses are all included in the docket for today's rule.

As a result of these comments, EPA has significantly revised the methodology used in the proposal to determine the total quantity of hazardous waste and laboratory hazardous waste. Specifically, in the proposal, we used key-word searches of the description field on Biennial Report (BR) forms to identify laboratory hazardous waste as a percent of the total hazardous waste generated. Our revised methodology uses three source codes

from the BR to identify which hazardous wastes are from laboratories:

(1) G11—Discarding off-specification or out-of-date chemicals or products (unused chemicals or products—corresponds to P and U hazardous waste codes);

(2) G22—Laboratory analytical wastes (used chemicals from laboratory operations), and

(3) G09—Other production or service-related processes from which the waste is a direct outflow or result. (Because hazardous waste from the source code G09 could also be generated in non-laboratory operations, these wastes were only considered laboratory wastes if the waste form codes indicated it was shipped in a lab pack (i.e., waste form codes W001 or W004)).

Additional laboratory wastes were identified using key-word searches of the description field. This revised method resulted in a much higher estimate for laboratory hazardous waste

as a percent of total hazardous waste at colleges and universities—73% under the revised methodology, compared to 9% under the original methodology used in the proposed rule. This revised methodology was used to calculate the amount of laboratory hazardous waste generated as a percent of the total hazardous waste generated for colleges and universities, as well as for other types of facilities with laboratories that we considered including in today's final rule: teaching hospitals, non-profit research institutes, governmental research laboratories, and commercial R&D laboratories. For a full explanation of the methodology used to determine the amounts of total hazardous waste and laboratory hazardous waste generated at colleges and universities, teaching hospitals, and non-profit research institutes, see the memo entitled, Lab Rule Data Analyses, from ICF International to Patricia Mercer, May 1, 2008; and for hazardous waste

information for LQG government research laboratories and LQG commercial R&D laboratories see the memo entitled, Final Analyses of College and University Laboratory Hazardous Waste, from ICF International to Patricia Mercer, August 17, 2007. Copies of both memos are in today's docket.

Below is a table of the hazardous waste data for eligible academic entities (i.e., those entities eligible to opt into Subpart K) that are LQGs. Using the revised methodology, we now estimate that for college and university LQGs, 73% of their total hazardous waste is from laboratories. The percent of hazardous waste coming from laboratories at teaching hospitals and non-profit research institutes is even higher—81% and 92%, respectively. Further, with all three types of eligible academic entities, nearly all LQGs generate laboratory hazardous waste.

	Colleges and universities	Teaching hospitals ¹	Non-profit research institutes ²
# LQGs generating laboratory hazardous waste	286	104	8
# LQGs generating hazardous waste	293	109	8
% that generate laboratory hazardous waste	98	95	100
Tons of laboratory hazardous waste	6,530	1,712	119
Tons of all hazardous waste ³	8,951	2,119	130
% of hazardous waste that is laboratory hazardous waste	73	81	92

¹ To be eligible to opt into Subpart K, a teaching hospital must be owned by or have a formal written affiliation agreement with a college or university

² To be eligible to opt into Subpart K, a non-profit research institute must be owned by or have a formal written affiliation agreement with a college or university

³ Excludes remediation wastes because remediation wastes are not regularly generated hazardous wastes, but rather are hazardous wastes generated only when a clean-up or remediation project takes place.

As discussed above, based on EPA's observations, as well as comments that we have received and given the nature of teaching and research, activities conducted at teaching and research laboratories in colleges, universities, teaching hospitals, and non-profit research institutes are comparable and therefore share similar hazardous waste generation patterns. EPA identified challenges associated with the specific hazardous waste generation patterns, such as difficulty making hazardous waste determinations with a large variety of wastestreams. These difficulties, along with the difficulties associated with the presence of a significant student population, form the basis of this rule. Even at proposal, when we estimated that 9% of a college or university's hazardous waste was generated in the laboratory, we believed that these challenges were sufficient to warrant the development of Subpart K. With the revised estimates indicating that the percentage of hazardous waste

generated in laboratories by eligible academic entities being much higher, these specific challenges are shown to be even more pervasive and support the need for the flexibility offered by Subpart K for these particular entities.

Given that these types of organizations with research and teaching laboratories share similar hazardous waste generation patterns, we focused on the extent to which these entities had a significant student presence, which is a very important basis of today's rule. Because students are inherently transient, and generally have less accountability than professionals employed in laboratories, it is unlikely that they will make a proper hazardous waste determination which requires detailed knowledge of RCRA. The following discussion of which entities are and are not eligible to opt into today's rule focuses on whether there is a significant student presence. However, there are limited data readily available about the number of students

in laboratories even at colleges and universities much less for entities, such as teaching hospitals and non-profit research institutes. Thus, we used certain factors as indications that the organization did indeed have students in the laboratories. Examples of factors indicating student presence include programs for high school, undergraduate, or graduate students to conduct laboratory research, presence of medical residents/interns, co-sponsored degree programs with colleges or universities, or classes offered independent of the college or university.

2. Laboratories Owned by Teaching Hospitals

In the proposal, EPA specifically requested comment on whether laboratories in hospitals affiliated with colleges or universities should be included in the final rule. Previously, information about hospital laboratories led EPA to believe that their wastestreams are fairly routine and they

did not have the same challenges faced by college or university laboratories in training their workers. Through comments, EPA learned that many teaching hospitals owned by or formally affiliated with a college or university have research and teaching laboratories in addition to diagnostic laboratories dedicated to patient care. As stated earlier, research laboratories at teaching hospitals have similar hazardous waste generation patterns as research laboratories on a college or university campus. In addition, such teaching hospitals have students working in the laboratories to learn how to run various tests, how to operate equipment, or to conduct research with professors.

In fact, one commenter asserted that, "these types of laboratories [laboratories at college or university affiliated hospitals and other similar locations such as dental colleges, clinics and associated laboratories] are very similar to instructional and research laboratories. They are used by a large number of students; they are used for instructional and research purposes; while some processes are static and predictable, others are not; large numbers of different wastestreams are produced, but in relatively small quantities." Another commenter wrote, "Research labs in a hospital are essentially the same as a research lab in a college or university and have similar waste generation patterns."

Based on these comments, EPA conducted additional research into the types of laboratories that are present at teaching hospitals that are owned by or formally affiliated with a college or university. In particular, EPA identified three types of laboratories: (1) Clinical diagnostic laboratories that conduct typical laboratory tests related to patient care, (2) applied research laboratories that conduct clinical trials and (3) research laboratories that conduct basic medical research. While strictly speaking, clinical diagnostic laboratories may not exhibit the hazardous waste generation pattern identified in the rationale for this rule, we found that the setup in teaching hospitals makes it difficult to draw hard distinctions between the various types of laboratories. That is, each teaching hospital divides its laboratory space differently and oftentimes a single laboratory serves multiple functions, such as both diagnostic testing and research. Furthermore, in some cases, laboratory personnel perform multiple functions within a laboratory and are involved with both diagnostic and research activities. Thus, EPA has determined that it would be extremely difficult to implement a rule that made

a distinction between the various types of laboratories at such teaching hospitals.

The Agency also analyzed data from the BR which are sent to the Agency every other year by LQGs and housed in EPA's RCRAInfo database, to find out more about the universe of non-teaching and teaching hospitals owned by or formally affiliated with a college or university and their hazardous waste generation patterns. Notably, one of the main differences between the hazardous waste generation patterns at LQG teaching hospitals owned by or formally affiliated with a college or university and non-teaching hospitals is in the amount of laboratory hazardous waste as a percentage of the total amount of hazardous waste generated. Specifically, teaching hospitals showed approximately 80% of the total quantity of hazardous waste generated coming from laboratories, while non-teaching hospitals only had 13% of the total quantity of hazardous waste generated coming from laboratories. EPA attributes this disparity to be the result of the greater amount of research generally occurring in teaching hospitals owned by or formally affiliated with a college or university.

In terms of the transient students, EPA has learned from its research that teaching hospitals instruct a variety of students—interns, residents, nursing students, laboratory technicians, and more, in the hospital. Instruction of these students includes work in the laboratories to learn about the processes and tests conducted there, introducing similar difficulties as those encountered at colleges and universities in teaching and training transient students and making the hazardous waste determination. In fact, one commenter asserted that, "the amount of time a student spends at a teaching hospital is comparable to that of a graduate student in another laboratory discipline." Also, medical research at a college and university oftentimes is shared between the college and university laboratories and teaching hospital laboratories. One commenter pointed out that professors, graduate students, and undergraduate students often go back and forth between laboratories at colleges and universities, and at teaching hospitals, to conduct research.

EPA recognizes that a teaching hospital that is owned by a college or university will instruct students from its medical school. However, due to the complex healthcare system, many times medical students or residents from a medical school will train in a teaching hospital that is affiliated with a college or university, but not owned by the

college or university. We do not want to preclude these teaching hospitals that are training students and have a significant transient student population from participating in Subpart K. Therefore, EPA looked for a way to define the concept of "affiliated teaching hospital." We discovered that the Accreditation Council for Graduate Medical Education (ACGME) defines two types of agreements between a medical school and a teaching hospital: A master affiliation agreement and a program letter of agreement.² EPA has determined that the presence of both these agreements indicates that a teaching hospital is formally affiliated with a college or university.

Based on the evidence provided by commenters and additional EPA research, we have concluded that teaching hospitals owned by or formally affiliated with a college or university fit within all aspects of the rationale of today's final rule: many hazardous wastes that vary over time are generated in small quantities at many points of generation, and there is a significant and transient student population that is not familiar with the RCRA hazardous waste requirements. Therefore, EPA is allowing teaching hospitals, as defined in this final rule that are either owned by or have a formal written affiliation agreement with a college or university, to opt into Subpart K for their laboratories. (See section III.B.3 for a discussion of the definition of teaching hospital and formal written affiliation agreement or § 262.200.)

3. Laboratories Owned by Non-profit Research Institutes

EPA received many comments from representatives of non-profit research institutes, colleges and universities, and trade groups stressing the similarities between college and university laboratories and the laboratories at non-profit research institutes in terms of the hazardous waste generation pattern rationale identified in the rule and the student presence in the laboratories. As indicated above, a research laboratory at a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university shares the same hazardous waste generation pattern.

² The ACGME defines these terms in the "Glossary of Terms" that appears on its Web site at http://acgme.org/acWebsite/about/ab_ACGMEglossary.pdf. The ACGME also describes these documents in more detail in a document called Frequently Asked Questions Related to Master Affiliation Agreements and Program Letters of Agreement that appears on its Web site at http://acgme.org/acWebsite/about/ab_FAQAgreement.pdf.

In terms of the presence of a significant transient student population, one commenter explained that as a non-profit research institute, it has close ties with the local university; they collaborate with the university on projects and faculty hold joint appointments. The commenter added that students and researchers often travel between the non-profit's laboratories and the local university's laboratories and that because the hazardous waste management requirements at both institutions are the same under the existing generator regulations, currently there are minimal differences in hazardous waste management for the students and researchers to learn when working at both institutions. Thus, the commenter requested that EPA add non-profit research institutes to the final rule in order to minimize confusion and training challenges under Subpart K.

In response to these comments, EPA conducted additional research and identified from the BR information housed in the RCRAInfo database, nine non-profit research institutes that are LQGs (see section III.A.1 for information on their hazardous waste generation). For all nine LGG non-profit research institutes, we were able to obtain readily available information on student populations and programs, as well as substantial evidence that non-profit research institutes are similar to colleges and universities in that they sometimes grant degrees of their own, co-sponsor degrees with colleges and universities, teach classes, and share faculty, funding sources, and laboratory space with colleges and universities. We determined that the information obtained is generally representative of the universe of laboratories at non-profit research institutes, because among the non-profits we researched, we found that their hazardous waste generation patterns and student programs were remarkably homogenous.

One commenter wrote, " * * * the distinction between a research laboratory in a college and university and a research laboratory in an institution that is not a college and university has blurred considerably over the last decade." As EPA conducted additional study into non-profit research institutes, it was difficult for the Agency to draw a hard line between college and universities and non-profit research institutes. For example, Memorial Sloan-Kettering Cancer Center (MSKCC) is a non-profit cancer research institute, a teaching hospital, a graduate school in biomedical sciences, and is in partnership with the Weill Cornell Graduate School of Medical Sciences

and Cornell University to train students in research and patient care. MSKCC also partners with New York-Presbyterian Hospital, the Hospital for Special Surgery, and the Rockefeller University. Via these partnerships, the majority of the faculty of the Weill Cornell Medical Graduate School of Medical Sciences has their research laboratories and other facilities located within the Weill Cornell Medical College-New York-Presbyterian Hospital Complex and the MSKCC's research laboratory buildings. Another outgrowth of this partnership is that MSKCC jointly administers a Ph.D. program with Cornell and Weill Medical College in computational biology and medicine. Finally, besides its own graduate school of biomedical sciences, MSKCC offers two certificate programs for students to learn cytotechnology and radiation therapy.

As shown in the example above, a non-profit research institute owned or formally affiliated with a college or university may be so closely associated with the college and university that excluding them will prevent colleges and universities from establishing one laboratory waste management system, introducing confusion among researchers working in laboratories at both institutions. In this situation, such non-profit research institutes are virtually identical to a college and university and their hazardous waste generation patterns and student presence fit within the rationale of this rule. This information made it clear to us that non-profit research institutes often are "academic" and should be eligible to opt into today's final rule, when they are owned by or formally affiliated with a college or university.

One commenter recommended that EPA expand the scope of the rule to any institution that has a formal affiliation with a college or university. While the Agency does not believe it should expand the scope of the rule to all institutions that have any kind of an affiliation with a college or university, we do believe it is appropriate to allow those non-profit research institutes that have a formal written affiliation agreement with a college or university to opt into Subpart K. In order to ensure that the formal written affiliation agreement between the two entities represents an affiliation that is longstanding, we believe that the affiliation must be at the institutional level, as opposed to an agreement between staff or professors at the two eligible academic entities. Of the nine non-profit research institutes that are identified as LQGs in the BR, we determined that eight had formal

affiliations with colleges and universities on an institutional level. For example, the Burnham Institute not only administers its own graduate program, it also has an institutional affiliation with the University of California at San Diego by participating in a joint graduate training program in molecular pathology (where approximately 30 graduate students a year obtain their primary scientific training at the Institute).

The reason we are requiring a formal written affiliation agreement at the institutional level is because having a formal affiliation at the institutional level with a college or university seemed to increase the likelihood that the non-profit research institutes would have students in their laboratories. The presence of a significant transient student presence is an important rationale of today's rule. Typically, a formal affiliation at the institutional level allows students at a college or university to conduct thesis research at the non-profit research institute, use non-profit researchers as mentors, and at times, take some of their degree classes at the non-profit research institute. Further, requiring a formal written affiliation agreement between the non-profit research institute and a college or university will assist the implementing agency verify that an affiliation at the institutional level exists. Thus, for these reasons, we decided to limit today's rule to those non-profit research institutes that have a formal written affiliation at the institutional level with a college or university. For a discussion of the definition of "formal written affiliation agreement," see section III.B.3 of this preamble or § 262.200.

4. Laboratories Owned by Eligible Academic Entities That Are Conditionally Exempt Small Quantity Generators (CESQGs)

EPA recognizes that laboratories at eligible academic entities that are CESQGs share the same hazardous waste generation patterns as laboratories at larger generators, except the eligible academic entities that are CESQGs generate smaller quantities of hazardous waste. However, while laboratories at CESQGs fit within the rationale used to define the scope of this rule, the proposal did not allow them to opt in. At the time of the proposal, we had thought CESQGs would not want to opt into Subpart K since they currently are not subject to the controls that apply to satellite accumulation areas (SAAs) and do not have to comply with most of the other requirements that apply to LQGs and SQGs. In fact, many of the

provisions in today's final rule would be more stringent than those to which they are currently subject under § 261.5. At proposal, we solicited comment on whether the final rule should include laboratories at CESQGs.

Numerous commenters indicated that we should provide CESQGs with the same opportunity as SQGs and LQGs to assess which set of generator regulations is most appropriate for their laboratories and that we should not prohibit them from opting into Subpart K.

Additionally, many comments from colleges and universities indicated that laboratory management would improve if their CESQG sites with laboratories could operate under this rule and follow the required LMP. Further, commenters explained that since colleges and universities often have CESQG sites, as part of a larger campus, a college or university may want to be able to manage all of its laboratories under one management system and that EPA should allow CESQGs to participate in Subpart K. This issue is particularly pertinent for urban college and university campuses that are divided by public roads. One campus can potentially include many separate generator sites, some LQGs, some SQGs, and some CESQGs. In light of the comments received, EPA agrees that it makes sense that at least some CESQGs would want to opt into Subpart K. Thus, EPA is allowing eligible academic entities to opt into Subpart K for their CESQG sites and is allowing stand-alone CESQGs to opt into Subpart K, as well. CESQG sites at an eligible academic entity may include field laboratories and small laboratories separated from the main campus by public roadways. In addition, we expect that some eligible academic entities that are themselves CESQGs (i.e., stand-alone CESQGs), such as small non-profit research institutes, may choose to opt into the rule to take advantage of the clean-out provisions.

Other commenters argued that the rule would encourage better environmental performance by extending the laboratory clean-out provisions to eligible academic entities that are themselves CESQGs or have CESQG sites without requiring them to comply with the rest of the Subpart K requirements. EPA agrees that stand-alone CESQGs and CESQG sites that are part of a larger eligible academic entity will benefit by removing legacy chemicals from the laboratory by taking advantage of the clean-out incentives of today's rule. However, EPA is not allowing a stand-alone eligible academic entity or a CESQG site that is part of a larger eligible academic entity to partake

only in the laboratory clean-out provisions and not the other Subpart K requirements because this would prevent CESQGs from taking advantage of the two main benefits of today's final rule. That is, if a CESQG site only participated in the laboratory clean-out provisions, it would not be able to take advantage of the flexibility in where and when to make the hazardous waste determination. Second, if a CESQG site that is part of a larger eligible academic entity only participated in the laboratory clean-out provisions, it would be unable to establish one hazardous waste management system in all the laboratories at the eligible academic entity. The ability to establish a unified hazardous waste management system for all laboratories is one of the priorities cited by academic commenters. Therefore, in order for a CESQG site at an eligible academic entity or an eligible academic entity that is itself a CESQG to take part in the laboratory clean-out incentives, the eligible academic entity must opt into Subpart K in its entirety and follow the management standards for unwanted materials in the laboratories.

5. Facilities With Laboratories Not Eligible To Participate in Subpart K

As explained above, EPA solicited comment on whether to expand the scope of the rule beyond laboratories at colleges and universities to laboratories at other types of facilities. Many commenters supported expansion of the scope of the rule. We received comments from both government research laboratories and commercial R&D laboratories requesting to be included in this rulemaking. Overall, from the information available at this time, it appears that laboratories at both of these types of facilities have hazardous waste generation patterns similar to laboratories at colleges and universities—generating small quantities of many types of waste that vary over time at many points of generation—since they are research laboratories. However, information about the other key aspect of the rationale for today's rule, that is, significant student presence, has led EPA to determine that, at this time, laboratories at government research and commercial R&D facilities are not eligible to participate in Subpart K.

(a) **Government Research Laboratories:** We received comments from a number of governmental organizations that have research laboratories requesting that they be allowed to participate in (or opt into) Subpart K. These commenters, all from the Federal government, asserted that

they fit the hazardous waste generation pattern explained by EPA as part of the rationale for Subpart K. In addition to the public comments, EPA collected readily available information on hazardous waste generation patterns and student presence in government research laboratories. From EPA's BR on hazardous waste generated by LQGs, we identified 39 LQG government research laboratories. In addition, in its comments on the proposal, one Federal agency provided student numbers for ten of its laboratories, three of which we have identified as LQGs. We also acquired aggregated student numbers or estimates for three other Federal agencies. We were unable to obtain student population data at laboratories at the remaining government research laboratories, including State and local governmental laboratories. Based on this lack of available information, EPA has decided to defer our decision on government research laboratories and therefore, government research laboratories are not included in this final rulemaking. Rather, in 2009, EPA expects to prepare a Federal Register Notice soliciting additional information about government research laboratories, particularly the presence of students at such research laboratories in order to make a more informed decision regarding whether or not to allow them to opt into Subpart K in the future.

(b) **Commercial R&D Laboratories:** EPA requested comment on whether private laboratories fit within the rationale of Subpart K and received comments from pharmaceutical companies, engineering companies, and a utility solid waste activity group, all requesting to be included in Subpart K because their laboratories fit within the rationale of the hazardous waste generation pattern. Based on these comments and responses to follow-up letters to commercial research and development laboratories (copies of which are in today's docket), it appears that there is a similar hazardous waste generation pattern (i.e., small amounts of many different types of waste generated at multiple points of generation) as at laboratories at colleges and universities. However, there is little evidence of student presence in these laboratories as indicated in the follow-up responses from commenters and EPA's own research. Without the presence of students, commercial R&D laboratories do not have the same challenges in making hazardous waste determinations for their laboratory hazardous wastes and in training their laboratory personnel. Having similar hazardous waste generation patterns is

only one element in determining which entities should be eligible to opt into Subpart K. EPA believes that having a significant student presence in the laboratories (which increases the difficulty in training and in making hazardous waste determinations) is extremely important. Therefore, without meeting the rationale that a significant number of students must be present, EPA has decided not to allow commercial R&D laboratories to opt into Subpart K.

6. Non-Laboratory Facilities at Eligible Academic Entities

The Agency received many comments requesting that the rule address all types of facilities at a college or university where hazardous waste is generated, rather than limiting the rule to teaching and research laboratories. Commenters requested that non-laboratory areas, such as vehicle maintenance shops, machine shops, maintenance shops, fabrication units, athletic departments, power plants/energy generation units, print shops, and facilities operations be included in the scope of the final rule. Some commenters suggested that we include these areas by modifying the definition of laboratory to include them. Other commenters stated that creating a dual regulatory system for hazardous waste management on college or university campuses would hinder their participation in Subpart K and ultimately be confusing.

While the Agency understands the concerns raised by the commenters, we also believe that the Subpart K requirements were developed to address specific concerns raised by the academic community as they relate to hazardous wastes generated in their laboratories—that is, the situations and challenges that exist in teaching and research laboratories are unique (e.g., having to identify which of the potentially hundreds of different wastestreams meet the definition of hazardous waste). The academic community has not raised such concerns about the hazardous wastes generated outside of the laboratories. For this reason, we believe it is inappropriate to expand the scope of the rule beyond laboratories at eligible academic entities.

B. Discussion of Definitions

All of the definitions that appear in today's final rule are only for the purposes of 40 CFR part 262, Subpart K. Therefore, the definitions are relevant only to the eligible academic entities that have laboratories and choose to be subject to the provisions of today's final rule. This section discusses: (1) Those

definitions that were proposed and have not changed since the proposal; (2) those definitions that were proposed, but have been modified based on comments received on the proposal; and (3) any new definitions that are being added, based on modifications to the final rule or comments on the proposed rule.

1. Definitions That Have Not Changed From the Proposed Rule

The following definitions have not been changed from the proposal. In general, we received few comments on these definitions and the comments we received on these definitions were supportive. Refer to the preamble from the proposed rule for a detailed discussion of these definitions (71 FR 29722).

College/University means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

Laboratory clean-out means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor/occupant. A regularly scheduled removal of unwanted material as required by § 262.208 does not qualify as a laboratory clean-out.

Laboratory worker means a person who handles chemicals and/or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, post-doctoral fellows, interns, researchers, technicians, supervisors/managers, and principal investigators. A person does not need to be paid or otherwise compensated for his/her work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.

Commenters pointed out that the definition of "laboratory worker" in the preamble to the proposed rule differed slightly from the definition in the proposed regulatory text. In the definition included the regulatory text, the last sentence of the definition included the words "Undergraduate and graduate" when referring to students. However, the definition included in the preamble discussion omitted the words "Undergraduate and graduate." Today,

we are finalizing the definition, as it was proposed, so that the final sentence reads, "Undergraduate and graduate students in a supervised classroom setting are not laboratory workers."

It is worth noting that EPA would consider undergraduate or graduate students in an unsupervised research setting to be laboratory workers. Additionally, any student performing duties of a trained professional, such as transferring unwanted materials and hazardous wastes outside of a laboratory, would be considered a trained professional, rather than a student.

2. Definitions That Have Changed From the Proposed Rule

This section discusses comments on the definitions that were included in the proposed rule, as well as the changes that have been made to these definitions in today's final rule.

Central accumulation area—The Agency proposed to define "central accumulation area" as: an on-site hazardous waste accumulation area subject to either § 262.34(a) of this Part (large quantity generators) or § 262.34(d) of this Part (small quantity generators). A central accumulation area at a college or university that chooses to be subject to this subpart must also comply with § 262.211 when accumulating unwanted material.

The Agency has made three minor changes to the proposed definition of central accumulation area (CAA). First, we added a reference to the hazardous waste accumulation area regulations that are applicable to Performance Track members. There are currently three Performance Track members that would likely qualify as eligible academic entities (the MD Anderson Cancer Center, the University of Texas Medical Branch, and Washington State University), and we did not intend to imply that these eligible academic entities could not opt into Subpart K when we omitted a reference to the hazardous waste accumulation area regulations of § 262.34 that pertain to them.

The second change is to make more complete the reference to the hazardous waste accumulation area regulations for SQGs. The proposed definition referred only to § 262.34(d), which among other things, allows 180 days or less for the on-site accumulation of hazardous waste. However, SQGs also have the option of complying with § 262.34(e), which allows them to accumulate hazardous waste on-site for 270 days or less, if they must send their hazardous waste more than 200 miles for treatment, storage or disposal. In

addition, SQGs are subject to § 262.34(f), which states that if more than a total of 6000 kg of hazardous waste is accumulated on-site, the generator is a storage facility that is subject to the requirements for TSDFs. The third change was made to reflect the expansion of the applicability of the final rule beyond colleges and universities to eligible academic entities.

The definition of "central accumulation area" in the final rule is:

an on-site hazardous waste accumulation area subject to either § 262.34(a) (or 262.34(f) and (k) for Performance Track members) of this part (large quantity generators); or § 262.34(d)-(f) of this part (small quantity generators). A central accumulation area at an eligible academic entity that chooses to be subject to this subpart must also comply with § 262.211 when accumulating unwanted material and/or hazardous waste.

Laboratory—The Agency proposed to define "laboratory" as:

an area within a college or university where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research purposes and are stored and used in containers that are easily manipulated by one person. An area where the same hazardous wastes are routinely generated, such as photo processing, is not a laboratory.

In response to comments and as a result of the expansion of scope of the final rule, the Agency has made several changes to the definition of laboratory. Specifically, the Agency has made two changes to reflect the expansion of scope, as discussed in section III.A of today's preamble. The first is to change the phrase "colleges and universities" to the phrase "eligible academic entities." The second change is to indicate that clinical diagnostic laboratories at teaching hospitals are included within the scope of the final rule, as well as teaching and research laboratories at all eligible academic entities. This change is being made due to the expansion of the scope to include teaching hospitals.

As discussed in section III.A.2 of today's preamble, the Agency believes, and commenters have supported the conclusion, that it is the research laboratories at a teaching hospital that are most similar to laboratories at colleges and universities in their hazardous waste generation patterns. However, we realize that it would be confusing and difficult for institutions to implement today's rule if the research laboratories at a teaching hospital were allowed to operate under Subpart K, but diagnostic laboratories at the same teaching hospital were not allowed to operate under Subpart K. In fact, some commenters have indicated that in

many cases at teaching hospitals, it is not possible to distinguish a research laboratory from a clinical laboratory because they share physical space and staff. Therefore, the Agency has amended the definition of laboratory to include clinical diagnostic laboratories at teaching hospitals so that unwanted materials from all of the laboratories at a teaching hospital can be managed under the same management standards.

In addition, in response to numerous comments, the Agency has deleted the last sentence from the proposed definition of laboratory: "An area where the same hazardous wastes are routinely generated, such as photo processing, is not a laboratory." The reason the Agency originally included this statement in the proposed definition is that part of our basis for proposing this rule is that laboratories at colleges and universities, unlike other types of hazardous waste generators, generate many different types of wastes that vary over time. However, based on the comments received, we believe it is no longer appropriate to include this sentence for the following reasons. First, comments indicated that some photo laboratories do, in fact, generate many wastestreams that vary over time—this is especially true when the photo laboratories are art studios where students may be experimenting with different photographic techniques, such as daguerreotype and calotype finishing.

Second, commenters pointed out that it is not unusual for an individual research laboratory to generate the same hazardous waste routinely for lengthy periods of time, as it focuses on a single area of research. Additionally, commenters pointed out that teaching laboratories can have an experiment that is part of the ongoing curriculum and that generates the same hazardous wastes each semester. We did not intend to create a system whereby some laboratories at the eligible academic entity would be eligible and some would not, based on the hazardous waste generation pattern of each individual laboratory. To the contrary, for ease of implementation and enforcement, if the eligible academic entity chooses to be subject to Subpart K, the Agency is requiring that all laboratories covered under an individual EPA Identification Number must operate under those provisions. Therefore, we believe that it is sufficient that an eligible academic entity's laboratories, as a category, rather than each laboratory, generate many different wastes every day.

Third, based on comments and follow-up discussion, we now understand that in many cases photo

processing takes place alongside teaching and research and that it would be difficult to regulate differently the various laboratory operations, as the same students and laboratory workers operate in both areas. Therefore, we have revised the definition of laboratory to include photo laboratories.

The Agency also received many comments suggesting that the definition of laboratory should include chemical stockrooms, preparatory laboratories and other areas ancillary to the laboratory. EPA agrees with these commenters that the definition of laboratory should include chemical stockrooms and preparatory laboratories and other areas that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals). The reason for this change is that the operation of these areas is well integrated with the operation of the laboratories; that is, they are often in close proximity to the laboratories, and share laboratory personnel, and thus should properly be viewed as part of the laboratory. Chemical stockrooms that are not associated with laboratory operations would not, however, be eligible to operate under Subpart K. For example, a chemical stockroom that stores cleaning chemicals or pesticides for maintenance at the facility would not be providing a support function to a laboratory and would not be considered a laboratory that is allowed to operate under Subpart K.

The Agency also agrees with commenters that field laboratories should be considered laboratories because we agree that field laboratories, like other laboratories under this rule, exhibit similar hazardous waste generation patterns. By considering field laboratories as laboratories, laboratory workers would thus only need to operate under one set of hazardous waste regulations. However, if the field laboratory is off-site and/or has a separate EPA Identification Number from the rest of the campus, the eligible academic entity must notify separately that the field laboratory will be subject to Subpart K. In the proposal, we stated that we expected many field laboratories to be CESQGs, which under the proposal were not eligible to opt into Subpart K. Commenters confirmed that many field laboratories are, indeed, CESQGs. Therefore, with the modifications that the Agency is making in today's rule regarding the eligibility of CESQGs and the definition of "laboratory," field laboratories, whether they are located on-site or off-site from the rest of the eligible academic entity, would be allowed to operate under the

Subpart K requirements. See Section III.C.9 regarding the implementation of Subpart K at CESQG sites.

Furthermore, a number of commenters agreed with the Agency's position that art studios at eligible academic entities should be considered laboratories, despite the fact that they are rarely referred to as laboratories. These commenters confirmed that art studios have similar hazardous waste generation patterns as scientific laboratories, and, like other classroom settings, have students generating much of the hazardous waste. Therefore, the definition has been changed to clarify that the Agency considers art studios to be laboratories for the purposes of Subpart K.

Finally, we proposed that a "laboratory" is "an area within a college or university * * *". We received comments suggesting that we modify the definition of laboratory to be "an area under the administrative or managerial control of a college or university * * *". However, this terminology is not currently used or defined under RCRA. The Agency agrees that the definition should be more specific and we have incorporated into today's definition of "laboratory" a similar concept as suggested by the commenters. However, we have relied on terminology that is already used and defined in RCRA. Specifically, under today's final rule, a laboratory is "an area that is owned by an eligible academic entity * * *". Therefore, in today's preamble and final rule, when we use the term laboratory, we are referring to laboratories that are owned by an eligible academic entity.

To be eligible to opt into today's final rule, an institution first must meet the definition of "eligible academic entity." That is, it must be a college or university, or a non-profit research institute or teaching hospital that is owned by or has a formal written affiliation agreement with a college or university, as these terms are defined in today's rule. Second, an eligible academic entity may opt into Subpart K for the laboratories that it owns. Therefore, government facilities with laboratories that are operated by colleges and universities (such as many of the Department of Energy's laboratories) would not be eligible to opt into Subpart K, because the government facility is not an eligible academic entity and the laboratories are not owned by an eligible academic entity.

For the reasons discussed above, today's final rule defines "laboratory" as follows:

an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

Reactive acutely hazardous unwanted material—The Agency proposed to define "reactive acutely hazardous unwanted material" as:

an unwanted material that is one of the acutely hazardous commercial chemical products listed in § 261.33(e) for reactivity and toxicity.

At proposal, the Agency intended to maintain more stringent regulations in the laboratory for the "P-listed" commercial chemical products that are listed for reactivity because of their high potential for causing immediate harm. In the preamble to the proposed rule, we provided a list of seven commercial chemical products that we believed met this definition:

- (1) P006 (CAS Number: 20859-73-8) Aluminum phosphide;
- (2) P009 (CAS Number: 131-74-8) Ammonium picrate; Pheno, 2,4,6-trinitro-, ammonium salt;
- (3) P042 (CAS Number: 51-43-4) 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl];
- (4) P065 (CAS Number: 628-86-4) Fulminic Acid, mercury(2+) salt; Mercury fulminate;
- (5) P081 (CAS Number: 55-63-0) Nitroglycerine; 1,2,3-Propanetriol, trinitrate;
- (6) P112 (CAS Number: 509-14-8) Methane, tetranitro-; Tetranitromethane; and
- (7) P122 (CAS Number: 1314-84-7) Zinc phosphide Zn₃P₂ when present at concentrations greater than 10%.

Many commenters correctly pointed out that P042 (CAS Number 51-43-4) 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, which is actually Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-, (and is also known as epinephrine) is not listed on the "P-list" because of reactivity. They pointed out that the (R)- following the listing for P042 refers to the R enantiomer of the chemical and does not refer to the reactivity characteristic. The Agency acknowledges that the commenters are, indeed, correct, and if epinephrine were an unwanted material in a laboratory, it would not meet the

definition of reactive acutely hazardous unwanted material. EPA's acknowledgment is simply a matter of clarification and does not affect the definition as proposed.³

Many commenters also correctly pointed out that three of the chemicals on the list above are listed only for reactivity (P009, P081, P112), and not for toxicity and, therefore, do not meet the definition of reactive acutely hazardous unwanted material, as proposed. While the commenters are correct that P009, P081, and P112 are listed only for reactivity, we believe that the proposal was clear as to the Agency's intent—that a "reactive acutely hazardous unwanted material" includes those chemicals included on the P-list for reactivity, and that some of those chemicals were listed for toxicity, as well. The wording of the proposed definition, however, did not convey that clearly. Therefore, we are revising the definition of "reactive acutely hazardous unwanted material" to be consistent with the intent discussed in the preamble, by omitting the reference to toxicity, as follows:

an unwanted material that is one of the acutely hazardous commercial chemical products listed in § 261.33(e) for reactivity.

Trained professional—The Agency proposed to define a "RCRA-trained individual" as:

a person who has completed the applicable RCRA training requirements of § 265.16 for large quantity generators, or § 262.34(d)(5)(iii) for small quantity generators. A RCRA-trained individual may be an employee of the college/university or may be a contractor or vendor.

The Agency is replacing the term "RCRA-trained individual" with "trained professional." This does not affect the substance of the definition, but is merely a change in terminology since Subpart K is part of the RCRA hazardous waste regulations and including "RCRA" as part of the term is unnecessary and may, in fact, imply that anyone who is trained under Subpart K is not "RCRA" trained.

In addition, because the final rule has been expanded to include eligible academic entities that include CESQG sites or that are themselves CESQGs, we have added to the definition of "trained professional" a requirement that a trained professional at an eligible academic entity that is a CESQG must be trained in accordance with the SQG training requirements of

³ The Agency has recently issued a memo clarifying that the scope of the P042 listing does not include epinephrine salts (see memo from Hale to EPA Regions, October 15, 2007, RCRA Online # 14778).

§ 262.34(d)(5)(iii). As discussed in more detail in Section III.C.4 of today's preamble, the hazardous waste determination and on-site transfers of unwanted materials outside the laboratory must be performed by trained professionals (also see § 262.207). The proposed definition of "RCRA-trained individual" (which is re-named "trained professional" in today's final rule) relied on references to the existing generator training requirements, which vary based on generator status. The existing CESQG regulations, however, do not include training requirements. It would be counter to the intent of today's rule to allow CESQGs opting into Subpart K to have untrained personnel making the hazardous waste determination and transferring unwanted materials outside the laboratory. Therefore, today's final rule requires that trained professionals at eligible academic entities that are CESQGs must be trained in accordance with the SQG training requirements.

Finally, because the applicability of the final rule has been broadened beyond colleges and universities, the Agency has modified the definition of "trained professional" accordingly, as follows:

a person who has completed the applicable RCRA training requirements of § 265.16 for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with § 262.34(d)(5)(iii) for small quantity generators and conditionally exempt small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

Unwanted material—The Agency proposed to define "unwanted material" as:

means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that are no longer needed, wanted or usable in the laboratory and that are destined for hazardous waste determination by a RCRA-trained individual. Unwanted material includes reactive acutely hazardous unwanted materials. Unwanted material includes material that may eventually be determined not to be solid waste pursuant to § 261.2 or a hazardous waste, pursuant to § 261.3.

The Agency has made two changes to the definition of unwanted material. The first is to reflect the change from the term "RCRA-trained individual" to "trained professional." The second change is to reflect the additional flexibility that we have added to the final rule that allows an eligible academic entity the option of using another "equally effective term" in lieu of the term "unwanted material." In the

preamble and the regulations, the Agency continues to use the term, "unwanted material," but an eligible academic entity that opts into Subpart K may use another term if it chooses, provided the term is used consistently and is identified in its LMP. Regardless of the term that is used, however, it will have the same meaning as found in the definition for unwanted material, and it will be subject to the same requirements under Subpart K. This additional flexibility allowed for using another term in lieu of "unwanted material" is discussed in more detail in preamble section III.C.2 (also see § 262.206).

For the reasons discussed above, today's final rule defines "unwanted material" as:

any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to § 261.2, or a hazardous waste pursuant to § 261.3. If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," as allowed by § 262.206(a)(1)(i), the equally effective term has the same meaning and is subject to the same requirements as "unwanted material" under this subpart.

3. Definitions That Are New

The definitions discussed in this section of today's preamble are those definitions that have been developed and added since the proposal. All new definitions, except one, pertain to the expansion of the scope to other eligible academic entities.

Eligible academic entity—Today's final rule defines "eligible academic entity" as:

a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

Since we have expanded the scope of the final rule to allow non-profit research institutes and teaching hospitals that are either owned by or have a formal written affiliation agreement with a college or university to opt into Subpart K, we believe it is appropriate to add a new term to refer to these types of institutions collectively.

Incorporated in the definition above is the concept that teaching hospitals and non-profit research institutes must be either owned by or have a formal

written affiliation agreement with a college or university. As explained in section III.A. of today's preamble, we are requiring a formal written affiliation agreement with a college or university because the affiliation indicates that an entity is integrated with the college or university and that the entity has a significant transient student presence. Our research also demonstrated that in some instances, a teaching hospital or non-profit research institute is owned by a college or university. We assume that if a non-profit research institute is owned by a college or university it would not have a formal written affiliation agreement. Similarly for teaching hospitals, we assume that a formal written affiliation agreement, defined below for teaching hospitals as a master affiliation agreement and program letter of agreement, would not exist when the teaching hospital is owned by the college or university. Thus, this definition allows teaching hospitals and non-profit research institutes that are located on-campus or off-campus to opt into this rule, provided they are owned by or have a formal written affiliation agreement with a college or university.

Formal written affiliation agreement—Today's final rule defines "formal written affiliation agreement" as:

for a non-profit research institute means a written document that establishes a relationship between institutions for the purposes of research and/or education and is signed by authorized representatives, as defined by § 260.10, from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement. A formal written affiliation agreement for a teaching hospital means a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

For non-profit research institutes, "formal written affiliation agreement" is defined in a manner to reflect the importance of having an official legal written agreement documenting the affiliation, partnership, collaboration, or association between the non-profit research institute and a college or university. In order for a non-profit research institute to be eligible to opt into Subpart K, it must have this documentation.

The Agency is requiring that this agreement be signed by authorized representatives with the authority to obligate the institution as a whole. The term "authorized representative" is already defined in 40 CFR 260.10 as "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." The Director or Chief Executive Officer (CEO) of a non-profit research institute and the President or Dean of a college or university, among others, would be considered authorized representatives.

The Agency also stresses that the formal written affiliation agreement must be between the institutions: The non-profit research institute and the college or university. This agreement is intended to represent a long-standing collaboration between the two institutions rather than simply a relationship between two principal investigators or researchers, working jointly for the duration of a particular project or grant. An example of what we would consider to be an affiliation at the institutional level includes being a member of a research consortium with colleges and universities. For instance, the Southwest Research Institute is a member of the Southwest Research Consortium which combines the research capabilities of nine research and educational organizations, including the University of Texas at San Antonio, Trinity University, and St. Mary's University. Another example of what we would consider an institutional-level affiliation agreement is when there are joint faculty appointments on a departmental or other large-scale basis. For instance, Seattle Biomedical Research and the University of Washington have a formal affiliation where all researchers at Seattle Biomedical Research are also faculty members at the University of Washington. A third example of what we would consider an institutional-level affiliation agreement is when a non-profit co-sponsors degrees with a college or university. For instance, Fred Hutchinson Cancer Research Center and the University of Washington jointly administer or co-sponsor a Ph.D. program in Molecular and Cellular Biology. Thus, EPA developed this definition to be broad to encompass the various working situations that we understand to be currently in existence.

For the definition of formal written affiliation agreement for teaching hospitals, EPA researched definitions and terms to describe the concept of "affiliated teaching hospitals," such as "academic health centers," "major teaching hospital," and "university teaching hospital." We quickly discovered that an industry-wide standard term for referring to teaching hospitals affiliated with colleges and universities does not exist. Without a standard definition, we looked into how

college or university medical schools are linked with hospitals. We learned that the ACGME has established a mechanism for medical schools to send residents to hospitals that are not part of the medical school. In such cases, ACGME requires a master affiliation agreement and a program letter of agreement between the medical school and the teaching hospital. Since the ACGME defines these two types of agreements and requires them in certain arrangements between teaching hospitals and colleges and universities, and since the industry already follows and understands these agreements, we have decided to refer to these agreements in the definition of "formal written affiliation agreement" for teaching hospitals in this rule.

Non-profit research institute—Today's final rule defines "non-profit research institute" as:

an organization that conducts research as its primary function and files as a non-profit organization under the tax code of 26 U.S.C. 501(c)(3).

EPA's definition, which refers to a well-known, existing definition under the tax code of 26 U.S.C. 501(c)(3), is intended to make the definition as clear as possible, as well as easy for implementers and inspectors to verify. We are emphasizing through this definition that not every non-profit organization is eligible to opt into the Subpart K requirements. Rather, the non-profit must conduct research as its primary function. We require this because, as explained in sections II.B and III.A of this preamble, research laboratories, as a category of laboratories, have a hazardous waste generation pattern that fits within the rationale of today's final rule. Further, as discussed above, the non-profit research institute must either be owned by a college or university or have a formal written affiliation agreement with a college or university in order to be eligible to opt into this rule.

Teaching hospital—Today's final rule defines "teaching hospital" as:

a hospital that trains students to become physicians, nurses or other health or laboratory personnel.

EPA believes it is important to capture the basic purpose of a teaching hospital in this definition: training students in medicine. A teaching hospital will train nursing students, medical residents, technicians, and others in the laboratories at the hospital's facilities ensuring that teaching hospitals fit within a key aspect of the rationale of today's rule: a significant transient student presence in the laboratories. In addition, the

teaching hospital must either be owned by a college or university or have a formal written affiliation agreement with a college or university in order to be eligible to opt into this rule.

Working container—The Agency did not include a definition of "working container" in the proposed rule. In the preamble to the proposed rule, however, we did discuss a possible definition for working container and solicited comment on whether the final rule should include such a provision. The definition of "working container" in the preamble to the proposed rule was:

A small container (of one gallon or less), managed under the control of a laboratory worker and used at a bench or work station, whose contents are emptied into a container of unwanted material at the end of the procedure.

There generally was broad support among commenters for including a definition of working container in the final rule. A number of commenters suggested, however, that the Agency increase the maximum size limit of a working container to five gallons. Since one gallon is equal to 3.78 liters, the one-gallon limit discussed in the preamble to the proposed rule would have precluded the use of four-liter solvent bottles as working containers. The Agency believes that a 5-gallon limit for working container is too large to be appropriate despite suggestions from commenters. Given that water weighs 8.34 pounds per gallon, a full 5-gallon container would weigh in excess of 40 pounds, which may be pushing the limits of what can be easily manipulated by one person (without the aid of equipment or other devices). This is especially true considering that the contents of many working containers will be transferred to other containers for disposal.

Nevertheless, the Agency does agree that since 4-liter solvent bottles are commonly used as collection containers in laboratories and are easily manipulated by one person, even if full, the Agency believes a two-gallon limit for working containers is more appropriate. Furthermore, two gallons is consistent with an interpretive letter signed by both Region I and the State of Massachusetts (September 2004; a copy of which is in today's docket), that originally introduced the concept of a working container under RCRA. Therefore, in response to these comments, the Agency has increased the maximum size of a working container to two gallons. The Agency is not limiting the type of containers that can be used as working containers. Thus, the types of containers that we would expect to be

used as working containers are beakers, flasks, bottles, and other types of containers typically used in a teaching or research laboratory.

The Agency also has deleted from the definition of working container that appeared in the preamble to the proposed rule the requirement for the contents of a working container to be emptied into a container of unwanted material at the end of a procedure. We believe it is more appropriate to include any management standards for working containers in § 262.206(b), which addresses the management standards for all containers.

Finally, the Agency has added to the definition that working containers are those that are used to collect "unwanted material." The Agency believes that this modification is necessary in order to distinguish "working containers" from other containers used during an experiment or procedure that may contain product and are not subject to the RCRA Subtitle C regulations. See section III.C.3 of today's preamble for a detailed discussion of the container management standards that apply to working containers (also see § 262.206).

The definition of "working container" in today's final rule is:

a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

C. Specific Requirements of the Alternative Regulations

Today's final Subpart K regulations will allow laboratories at eligible academic entities to send unwanted materials that are generated in the laboratory to an on-site CAA or an on-site TSD before making the hazardous waste determination for the unwanted materials, or to make the hazardous waste determination in the laboratory prior to its removal. However, the eligible academic entity must meet certain requirements such as notifying, complying with performance-based standards in the laboratory, and developing and implementing an LMP with nine required elements as described in the sections below.

1. Notification

Because today's final rule provides eligible academic entities the option to manage their hazardous wastes from laboratories under the existing generator regulations or their laboratories' unwanted materials under today's provisions, it is important that EPA, or the authorized State, know to which set of regulations an eligible academic entity's laboratories are subject.

Therefore, this rule requires that an eligible academic entity choosing to manage its unwanted materials in compliance with the alternative set of generator requirements being promulgated today submit a one-time notification to the appropriate EPA Regional Administrator or, when appropriate, State Director in authorized States that have adopted the final rule. Should an eligible academic entity decide not to opt into Subpart K, it will continue to operate under the existing generator regulations and there is no need to notify.

EPA proposed that the notification be provided by letter, but requested comment on whether the RCRA Subtitle C Site Identification Form (EPA Form 8700-12; or Site Identification Form) should be used to provide this notice, and whether the form should be modified to include a checkbox to indicate that a college or university is choosing to be subject to Subpart K. One commenter pointed out the advantage to using a letter would be to allow a college or university to submit one notice for several sites with different EPA Identification Numbers. However, most commenters supported the option of using the Site Identification Form to notify EPA (or the authorized State) regarding their decision to manage laboratory hazardous waste under the Subpart K requirements. The commenters noted that the regulated community is already familiar with this form and the form requires much of the necessary information required by the notification requirement that was proposed under Subpart K, such as name of the facility, address, and EPA Identification Number. Further, most commenters agreed that by using the Site Identification Form, there would be increased consistency in reporting. When eligible academic entities notify by Site Identification Form, the information is included in the RCRAInfo database, which provides an additional benefit of being able to monitor the extent to which eligible academic entities are taking advantage of this new Subpart.

Based on these comments, EPA is requiring the use of the Site Identification Form for notification of opting into, as well as withdrawing from Subpart K. In order to use this form for this purpose, we will be modifying the Site Identification Form to include a checkbox for an eligible academic entity to indicate what type of entity it is (i.e., a college or university, or a teaching hospital or a non-profit research institute that is either owned by or has a formal written affiliation agreement with a college or university) and that it

is choosing to be subject to the 40 CFR part 262, Subpart K requirements.⁴ There is also a checkbox for an eligible academic entity to indicate that it is withdrawing from the Subpart K requirements, if after having decided to be subject to Subpart K, it determines it would prefer to be regulated under the existing hazardous waste generator standards.

Since we are requiring the use of the Site Identification Form, an eligible academic entity will have to submit one Site Identification form for each EPA Identification Number, or site as defined by RCRA.⁵ Thus, if the eligible academic entity is composed of multiple sites (i.e., it has multiple EPA Identification Numbers) and all its sites will operate under Subpart K, separate Site Identification Forms must be submitted for each site. For example, if an urban college or university composed of multiple sites divided by public roads wants all of its laboratories to operate under Subpart K, the college or university must notify the appropriate authority that each of its sites is going to be subject to 40 CFR part 262, Subpart K by submitting a Site Identification Form for each distinct site (i.e., EPA Identification Number) opting into today's rule.

As indicated in the example above, an eligible academic entity can be composed of multiple sites because of the way RCRA defines "on-site." We believe that where this is the case, the eligible academic entity will choose to have all its sites at a single campus opt into Subpart K. This would allow eligible academic entities to have a unified institution-wide hazardous waste management system for all its laboratories on campus, which is one of the highest priorities for Subpart K cited by the academic community in their public comments. However, since a campus or institution opts in for each individual site, via EPA Identification Number, there is nothing in today's rule

⁴ If an eligible academic entity chooses to opt into Subpart K prior to the completion of the revisions to the Site Identification Form (8700-12), it should indicate in the comment field of the form what type of eligible academic entity it is and that it is opting into Part 262 Subpart K.

⁵ RCRA 40 CFR part 260.10 defines, "on-site" to mean the same or geographically contiguous property which may be divided by public or private right-of-way provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person, but connected by a right-of-way which he controls and to which the public does not have access, is also considered on-site property. For further interpretations, see Memo, Shapiro to Wojdyla; May 1, 1986, (RCRA Online #14031), a copy of which is in today's docket.

that requires an eligible academic entity to have all of its separate sites opt into the Subpart K requirements. Thus, by not requiring that all the sites with different EPA Identification Numbers at an eligible academic entity opt into this rule together, we are providing additional flexibility for the eligible academic entity to determine the best hazardous waste management practices for its facility.

Teaching hospitals and non-profit research institutes, as defined in this rule, may be located on a college or university campus or located nearby. In rare instances, they may even be located in a separate State from the college or university with which they are affiliated. Since eligible academic entities opt in by filling out the Site Identification Form, a teaching hospital or non-profit research institute that has a separate EPA Identification Number from a college or university must decide independently whether it wants to opt into today's final rule. When a teaching hospital or non-profit research institute is owned by or formally affiliated with a college or university and located on campus, it does not have to opt in when the college or university opts in, if it is a separate site or has a separate EPA Identification Number, although, as noted above, we believe that teaching hospitals and non-profit research institutes will likely opt into Subpart K, if the colleges or universities with which they are affiliated opt in, to create a more integrated laboratory waste management system on campus.

As explained above, while not all the sites of an eligible academic entity must choose to be subject to today's rule, we continue to stress that all laboratories owned by the eligible academic entity within one EPA Identification Number must comply with the same set of regulations. In other words, the alternative approach cannot be applied to only one or a few laboratories within that EPA Identification Number, but rather must apply to all laboratories or no laboratories. The reason for this is that EPA believes it would be difficult for an eligible academic entity to keep track of which set of generator regulations apply to which laboratory or group of laboratories. Moreover, it would be extremely difficult, if not impossible, for the States or Regions to keep track of the applicable set of regulations if, within a single EPA Identification Number, different laboratories were choosing to be regulated under different requirements. No mechanism currently exists at EPA or the States to track such distinctions.

The required notice must be submitted to the appropriate EPA

Regional Administrator (or State Director in authorized States that adopt the final rule). At all times, an eligible academic entity's laboratories must comply with either the existing hazardous waste generator regulations or the Subpart K regulations. Once an eligible academic entity notifies by Site Identification Form that it is opting into Subpart K, EPA expects that the site will be in compliance with the Subpart K requirements. Therefore, we strongly suggest that an eligible academic entity prepare its LMP and ready its facilities for the Subpart K laboratory hazardous waste management system before it submits a Site Identification Form to the EPA Regional Authority (or State Director in authorized States). Further, an eligible academic entity may, for example, want to train its employees in the Subpart K labeling requirements and container management standards before notifying. In addition, an eligible academic entity may want to contact its hazardous waste vendors to prepare the vendor for the eligible academic entity's switch to Subpart K.

It is also possible that after an eligible academic entity has chosen to manage its unwanted materials under the Subpart K regulations and has gained some experience with the program, it may decide that this approach is not meeting its needs, and that it would prefer to return to regulation under the now existing applicable generator regulations, 40 CFR part 262 (or 40 CFR 261.5 for CESQGs). Under this final rule, an eligible academic entity that chooses to end its participation in the Subpart K program would be required to submit another Site Identification Form to the EPA Regional Administrator (or State Director in authorized States) checking the box for withdrawing from 40 CFR part 262, Subpart K. Then, the eligible academic entity's laboratories would no longer be subject to Subpart K and would be subject to the existing applicable generator regulations. Once the Agency receives the Site Identification Form from the eligible academic entity indicating that it is withdrawing from the Subpart K program, the Agency expects that the eligible academic entity will be in compliance with the 40 CFR part 262 applicable generator requirements (or 40 CFR 261.5 for CESQGs).

Finally, EPA sought comment on whether the Regional Administrator (or State Director in authorized States) should provide the eligible academic entity with a written receipt of the one-time notice before it could manage its unwanted materials in accordance with the Subpart K requirements. Most commenters did not want to wait for

EPA or the State to provide a written receipt of the one-time notice before managing their unwanted materials under these alternative generator requirements; they argued that it would cause delay and confusion. Other commenters pointed out that many States already respond in writing when the Site Identification Form is received. Therefore, we are not requiring that the Regional Administrator (or State Director in authorized States) provide a written receipt of the one-time notice before the eligible academic entity can manage its unwanted materials under the Subpart K requirements. (For more information on how CESQGs notify, see section III.C.9 and § 262.203.)

2. Labeling Standards

Because today's rule provides laboratories owned by eligible academic entities with flexibility in where and when to make the hazardous waste determination, labeling requirements for unwanted materials in the laboratory are needed. For example, labeling is critical to ensure that non-laboratory personnel, such as firefighters can quickly ascertain the hazardous materials that are in the laboratory in case of an emergency. In order to provide the necessary information to laboratory personnel, EH&S staff, inspectors, emergency responders, and others, today's rule includes performance-based labeling requirements that are informative, yet flexible to fit the varying situations at eligible academic entities.

The labeling requirements in the proposed rule consisted of two sets of performance-based labels. First, the proposal required that a label be affixed to or physically accompany the container of unwanted material. This label was intended to convey the most essential information that one needs to know about the contents of the container in an emergency situation. It also was intended to convey the notion that "unwanted material" was no longer wanted in the laboratory. Thus, the proposal required that this label include the words "unwanted material," as well as sufficient information to alert emergency response personnel to the container's hazards or contents.

The second part of the proposed labeling requirements provided flexibility by allowing information to be "associated with the container." We proposed that this label contain sufficient information for the RCRA-trained professional (which has been changed to trained professional in today's final rule) to make the hazardous waste determination. At a minimum, the information "associated" with containers of unwanted materials

was intended to ensure that a hazardous waste determination of the contents can be made by a trained professional. Additionally, the proposal required that the date when the unwanted materials first began accumulating in the container be associated with the container, so that EH&S staff or other trained professionals would know when to remove the containers of unwanted materials from the laboratory. The preamble to the proposed rule indicated that the accumulation start date and information sufficient to make a hazardous waste determination could be on the label that is affixed to or physically accompanies the container, but must, at a minimum, be associated with the container.

In the preamble to the proposed rule, we discussed examples of how the required information might be "associated" with a container. One example is that laboratory personnel could number containers of unwanted material and create an accompanying spreadsheet containing sufficient information to identify the material for each numbered container of unwanted material that would be given to the trained professional to make the hazardous waste determination. Another example is that laboratories could affix a bar code to each container of unwanted material that when scanned would provide the necessary information to make the hazardous waste determination of the unwanted material. Alternatively, laboratory personnel might choose to include a printed inventory of the unwanted materials and the associated information for each container that would provide the necessary information for a trained professional to make the hazardous waste determination.

The Agency received a large number of comments from academia in support of the performance-based labeling requirements in lieu of prescriptive requirements. In keeping with the original intent of the rulemaking, today's final rule maintains the performance-based two-tiered labeling structure; however, we have revised the labeling requirements to take into account public comments received on the proposal.

Specifically, we have revised the proposed labeling requirements in today's final rule to clarify that the first part of the labeling requirement requires the label to be "affixed or attached to" the container of unwanted material rather than be "affixed to or physically accompany" the container. We believe this modified language provides clarity and ensures that, during the accumulation period in the laboratory or

during on-site transfer, the identifying information will not be inadvertently separated from a container of unwanted material and thus the contents of any container can be quickly identified in an emergency situation. Examples of labels that are "affixed or attached to" containers of unwanted materials are stickers that have been affixed on the container by adhesive, or labels that are attached to a small container of unwanted material (i.e., too small for an adhesive label) by wire or a piece of tape.

Many commenters expressed concern about the proposed requirement to label containers with the words "unwanted material," preferring a more flexible labeling requirement. As one commenter stated, "The purpose of adding an additional label [unwanted material] to a reagent chemical container, for instance, is to differentiate it from others that a lab still wants or needs in their work so that the pickup crew or contractor knows which containers to take. The exact terminology is not important to meeting this goal." In response to this and other similar comments, in the final rule, we are requiring that containers be labeled with the words "unwanted material" or another "equally effective term" that is used consistently by the eligible academic entity and is identified in Part I of the eligible academic entity's LMP. Examples of an "equally effective term" include, but are not limited to, "laboratory waste" or "chemical lab waste." We believe this approach is responsive to the comments in that it provides each eligible academic entity with flexibility, yet conveys the basic information that the material is no longer needed or wanted in the laboratory. To this end, if an eligible academic entity elects to use another equally effective term in lieu of "unwanted materials," that term must address and have the same meaning as "unwanted material," and is subject to the same requirements in Subpart K for "unwanted material." Additionally, if an eligible academic entity chooses to use an equally effective term instead of "unwanted materials," the eligible academic entity must use the term consistently in all its laboratories that are covered by its LMP. It would not be acceptable for each laboratory at an eligible academic entity to be free to use its own term of choice because the use of different terms at the same eligible academic entity would cause confusion for implementers and enforcers.

A number of commenters opposed the proposed requirement that the label that is "affixed to or physically accompany" the container provide sufficient

information to alert emergency responders to the contents or the hazards of the container, arguing that the requirement is unnecessary and burdensome.⁶ EPA disagrees with these comments and believes that maintaining this information is necessary to protect the safety of workers, students, emergency responders, and others that may come into contact with containers of unwanted materials. For safety purposes, emergency responders need to have a quick way to assess the contents of a container. However, we understand that at least part of the concern was the use of the term "hazards," in that it caused some confusion among commenters, many of whom thought that the Agency was proposing to require Department of Transportation (DOT) hazard classes or National Fire Protection Agency (NFPA) chemical hazard labels to be on the label that must be "affixed to or attached to" the container. This was not the Agency's intent. To address this misunderstanding in today's final rule, we have clarified the requirement that the label contain sufficient information to alert emergency responders to the contents of the container. This performance-based standard could be met by including information, such as the name of the chemical(s) in the container or, alternatively, a descriptive phrase, such as "inorganic solvents," "halogenated organic solvents," or "water reactive chemicals." This requirement is flexible, yet provides sufficient information to emergency responders in an easily understandable manner that would allow them to ascertain the potential dangers associated with the contents of containers in the laboratory, while being protective of health and safety.

As proposed, today's final rule requires that each container of unwanted material must have associated with the container the date that the unwanted material begins accumulating and information sufficient to make a hazardous waste determination. We are allowing this information to be "associated with" the container, as opposed to requiring that it be "affixed or attached to" the container, in order to facilitate the use of technology in conveying this information. This could be done using an electronic spreadsheet, a bar code, or some other printed inventory of containers (see previous examples of "affixed or attached to" or

⁶ As discussed previously, the requirement that the label be "affixed to or physically accompany" the container has been changed in the final rule to that the label must be "affixed or attached to" the container.

"associated" labels). We also point out that this labeling requirement maintains the flexibility of the proposed rule, such that an eligible academic entity can use the container labeling approach that works best for the institution. That is, while it is acceptable to have the accumulation start date and information sufficient to make a hazardous waste determination "associated with" the container, some eligible academic entities may prefer to have all required container labeling information in a single place. Therefore, it is also acceptable to place the accumulation start date and the information sufficient to make a hazardous waste determination on the label that is "affixed or attached to" the container. We have reworded the container labeling regulations accordingly to reflect the intended flexibility and to indicate that, at a minimum, the accumulation start date and information sufficient to make a hazardous waste determination must be "associated with" the container, but that it can be on the label that is "affixed or attached" to the container, if that is preferred.

Many commenters had concerns about the burden imposed by the requirement to associate the accumulation start date with containers of unwanted material because it is not required in the current satellite accumulation area regulations. We maintain that this requirement is necessary to ensure that accumulation time limits in the laboratory are complied with for containers of unwanted material. Some commenters argued that alternatively, EPA should add a requirement to log regular removals from each laboratory in lieu of the container "dating" requirement. We disagree with this comment because we believe that the suggested method would not provide the information necessary to verify that a particular container had not been accumulating unwanted material for more than six months in the laboratory and, therefore, would not allow EPA or an authorized State to determine whether the laboratory was in compliance with Subpart K. Therefore, the dating requirement for each container of unwanted material has been retained in today's final rule.

Finally, we have retained the requirement from the proposal that the label associated with the container must contain information sufficient to make a hazardous waste determination. As discussed above, this requirement provides flexibility to eligible academic entities in that this information can be on the label that is "affixed or attached to" the container, but it must at least be

on the label that is "associated with" the container. However, we stress that "information sufficient" to make a hazardous waste determination, whether that information is "associated with" or "affixed or attached to" containers of unwanted materials, must ensure that a hazardous waste determination of the contents can be made. Examples of information sufficient to make a hazardous waste determination include, but are not limited to: the name and/or description of the chemical contents or composition of the unwanted material, or, if known, the product of the chemical reaction, whether the unwanted material has been used or is unused, and a description of the manner in which the chemical was processed, if applicable.

In summary, today's rule finalizes the proposed performance-based two-tiered labeling structure, but has modified it to address a number of comments received on the proposal. The first part of the final labeling requirement consists of information that must be "affixed or attached to" the container. The information must consist of the words "unwanted material" or another equally effective term that is used consistently by the eligible academic entity and is identified in Part I of the eligible academic entity's LMP. Additionally, the label must contain sufficient information to alert emergency responders to the contents of the container. The second part of the final labeling requirement consists of information that must be "associated with" the container in some manner, which could include affixing or attaching it to the container. The information required includes the date that unwanted material first begins accumulating in the container, and information sufficient to allow trained professionals to determine whether the unwanted material is a solid and hazardous waste, as well as assign the proper hazardous waste code(s), pursuant to § 262.11. For more detail on specific labeling requirements for when volume limits are exceeded in the laboratory and after hazardous waste determinations are made, see section III.C.5, Removal Frequency of Unwanted Materials and Section III.C.6, Making the Hazardous Waste Determination, respectively.

3. Container Standards

When accumulating unwanted materials in the laboratory, proper container management is essential to protect human health and the environment. We proposed performance-based container management standards, requiring that

the containers be stored to prevent leaks, spills, emissions to the air, adverse chemical reactions, and to avoid dangerous situations that may result in harm to human health and the environment. The proposed container management standards also included two specific standards as a means to achieve these goals: (1) Containers must be kept in good condition and damaged containers must be replaced; and (2) containers must be compatible with their contents.

In the preamble to the proposed rule, we solicited comment on two alternative approaches for container management. First, we requested comment as to whether the rule should include more specific container management requirements in the regulations, potentially going beyond what was proposed. In the preamble, we included some examples of specific requirements we were considering, such as secondary containment and imposing a minimum safe distance for the storage of incompatibles. Another example that was discussed in the preamble was requiring that containers of unwanted material always be closed during storage, except for cases of in-line collection. An in-line collection system is a piece of laboratory equipment, such as a high performance liquid chromatograph (HPLC) that is directly connected to a container that collects unwanted material, including hazardous waste, typically by tubing. The tube carries the waste from the equipment directly into the container.

The second alternative approach for container management that we requested comment on was the concept of a "working container." In the preamble to the proposal, a working container was defined as a small container (one gallon or less), managed under the control of a laboratory worker and used at a bench or work station, whose contents are emptied into a container of unwanted material at the end of the procedure. Similar to the previous alternative, we indicated that if we added "working container" to the final rule, we would also add a more specific requirement that any container of unwanted material that does not fit the definition of working container, be closed at all times, except when necessary to add or remove unwanted materials.

We received many comments on the proposed container management standards. Most commenters were supportive of the performance-based container management standards in lieu of the more prescriptive standards. Commenters argued that performance-based container management standards

would allow them the flexibility to tailor the standards to laboratory-specific operations. On the other hand, a few State commenters preferred more prescriptive container management standards as they found them easier to enforce than performance-based standards. However, we decided to maintain the performance-based container standards because we believe they are protective of human health and the environment, while providing flexibility to eligible academic entities.

Today's rule finalizes the proposed container management standards with one minor change and adds a new requirement. The requirement that eligible academic entities must properly manage containers of unwanted material to assure safe storage of the unwanted materials, to prevent leaks, spills, emissions to the air, adverse chemical reactions, and dangerous situations that may result in harm to human health or the environment has remained the same from proposal. Similarly, containers must be compatible with their contents. A minor clarification was added to the requirement that damaged containers be replaced. Several commenters requested that the Agency add language clarifying that replacing damaged or degraded containers is not the only method of reducing their threat. We agree and have added the requirement in the final rule that damaged or degraded containers be replaced, overpacked, or repaired, in order to prevent releases of the container's contents into the environment. An example of overpacking a container is taking a damaged container of unwanted materials and placing it into a second container in good condition and then packing the second container with absorbent filler similar to the practice of lab-packing. An example of repairing a damaged container would be if a small leak appears in the cap of a container of unwanted material, and a laboratory worker covered the broken cap with a polymer film.

Many commenters also provided comments in support of the concept of a "working container," although a few commenters were opposed to allowing a "working container" in the final rule. Opponents believed that the approach is not protective of the environment, while supporters felt that the prescriptive requirement that containers be kept closed, except when adding or removing waste, which we said would be added if a working container provision were added to the final rule, is easier to enforce. In addition, commenters in support of adding a working container wrote that this concept "recognizes the fact that many unwanted laboratory

materials are actively accumulated in small containers at a bench, work station, or fume hood." Academic and State commenters supported the inclusion of a working container provision because it allows containers that are in use for collecting unwanted materials to be open while the experiment is running, while at the same time it provides protection by requiring that non-working containers be closed at all times, except when adding, removing, or consolidating unwanted materials.

After evaluating all of the comments, we have decided to include a provision in the final rule allowing laboratories to use "working containers." As discussed in the definition section above (section III.B.3), a working container is defined in the final rule as a small container (i.e., two gallons or less) that is used at a laboratory bench, hood, or other work station in order to collect unwanted material from a laboratory experiment or procedure. We have added to the container management standards a requirement that a working container may be open until the end of the procedure or work shift, or until it is full, whichever comes first, at which time it must either be closed or the contents must be emptied into a container that is closed after the contents of the working container are added.

In reference to the other containers of unwanted materials in the laboratory (i.e., non-working containers), several commenters opposed the requirement that these non-working containers remain closed, except to add or remove unwanted material. We disagree with these commenters. We believe that the requirement that containers remain closed, except when adding, removing, or consolidating unwanted material is straightforward and is protective of human health and the environment. Requiring that containers remain closed, except in certain instances, will prevent or mitigate accidents in the laboratory that could otherwise lead to spills or releases.

Commenters identified two additional situations (besides working containers) where they believed a requirement to keep containers closed is problematic. One commenter stated, " * * * tightly capping containers after addition of waste is sometimes impractical and dangerous. Capping systems should be allowed which preclude excessive evaporation while providing for displacement of air while filling from in-line systems such as an HPLC or allow pressure relief from wastes which have not fully reacted." The comment about "in-line" collection of unwanted

materials is consistent with what the Agency has heard over the years through our Project XL with the three New England colleges and universities, as well as through public meetings. In many cases, automated laboratory equipment will shut down if air is not able to escape from an in-line collection system because of a build-up of pressure. Another commenter stated, " * * * that the closed container rule may also have a negative effect by creating a compromised container in certain situations. Chemical reaction residues may react slowly over several days, thus building up pressure in a container. The semiconductor etching solution known as "piranha solution" is one example. Proper management of these solutions requires that the container be able to safely vent the excess pressure."

In response to the two public comments above, we have modified the container management regulations to add these two additional situations (besides working containers) in which containers are not required to be completely closed, because in these two situations keeping a container of unwanted materials closed may be problematic. Specifically, the final rule allows containers to be vented when it is necessary (1) for the operation of laboratory equipment, such as in-line collection, and (2) to avoid dangerous situations, such as the build-up of extreme pressure. Thus, as we have explained, we have determined that a combination of both performance-based and prescriptive approaches (as it relates to whether containers must be kept closed) is more protective of human health and the environment than performance-based requirements alone. The Agency believes it is preferable to maintain the requirement that containers remain closed, except when adding, removing or consolidating unwanted material in most instances, while allowing for a few specific instances in which it is not appropriate, rather than to eliminate the requirement for closed containers altogether. This is because such an approach provides the flexibility in specific situations where commenters have shown that requiring closed containers is inappropriate and does not compromise protection for all the other containers of unwanted materials that have no cause to be open. Furthermore, this approach is simpler for an eligible academic entity to implement and is more easily enforceable.

In summary, today's final rule contains container management standards that require that containers be managed to assure the safe storage of the

unwanted material to prevent leaks, spills, emissions to the air, adverse chemical reactions, and dangerous situations that may result in harm to human health or the environment. Specifically, today's final rule requires that containers be maintained and kept in good condition and that damaged containers be replaced, overpacked, or repaired. Additionally, containers must be compatible with their contents to avoid reactions between the contents and the container and must be made of, or lined with, material that is compatible with the unwanted material so that the container's integrity is not impaired. Finally, containers of unwanted material must be kept closed at all times, with three exceptions: (1) When adding, removing or consolidating unwanted material, (2) when using working containers, which may be open until the end of the procedure or work shift, or until they are full, whichever comes first, and (3) allowing containers to be vented if necessary for the proper operation of laboratory equipment, such as with in-line collection, or to prevent dangerous situations, such as build-up of extreme pressure.

4. Training Requirements

The Agency intends to provide flexibility in the content and method of training for laboratory workers and students, while ensuring that unwanted materials are properly managed and that an eligible academic entity is in full compliance with the Subpart K requirements. Thus, EPA has included performance-based standards in today's final rule for training of laboratory workers and students.

EPA proposed that under Subpart K a college or university be required to provide training or instruction to all individuals working in the laboratory. Specifically, the proposal required that laboratory workers be trained commensurate with their duties so they understand the requirements of Subpart K and can implement them to ensure the laboratories' compliance with the requirements of the rule. In addition, we proposed that students in a laboratory where unwanted material is generated must receive instruction relevant to their activities in the laboratory. We proposed that instruction may include proper container labeling, collection procedures for unwanted material, and emergency response procedures. Further, the proposal required that on-site transfers of unwanted materials (which ultimately may prove to be hazardous wastes) and the hazardous waste determination could only be conducted by RCRA-trained individuals

(called "trained professionals" in the final rule). The proposal indicated that a college or university could provide training and instruction for laboratory workers and students in a variety of ways, including, but not limited to, instruction by the professor or laboratory manager before or during an experiment, formal classroom training, electronic or written training, on-the-job training, or written or oral exams. Finally, the proposal required that a college or university that is an LQG must maintain training records for the laboratory workers that are sufficient to determine whether such workers have been trained.

Many commenters expressed general or partial support for the proposed performance-based training and instruction requirements, in lieu of prescriptive training requirements. However, many commenters requested that the training requirements be made more performance-based and include greater flexibility in training approaches (e.g., use of postings and signs). In contrast, a few commenters expressed support for a more prescriptive approach to training and instruction, including a clear and concise required curriculum for RCRA training in order to make the Subpart K requirements more meaningful.

We maintain that performance-based training requirements are appropriate for laboratory workers and students. Eligible academic entities should have the flexibility to offer training to laboratory workers and students through their choice of an effective method, provided the information is sufficient and thorough enough to ensure proper management of the unwanted materials by laboratory personnel in order to avoid dangerous situations. However, EPA disagrees that merely posting a sign would adequately instruct laboratory workers and students on the proper and safe management of unwanted materials, believing that some active training is necessary to ensure that all laboratory personnel fully comprehend their duties and assignments with respect to unwanted materials management. As stipulated in the proposal and supported by comments, today's final rule maintains that training methods may consist of a variety of approaches, including formal classroom or electronic on-line training, on-the-job training, or instruction by a professor or manager. Use of postings or signs may supplement and serve as a reminder of the more formal training, but does not itself constitute "training" for the purposes of today's final rule. While we do not believe the use of postings or signs alone constitute "training," EPA

believes that the use of signs and postings to supplement and reinforce the knowledge gained from the required training program would be beneficial. Training must be sufficient to enable individual laboratory workers and students in the laboratory to conduct their duties in an environmentally safe manner and in accordance with all applicable regulations.

Many commenters stated that all training and instruction should be commensurate with the duties and activities of the personnel, irrespective of their status as students or laboratory workers. We concur with these commenters and thus the final rule has been modified to reflect that principle. Therefore, as opposed to the proposed rule, which distinguished between training for laboratory workers and instruction for students, today's final rule requires that both laboratory workers and students be trained commensurate with their duties. Therefore, commensurate training constitutes training aligned with an individual's assigned duties and the degree of involvement with the management of the unwanted materials. EPA believes that training commensurate with ones duties should correspond with the level of knowledge or practical application needed by individuals to perform their assigned functions or fulfill their job or enrollment classification (i.e., professor, researcher, graduate student, undergraduate student) within an eligible academic entity.

We believe that training commensurate with the duties for students constitutes familiarization or transference of knowledge to perform tasks and assignments in the laboratory in a safe and environmentally sound manner for unwanted materials handling, in accordance with the Subpart K requirements. Specifically, students conducting experiments will come in contact with and use a variety of chemicals which may potentially become hazardous waste following experimentation or may react adversely if incorrectly stored or managed. Students in a supervised classroom setting generally would require less training than students in a research setting. In a teaching laboratory, containers for the unwanted materials that are generated during an experiment are typically pre-labeled by the laboratory instructor. Therefore, students in a supervised classroom setting should be trained to place the products of experiments in the appropriate containers of unwanted materials. On the other hand, students conducting research where such

containers are not provided should be trained to store unwanted materials in containers to minimize risk and label containers with the words "unwanted materials," or another equally effective term, so that EH&S staff know that the containers are not longer wanted, as well as the contents of the container and the accumulation start date. There is also the potential for dangerous or hazardous situations, such as explosions, fires, spills, or other hazards from mishandling chemicals of unwanted materials which would require emergency response actions by qualified personnel. It is not necessary that students have the capability of an emergency response coordinator or other qualified individual to respond and perform emergency procedures and other remedial actions. Rather, it is sufficient for students to know how to correctly handle and manage unwanted materials to avoid dangerous or hazardous situations and in case of an emergency, know the correct information or procedures to follow, such as how to contact emergency responders and when to evacuate the laboratory.

Training commensurate with the duties for laboratory workers and graduate students working as laboratory workers may be more formalized or technical instruction whereby upon completion of training, personnel are qualified to perform the functions of their job descriptions or assigned duties. For the purpose of Subpart K, laboratory workers must receive training or technical instruction in direct correlation to their individual job description or assignments. Under Subpart K, the definition of "laboratory worker" includes a broad array of job classifications with different duties, such as supervisor or manager of a laboratory, faculty, staff, researcher, post-doctoral fellows, interns, technicians and principal investigators. Examples of training for laboratory workers commensurate with ones duties include, but are not limited to, training to perform their duties to comply with the Subpart K labeling and container management standards, supervising students in the laboratory, preparing containers for transport, emergency response duties, and/or other duties, as appropriate.

Several commenters expressed concern about the requirement that personnel conducting on-site transfers of unwanted materials be RCRA-trained. The commenters stated that this requirement is unnecessary and does not recognize that these entities have been safely transferring hazardous waste on-site for years and that a person can

safely transfer unwanted materials with appropriate safety training. In contrast, the Agency heard from one commenter stating that students and non-RCRA trained staff should not transfer hazardous wastes outside of the laboratory. We believe that the person transferring unwanted materials on-site must be a "trained professional" according to the definition in § 262.200, which requires that the individual complete the applicable RCRA training requirements of § 265.16 for LQGs, or § 262.34(d)(5)(iii) for SQGs and CESQGs. Despite the fact that commenters stated otherwise, this requirement is consistent with the Agency's existing interpretation for on-site transfers of hazardous waste (see memo March 17, 2004, Springer to Regions, RCRA Online #14703). Furthermore, we believe that this level of training is "commensurate" with the duties of the individual transferring the unwanted materials on-site, which are to transfer the materials safely, to avoid spills or releases, and to respond properly to any releases, among other things. Specifically, we believe that the on-site transfer of unwanted materials outside of the laboratory should be conducted by an individual who has received the full complement of RCRA training in accordance with the eligible academic entity's generator status, to ensure that that individual is knowledgeable about the RCRA requirements, especially with regard to the compatibility of chemicals, spill prevention, and emergency response. This is especially important considering that the unwanted materials from many individual laboratories will often be collected together during the on-site collection and transfer of those materials.

We also heard from two commenters who emphasized the importance of training for personnel who make the hazardous waste determination at an eligible academic entity. We agree with the commenters, and, as proposed, require in today's final rule that the individual making the hazardous waste determination, whether it is in the laboratory, at the on-site CAA or on-site TSDF, be a trained professional who has the full complement of RCRA training in accordance with the eligible academic entity's generator status (SQG status for CESQGs). Individuals making the hazardous waste determination must be aware of all applicable RCRA requirements in order to complete their duties, which are to classify the unwanted materials properly as solid and/or hazardous wastes and to apply the correct hazardous waste code(s).

Thus, we are continuing to require that the person making the hazardous waste determination be a "trained professional" according to the definition set out in § 262.200.

Therefore, today's final rule maintains the requirement that trained professionals make the hazardous waste determination and transfer unwanted materials (or hazardous wastes, if the hazardous waste determination is made in the laboratory) outside the laboratory and that the trained professionals must meet the existing RCRA generator training requirements applicable to the eligible academic entity's generator status. In addition, today's final rule has added the requirement that trained professionals at CESQGs must receive RCRA training in accordance with the training requirements for SQGs, at a minimum (see definition of "trained professional" in Section III.B.2 of today's preamble, as well as § 262.200).

Several commenters described other regulatory bodies (e.g., DOT; U.S. Nuclear Regulatory Commission (NRC); Occupational Safety and Health Administration (OSHA)) that require training on hazardous chemicals, emphasizing that Subpart K's training requirements should avoid redundancy with other required training. Some of these commenters stated that they would use OSHA training to satisfy the proposed Subpart K training requirements. In contrast, we heard from one commenter expressing concern that there are no other appropriate regulatory requirements for training specific enough to be appropriate for RCRA because they do not effectively cover the RCRA hazardous waste determination. The Agency believes that neither the "traditional" RCRA generator regulations nor Subpart K prohibits the use of other training programs to satisfy the training requirements of Subpart K, provided the other training program(s) address the relevant RCRA requirements for trained professionals, and the relevant Subpart K requirements to train laboratory workers and students commensurate with their duties.

Several commenters argued that eligible academic entities should be able to provide evidence of training, in lieu of training records, which they believe are too burdensome to keep. Furthermore, a few commenters advocated eliminating the proposed recordkeeping requirements for LQGs, arguing that such requirements would be more burdensome than the existing requirements for satellite accumulation areas, which do not require documented training for personnel. The Agency recognizes that the satellite

accumulation area regulations do not require documented training for personnel and is not requiring that records be retained for training of students in the laboratory. However, we believe it is appropriate that eligible academic entities that are LQGs retain the records for training of laboratory workers in order to demonstrate that the laboratory worker received the necessary training. The records that are required for laboratory workers at LQGs are the same that are required for trained professionals at eligible academic entities that are LQGs (and which they are subject to today), both of which reference the current LQG training regulations in § 265.16.

Finally, we heard from a few commenters who stated that the maintenance of training records for trained professionals or laboratory workers at SQGs is unnecessary. We did not propose to require such recordkeeping for training of laboratory workers or trained professionals at SQGs, nor has the Agency included such a requirement in today's final rulemaking.

In summary, under today's final rule, eligible academic entities managing their laboratory hazardous wastes under Subpart K must provide training for laboratory workers and students, and the training must provide sufficient information so that laboratory workers and students can understand and implement the requirements of Subpart K, commensurate with their duties. An eligible academic entity can provide training and instruction for laboratory workers and students in a variety of ways, including, but not limited to, instruction by the professor/manager before or during an experiment, formal classroom training, electronic/written training, on-the-job training, or written or oral exams. LQGs managing their laboratory waste under Subpart K must maintain documentation demonstrating that the training has been provided to laboratory workers and trained professionals. Documentation demonstrating training can include, but is not limited to, sign-in or attendance sheet(s) for training session(s), syllabi for training session(s), certificate(s) of completion, or test results. Finally, the training requirements in today's final rule restrict who may conduct certain activities under Subpart K. Specifically, only "trained professionals," as defined in § 262.200, may transfer unwanted materials on-site and make the hazardous waste determination, pursuant to § 262.11, for unwanted material.

5. Removal Frequency of Unwanted Materials

Currently, most laboratories operate under what is commonly referred to as the satellite accumulation area (SAA) regulations (see 40 CFR 262.34(c)). At SAAs, removal of hazardous waste is dependent on the volume of hazardous waste that is accumulated in each SAA. That is, once more than 55 gallons of hazardous waste (or more than 1 quart of acutely hazardous waste) is accumulated in an SAA, a generator has three days to remove the excess of 55 gallons (or excess of 1 quart of acutely hazardous waste) from the SAA and transfer it to an on-site CAA or TSDF, or transport it off-site.

In large part because colleges and universities explained to us that they rarely accumulate 55 gallons of hazardous waste in a laboratory, except during a laboratory clean-out, in Subpart K we proposed to require the removal of unwanted materials from laboratories based primarily on time, and secondarily by the volume of unwanted materials. Specifically, we proposed that all unwanted materials, including reactive acutely hazardous unwanted materials (as defined in the proposal), generated in laboratories must be removed from the laboratory at a regular interval that is specified in the entity's LMP, and that such interval for routine removals must not exceed six months. College and university representatives had told EPA that tying the removal of laboratory wastes with the academic calendar would facilitate removal of laboratory wastes that accumulate during the course of the semester with a minimum of disruption. Therefore, the Agency believed that six months was an appropriate length of time to allow colleges and universities to schedule routine removals of unwanted materials at the end of each semester.

We also proposed that if a laboratory accumulates more than 55 gallons of unwanted materials (including reactive acutely hazardous unwanted materials) prior to the regularly scheduled removal specified in the entity's LMP, then all of the unwanted materials, including the reactive acutely hazardous unwanted materials, must be removed from the laboratory within ten calendar days of exceeding 55 gallons, or at the next regularly scheduled removal, whichever occurs first. For reactive acutely hazardous unwanted materials, we proposed that if a laboratory accumulates more than 1 quart prior to the regularly scheduled removal, then the reactive acutely hazardous unwanted materials would have to be

removed from the laboratory within ten calendar days of exceeding 1 quart, or at the next regularly scheduled removal, whichever occurs first. The Agency proposed that the reactive acutely hazardous unwanted materials be subject to the 1-quart volume limit for accumulation in the laboratory, instead of the 55-gallon limit, because when these reactive chemicals are stored for long periods, they can become unstable, posing an extreme danger because these reactive chemicals have the potential to cause significant harm to laboratory personnel and property.

Many commenters generally supported the shift to the time-driven removal of unwanted materials from laboratories. However, they also requested that the maximum time between regularly scheduled removals be lengthened from six months to a year, or an "academic year," which commenters defined as "the 11-13 month period that corresponds to a college or university's annual teaching and research activities." Some commenters argued that six months was too frequent because some laboratories generate very small quantities of unwanted material in that time period. While some laboratories may generate small quantities of unwanted material, we have determined, based on all the available information, to keep six months as the maximum time between regularly scheduled removals.

We have retained six months as the maximum time between regularly scheduled removals of unwanted materials from the laboratory for several reasons. First, we believe that implementing regular removals on the basis of an "academic year" could be confusing. Second, as we indicated in the preamble to the proposed rule, our goal is to have unwanted materials removed from laboratories at least once each semester. One commenter indicated that a schedule that allows removals on a semester basis is preferred by stating, "colleges and universities generally use the semester's end to encourage laboratory workers and students to have unwanted materials removed from their laboratories before leaving campus. This practice reduces the risk that unknown materials will be left behind by a student or laboratory worker who does not return the following semester. Also it limits the amount of waste material stored in laboratories during the break, when fewer people are around to monitor or be aware of the conditions in the laboratory." Finally, as discussed in the proposal, we do not believe that allowing unwanted materials to accumulate for longer than six months

would reduce risk to laboratory personnel and provide the benefits to human health and the environment to the same extent and therefore the anticipated benefits from moving to a time-driven rather than a volume-driven approach would be diminished.

We realize that some laboratories will not generate any unwanted materials during a six month period and we do not intend for EH&S personnel or other staff or contractors to make a trip to the laboratory if they know that the laboratory does not have any unwanted materials. The eligible academic entity must describe in Part II of its LMP how it will determine whether a removal of unwanted material is necessary at each individual laboratory. For example, a form or an e-mail could be sent to each laboratory asking whether the laboratory has any unwanted material accumulating and the EH&S could respond accordingly. Eligible academic entities have flexibility with respect to how they intend to comply with the requirements for regular removals of unwanted materials. However, each eligible academic entity is responsible for ensuring that it meets the time-driven requirement (i.e., every six months) for the method it has selected for removing unwanted materials from the laboratory. The accumulation start date associated with each container (or affixed or attached to each container, if that is preferred) of unwanted material is intended to be used as the mechanism for determining compliance with regularly scheduled removals. Of course, unwanted materials may always be picked up with greater frequency than specified in either the regulations or the eligible academic entity's LMP.

A number of commenters expressed concern over the requirement to remove "all" containers of unwanted materials from the laboratory either during a regularly scheduled removal or when the volumes have been exceeded, because this would require partially-filled containers to be removed from the laboratory, which could require the use of more containers. Many of these commenters requested that EPA modify the requirement to remove "all" unwanted material from the laboratory to require that only full containers of unwanted material have to be removed from the laboratory.

We recognize the commenters' concerns regarding the requirement to remove "all" unwanted materials from the laboratory during regularly scheduled removals or when volumes have been exceeded. However, we do not consider the alternative suggested by commenters—to require that only full containers of unwanted material

have to be removed from the laboratory—to be practical. It would be easy to circumvent the intent of the regulations for regular systematic removals of unwanted materials from the laboratory by simply not completely filling containers of unwanted materials. In this scenario, the removal of unwanted materials from the laboratory would be based primarily on volume, rather than based on EPA's preferred approach of time. We prefer the time-driven approach, with the maximum volumes as a backup because, for most laboratories, it is rare to accumulate 55 gallons of unwanted material. Without a time limit, unwanted materials could remain in the laboratory for extended periods of time. As for the concern about using too many containers, consolidation of compatible materials is allowed within in a laboratory, as well as at an on-site CAA or on-site TSDF, which could then return some or most of the reusable containers for use in collecting unwanted material.

One commenter suggested adopting a system that mirrors the Universal Waste system for tracking the amount of time that unwanted materials remain in the laboratory. This commenter suggested that a laboratory should be allowed to demonstrate the length of time that each container has been accumulating unwanted material and that EPA should base the removal on how long each container is in the laboratory. We also heard from many commenters that we should be more flexible in the removal provisions.

In response to these comments, there are now two alternative approaches allowed for regular removals of unwanted materials. The first approach is the one that was proposed. That is, all containers of unwanted material must be removed from the laboratory on a regular basis, not to exceed six months. Under this approach, however, it is possible that a container that began accumulating unwanted materials the day before the regularly scheduled removal would be required to be removed. This approach is easy to implement, as all containers of unwanted material would be removed from the laboratory, regardless of when they began accumulating unwanted materials.

The second alternative being added today allows the removal of containers of unwanted material using a "rolling" six months approach. That is, no individual container of unwanted material could remain in the laboratory for more than six months. We believe this alternative approach provides additional flexibility that many commenters sought by adding a choice

of implementation methods for the removal of unwanted materials, while maintaining the intent of the regulations by requiring regular, systematic, time-driven removals of unwanted materials. Since there is already a requirement that all containers have an accumulation start date associated with them, this approach would rely on checking the dates associated with each container in order to determine which containers would have to be removed from the laboratory. Individual containers could potentially remain in the laboratory longer than under the other alternative approach and therefore, would be more likely to be full or nearly full. On the other hand, this approach would likely require more frequent removals from the laboratory to ensure that no container accumulating unwanted materials remains in the laboratory longer than six months.

Each eligible academic entity choosing to be subject to Subpart K must select and identify in Part I of its LMP, the approach it chooses for complying with regular removals of unwanted materials from the laboratory. In Part II of its LMP, the eligible academic entity must describe how it plans to comply with the approach it has chosen for regular removal of unwanted materials from the laboratory.

Under the SAA regulations of § 262.34(c), if the maximum volumes are exceeded, the excess of 55 gallons of hazardous waste (or 1 quart of acutely hazardous waste) must be removed from the area within three days. We have frequently heard that the three-day time limit was problematic, especially during long weekends and holidays. Under Subpart K, we proposed to extend from three days to ten calendar days the removal of unwanted materials from the laboratory when the maximum volumes are exceeded. Many commenters supported this change, although a few commenters believed that three days was sufficient. One State commenter suggested that laboratories should remove their unwanted materials before the maximum volumes are reached, which would remove the need for providing additional time for the removal of unwanted materials from the laboratory. We have decided to retain ten calendar days for removing unwanted materials from the laboratory when the maximum volumes are exceeded. We believe that ten calendar days will provide sufficient flexibility to respond to the occasions when 55 gallons of unwanted material (or 1 quart of reactive acutely hazardous unwanted material) is exceeded, while maintaining protection to human health and the environment.

With regard to which unwanted materials must be removed from the laboratory when maximum volumes are exceeded, we proposed that when a laboratory exceeds 55 gallons of unwanted material, it must remove all unwanted materials—including the reactive acutely hazardous materials. This is because all reactive acutely hazardous materials are unwanted materials and should be considered in calculating whether the 55 gallons has been exceeded. On the other hand, we proposed that when a laboratory exceeds 1 quart of acutely reactive unwanted material, it must remove only the reactive acutely hazardous unwanted material, not all containers of unwanted material, because not all unwanted materials are reactive acutely hazardous unwanted materials, and therefore should not be subject to the lower accumulation limits in the laboratory. We have retained these requirements in today's final rule, with some minor rewording to clarify our intent. Of course, in the case where a laboratory exceeds 1 quart of reactive acutely hazardous unwanted material, an eligible academic entity may choose to remove all unwanted materials from the laboratory. If a trained professional has to make a trip to the laboratory to remove reactive acutely hazardous unwanted materials in excess of 1 quart, it may be more efficient to remove all unwanted materials at the same time, even if they are not required to be removed at that time.

We proposed that if a laboratory accumulates more than 55 gallons of unwanted material, then all containers of unwanted materials (including reactive acutely hazardous unwanted materials) must be dated with the date the 55 gallons is exceeded. We also proposed that if a laboratory accumulates more than 1 quart of reactive acutely hazardous unwanted material, then all containers of reactive acutely hazardous unwanted materials must be dated with the date the 1 quart is exceeded. This date is necessary to determine whether the ten calendar days had elapsed and, therefore, when the containers must be removed from the laboratory. In the proposed regulations, we did not specify which label this date must go on—the label that is “affixed to or physically accompanies” (which has been changed to “affixed or attached to” in the final rule) the container, or the label that is “associated with” the container. However, in the preamble to the proposed rule, we did indicate that, as with the requirement to date containers with their accumulation start date, this

date may be included on either label—the label that is “affixed or physically accompanies” the container, or the label that is “associated with” the container (see 71 FR 29730). In today's final rule, we have revised the regulatory text to be consistent with the preamble discussion from the proposed rule. Therefore, when 55 gallons of unwanted material (or 1 quart of reactive acutely hazardous unwanted material) is exceeded in a laboratory, the date that the maximum volume is exceeded may be added to either type of label. That is, it may be added to the label that is “affixed or attached to” the container, but at a minimum it must be added to the label that is “associated with” the container.

One commenter pointed out that if an eligible academic entity does not have an on-site CAA and one of its laboratories exceeds the specified volume limits, the generator must be prepared to have a vendor ship the unwanted materials from the laboratory to an off-site TSDF within 10 calendar days. We agree with the commenter's assessment and point out that this is an increase in the time allowed under the current SAA regulations, under which the same generator would have only three days in which to ship the hazardous waste off-site (or come into compliance with the requirements for 90/180/270-day generator accumulation areas).

One commenter suggested that in order to be consistent with the SAA regulations, the 55-gallon limit should be on a “per wastestream” basis, rather than a “total volume” basis. We disagree with the commenter and find the commenter's interpretation of the SAA regulations to be incorrect. To the contrary, EPA has consistently interpreted the SAA regulations such that 55 gallons is based on a total volume of all wastestreams combined (see memo from Robert Springer, Director, OSW to EPA Regional Directors, March 17, 2004, RCRA Online #14703). Thus, Subpart K is consistent with the SAA regulations with respect to this provision.

a. Reactive Acutely Hazardous Unwanted Materials

Under the SAA regulations of § 262.34(c), if more than 1 quart of an acutely hazardous waste listed in § 261.33(e) is accumulated, the excess of 1 quart must be removed from the SAA within three days and taken either to an on-site CAA or TSDF, or transported off-site. Section 261.33(e), which is commonly referred to as the “P list” of hazardous wastes, currently comprises 124 chemicals. The P-list is a list of commercial chemical products that are

considered acutely hazardous waste when discarded because they are considered hazardous even when managed in small quantities. Under Subpart K, the Agency is reducing the number of chemicals that are subject to removal from the laboratory at the 1-quart threshold from all 124 chemicals on the P-list to the six chemicals that are on the P-list because they are reactive. We focused on the reactive chemicals on the P-list because, as reactive chemicals, they have the potential to cause significant and immediate harm to individuals and property. We are finalizing this provision as proposed, along with the change to the definition of reactive acutely hazardous unwanted material that was previously discussed in section III.B.2 of today's preamble (also see § 262.200).

We also would like to clarify that this regulatory revision—that is, the number of P-listed chemicals that are subject to removal from the laboratory if they exceed the 1-quart threshold—does not impact other aspects of the hazardous waste regulations. That is, we have not changed the regulations with respect to which chemicals are identified as acutely hazardous wastes or the 1 kg/month threshold for becoming an LQG. Therefore, the entire P-list must be considered when a trained professional makes the hazardous waste determination for unwanted materials. If an eligible academic entity generates more than 1 kg/month of acutely hazardous waste, it is an LQG for that calendar month, except if the acutely hazardous waste is from a laboratory clean-out conducted in accordance with § 262.213 of today's rule, in which case it need not be counted toward the eligible academic entity's generator status. See section III.C.7 of today's preamble for a discussion of the laboratory clean-out provisions, as well as § 262.213.

b. Transferring Unwanted Materials or Hazardous Wastes From the Laboratory to an On-site CAA or On-site TSDF

To ensure that unwanted materials removed from the laboratory are brought promptly to their next destination, such as an on-site CAA or TSDF, the Agency proposed to require that when unwanted materials (or hazardous wastes, if the hazardous waste determination was made in the laboratory) are removed from a laboratory, they must be brought “directly” from the laboratory(ies) to an on-site CAA or TSDF. We sought comment on whether it was necessary to define “directly” or to replace it with a more specific time-frame, such as a same day requirement.

We received several comments in support of defining the term "directly." Other commenters, however, stated that it was not necessary to define the term, especially given our preamble discussion in the proposed rule. In reviewing the comments, we have decided not to add a regulatory definition of "directly" and will simply reiterate and expand upon the preamble discussion from the proposed rule.

In general, if the unwanted material is sent from the laboratory or laboratories to the on-site CAA or TSDF within the same work day, this would meet the intent of the regulation. We realize that many eligible academic entities will collect unwanted materials from many laboratories at a time, in series, and will deliver all the unwanted materials to an on-site CAA or TSDF at the end of the collection process. This would be an acceptable practice under today's regulations, provided the unwanted materials are in continuous custody of the trained professional that is collecting and transferring the unwanted materials and they are delivered to the on-site CAA or TSDF at the end of the work shift. It is not necessary to bring the unwanted material from each individual laboratory directly to the on-site CAA or TSDF and then in a separate trip bring the unwanted materials from the next laboratory. Such an arrangement would only increase the amount of time that trained professionals would spend in removing unwanted materials from laboratories and that unwanted materials would spend in transport, with no benefit. On the other hand, if unwanted materials were left on a cart in the hallway overnight, this would not be an acceptable practice and would not meet the intent of the regulation.

c. On-site Consolidation Areas

Under the existing regulations, generators may accumulate hazardous waste in two types of areas without having a permit or interim status: (1) An SAA or (2) an on-site generator accumulation area (≤90, ≤180 or ≤270 day areas).⁷ Under Subpart K, eligible academic entities also may accumulate

⁷ LQGs may accumulate hazardous waste for 90 days or less on-site without a permit or interim status, provided the provisions of § 262.34(a) (or § 262.34(g)-(i) for F006 recyclers; or § 262.34(j)-(k) for Performance Track members) are met. SQGs may accumulate hazardous waste for 180 days or less on-site without a permit or interim status, provided the provisions of § 262.34(d) and (f) are met. SQGs that must send their hazardous waste more than 200 miles for off-site treatment, storage, or disposal are allowed to accumulate hazardous waste for 270 days or less on-site without a permit or interim status, provided the provisions of § 262.34(d) and (f) are met (see § 262.34(e)).

unwanted materials and hazardous wastes in two types of areas without having a permit or interim status: (1) Laboratories (in lieu of SAAs) and (2) an on-site CAA ("CAA" is a term that has been defined under Subpart K, but is the same as what has sometimes been called "generator accumulation areas" or "90/180/270-day areas").

At proposal, we solicited comment on whether an additional accumulation area beyond what is already allowed in the rules should be created to allow for the consolidation of unwanted materials after they have been removed from the laboratory. We received many comments in favor of establishing a consolidation area as a new type of area for the accumulation of unwanted materials after such material has been removed from the laboratory. Some commenters even included suggested regulatory text for how these new consolidation areas would be regulated, including specific requirements for labeling/dating, container management, training, removal frequency, hazardous waste determinations, inspections, spill response, signage, and documentation in the LMP. A few commenters, however, opposed the creation of another type of accumulation area, primarily because they were concerned that the addition of another accumulation area would cause confusion.

After analyzing the comments and considering the flexibility that is already provided in the regulations, we have decided not to establish a "consolidation area" as another type of accumulation area for unwanted materials. We agree with the commenters that argued that adding another type of accumulation area with another set of standards would be confusing for implementers and enforcers with little, if any, benefit. We believe that the flexibility that is already in Subpart K can provide the benefits of a consolidation area, without establishing a new regulatory category for them.

It has been EPA's regulatory interpretation that hazardous wastes can not be moved from one SAA to another (see memo from Robert Springer, Director, OSW, to EPA Regional Directors; March 17, 2004, RCRA Online #14703). One reason for this prohibition is that it would be easy to circumvent the 55-gallon limit in an SAA by moving hazardous wastes from one SAA to another SAA and thus remain below the volume limits, allowing hazardous wastes to remain in the SAA indefinitely.

In today's rule, however, the removal of unwanted materials is based on time

primarily, and volume secondarily. Containers must be marked with the date that unwanted materials first begin to accumulate. This requirement is necessary in order to verify that unwanted materials are being removed from the laboratory on a regular basis. The requirement for a date to be associated with each container provides laboratories with additional flexibility that does not exist in SAAs. That is, under Subpart K, unwanted materials can be safely consolidated within an on-site laboratory, such as in a chemical stockroom. As with all on-site transfers of unwanted material outside of a laboratory, the transfer of unwanted materials between laboratories must be accompanied by a trained professional. Further, any laboratory in which unwanted materials are consolidated from other laboratories is subject to the time and volume limits for all laboratories that are subject to Subpart K (i.e., if the laboratory accumulates more than 55 gallons of unwanted material (or 1 quart of reactive acutely hazardous unwanted material), the unwanted material must be removed from the laboratory within 10 calendar days). In addition, the date that an unwanted material first begins to accumulate in a container would remain the same, regardless of where the container is moved. In other words, no re-dating of a container would be permitted if it were moved to another laboratory or chemical stockroom. If the contents of two or more containers with compatible materials are combined into one container; however, the earliest date associated with the original containers must be used. The date that is associated with each container will allow inspectors to verify that containers are being removed from the laboratory on a routine basis not to exceed six months, as required. The 55-gallon volume limit will ensure that large quantities of unwanted materials are not consolidated without the additional protections required at CAAs.

We envision this flexibility to be particularly useful for eligible academic entities that do not have on-site CAAs. Commenters have indicated that by consolidating their unwanted materials in a laboratory or chemical stockroom themselves prior to a vendor's arrival, they can save money because the vendor will be able to collect unwanted materials from fewer laboratories, thus spending less time on-site. In such a situation, if an eligible academic entity (or the vendor) makes the hazardous waste determination in the laboratory, the eligible academic entity does not have to make the hazardous waste

determination when the unwanted material is removed from the first laboratory. Rather, the hazardous waste determination may be made when the unwanted material is removed from the final laboratory where the unwanted materials are consolidated, before it is sent off-site. Consolidating unwanted materials from multiple laboratories will provide another opportunity to consolidate unwanted materials that are compatible with one another, thereby allowing containers to be reused. We emphasize that trained professionals must transfer unwanted materials between laboratories and that any laboratory where unwanted materials are consolidated also is subject to the Subpart K requirements, including the time and volume limits.

6. Making the Hazardous Waste Determination

One of the primary benefits that Subpart K provides over the existing generator regulations is flexibility in where and when to make the hazardous waste determination. The Agency has consistently interpreted the existing generator regulations to require that the hazardous waste determination be made at the point of generation. We now recognize that making the hazardous waste determination at the point of generation is difficult and impractical in teaching and research laboratories, because of the high number of individual wastes, the variability in such wastes, and the transient nature of those generating many of the wastes, namely students. Therefore, in Subpart K, we proposed to allow the hazardous waste determination to be made in the laboratory before the unwanted materials are removed from the laboratory, or within four calendar days of arriving at an on-site CAA or interim status or permitted TSDF. We proposed that when the hazardous waste determination is made in the laboratory, it does not have to be made at the initial time that the hazardous waste is generated, as is required under the existing generator regulations, only that it must be made before the unwanted materials are removed from the laboratory. This alternative approach ensures that the hazardous waste determination is made by a trained professional, rather than by students, who would likely lack the necessary training, and allows much greater flexibility in where and when to make the hazardous waste determination.

In general, we received favorable comments about the flexibility provided by Subpart K with regard to making the hazardous waste determination. Today, we are finalizing the regulations

pertaining to where and when the hazardous waste determination must be made with some minor changes to address the expansion of the applicability of the final rule to include eligible academic entities that are CESQGs. Eligible academic entities that are LQGs or SQGs will continue to have the choice of making the hazardous waste determination in the laboratory before the unwanted material is removed from the laboratory, or within four calendar days of arriving at an on-site CAA or interim status or permitted TSDF. Because CESQGs would not have an on-site CAA or TSDF, CESQGs are required to make the hazardous waste determination in the laboratory before the unwanted material is removed from the laboratory. See section III.C.9 of today's preamble for further discussion of how Subpart K is implemented at CESQGs.

At the time of the proposal, the Agency was aware that many smaller eligible academic entities contract with outside vendors to make the hazardous waste determination on their behalf. We expected that the smaller eligible academic entities, which do not have on-site CAAs or on-site TSDFs, would be relying on vendors to make the hazardous waste determination in the laboratory(ies) prior to the hazardous waste being brought off-site. As proposed, the regulations of Subpart K, specifically § 262.210, allowed for this scenario.

From comments, we learned that even eligible academic entities with on-site CAAs contract with vendors to make and/or confirm their hazardous waste determinations. Thus, we received many comments arguing against the requirement that the hazardous waste code(s) be placed on the container within four days of arriving at the on-site CAA because this essentially would preclude these entities from using vendors to make the hazardous waste determinations for them. These commenters believe that placing the words "hazardous waste" on the container is sufficient to indicate that a hazardous waste determination has been made and that they should be allowed to delay putting the hazardous waste code(s) on the container until the vendor comes to ship the hazardous wastes off-site.

We agree with these commenters that the practice of using vendors to make the hazardous waste determination should not be limited to those eligible academic entities that make the hazardous waste determination in the laboratory. Eligible academic entities that make the hazardous waste determination in an on-site CAA or

interim status or permitted TSDF also should be able to use vendors to assist them with their hazardous waste determination. In today's final rule, therefore, the hazardous waste determination must still be made within four calendar days of arriving at an on-site CAA or TSDF, and for those unwanted materials that are hazardous waste, the words "hazardous waste" still must be added to the label that is affixed or attached to the container within those four calendar days. However, the Agency is amending the final rule so that eligible academic entities may delay assigning the hazardous waste code(s) until immediately prior to shipping the hazardous waste(s) off-site. When containers of unwanted materials arrive at an on-site CAA, they are subject to the CAA regulations appropriate to the site's generator status, including dating of the containers to calculate the 90/180/270 days that the containers may be accumulated on-site, and the container management standards. Likewise, when containers of unwanted materials arrive at an on-site TSDF, the unwanted material becomes subject to the terms of the facility's hazardous waste permit or interim status, as soon as it arrives. Therefore, since the containers must be managed as hazardous waste upon arriving at an on-site CAA or TSDF, we believe there is no decrease in protection of human health and the environment by delaying the addition of the hazardous waste code(s). The hazardous waste code(s) are necessary for determining the LDR regulations that apply to the hazardous wastes, but do not provide additional protection while the hazardous wastes are being accumulated on-site. We emphasize that, in all cases, regardless of generator status, or where the eligible academic entity chooses to make the hazardous waste determination, the hazardous waste determination must be made on-site before the unwanted material can be treated at an on-site CAA, or treated or disposed at an on-site TSDF, or sent off-site.

Many commenters stated that four calendar days was not sufficient to make the hazardous waste determination in an on-site CAA or TSDF. However, given that (1) the hazardous waste determination is usually required to be made at the point of generation and that the Agency is providing considerable flexibility in Subpart K for where and when to make the hazardous waste determination and (2) the initial hazardous waste determination should be more straightforward without the addition of the hazardous waste code(s),

we are not providing additional time. Thus, under today's final rule, the hazardous waste determination must be made within four calendar days of arriving at an on-site CAA or TSDF. Commenters also gave various suggestions for changing "calendar" days to "working" or "business" days. We believe that this would be confusing because not everyone shares the same "working" or "business" days. By relying on "calendar" days, we are providing consistency and clarity in calculating the timeframes within the rule.

The Agency solicited comment on whether the four calendar days should be included within the 90/180/270 day timeframe allowed for accumulation in an on-site CAA or whether it should be separate from these timeframes. Most commenters preferred the proposed option of including the four calendar days for making the hazardous waste determination as part of the 90/180/270 days allowed for the on-site accumulation of hazardous wastes. They expressed this preference, in large part, to avoid additional dating of containers that would be necessary if the four days were separate from, and additional to, the 90/180/270 days of accumulation time. Therefore, under today's final rule, a container's date of arrival at an on-site CAA will be used for two purposes: (1) Calculating the four calendar days allotted for making the hazardous waste determination and (2) calculating the maximum accumulation time in the CAA.

Many commenters objected to the proposed requirement that the hazardous waste code(s) be placed on the label that is affixed to or physically accompanies the container (as previously discussed, today's final rule changes this requirement so that the label must be "affixed or attached" to the container). They pointed out that the majority of hazardous wastes generated in a laboratory are lab-packed when they are transported off-site and that putting the hazardous waste code(s) on the label that is affixed to the container, then placing the container inside of a lab pack is of no value because the hazardous waste code(s) would not be able to be seen. The commenters suggested allowing the hazardous waste code(s) to be placed on the label that is "associated with the container" rather than the label that is "affixed or physically accompanies the container." We had proposed that, as part of the hazardous waste determination, the hazardous waste code(s) must be placed on the containers within four days of arriving at an on-site CAA or interim status or permitted TSDF. In this

instance, the hazardous waste code(s) on the container label would have been visible during accumulation in an on-site CAA or storage in an on-site TSDF. However, since the final regulations have been revised so that the hazardous waste code(s) do not need to be added until just before the hazardous waste is transported off-site and since most containers will be lab-packed, we agree that placing the hazardous waste code(s) on the container label that is affixed or attached to the container provides no value. Therefore, we have revised the regulatory language in §§ 262.210(b)(2), 262.211(e)(2), and 262.212(e)(2) to allow the appropriate hazardous waste code(s) to be placed on the container label that is associated with the container. This will allow the practice of putting hazardous waste code(s) on a packing slip or inventory list for a lab pack to continue.

One commenter expressed concern about the statement in the preamble to the proposed rule (see 71 FR 29735) that, " * * * regardless of whether an employee or non-employee makes the hazardous waste determination, the college or university could (emphasis added) still be responsible if the hazardous waste determination is not made correctly and for any mismanagement of hazardous waste." The commenter was concerned "that such wording could be used to contradict current RCRA requirements that the generator is always responsible for the proper waste determination regardless of who does the actual designation." We did not intend this language to suggest the potential interpretation for which the commenter expressed concern. Indeed, we agree with the commenter that making the proper hazardous waste determination is, and always has been, the responsibility of the generator (as described in 40 CFR 262.11), which in this case, would be the eligible academic entity, and did not intend to suggest otherwise.

Another commenter requested that the Agency clarify that the hazardous waste determination can be made in "any" of the three areas, rather than in "one" of the three areas identified in § 262.209(a). We agree with the commenter and have changed the regulatory language to reflect the comment. For LQs and SQs, it is not necessary for the eligible academic entity to limit itself to making the hazardous waste determination in the same place all the time. We realize that this could change depending upon circumstances. For instance, during typical operations, an eligible academic entity may choose to make the

hazardous waste determination in its on-site CAA. However, during a laboratory clean-out, the hazardous waste determination might be made in the laboratory. Eligible academic entities that are CESQs, however, are limited by regulation to making the hazardous waste determination in the laboratory before the unwanted materials are removed from the laboratory and sent off-site.

Several commenters requested that the Agency clarify the status of chemicals or unwanted materials that can be redistributed to other laboratories. It has always been the case under existing RCRA regulations, and continues to be the case under Subpart K, that chemicals that are fit for continued use are not solid or hazardous wastes (see § 261.2(e)(1)) and can be transferred between SAAs, laboratories, and chemical stockrooms. Under Subpart K, we realize that some chemicals that are initially identified as unwanted materials will turn out not to be solid or hazardous wastes. If, for example, an unwanted material is brought to an on-site CAA or TSDF for a hazardous waste determination, and it is determined that such unwanted material can be reused, then it is not a solid or hazardous waste and is not subject to Subpart K or the Subtitle C hazardous waste regulations, once the determination is made. That is, if a chemical is initially labeled as an unwanted material and then it is subsequently discovered that it can continue to be used, the chemical can be returned to a laboratory or chemical stockroom for redistribution. EPA selected the term "unwanted material" over "laboratory waste," in part to indicate that the material may still be useable.

Sometimes laboratories end up discarding chemicals for which little or no identifying information is available. We recognize that, in some cases, chemicals will be managed in the laboratory and that when those chemicals are eventually disposed, it may not be possible to identify the chemicals. This sometimes happens when a researcher retires and leaves unlabeled chemicals behind. In addition, some laboratories synthesize new compounds as part of their research. When these "unknowns" are disposed of, it may not be possible to make a hazardous waste determination without analysis. A few commenters requested that the Agency address more specifically how to handle the hazardous waste determination for such unknown chemicals. As a result, we have added a requirement that an eligible academic entity must develop,

in Part II of its LMP, procedures for the timely and reliable characterization of unknown chemicals. See section III.C.8, of today's preamble for more detail, as well as § 262.214.

7. Laboratory Clean-outs

a. Summary of the Proposed Laboratory Clean-out Provisions

EPA inspections and enforcement cases have revealed that used and unused chemicals that are clearly no longer useable, have in some cases remained in laboratories at academic institutions for years and even decades. Sometimes these chemicals have not been discarded because the eligible academic entity did not want to change its RCRA generator status. In fact, one of EPA's goals in promulgating Subpart K has been to provide incentives for eligible academic entities to remove such "legacy" chemicals from their laboratories. We proposed to provide two incentives for conducting voluntary laboratory clean-outs. First, we proposed that a college or university would have 30 days to conduct a laboratory clean-out. It is during a laboratory clean-out that a laboratory is most likely to accumulate more than 55 gallons of unwanted material (or 1 quart of reactive acutely hazardous unwanted material). If a laboratory accumulates more than 55 gallons, the current SAA regulations require that the excess of 55 gallons of hazardous waste (or 1 quart of acutely hazardous waste) be removed within three days. Under Subpart K, we proposed that if a laboratory accumulates more than 55 gallons of unwanted material, all unwanted material, including reactive acutely hazardous unwanted material, must be removed within ten calendar days, and if a laboratory accumulates more than 1 quart of reactive acutely hazardous unwanted material then all reactive acutely hazardous unwanted material must be removed from the laboratory within ten calendar days. In a laboratory clean-out conducted under Subpart K, however, a laboratory has 30 days from the starting date of the laboratory clean-out to complete the laboratory clean-out without being required to remove the assembled unwanted materials from the laboratory, even if the laboratory exceeds 55 gallons of unwanted material (or 1 quart of reactive acutely hazardous unwanted material). This incentive provides flexibility by giving an extension in the time allowed for removal of the unwanted material over the three days allowed in the satellite accumulation area regulations, as well as the ten days allowed in Subpart K for

unwanted materials that are routinely generated.

Second, we proposed that unwanted materials that are generated during the 30 days of a laboratory clean-out and that are hazardous wastes do not need to be counted toward the facility's generator status. However, with this "no counting" incentive, we were and remain concerned about inadvertently encouraging eligible academic entities to retain unwanted materials that are generated in the laboratory on a routine basis and to remove them only during a laboratory clean-out, thereby improperly manipulating their generator status. Two provisions in the proposal were intended to safeguard against this. First was the proposed requirement for the college or university to identify the start date of the laboratory clean-out in its records. This, in combination with the proposed labeling requirement for each container to have an accumulation start date associated with it, provides a method of verification to ensure that any container of unwanted material that has a date that pre-dates the onset of the laboratory clean-out would not be considered to be from the laboratory clean-out and the unwanted material would have to be counted toward calculating the facility's generator status, assuming it is determined to be hazardous waste. The second safeguard that was proposed was that each laboratory at an eligible academic entity could take advantage of the laboratory clean-out incentives only once per 12 month period. Given that each laboratory is required to have a regularly scheduled removal of unwanted material at least every six months, this was intended to ensure that each laboratory would have at least one regularly scheduled removal during a calendar year between laboratory clean-outs.

We received a large number of comments, covering all aspects of the laboratory clean-out provisions. In general, there was overwhelming support for the concept of the laboratory clean-out incentives, although there was opposition expressed by some commenters, as well. Based on these comments, in today's final rule, we have made some revisions to the proposed laboratory clean-out provisions. Below, we discuss the revisions to the proposed laboratory clean-out provisions, as well as the aspects of the laboratory clean-out provisions that are being finalized as proposed, and we provide clarifications regarding the laboratory clean-out provisions.

b. Changes Made to the Laboratory Clean-Out Provisions

Many commenters expressed support for the laboratory clean-out incentive that allowed them not to count their laboratory clean-out hazardous wastes toward their generator status. On the other hand, several commenters expressed concern that the Agency was creating a system that would encourage laboratories to hold onto their routinely generated unwanted materials until a laboratory clean-out, in order to manipulate their generator status. We share the commenters' concerns and have changed the provision of the laboratory clean-out incentive so that only laboratory clean-out hazardous wastes that are unused commercial chemical products are not counted toward the eligible academic entity's generator status. Unused commercial chemical products include chemicals that are discarded P- or U-listed commercial chemical products, and unused discarded chemicals that are hazardous waste because they exhibit one or more characteristics. Any unwanted material that has been used and is a hazardous waste must be counted toward the eligible academic entities generator status, even if it is removed during the 30-day period of a laboratory clean-out. We intend for routinely generated unwanted materials to be removed from the laboratory during regularly scheduled removals, and we expect that the bulk of these routinely generated unwanted materials will be used chemicals. We do not consider these used, routinely generated unwanted materials to be laboratory clean-out wastes and thus, they must be counted toward the eligible academic entity's generator status. Therefore, we have revised the regulatory language to be consistent with our intent and to safeguard against the potential for abuse of the laboratory clean-out incentive. This change will also emphasize that the purpose of the laboratory clean-out is to remove unneeded or unusable chemicals from the laboratory's inventory in order to increase safety within the laboratory.

We will rely on existing regulations and guidance for defining what is considered a used or unused commercial chemical product. For example, the P- or U-listings of § 261.33(e) and (f) apply only to unused commercial chemical products. Therefore, a P- or U-listed hazardous waste generated during a laboratory clean-out would not have to be counted toward the eligible academic entity's generator status, because, by definition, it would be unused. An unused

chemical that is a hazardous waste because it exhibits one or more characteristics also would not have to be counted toward the eligible academic entity's generator status if it were generated during a laboratory clean-out. In a memo dated June 14, 1990, (Bussard to Wilson, RCRA Online #11523), the Agency answered a series of specific questions relating to the definition of "used." In summary, the memo states that dissolving or diluting P- or U-listed chemicals in water, acids, bases, preservatives, or solvents to make laboratory standards (in lieu of buying such solutions) does not constitute use of these chemicals. In addition, any unused, leftover chemical (either P- or U-listed, or characteristic) in an original container, either unopened or opened, or that has been transferred to another container, such as a squirt bottle, for use would also be considered unused.

Some commenters were concerned about the possibility that as a result of the laboratory clean-out provision that allows some hazardous waste not to count toward the eligible academic entity's generator status, some eligible academic entities that are typically CESQGs but would become either SQGs or LQGs as a result of a laboratory clean-out (absent Subpart K), would be able to maintain their CESQG status. If this were the case, the commenter was concerned that hazardous wastes that should normally be managed as hazardous waste would be eligible to be disposed of in a municipal solid waste landfill, which is allowed under the CESQG regulations of § 261.5. The Agency shares the commenter's concern. In fact, in the preamble to the proposed rule we stated, "any hazardous waste that is not counted toward generator status during a laboratory clean-out is still a hazardous waste and is subject to all applicable regulations, including the land disposal regulations, and the regulations for on-site and off-site management, transportation, and treatment and disposal of hazardous waste. The incentive that the Agency is proposing to provide for hazardous wastes generated during a laboratory clean-out affects only the length of time that hazardous wastes are stored on-site and other associated regulations of 40 CFR 262.34 pertaining to generator status, such as biennial reporting and contingency plans" (see 71 FR 29739).

Nevertheless, we believe that for clarity it is appropriate to revise the regulatory language of § 262.213 to reflect the intent of the rule as stated in the preamble to the proposed rule. This is made all the more necessary by the expansion of the final rule to include

eligible academic entities that are CESQGs. If an SQG avoided LQG status as the result of a laboratory clean-out incentive, the hazardous waste would still be regulated as hazardous waste once it is taken off-site, since both SQGs and LQGs must comply with the same transportation and disposal regulations. With the inclusion of CESQGs into the final rule, however, if a CESQG avoided becoming an SQG or LQG as the result of a laboratory clean-out incentive, then potentially regulated hazardous waste would be allowed to be disposed of at a municipal solid waste landfill. Therefore, we are modifying the language of § 262.213(a)(2) to indicate that the effect of not counting hazardous wastes that are unused commercial chemical products toward the eligible academic entity's generator status is limited to the *on-site accumulation* of the hazardous waste. In tandem, we also are including a new paragraph, § 262.213(a)(3), to indicate that for the purposes of *off-site management*, if an eligible academic entity generates more than the monthly CESQG limits (i.e., >1 kg of acutely hazardous waste, or >100 kg of hazardous waste), then the eligible academic entity must manage its hazardous waste according to all applicable hazardous waste regulations for SQGs and LQGs. When determining whether these monthly limits have been exceeded, the eligible academic entity must count all of its hazardous wastes, including those generated during laboratory clean-outs. In other words, even when hazardous wastes are not counted toward the site's generator status, if they are generated in excess of the CESQG monthly limits, they are regulated as hazardous waste when they are transported, treated, stored or disposed of off-site. EPA intended to create an incentive to conduct laboratory clean-outs by relieving the generator of some of the additional burden that would be incurred by changing generator status. However, we did not intend to allow regulated hazardous waste in excess of the CESQG monthly limits to be disposed of in municipal solid waste landfills.

We illustrate how this would work by providing an example of a likely scenario. An eligible academic entity that is normally a CESQG conducts a laboratory clean-out. As a result of the laboratory clean-out, the eligible academic entity generates 5 kg of P-listed hazardous waste. Because P-listed hazardous wastes are all acute hazardous wastes, the eligible academic entity generates more than 1 kg of acute hazardous waste that month. Normally, this would mean that the eligible

academic entity would become subject to the LQG regulations for that month. However, because the laboratory clean-out provisions allow the eligible academic entity not to count the 5-kg of P-listed hazardous waste from the laboratory clean-out toward its generator status, the eligible academic entity will remain a CESQG under § 261.5 for the purposes of on-site accumulation of its hazardous waste, including the acute hazardous waste. However, once the hazardous waste is sent off-site, the eligible academic entity would not be allowed to send its hazardous waste to a non-hazardous waste facility, such as a municipal solid waste landfill, as allowed by the CESQG regulations of § 261.5. Instead, because the eligible academic entity generated acute hazardous waste in excess of the CESQG monthly limits (i.e., >1 kg acute hazardous waste), the hazardous waste would have to be managed as hazardous wastes when sent off-site. This means, for example, that the hazardous waste would have to be manifested, comply with the LDRs, and be either recycled or treated and disposed of at a hazardous waste TSDF.

A number of commenters expressed support for extending the laboratory clean-out incentives to ancillary spaces, such as stockrooms and laboratory preparatory rooms. As discussed in the preceding section on the definition of laboratory (see Section III.B.2 and § 262.200), these ancillary spaces would be considered laboratories, whether they support individual laboratories or the laboratories of a department, and thus would be eligible to take advantage of the laboratory clean-out provisions. In fact, since these ancillary areas typically store chemicals for use by nearby or surrounding laboratories, we believe the clean-out provisions are especially important for these ancillary areas.

Two commenters pointed out an inconsistency between the preamble and the regulatory text with respect to how long records of laboratory clean-outs must be kept. The preamble to the proposed rule stated that records must be kept "for as long as the college or university operates under this new subpart" (see 71 FR 29739), while the proposed regulatory text stated that records pertaining to laboratory clean-outs must be kept "for a period of three years from the date the clean-out ends." The proposed regulatory text reflects what we intended for record retention pertaining to laboratory clean-outs. Thus, the final rule makes clear that records for laboratory clean-outs must be kept for three years from the date the clean-out ends.

c. Changes Not Made to the Laboratory Clean-Out Provisions

Many commenters expressed support for the 30-day timeframe for conducting laboratory clean-outs, believing that 30 days is sufficient time to conduct a laboratory clean-out. About the same number of commenters, however, requested a longer timeframe for conducting laboratory clean-outs. Suggestions ranged from 60 days to 180 days. One commenter indicated that "60 days is a more reasonable length of time to arrange for and mobilize a hazardous waste contractor for on-site lab-packing services, especially if the clean-out was unexpected or the institution is in a remote location." We anticipate that in most instances, laboratory clean-outs will be planned events. Therefore, we continue to believe that 30 days is sufficient time to conduct a thorough laboratory clean-out and we are finalizing the time limit for laboratory clean-outs, as proposed.

Commenters asked the Agency when the 30 days of a laboratory clean-out would begin—while the inventory of laboratory chemicals is being sorted or when they are discarded? The definition of "laboratory clean-out" in today's final rule is:

an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor/occupant. A regularly scheduled removal of unwanted material as required by § 262.208 does not qualify as a laboratory clean-out.

Therefore, the 30 days of a laboratory clean-out starts when a trained professional or laboratory personnel begins sorting through and evaluating the inventory of laboratory chemicals, making decisions about whether they are unwanted materials or not. Once it has been determined that a chemical is, indeed, an unwanted material, as opposed to a chemical or other material that can be kept in the laboratory for further use, then the unwanted material becomes subject to the requirements of Subpart K. We realize that a laboratory clean-out can involve considerable planning before the laboratory clean-out begins. Advanced planning for a laboratory clean-out prior to sorting and evaluating a laboratory's chemical inventory is not considered the start of the 30 days allowed for a laboratory clean-out.

At the conclusion of the laboratory clean-out, all unwanted materials (or

hazardous waste, if the hazardous waste determination is made in the laboratory) must be removed from the laboratory. Note that, as with routinely generated unwanted materials, unwanted materials from a laboratory clean-out can be taken to an on-site CAA or TSDF to make the hazardous waste determination. Eligible academic entities without an on-site CAA, or on-site interim status or permitted TSDF will have to make the hazardous waste determination for unwanted materials generated during a laboratory clean-out in the laboratory before they are removed from the laboratory and will have to be prepared to send the hazardous wastes off-site at the conclusion of the 30-day clean-out.

Finally, although a few commenters suggested that the Agency require that eligible academic entities conduct laboratory clean-outs, the Agency has decided not to do so. Rather, we believe that the laboratory clean-out provisions are attractive enough to eligible academic entities such that they will avail themselves of the clean-out provisions without EPA forcing them to do so through a mandate.

d. Clarifications About the Laboratory Clean-Out Provisions

The Agency wants to reiterate the point that we view laboratory clean-outs to be distinct from routine, regularly scheduled removals of unwanted materials. In the course of normal laboratory operations, many chemicals are used and will become unwanted materials and ultimately may be determined to be hazardous wastes. This can occur as a result of teaching or research activities or, in the case of teaching hospitals, as a result of clinical or diagnostic activities. We expect that these routinely generated wastestreams will comprise the bulk of the unwanted materials that are removed from the laboratory during regularly scheduled removals. On the other hand, a laboratory often can accrue a large number of unused chemicals in its inventory, some of which can become dangerous over time, developing the potential to cause significant harm. It has been our observation that it is unusual for laboratories to remove unused chemicals from their inventories on any regular basis. We have developed the laboratory clean-out provisions to provide incentives for laboratories to assess their inventory and remove chemicals from the laboratory that are either dangerous or have the potential to become dangerous, or are unlikely to be used in the future, regardless of the reason. We anticipate that many eligible academic entities will

take advantage of the laboratory clean-out provisions when a researcher or faculty member retires or moves, or when a building is renovated. However, we are not limiting the use of the laboratory clean-out provisions to these events because we would like to encourage laboratories to develop the practice of more frequent reviews and removals of their unneeded or unusable chemicals. However, the laboratory clean-out incentives (i.e., having 30 days to conduct a laboratory clean-out and not counting toward the eligible academic entity's generator status the hazardous waste that consists of unused commercial chemical products) is still limited to once per laboratory per 12 month period.

Two commenters asked for clarification about the labeling and container management standards that apply to laboratory clean-out wastes. During the course of a laboratory clean-out, some chemicals will be considered unwanted materials and ultimately hazardous wastes, while others will not. Those laboratory clean-out chemicals that become unwanted materials are subject to all the same labeling and container management standards—as well as all other applicable requirements of Subpart K—as any other unwanted material in the laboratory, with the exceptions noted in § 262.213(a)(1)–(4). On the other hand, those chemicals that can continue to be used in the same laboratory would be considered products, not unwanted materials, and would not be subject to the labeling and container management standards of Subpart K. If a clean-out chemical from one laboratory can be used in a different laboratory, we can envision two probable scenarios. If the determination is made in the laboratory that a chemical can be used in another laboratory, it would not be considered an unwanted material; rather, it would be considered a product and thus not regulated under RCRA. If, on the other hand, the determination that the chemical can be used in another laboratory is made after it is removed from the laboratory, in an on-site CAA or TSDF, the clean-out chemical would be regulated as an unwanted material until it is redistributed from the CAA to another laboratory for further use.

Several commenters were concerned that if hazardous wastes generated as a result of a laboratory clean-out do not have to be counted toward the eligible academic entity's generator status, fewer generators will have to submit a BR and the result would be under-reporting of hazardous wastes from those eligible academic entities that choose to be subject to the Subpart K requirements.

We acknowledge that there may be fewer generators reporting hazardous waste generation as a result of the laboratory clean-out provisions not to count hazardous waste that consists of unused commercial chemical products toward the eligible academic entity's generator status because under the Federal regulations, only LQGs have to submit the BR. Nevertheless, we anticipate that even after subtracting laboratory clean-out wastes when calculating their generator status, many eligible academic entities will still generate enough hazardous waste to be LQGs, based on their routinely generated laboratory waste, as well as their non-laboratory hazardous wastes, in which case they will still be required to submit the BR. Moreover, some States require SQGs to submit a BR. For information on how to submit the BR with respect to hazardous wastes generated during laboratory clean-outs, see Section III.D.1.

8. Laboratory Management Plan

Today's final rule requires that eligible academic entities choosing to be subject to the Subpart K requirements must develop an LMP. As EPA explained in the preamble to the proposed rule, the goal of the LMP is for a college or university to plan carefully how it is going to implement Subpart K's performance-based requirements for safely managing the unwanted materials generated in laboratories. We believe that the LMP provides a necessary supplement to the flexibility provided in this rule and will ultimately work to increase environmental performance and protection. EPA received positive feedback from commenters about requiring the LMP. Many commenters explained that requiring an LMP along with a performance-based approach will help make it possible for eligible academic entities to achieve their environmental goals, such as regulatory compliance, pollution prevention and laboratory safety.

Some commenters misinterpreted EPA's intent for the LMP. One commenter believed that each laboratory within a college or university had to develop an LMP. That is not the case at all. Rather, EPA intended that the eligible academic entity—a college or university, or non-profit research institute or teaching hospital that is owned by or has a formal written affiliation agreement with a college or university—would create one LMP for all its laboratories that are operating under Subpart K. In addition, if an eligible academic entity has multiple EPA Identification Numbers or sites, then it can develop one LMP to cover

operations for all laboratories at all sites operating under the Subpart K requirements. Also, a number of commenters suggested that an eligible academic entity should list in its LMP which laboratories would be covered under Subpart K and its LMP. The commenters go on to state that each eligible academic entity should be allowed to determine which of its laboratories will operate under Subpart K and document this in its LMP. In response, and as described earlier in the preamble, if multiple sites with separate EPA Identification Numbers operate under one LMP, the LMP must identify which sites are covered by the LMP. However, there is no requirement to identify each laboratory within each site, as all laboratories at a participating eligible academic entity within that site or covered by an EPA Identification Number must operate under Subpart K (see section III.C.1, Notification and § 262.203). Nevertheless, should an eligible academic entity choose to list all its laboratories that are participating in Subpart K, it could be a valuable tool to manage removals of unwanted material, as well as assist EPA and State inspectors in determining compliance with the Subpart K requirements.

Another commenter argued that requiring an LMP would be redundant documentation since laboratories are required to have a Chemical Hygiene Plan under OSHA's Laboratory Standard. We disagree. As the proposal clearly explained, a college or university (and now eligible academic entities) can take an existing plan, such as the Chemical Hygiene Plan and revise it to include the additional necessary information or procedures required by today's rule.

Two requirements for the LMP are remaining the same in today's final rule. First, an eligible academic entity must make its LMP "available" to laboratory workers, students, and anyone requesting the LMP at the eligible academic entity. Examples may include, but are not limited to, posting the LMP on the Web site of the participating eligible academic entity or keeping a copy of the LMP at each individual site of the eligible academic entity that is participating in Subpart K. Second, since the LMP is a document to plan how an eligible academic entity will meet the performance-based standards of Subpart K, EPA requires the LMP to be reviewed and updated, as needed, so that it is current with the waste management practices at the eligible academic entity's laboratories.

Most of the comments received about the LMP centered on the two options EPA co-proposed regarding the

enforceability of the contents of the LMP. Both proposed options required development of an LMP that addressed how the college or university would achieve the performance-based standards of the rule. The difference between the two options was in the enforceability of the contents of the LMP. Under one proposed option, compliance with the performance-based regulations was enforceable, but the contents of the LMP were not enforceable. In the other proposed option, the contents of the LMP were enforceable, as well as compliance with the performance-based regulations.

EPA received comments supporting both options. There was a strong belief from some commenters that if the EPA did not make the LMP's contents enforceable, then the LMP would not be a meaningful document and would not be followed. On the other side, commenters argued that the LMP should not be enforceable; these commenters believed that an enforceable LMP would compel colleges or universities to develop vague, minimum procedures and that an enforceable LMP would be contrary to the goals of a performance-based regulation.

Reviewing the Agency's reasons for proposing the requirement for an LMP, EPA wanted colleges and universities to give careful thought regarding the management of unwanted materials and hazardous waste generated in their laboratories. Moreover, we wanted to encourage colleges or universities to go above and beyond the regulations and to think holistically about waste management on campus by planning and developing best management practices (BMPs) in the LMP. We continue to believe strongly that the LMP is necessary in order to provide the planning component for implementing the provisions of this rule. Based on our views regarding the purpose of the LMP and the comments we received, we have decided to split the LMP into two parts—with the contents of one part enforceable and the contents of the other part not enforceable, although in order to be in compliance with Subpart K, an eligible academic entity must address all nine elements in its LMP.

Thus, under the final rule, the LMP must be comprised of two parts with a total of nine elements as specified in 40 CFR 262.214. The specific contents in Part I of the LMP are enforceable, while the specific contents in Part II of the LMP are not enforceable. Below is a discussion of the required elements in the two Parts of the LMP. If an element has remained the same as proposed, it is simply enumerated without discussion.

a. Part I of the LMP

As a way to incorporate more flexibility into the regulations, while maintaining the accountability in this Subpart, the contents of Part I of the LMP are enforceable. This part of the LMP contains necessary information for inspectors and other officials about what options within Subpart K the eligible academic entity is exercising. The two elements of Part I of the LMP are explained here:

1. Describe procedures for container labeling in accordance with § 262.206(a), including

i. Identifying whether the eligible academic entity will use the term "unwanted material" on the containers in the laboratory. If not, identify the equally effective term that will be used in lieu of "unwanted material" and consistently by the eligible academic entity. The equally effective term, if used, has the same meaning and is subject to the same requirements as "unwanted material."

ii. Identifying the manner in which information that is "associated with the container" will be imparted.

The first sub-element allows flexibility in using different terminology other than "unwanted materials." Many commenters wrote that they disliked the term "unwanted materials" because it was overbroad and would cause confusion. While we do not necessarily agree with these commenters, EPA does not object to including additional flexibility concerning the terminology that can be used in the laboratory instead of "unwanted materials."^a However, in order for an eligible academic entity to take advantage of this option, it must identify another equally effective term (e.g., laboratory waste) in the first element of Part I of its LMP. This equally effective term must be used consistently in all of its laboratories operating under Subpart K (see Section III.C.2 and § 262.206(a)(1)(i)).

The second sub-element of the first element of Part I of the LMP in today's final rule requires eligible academic entities to describe the manner in which information associated with the container will be provided. For example, if an eligible academic entity chooses to use barcodes and a computer tracking system to meet the requirement to have information associated with a container, it must describe this in the enforceable Part I of the LMP, so that inspectors know where the associated container information resides.

^a If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," in compliance with § 262.206(a)(1)(i), the equally effective term will have the same meaning as "unwanted material." In addition, the equally effective term shall be subject to all of the same requirements in this rule that apply to unwanted materials.

2. Identify whether the eligible academic entity will comply with § 262.208(a)(1) or § 262.208(a)(2) for regularly scheduled removals of unwanted material from the laboratory.

In the second element of Part I of the LMP, an eligible academic entity must describe which method it will exercise for the removal of unwanted materials. Today's final rule adds another option for the removal of unwanted materials, as described in Section III.C.5 of today's preamble, in order to increase the flexibility for eligible academic entities. However, with the added flexibility, we require that the eligible academic entity documents which removal method it chooses to use. For example, if an eligible academic entity elects to comply with 40 CFR 262.208(a)(2), where it must remove containers of unwanted material from each laboratory within six months of each container's accumulation start date, then the eligible academic entity must record this choice in Part I of the LMP. If the eligible academic entity elects to comply with the other approach, that must be documented in Part I of the LMP.

b. Part II of the LMP

As with Part I of the LMP, Part II of the LMP is required and must reasonably address the seven required elements. EPA envisions that eligible academic entities will use this section to capture BMPs for holistic waste management within laboratories. In order to encourage the development of BMPs, the specific contents of Part II of the LMP are not enforceable. For example, should an eligible academic entity explain that it will train students commensurate with their duties by showing a video, but instead provides classroom instruction because the video is broken, then the eligible academic entity is not in violation of its LMP. The following are the seven elements that an eligible academic entity must address in Part II of its LMP; discussed in the order in which they appear in the regulations.

• The first three elements of Part II of the LMP are essentially the same as proposed.

The second element includes a minor change that was necessary because of the change in the training and instruction requirements for laboratory workers and students. Under the proposed rule, training was required for laboratory workers, while instruction was required for students. Today's final rule requires that for both laboratory workers and students, training be commensurate with their duties. Elements one, two, and three of Part II of the LMP are below:

1. Describe its intended best practices for container labeling and management standards, including how the eligible academic entity will manage containers used for in-line collection of unwanted materials, such as with high performance liquid chromatographs and other laboratory equipment (see the required standards at § 262.206).

2. Describe its intended best practices for providing training for laboratory workers and students commensurate with their duties (see the required standard at § 262.207(a)).

3. Describe its intended best practices for providing training to ensure safe on-site transfers of unwanted material by trained professionals (see the required standard at § 262.207(d)(1)).

• The fourth element of Part II of the LMP has changed since proposal.

The fourth element of Part II of the LMP concerns the procedures of regularly removing unwanted materials from the laboratory. While EPA is not adding anything to this element, the regulatory language has been modified to clarify what the Agency intends as part of this element. That is, we have included two different types of removals of unwanted materials from laboratories—regularly scheduled removals, and removals when maximum volumes are exceeded—because they require different procedures. This clarification will ensure that an eligible academic entity develops a method to communicate with EH&S personnel or vendors when laboratories exceed the maximum volume and a pickup of the unwanted materials is needed. See the fourth element below:

4. Describe its intended best practices for removing unwanted material from the laboratory, including:

a. For regularly scheduled removals—Develop a regular schedule for identifying and removing unwanted materials from its laboratories (see the required standards at § 262.208(a)(1) and § 262.208(a)(2)).

b. For removals when maximum volumes are exceeded

A. Describe its intended best practices for removing unwanted materials from the laboratory within 10 calendar days when unwanted materials have exceeded their maximum volumes (see the required standards at § 262.208(d)).

B. Describe its intended best practices for communicating that unwanted materials have exceeded their maximum volumes.

• The fifth and sixth elements of Part II of the LMP have remained essentially the same as proposed. The second part of element six reflects one minor change. In the preamble to the proposed rule and as finalized today, one of the requirements for a laboratory clean-out is that an eligible academic entity must document its clean-out activities (see section III.D.2 or § 261.213(a)(4)). Because we are not mandating that an

eligible academic entity document its laboratory clean-out in a particular format or media, we are requiring that an eligible academic entity develop procedures for documenting it as part of element six of Part II of the LMP. See elements five and six below:

5. Describe its intended best practices for making hazardous waste determinations, including specifying the duties of the individuals involved in the process (see the required standards at § 262.11 and §§ 262.209–262.212).

6. Describe its intended best practices for laboratory clean-outs if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in § 262.213, including:

a. Procedures for conducting laboratory clean-outs (see the required standards at § 262.213(a)(1)–(3)) and

b. Procedures for documenting laboratory clean-outs (see the required standards at § 262.213(a)(4)).

• The seventh element of Part II of the LMP has changed since proposal.

The seventh element has been expanded in the final rule based on several comments about the characterization of unknown chemicals and chemicals that degrade over time. The proposed rule required colleges and universities to develop emergency prevention, notification, and response procedures appropriate to the hazards in the laboratory, and the final rule keeps this requirement as the first sub-element of element seven. In comments, however, we were informed that laboratories face issues with chemicals that expire and/or become dangerous as they degrade. A good example of this is picric acid, which becomes explosive if it becomes dehydrated/crystallized. Because of the threat some chemicals may pose, the final rule requires that the seventh element of Part II of the LMP includes a list of chemicals that the eligible academic entity has or is likely to have that can degrade over time and become more dangerous with age; the list of chemicals is intended to facilitate the removal of these chemicals before a problem develops. The third sub-element requires eligible academic entities to develop procedures to dispose of these chemicals safely.

Finally, a number of commenters suggested that eligible academic entities should develop procedures in their LMPs for identifying and characterizing unknown chemicals in a timely manner. Since transporters and TSDFs often will not accept unknown chemicals, the unknown chemicals tend to remain on-site for extended periods. We agree with the commenters and believe this requirement will assist in the timely removal of these unknown chemicals and in emergency prevention for

laboratories. Thus, we have added it as the fourth sub-element of the seventh element of Part II of the LMP. See the seventh element below:

7. Describe its intended best practices for emergency prevention, including:

a. Procedures for emergency prevention, notification, and response, appropriate to the hazards in the laboratory, and

b. A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when they exceed their expiration date and/or as they degrade, and

c. Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date and/or as they degrade, and

d. Procedures for the timely characterization of unknown chemicals.

In summary, an eligible academic entity must develop an LMP with two parts covering a total of nine elements. The contents of the two elements in Part I of the LMP are enforceable. Part II of the LMP is intended to encourage eligible academic entities to develop BMPs for their laboratories. While the contents of Part II of the LMP are not enforceable, eligible academic entities must reasonably address the seven required elements.

9. How CESQGs Comply With Subpart K and How They Differ From LQGs and SQGs

In most respects, an eligible academic entity that opts into Subpart K is regulated the same, regardless of whether the eligible academic entity is a CESQG, SQG, or LQG. However, because CESQGs are regulated differently than SQGs and LQGs under the existing generator regulations, we have had to tailor some sections of the Subpart K requirements to reflect their inclusion. This section discusses how the Subpart K requirements will be implemented for CESQGs.

Specifically, Subpart K provides an alternative set of requirements for generators of laboratory hazardous waste. For SQGs and LQGs, Subpart K provides an alternative to §§ 262.11 and 262.34(c) (the SAA regulations). For CESQGs, however, the Subpart K requirements provide an alternative to the conditional exemption in § 261.5(b), which exempts hazardous waste from regulation under 40 CFR Parts 124, 262–266, 268, 270, and the notification requirements of RCRA section 3010, provided the CESQG complies with the conditions of the exemption. Thus, by choosing to become subject to Subpart K, an eligible academic entity relinquishes its conditionally exempt status and becomes subject to the requirements of 40 CFR part 262, Subpart K, while managing its

unwanted materials and hazardous wastes in its laboratories. However, a CESQG also will be able to take advantage of the two main benefits of the alternative standards: Making the hazardous waste determination before the unwanted materials are removed from the laboratory (but at a time after the initial generation) and the laboratory clean-out provisions.

As with other eligible academic entities, an eligible academic entity that is a CESQG and that opts into Subpart K must notify EPA of its intended participation using the Site Identification Form (EPA Form 8700–12). One of the fields on the Site Identification Form asks for the site's EPA Identification Number. We realize that most CESQGs will not have EPA Identification Numbers when they submit their notifications for Subpart K and they are not required to apply for one, although some States may choose to assign an Identification Number once a Site Identification Form is submitted. If an eligible academic entity that opts into Subpart K is a CESQG and does not have an EPA Identification Number, all of the laboratories owned by the eligible academic entity and that are on-site (as opposed to under the same EPA Identification Number) will be subject to Subpart K.

Many college and university commenters informed the Agency that they have multiple EPA Identification Numbers (or sites) within a single campus. When a campus is divided into numerous sites, each site has its own generator status, based on its monthly generation of hazardous waste. Therefore, a single campus may be comprised of sites that are CESQGs, SQGs, and LQGs. Some other commenters also indicated that they have field laboratories, which may not be on campus, that are typically CESQGs, and which may not be on campus, but that laboratory personnel often work in both the campus laboratories and the field laboratories. Commenters requesting that CESQGs be allowed to be subject to Subpart K argued that it would be to their benefit to have the same management standards for the hazardous waste generated in all of their laboratories. The Agency agrees and is clarifying that when eligible academic entities that are CESQGs choose to be subject to the Subpart K requirements, their laboratories must follow the same container labeling, container management, training requirements and all other management standards for the management of their unwanted materials in the laboratory as other generators operating under Subpart K.

Since CESQGs will not have an on-site CAA or TSD, CESQGs must make the hazardous waste determination in the laboratory before the unwanted materials may be removed from the laboratory (but at a time after the initial generation of the unwanted materials). We realize that a CESQG may be part of a larger "main" campus that has a CAA and that the eligible academic entity may want to bring the unwanted materials from the CESQG site to the main campus's CAA to make the hazardous waste determination. However, today's rule does not allow for this and all hazardous waste determinations must be made on-site before the unwanted material may be treated or disposed of on-site or transported off-site. Today's rule does not allow for off-site consolidation of unwanted materials or hazardous wastes, with two exceptions that are discussed in section III.C.10 of today's preamble. As discussed previously, eligible academic entities, including CESQGs, may consolidate unwanted materials on-site in another laboratory (see section III.C.5.c of today's preamble for more detail).

Once the hazardous waste determination is made in accordance with § 262.11, the eligible academic entity must count the unwanted materials that are hazardous wastes toward calculating its monthly generator status and it must remove the hazardous waste from the laboratory directly. If the total quantity of hazardous waste for the month for the site is below the CESQG limits (i.e., <1 kg of acutely hazardous waste and <100 kg of hazardous waste), the hazardous waste may be managed as CESQG hazardous waste when removed from the laboratory. That is, the hazardous waste may be managed at any of the types of facilities listed in § 261.5(f)(3) for acute hazardous waste, or § 261.5(g)(3) for hazardous waste:

- (i) Permitted under 40 CFR part 270.
- (ii) In interim status under 40 CFR parts 265 and 270.
- (iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under 40 CFR part 271.
- (iv) Licensed, registered or permitted by the State to manage municipal solid waste, and if managed in a solid waste landfill is subject to 40 CFR part 258.
- (v) Licensed, registered or permitted by the State to manage non-municipal non-hazardous waste, and if managed in a non-municipal non-hazardous waste disposal unit is subject to 40 CFR 257.5-257.30.
- (vi) Beneficially uses, reuses, legitimately recycles or reclaims its waste; or treats its waste prior to

beneficial use, reuse, legitimate recycling or reclamation, or

- (vii) For universal waste, a universal waste handler or destination facility subject to the requirements of 40 CFR part 273.

Eligible academic entities that are CESQGs or have CESQG sites also will be able to take advantage of the laboratory clean-out provisions in the final rule. That is, CESQGs can have up to 30 days to conduct a laboratory clean-out and not be required to count hazardous wastes that are unused commercial chemical products and that are generated during a laboratory clean-out toward calculating their generator status. Thus, we believe that the laboratory clean-out incentives will now provide a considerable benefit to generators that are typically CESQGs, but become LQGs on an episodic or periodic basis when they discard unused commercial chemical products (either listed or characteristic) from their laboratories. As discussed in section III.B.7 of today's preamble, even if the laboratory clean-out incentives allow an eligible academic entity to maintain its conditionally exempt status, if the eligible academic entity generates hazardous waste in quantities in excess of the CESQG monthly limits, the hazardous waste is fully regulated as hazardous waste when it is transported, treated, stored or disposed of off-site (also see § 262.213).

10. Off-site Consolidation

a. Off-site Consolidation by CESQGs

Several commenters suggested that the Agency allow the off-site consolidation of unwanted materials at a centralized, off-site location. These commenters generally suggested this as part of their request to expand the applicability of the final rule to include CESQGs. The current generator regulations, for any generator status, provide limited opportunities for a generator to accept off-site shipments of another generator's hazardous waste. Under both the existing generator regulations, as well as under today's final rule, there are two situations that allow for a generator to receive hazardous waste from another, off-site generator.

The first situation applies to the off-site consolidation of hazardous waste generated only by CESQGs. Under § 261.5, in order to qualify as a CESQG, a CESQG must ensure delivery of its acute hazardous waste and hazardous waste to one of the seven types of facilities listed in § 261.5(f)(3) and 261.5(g)(3):

- (i) Permitted under 40 CFR part 270.

- (ii) In interim status under 40 CFR Parts 265 and 270.

(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under 40 CFR part 271.

(iv) Licensed, registered or permitted by the State to manage municipal solid waste, and if managed in a solid waste landfill is subject to 40 CFR part 258.

(v) Licensed, registered or permitted by the State to manage non-municipal non-hazardous waste, and if managed in a non-municipal non-hazardous waste disposal unit is subject to 40 CFR 257.5 through 257.30.

(vi) Beneficially uses, reuses, legitimately recycles or reclaims its waste; or treats its waste prior to beneficial use, reuse, legitimate recycling or reclamation, or

- (vii) For universal waste, a universal waste handler or destination facility subject to the requirements of 40 CFR part 273.

If a CESQG that generates hazardous waste wants to send its hazardous waste to an off-site consolidation area for centralized collection, it must send its hazardous waste to a collection site that would qualify as one of the above mentioned facilities in order to still qualify as a CESQG. Thus, a receiving generator could be an acceptable collection site if it qualified as one of the seven categories of facilities above. For example, a CESQG could send its hazardous waste to an eligible academic entity if such receiving entity was an interim status or permitted TSD or was authorized by the State to manage hazardous waste under the State approved program. If the CESQG that generates hazardous waste sends it to another generator that does not qualify as one of the facilities specified above, the generating CESQG would not meet the conditions of the CESQG exemption and would be subject to the applicable generator regulations of 40 CFR part 262 (see Q&A dated April 4, 1987; RCRA Online #12894).

b. Off-site Consolidation by CESQGs, SQGs, and LQGs

The second situation applies to all generator categories. A generator can send its hazardous waste to another generator's site if the receiving site qualifies as a transfer facility (see Q&A dated April 4, 1987; RCRA Online #12894). Under § 263.12, hazardous waste may be stored in containers at a transfer facility for ten days or less without requiring interim status or a permit. A transfer facility is defined in 40 CFR 260.10 as " * * * any transportation related facility including loading docks, parking areas, storage

areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation." It is possible that a generator may qualify as a transfer facility, as long as the hazardous waste it receives is not stored on-site for more than ten days. As stated previously, the hazardous waste determination must be made for all unwanted materials prior to transporting them off-site, regardless of whether the off-site transportation includes a stop at a transfer facility.

11. Topics That Are Outside the Purview of This Rulemaking

EPA has consistently interpreted our existing hazardous waste regulations to allow generators to non-thermally treat the hazardous waste they generate on-site in their accumulation tanks and containers, without needing to obtain a RCRA permit or having interim status (51 FR 10168, March 24, 1986). Examples of treatment that may be conducted in accumulation tanks and containers without a permit or interim status include precipitating heavy metals from solutions and oxidation/reduction reactions. A permit or interim status would be required to store and/or treat hazardous waste that is consolidated from off-site locations or if the treatment was thermal treatment.

Many commenters suggested that the Subpart K requirements should specifically address treatment of hazardous waste by generators in laboratories. In the proposal to Subpart K, the Agency did not specifically identify a regulatory approach for the treatment of hazardous waste by generators in laboratories. Therefore, because the Agency did not provide notice and an opportunity for public comment on this subject, it is outside the scope of this rulemaking and EPA does not intend to add any such provisions to the final rule. While today's final rule does not specifically address the treatment of hazardous waste in laboratories, it also does not change EPA's interpretation of its existing regulations.

We have also often been informed, and commenters confirmed, that it is not uncommon for an eligible academic entity to have numerous EPA Identification Numbers per "campus." Typically, this is because the campus is intersected by public roads so that not all areas of the campus are considered "on-site," as defined by RCRA. We received several comments encouraging EPA to allow a single EPA Identification Number per campus. We did not specifically identify in the proposal to Subpart K a regulatory approach for allowing one EPA Identification

Number per campus. Therefore, because the Agency did not provide notice and an opportunity for public comment on this subject, it is outside the scope of this rulemaking and EPA does not intend to add any such provisions to the final rule.

D. Reporting and Recordkeeping

1. Reporting to the Biennial Report for Eligible Academic Entities That Are LQGs

Under the existing generator regulations, LQGs are required to submit information about their hazardous waste generation and management activities in the BR. The data are prepared and submitted to the EPA Regions (or authorized States) in even-numbered years (e.g., 2006) and must include waste information from the previous, odd-numbered year (e.g., 2005). The data submitted for the BR is retained in the RCRAInfo System. When developing rulemakings, the Agency often relies on data submitted for the BR to inform us about various aspects of the hazardous waste activities, such as identifying generators of hazardous wastes and waste generation and management activities (i.e., number of hazardous waste generators and volume of hazardous waste being generated and managed). When analyzing data in the RCRAInfo System to support the development of this rulemaking, it became clear to the Agency that there are a variety of ways in which similar entities with similar hazardous waste generation patterns report data for the BR. The Agency recognizes the differences in reporting may be situational; however, we offer suggestions here for reporting future laboratory hazardous waste activities to the BR that will assist the Agency in analyzing data in a more consistent and accurate manner.

On the Generation and Management (GM) form of the BR, we suggest the use of the Source Code G22 (Laboratory analytical wastes (used chemicals from laboratory operations)) would be appropriate in most cases for hazardous wastes that are generated in the laboratory and that are not from a laboratory clean-out. When G22 is not applicable, but the hazardous wastes are generated in a laboratory, the generator should indicate in the comment field (when provided by the State) that the hazardous waste originated in a laboratory. In addition, the Form Codes W001 (Lab packs from any source not containing acute hazardous waste) and W004 (Lab packs from any source containing acute hazardous waste) should be used when applicable.

If an eligible academic entity submits a BR that includes hazardous waste from laboratory clean-outs, the Agency's guidance on preparing the GM Form of the BR is to use the Source Code G11, for the discarding of off-specification or out-of-date chemicals or products. If the State's version of the GM form provides a comment section, we suggest the eligible academic entity indicate that the hazardous waste is from a Subpart K laboratory clean-out.

2. Recordkeeping

Today's final rule requires that eligible academic entities choosing to comply with the Subpart K requirements maintain certain records. Specifically, eligible academic entities must maintain the following records: (1) Notification(s) to the appropriate EPA Regional Administrator (or State Director, in authorized States) of its participation in or subsequent withdrawal from Subpart K (using the EPA Site Identification Form (EPA Form 8700-12)); (2) non-profit research institutes and teaching hospitals that are not owned by a college or university must keep the formal written affiliation agreement on file; (3) training records for laboratory workers defined in 40 CFR 262.200 of this Subpart at participating LQG eligible academic entities; (4) documentation of laboratory clean-out activities identifying the laboratory being cleaned out, the date the clean-out begins and is completed, and the volume of hazardous waste generated during the clean-out that is conducted in accordance with § 262.213; and (5) an LMP (an existing plan may be modified to address the specific requirements of this alternative regulation).

EPA is not requiring that a participating eligible academic entity keep all required records, such as notifications, training records, formal written affiliation agreements and the LMP together. However, EPA believes filing all required records together, if practicable, may enhance the ease of accessibility by those individuals needing access to the records at any given time. Additionally, having the records located in one central location may help increase efficiency of inspections by reducing the amount of time expended to locate records that may be kept in several different locations at a participating institution (e.g., training records might normally be filed with personnel files and the LMP might normally be kept at the EH&S department).

EPA is requiring that an eligible academic entity maintain a copy of its notification to participate in this

Subpart on file in-house (i.e., at the participating eligible academic entity) for the duration that the institution remains subject to the Subpart K requirements. Additionally, an eligible academic entity must maintain a copy of its notification to withdraw from Subpart K on file for three years from the date of the notification of withdrawal from the Subpart K requirements.

Because of the expansion in scope of today's final rule, the Agency has added recordkeeping for teaching hospitals and non-profit research institutes, as defined in the final rule. In order to document that a non-profit research institute or a teaching hospital is eligible to opt into Subpart K, the non-profit research institute or teaching hospital must keep on file for the duration that the institution remains subject to the Subpart K requirements a copy of the formal written affiliation agreement that it has with the college or university. For a teaching hospital, the formal written affiliation agreement must consist of a master affiliation agreement and program letter of agreement with the medical college or school with which it is affiliated.

We reiterate that today's final rule does not change the existing recordkeeping requirements for documenting training of trained professionals at LQGs. Under the existing hazardous waste generator regulations, LQGs must comply with the recordkeeping requirements found at 40 CFR 265.16(e). Since this rule simply refers to the existing applicable training requirements pertaining to an eligible academic entity's generator status, training records for trained professionals (i.e., individuals conducting the hazardous waste determination or transferring unwanted materials on-site) must be maintained at LQGs. SQG training requirements at 40 CFR 262.34(d)(5)(iii) do not require retention of training records; therefore, Subpart K does not require training records to be kept for trained professionals at SQGs. Likewise, training records are not required for trained professionals at CESQGs. Furthermore, training records for students are not required for LQGs, SQGs or CESQGs.

In addition, as proposed, today's final rule requires that LQG eligible academic entities maintain documentation that demonstrates that laboratory workers have been trained commensurate with their duties. As with trained professionals, these records must be kept for the duration specified in § 265.16(e). Thus, these training records must be kept until the institution closes

or for three years after the departure of a trained professional or laboratory worker.

Additionally, as proposed, today's final rule includes a recordkeeping provision for laboratory clean-out events at participating eligible academic entities. Section 262.213(a)(4) of today's rule requires eligible academic entities to document their clean-out activities. EPA is not mandating a particular record format or media. Instead, participating institutions may determine the most appropriate type of record that best suits their individual capabilities and recordkeeping systems (e.g., filed hard copy, electronic copy). However, the documentation must contain certain information and be retained at the eligible academic entity for three years from the date the laboratory clean-out ends. Specifically, this documentation must identify the particular laboratory that is being cleaned out, the date the clean-out began and ended, and the volume of hazardous waste generated during the clean-out. This documentation is particularly relevant since a laboratory may only utilize the laboratory clean-out provision incentives (i.e., not counting hazardous wastes that are unused commercial chemical products toward its generator status and the 30-day allowance for removal) once per 12-month period per laboratory.

Also, EPA is requiring that a copy of a participating eligible academic entity's LMP be retained on file at the participating institution for the duration that it is regulated under 40 CFR part 262, Subpart K. Furthermore, we recommend that the LMP be dated. While EPA is not requiring that a copy of the LMP at a participating eligible academic entity be kept at each individual site with a unique EPA Identification Number that has opted in, we do require that the LMP is "available" by anyone involved in the management of unwanted materials (e.g., students in the laboratory, faculty, inspectors and other relevant regulatory authorities). The participating eligible academic entity will determine how best to meet the requirements of making the LMP available since EPA envisions that an LMP will be revised periodically. Examples of "available" may include, but are not limited to, posting the LMP on the participating eligible academic entities Web site or other universally accessible electronic system, or keeping a copy of the LMP at each individual site that has opted in.

Today's rule strives to reduce or minimize additional recordkeeping requirements on eligible academic entities participating in Subpart K. As

an example, we believe some participating eligible academic entities will revise their current required planning documents, such as the Chemical Hygiene Plan (CHP), which is required by OSHA's Laboratory Standard regulations at 29 CFR 1910.1450. In such cases, there would be minimal additional recordkeeping associated with an LMP. However, we also understand that this may not be true in all cases. When planning documents don't already exist, an additional recordkeeping requirement would be associated with maintaining an LMP since eligible academic entities will need to develop this document to comply with this Subpart.

We solicited comment on whether there should be a requirement to retain records of the labels associated with containers. The information on the label associated with containers, such as the accumulation start date and information sufficient to make a hazardous waste determination, was assumed to be either electronic, via spreadsheets and bar codes, or written logs and in the proposed rule EPA considered requiring that this information be retained on file as a record. However, commenters noted that records of container labels should not be retained because it would be too burdensome and unnecessary. We agree with the commenters and believe that other recordkeeping requirements sufficiently document the information necessary for inspections of laboratories at eligible academic entities. Therefore, the final rule does not require that records be kept for labeling information associated with containers, beyond the time that a hazardous waste determination is made for the contents.

EPA also solicited comment in the proposal on whether maintenance of any other records or reporting requirements should be required under today's Subpart K regulations for purposes of improving implementation, compliance monitoring and assistance by the relevant regulatory authority or for program implementation. Comments submitted by the academic community stated, "do not add recordkeeping." These comments noted that the proposed recordkeeping or documentation requirements for notification, labeling, laboratory clean-outs and the LMP are sufficient to ensure compliance and measure success. We agree with these commenters that additional recordkeeping or reporting requirements beyond what was included in the proposal are unnecessary to ensure compliance with today's rule. Therefore, in today's final rule, we are not including any new or additional

recordkeeping or reporting requirements to the final rule.

E. Implementation and Enforcement

Subpart K blends traditional regulatory requirements with performance-based standards to maximize flexibility and enable better environmental compliance at eligible academic entities. Subpart K also offers greater flexibility in implementation than the existing generator requirements. As such, we are highlighting some points on compliance for a few of the more flexible requirements of Subpart K.

First, only eligible academic entities, as defined in this final rule, may participate in Subpart K. As this rule is optional, eligible academic entities must at all times comply with either the existing generator regulations or with today's Subpart K requirements. Specifically, under today's final rule, an eligible academic entity must decide under which set of standards (existing generator standards or Subpart K) it will operate all of its laboratories that are covered by the same EPA Identification Number (or that are on-site) and notify EPA if it chooses to opt into Subpart K. Eligible academic entities may have several sites with unique EPA Identification Numbers, and each site may have laboratories. It is important to note that eligible academic entities operating laboratories with different EPA Identification Numbers may elect which laboratories will opt into or withdraw from Subpart K on a site-by-site basis.

Second, since this rule is for laboratories only, it is likely that participating eligible academic entities will be subject to two different sets of requirements for hazardous waste management: 40 CFR part 262, Subpart K for unwanted materials generated in its laboratories, and existing generator requirements for all other hazardous wastes generated at these institutions. As a result, implementers (eligible academic entities and compliance and enforcement individuals) will need to determine whether the laboratories at an eligible academic entity are operating under Subpart K (i.e., under different generator regulations) from the remainder of the site for compliance monitoring and assistance.

Third, because the enforcement of the contents of the LMP differs for Part I and Part II, and participating entities may modify an existing plan to meet the LMP requirements, we reiterate the requirements relating to the different parts below (see preamble section III.C.8 or § 262.214 of today's final rule for all requirements related to the LMP). We

also remind eligible academic entities that if they choose to modify an existing plan in order to meet the LMP requirements under Subpart K, today's rule does not supersede or otherwise affect the requirements related to that existing plan.

For Part I of the LMP, the eligible academic entity must implement and comply with the specific contents for all the elements they develop for Part I. For example, if an eligible academic entity chooses to use another "equally effective term" for "unwanted material," then it must identify the term in Part I of its LMP and must use this equally effective term consistently. In addition, the equally effective term is subject to all requirements of this rule that apply to unwanted materials. If the eligible academic entity uses another term, but fails to identify the equally effective term in Part I of its LMP, or uses a different term not identified in Part I of its LMP, then the eligible academic entity would be considered in violation of Subpart K.

While an eligible academic entity's LMP must include, and reasonably address, the required elements in Part II of its LMP, if the eligible academic entity does not meet or implement the specific contents of the elements in Part II of its LMP, an enforcement action would not be brought against it for such deviations. For example, an eligible academic entity must describe in Part II of its LMP how it will provide training for laboratory workers and students commensurate with their duties. If the institution describes a training program that specifies the number of hours of classroom training for laboratory workers or students in its LMP, but they receive either a different number of hours, or a different type of training, such as video instruction, the participating institution would not be in violation of Subpart K, provided the laboratory workers and students are trained commensurate with their duties.

Finally, today's rule would not affect a participating eligible academic entity's obligation to respond promptly to any releases of hazardous wastes that may occur, including releases of unwanted materials in the laboratory. Any management of released unwanted material not in compliance with applicable Federal and State hazardous waste requirements could result in an enforcement action. For example, if a spill or release of hazardous waste occurred and was not immediately cleaned up, the participating eligible academic entity could potentially be subject to enforcement for illegal disposal of the hazardous waste. In addition, solid and hazardous waste

releases could potentially be addressed through enforcement orders, such as orders under RCRA sections 3013 and 7003.

IV. State Authorization

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize a qualified State to administer its own hazardous waste programs within the State in lieu of the Federal program. 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 the existing Federal requirements. RCRA section 3009 allows the 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, both HSWA

and non-HSWA, that are considered less stringent than previous Federal regulations.

B. Effect on State Authorization

Today's rule finalizes regulations that are not being promulgated under the authority of HSWA. Thus, the standards finalized today would be applicable on the effective date only in those States that do not have final authorization of their base RCRA programs. Moreover, authorized States are required to modify their programs only when EPA promulgates Federal regulations that are more stringent or broader in scope than the authorized State regulations. For those changes that are less stringent or reduce the scope of the Federal program, States are not required to modify their program. This is a result of section 3009 of RCRA, which allows States to impose more stringent regulations than the Federal program. However, today's final rule is considered to be neither more nor less stringent than the current standards. Therefore, authorized States would not be required to modify their programs to adopt regulations consistent with and equivalent to today's standards. Nevertheless, because EPA believes that today's rule will increase the ability of eligible academic entities to comply with the RCRA hazardous waste generator regulations which would likely lead to greater environmental protection, EPA strongly encourages States to adopt today's rule. Eligible academic entities located in authorized States wishing to be subject to Subpart K do not have this option until their State has adopted the final rule.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" since this action may raise novel legal or policy issues [3(f)(4)]. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under EO 12866. Any changes made in response to OMB recommendations have been documented in the docket for this action.

This rule is projected to result in benefits to society in the form of cost savings. The aggregate cost savings for all eligible academic entities that are projected to take advantage of the final rule is estimated to be \$396,000 per year. This figure is significantly below

the \$100 million threshold⁹ established under part 3(f)(1) of the Order. Thus, this rule is not considered to be an "economically significant action." However, in an effort to comply with the spirit of the Executive Order, we have prepared an economic assessment in support of today's action. This document is entitled: *Assessment of Potential Costs, Benefits and Other Impacts for the Revised Standards Applicable to Generators of Hazardous Waste; Subpart K—Laboratories Owned by Eligible Academic Entities*. This document is otherwise referred to as the "Economic Assessment." The docket established for today's rulemaking maintains a copy of this *Economic Assessment* for public review. For a more detailed discussion regarding the comments received on the economic assessment for the proposed rule, refer to the Response to Comments Document which can be found in the docket for today's final rule.

1. Introduction to the Economic Assessment for the Final Rule

The value of any regulatory action is traditionally measured by the net change in social welfare that it generates. The Agency's economic assessment conducted as part of EPA's obligations under Executive Order 12866 evaluates costs, cost savings (benefits), waste quantities affected, and other impacts, such as environmental justice, children's health, unfunded mandates, regulatory takings, and small entity impacts. To conduct this analysis, we prepared a baseline characterization, developed and implemented a methodology for examining impacts, and followed appropriate guidelines and procedures for examining equity considerations, children's health, and other impacts.

2. Baseline Specification

Proper baseline specification is vital to the accurate assessment of incremental costs, benefits, and other economic impacts associated with any rulemaking. The baseline essentially describes the world absent today's final rulemaking. The incremental impacts of today's final rule are evaluated by assessing anticipated post-rule responses with respect to baseline conditions and actions. The baseline, as applied in this analysis, reflects the practices and requirements of eligible academic entities under the existing hazardous waste generator regulations. A full discussion of the baseline

⁹ The \$100 million threshold applies to both costs, and cost savings.

specification is presented in the *Economic Assessment*.

3. Analytical Methodology, Primary Data Sources, and Key Assumptions

The first step in the methodology for the economic assessment of today's final rule was to use data from EPA's 2005 *National Biennial Report* database and other sources to estimate the number of eligible academic entities that generate laboratory hazardous wastes and may be affected by the final rule. Several of the comments submitted to EPA expressed concern that in the proposed rule, EPA underestimated the fraction of hazardous waste generated in teaching and research laboratories at colleges and universities compared to total hazardous waste generated at colleges and universities. In contrast to the 9 percent estimate used by EPA for its economic analysis for the proposed rule, these commenters stated that in their experience, laboratory hazardous waste represents a much larger portion (60 to 95 percent) of a college or university's total hazardous waste stream. Several commenters provided detailed data on their hazardous waste generation especially laboratory hazardous waste. To address this concern, a more refined methodology for estimating the quantity of hazardous waste generated by laboratories at eligible academic entities was developed. For more details about the methodology changes, see section III.A.1 of today's preamble or the economic assessment for today's final rule.

Since today's final rule is equally as stringent as the existing Federal hazardous waste regulations, authorized States are not required to adopt Subpart K. Thus, once the number of eligible academic entities was determined, for purposes of the rule's *Economic Assessment*, EPA estimated how many States would adopt Subpart K. EPA assumed that States which have historically adopted at least 85 percent of RCRA's rule changes over a five-year period will adopt Subpart K. Thus, 29 States and Puerto Rico are projected to adopt today's final rule, while 21 States are assumed to not adopt today's rule.

In order to model the various scenarios at eligible academic entities, we employed four factors to categorize eligible academic entities: institution type, laboratory system size, hazardous waste generator status, and whether an eligible academic entity operates a CAA. Using these categorizations, the *Economic Assessment* examines the costs and savings of this rule's new requirements, such as recordkeeping, reporting, training, laboratory clean-outs, etc., compared to the existing

hazardous waste generator requirements, to determine the net overall cost or cost savings of Subpart K which includes all of these factors.

Finally, a specific annualized before-tax cost analysis was conducted for each affected entity. Before-tax incremental compliance costs were used because they represent a resource or social cost of the rulemaking. A discount rate (real rate of return) of 7 percent was used covering the estimated period of service or life of the product. All costs are adjusted to year 2008 dollars using the Implicit Price Deflator for Gross Domestic Product.

4. Key Analytical Limitations

The Agency was not able to complete a formal RCRA Section 3007 survey of laboratories at colleges and universities, and non-profit research institutes and teaching hospitals that are either owned by or have a formal written affiliation agreement with a college or university. Consequently, for this assessment, it was necessary to rely on publicly available data. The key analytical limitations associated with these data are briefly summarized in the bullets below. Additional limitations and assumptions related to the economic analysis are discussed in more detail in the *Economic Assessment*.

- The analysis relies heavily on information generated in 2005 through a survey by NACUBO and, while this survey represents the best available source of data, the facilities captured by the survey may not be representative of the colleges and universities impacted by the rule.

- This analysis relies on BR data which includes hazardous waste quantity data for a limited number of SQGs and CESQGs. Thus, the number of entities within the universe of potentially eligible academic entities is uncertain.

- Data were not available to estimate the number of laboratories at non-profit research institutes and teaching hospitals. College and university data and Web-based internet information were used to estimate the number of laboratories at these sites.

- The cost impact analysis is very sensitive to the number and size of containers requiring labeling in the laboratory. The analysis assumes that one-third of the containers are pint-size, one-third are quart-size and one-third are gallon-size.

- An eligible academic entity can develop a single LMP that can cover all its laboratories regardless of whether they are located in sites with separate EPA Identification Numbers. Data limitations prevented us from

determining which sites generating laboratory hazardous waste may choose to operate under the same LMP.

5. Findings

The findings presented here reflect a number of analytical assumptions and limitations, as touched on above, and as described in more detail in the *Economic Assessment*. Furthermore, we have analyzed additional scenarios and conducted sensitivity analyses that are not presented in today's preamble. Readers wanting to gain a full understanding of our analytical methodology, data, findings, assumptions, and limitations are encouraged to read the *Economic Assessment* document prepared in support of this final rule.

In summary, we have identified a total of 1,580 facilities in operation in the U.S., which generate laboratory hazardous wastes and are eligible academic entities as defined under today's rulemaking. Of this total, 397 are LQGs, 759 are SQGs, and the remaining 424 are CESQGs. However as stated above, we assume the States which have historically adopted at least 85 percent of RCRA's rule changes over a five-year period will adopt Subpart K; thus the universe of eligible academic entities located in these States is 169 LQGs, 323 SQGs and 181 CESQGs (673 facilities in total). Out of this number of eligible academic entities located in the States that adopt Subpart K, we assumed for this analysis that eligible academic entities that experience cost savings by opting into Subpart K will be the only eligible academic entities that participate in the final rule. Thus, the final rule would provide annual aggregate net cost savings of approximately \$396,000. These savings would be realized by the estimated 112 eligible academic entities that we project would choose to operate under Subpart K. The greatest savings would accrue to the 25 LQGs projected to elect to be regulated under Subpart K; the analysis estimates average annual cost savings of approximately \$12,200 per LQG opting into the rule. Lesser savings would be realized by the 87 SQGs that are projected to elect to be regulated under Subpart K; for each SQG opting into Subpart K, we estimate average annual cost savings of approximately \$1,000. Under this *Economic Assessment*, all CESQG eligible academic entities demonstrated cost increases by operating under Subpart K, so we assumed that CESQGs would not opt into the final rule. Overall, average annual savings for eligible academic entities operating under Subpart K are

estimated at approximately \$3,500 per entity.

An important benefit of Subpart K for some eligible academic entities will be the opportunity to maintain their typical RCRA generator status because of today's rule's laboratory clean-out provisions (see § 262.213). Eligible academic entities that are able to maintain their normal generator status rather than episodically increasing their generator status by generating laboratory clean-out waste can realize savings in reporting, planning, and overall administrative costs when operating under Subpart K. Another significant portion of the cost savings achieved reflects a reduction in the number of off-site hazardous waste shipments, thereby reducing shipment costs, particularly among colleges, universities, and research institutes that are able to maintain their typical generator status from LQG to SQG as a result of the laboratory clean-out provisions. Such a change allows for longer accumulation times and increased efficiencies in the number of laboratories visited per day for entities without CAAs, in order to remove unwanted materials. In addition to reduced shipments, much of the benefits of the rule include reduced costs for on-site travel. This largely reflects the stipulation that a hazardous waste determination for unwanted material in the laboratory may occur at any time before it is removed from the laboratory or within four days of arrival at an on-site CAA or TSDF, unlike the existing generator regulations that stipulate that the hazardous waste determination must be made at the point of generation.

The overall goal of today's action is to promote environmental protection and public health through safer management of laboratory hazardous waste at eligible academic entities. The Agency has not monetized or quantitatively estimated the human health or environmental benefits. However, this rule is expected to result in numerous environmental benefits. The structured nature of the LMP is expected to result in safer laboratory practices and increased awareness of hazardous waste management. This will minimize exposure of humans and the environment to hazardous wastes. Ultimately, LMPs are expected to improve the way eligible academic entities coordinate and integrate their hazardous waste management activities and enhance awareness about proper laboratory waste handling techniques. In addition to the LMP, the rule specifies streamlined, yet cost-neutral training requirements that are expected to increase awareness of waste hazards

and so reduce the potential for mismanagement of the hazardous waste generated in laboratories. Also, the Agency included incentives in today's final rule to encourage more frequent laboratory clean-outs of unwanted and unused reagents, thus reducing the potential for accidental releases of these chemicals into the environment. Further, EPA expects to see a benefit from allowing CESQs to opt into the rule, because those hazardous wastes generated above CESQs' monthly volume limits during a laboratory clean-out will be managed within the Subtitle C system, as opposed to being managed as a non-hazardous waste. Finally, we anticipate additional non-quantified economic gains through improved hazardous waste management practices, waste minimization, and waste coordination activities.

B. Paperwork Reduction Act

The information collection requirements in this final rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR Number 2317.01.

The Paperwork Reduction Act requires that EPA estimate the burden (time, effort, financial resources) on respondents to comply with all actions that involve the collection of information, such as recordkeeping, reporting, or disclosure requirements or other information collection activities required by this rulemaking. Below is a description of the information collection activities required by today's rulemaking.

Since this rule establishes an alternative set of hazardous waste generator requirements for eligible academic entities' laboratories, it is important that EPA or the authorized States know to which set of regulations an eligible academic entity is subject. Therefore, EPA has determined at 40 CFR 262.203 and 262.204 that it is necessary to require an eligible academic entity to submit a notification to the EPA Regional Administrator (or State Director in authorized States) indicating that it is electing to be subject to or withdrawing from Subpart K for all laboratories under the same EPA Identification Number (or on the same site, in the absence of an EPA Identification Number). The Site Identification Form must be used by eligible academic entities to notify the appropriate authority of its participation in or withdrawal from Subpart K. Under 40 CFR 262.206, 262.208, 262.10,

262.11, and 262.12 of Subpart K, an eligible academic entity must label containers of unwanted materials, as specified. These labeling requirements are necessary to: Demonstrate compliance with Subpart K, alert individuals handling the containers of their contents to ensure proper management, assist trained professionals in making the hazardous waste determination and assigning the appropriate hazardous code(s), ensure emergency responders can quickly ascertain and assess the contents of a container in case of an emergency, and utilize for enforcement and monitoring purposes.

Part 40 CFR 262.207 of Subpart K requires training, commensurate with duties, for all students and laboratory workers working in a laboratory. This training is necessary to ensure that unwanted materials are handled safely and in an environmentally sound manner and in compliance with Subpart K. In addition, eligible academic entities that are LQs must maintain the training records for laboratory workers.

Under 40 CFR 262.313, eligible academic entities must develop and maintain documentation of laboratory clean-outs to ensure compliance with Subpart K. Also under 40 CFR 262.214, eligible academic entities are required to develop, implement and maintain an LMP to document their practices for complying with the performance-based requirements of Subpart K.

Section 3007(b) of RCRA and 40 CFR part 2, Subpart B, defines EPA's general policy on public disclosure of information, and contains provisions for confidentiality. However, the Agency does not anticipate that eligible academic entities will assert any claims of confidentiality in association with the final rule. If such a claim were asserted, EPA must and will treat the information in accordance with the regulations cited above. EPA also will assure that this information collection complies with the Privacy Act of 1974 and OMB Circular 108.

According to the estimates provided in the ICR for this final rule, the average annual incremental burden of new paperwork requirements to respondents as a result of today's final rule is approximately 12,557 hours and \$461,632. These estimates are a total net burden to respondents meaning that the burden relief to eligible academic entities under the existing regulations was subtracted from the new paperwork requirements of Subpart K. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal

agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

The Agency received one consolidated comment representing six commenters on the ICR for the proposed rule. The comment on burden estimates focused on the notification requirement for Subpart K. In general, the commenters believe the burden estimates for notifying the appropriate authority of an eligible academic entity's decision to opt into or out of Subpart K (see §§ 262.203 and 262.204) were fairly accurate and supported use of the Site Identification Form as the mechanism to be used for notification. The comment specifically stated, " * * * burden for the college to notify appears to be accurate and would be the same regardless of whether a letter or Site Identification Form is used. However, the burden for the implementer for clerical time should be cut in half, from 0.5 to 0.25." In addition the comment stated, " * * * the proposed notification requirement discussed on Federal Register notice page 29727 under section B.3 could be met by using the Site Identification Form (EPA form 8700-12)." A vast majority of the comments received supported the use of the Site Identification Form over the use of a letter for notification purposes. Thus, the Agency has chosen to finalize the requirement for eligible academic entities to use the Site Identification Form for notification.

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. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the Federal Register to display the OMB control number for the approved information collection 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.

The RFA provides default definitions for each type of small entity. Small entities are defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (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. Under the final rule, no small eligible academic entities are projected to adopt the regulation unless they expect to experience a net decrease in costs associated with managing their laboratory hazardous waste. Based on these findings, we do not believe that this rule will result in significant economic impacts on a substantial number of small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, Local, and Tribal governments and the private sector. Under § 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, Local, and Tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, Section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives

of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's final rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, Local, or Tribal governments or the private sector. The UMRA generally excludes from the definition of "Federal intergovernmental mandate," duties that arise from participation in a voluntary Federal program. This rule is a voluntary program because the States are not required to adopt these requirements as a condition of authorization (or otherwise). Furthermore, EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, Local, and Tribal governments, in the aggregate, or the private sector in any one year. The total net benefits (cost savings) of this action are estimated to be \$396,000 per year. Finally, EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and Local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" are defined in the Executive Order to include regulations that 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."

Today's rule 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 the Order. The rule focuses on a set of alternative generator requirements for eligible academic entities generating laboratory hazardous wastes, without affecting the relationships between Federal and State governments. Thus, Executive Order 13132 does not apply to this rule.

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

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by Tribal officials in the development of regulatory policies that have Tribal implications." This final rule does not have Tribal implications, as specified in Executive Order 13175. EPA has concluded that this rule may have Tribal implications only to the extent that qualifying academic institutions could be affected if they have laboratories that are in some way affiliated with Tribal lands. However, this rule will neither impose substantial direct compliance costs on Tribal governments nor preempt Tribal law.

EPA did not consult directly with representatives of Tribal governments in the process of developing this rule. However, EPA did conduct an extensive outreach process with States and potentially affected entities. Furthermore, we received no comments from any Tribal governments on the proposed rule. Thus, we believe we have captured the concerns that would have been expressed by representatives of Tribal governments.

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

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria,

the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

Today's final rule is not subject to the Executive Order because it is not economically significant and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Usage

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355 (May 22, 2001)) because it is not an economically significant action under Executive Order 12866. This rule will not seriously disrupt energy supply, distribution patterns, prices, imports or exports. Furthermore, this rule is designed to improve economic efficiency by streamlining the management of laboratory hazardous wastes.

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, section 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 12898 (59 FR 7629 (Feb. 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. This final action is designed to ensure more effective and efficient management of laboratory hazardous wastes.

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 December 31, 2008.

List of Subjects

40 CFR Part 261

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

40 CFR Part 262

Environmental protection, Exports, Hazardous materials transportation, Hazardous waste, Imports, Labeling, Packaging and containers, Reporting and recordkeeping requirements.

Dated: November 18, 2008.

Stephen L. Johnson,
Administrator.

For the reasons set out in the preamble, Parts 261 and 262 of title 40, chapter I of the Code of Federal Regulations are amended as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. 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.

2. Section 261.5 is amended by removing the period at the end of paragraph (c)(6) and adding in its place a "semicolon" and by adding paragraph (c)(7) to read as follows:

§ 261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

* * * * *

(c) * * *

(7) Is a hazardous waste that is an unused commercial chemical product (listed in 40 CFR part 261, subpart D or exhibiting one or more characteristics in 40 CFR part 261, subpart C) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to § 262.213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in § 262.200 of Part 262.

* * * * *

PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

3. The authority citation for part 262 continues to read as follows:

Authority: 42 U.S.C. 6906, 6912, 6922-6925, 6937, and 6938.

Subpart A—General

4. Section 262.10 is amended by adding paragraph (l) to read as follows:

§ 262.10 Purpose, scope, and applicability.

* * * * *

(l) The laboratories owned by an eligible academic entity that chooses to be subject to the requirements of Subpart K of this part are not subject to (for purposes of this paragraph, the terms "laboratory" and "eligible academic entity" shall have the meaning as defined in § 262.200 of Subpart K of this part):

(1) The requirements of § 262.11 or § 262.34(c), for large quantity generators and small quantity generators, except as provided in Subpart K, and

(2) The conditions of § 261.5(b), for conditionally exempt small quantity generators, except as provided in Subpart K.

5. Part 262 is amended by adding Subpart K to read as follows:

Subpart K—Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities

Sec.
262.200 Definitions for this subpart.
262.201 Applicability of this subpart.
262.202 This subpart is optional.

- 262.203 How an eligible academic entity indicates it will be subject to the requirements of this subpart.
- 262.204 How an eligible academic entity indicates it will withdraw from the requirements of this subpart.
- 262.205 Summary of the requirements of this subpart.
- 262.206 Labeling and management standards for containers of unwanted material in the laboratory.
- 262.207 Training.
- 262.208 Removing containers of unwanted material from the laboratory.
- 262.209 Where and when to make the hazardous waste determination and where to send containers of unwanted material upon removal from the laboratory.
- 262.210 Making the hazardous waste determination in the laboratory before the unwanted material is removed from the laboratory.
- 262.211 Making the hazardous waste determination at an on-site central accumulation area.
- 262.212 Making the hazardous waste determination at an on-site interim status or permitted treatment, storage or disposal facility.
- 262.213 Laboratory clean-outs.
- 262.214 Laboratory management plan.
- 262.215 Unwanted material that is not solid or hazardous waste.
- 262.216 Non-laboratory hazardous waste generated at an eligible academic entity.

Subpart K—Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities

§ 262.200 Definitions for this subpart.

The following definitions apply to this subpart:

Central accumulation area means an on-site hazardous waste accumulation area subject to either § 262.34(a) (or 262.34(j) and (k) for Performance Track members) of this part (large quantity generators); or § 262.34(d)–(f) of this part (small quantity generators). A central accumulation area at an eligible academic entity that chooses to be subject to this subpart must also comply with § 262.211 when accumulating unwanted material and/or hazardous waste.

College/University means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

Eligible academic entity means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

Formal written affiliation agreement for a non-profit research institute means a written document that establishes a relationship between institutions for the purposes of research and/or education and is signed by authorized representatives, as defined by § 260.10, from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement. A *formal written affiliation agreement* for a teaching hospital means a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

Laboratory means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

Laboratory clean-out means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor/occupant. A regularly scheduled removal of unwanted material as required by § 262.208 does not qualify as a laboratory clean-out.

Laboratory worker means a person who handles chemicals and/or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, post-doctoral fellows, interns, researchers, technicians, supervisors/managers, and principal investigators. A person does not need to be paid or otherwise compensated for his/her work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.

Non-profit research institute means an organization that conducts research as its primary function and files as a non-

profit organization under the tax code of 26 U.S.C. 501(c)(3).

Reactive acutely hazardous unwanted material means an unwanted material that is one of the acutely hazardous commercial chemical products listed in § 261.33(e) for reactivity.

Teaching hospital means a hospital that trains students to become physicians, nurses or other health or laboratory personnel.

Trained professional means a person who has completed the applicable RCRA training requirements of § 265.16 for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with § 262.34(d)(5)(iii) for small quantity generators and conditionally exempt small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

Unwanted material means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to § 261.2, or a hazardous waste pursuant to § 261.3. If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," as allowed by § 262.206(a)(1)(i), the equally effective term has the same meaning and is subject to the same requirements as "unwanted material" under this subpart.

Working container means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

§ 262.201 Applicability of this subpart.

(a) Large quantity generators and small quantity generators. This subpart provides alternative requirements to the requirements in §§ 262.11 and 262.34(c) for the hazardous waste determination and accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to this subpart, provided that they complete the notification requirements of § 262.203.

(b) Conditionally exempt small quantity generators. This subpart provides alternative requirements to the conditional exemption in § 261.5(b) for

the accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to this subpart, provided that they complete the notification requirements of § 262.203.

§ 262.202 This subpart is optional.

(a) Large quantity generators and small quantity generators: Eligible academic entities have the option of complying with this subpart with respect to its laboratories, as an alternative to complying with the requirements of §§ 262.11 and 262.34(c).

(b) Conditionally exempt small quantity generators. Eligible academic entities have the option of complying with this subpart with respect to its laboratories, as an alternative to complying with the conditional exemption of § 261.5(b).

§ 262.203 How an eligible academic entity indicates it will be subject to the requirements of this subpart.

(a) An eligible academic entity must notify the appropriate EPA Regional Administrator in writing, using the RCRA Subtitle C Site Identification Form (EPA Form 8700-12), that it is electing to be subject to the requirements of this subpart for all the laboratories owned by the eligible academic entity under the same EPA Identification Number. An eligible academic entity that is a conditionally exempt small quantity generator and does not have an EPA Identification Number must notify that it is electing to be subject to the requirements of this subpart for all the laboratories owned by the eligible academic entity that are on-site, as defined by § 260.10. An eligible academic entity must submit a separate notification (Site Identification Form) for each EPA Identification Number (or site, for conditionally exempt small quantity generators) that is electing to be subject to the requirements of this subpart, and must submit the Site Identification Form before it begins operating under this subpart...

(b) When submitting the Site Identification Form, the eligible academic entity must, at a minimum, fill out the following fields on the form:

- (1) Reason for Submittal.
- (2) Site EPA Identification Number (except for conditionally exempt small quantity generators).
- (3) Site Name.
- (4) Site Location Information.
- (5) Site Land Type.
- (6) North American Industry Classification System (NAICS) Code(s) for the Site.
- (7) Site Mailing Address.
- (8) Site Contact Person.

(9) Operator and Legal Owner of the Site.

(10) Type of Regulated Waste Activity.

(11) Certification.
(c) An eligible academic entity must keep a copy of the notification on file at the eligible academic entity for as long as its laboratories are subject to this subpart.

(d) A teaching hospital that is not owned by a college or university must keep a copy of its formal written affiliation agreement with a college or university on file at the teaching hospital for as long as its laboratories are subject to this subpart.

(e) A non-profit research institute that is not owned by a college or university must keep a copy of its formal written affiliation agreement with a college or university on file at the non-profit research institute for as long as its laboratories are subject to this subpart.

§ 262.204 How an eligible academic entity indicates it will withdraw from the requirements of this subpart.

(a) An eligible academic entity must notify the appropriate EPA Regional Administrator in writing, using the RCRA Subtitle C Site Identification Form (EPA Form 8700-12), that it is electing to no longer be subject to the requirements of this subpart for all the laboratories owned by the eligible academic entity under the same EPA Identification Number and that it will comply with the requirements of §§ 262.11 and 262.34(c) for small quantity generators and large quantity generators. An eligible academic entity that is a conditionally exempt small quantity generator and does not have an EPA Identification Number must notify that it is withdrawing from the requirements of this subpart for all the laboratories owned by the eligible academic entity that are on-site and that it will comply with the conditional exemption in § 261.5(b). An eligible academic entity must submit a separate notification (Site Identification Form) for each EPA Identification Number (or site, for conditionally exempt small quantity generators) that is withdrawing from the requirements of this subpart and must submit the Site Identification Form before it begins operating under the requirements of §§ 262.11 and 262.34(c) for small quantity generators and large quantity generators, or § 261.5(b) for conditionally exempt small quantity generators.

(b) When submitting the Site Identification Form, the eligible academic entity must, at a minimum, fill out the following fields on the form:

- (1) Reason for Submittal.

(2) Site EPA Identification Number (except for conditionally exempt small quantity generators).

(3) Site Name.

(4) Site Location Information.

(5) Site Land Type.

(6) North American Industry Classification System (NAICS) Code(s) for the Site.

(7) Site Mailing Address.

(8) Site Contact Person.

(9) Operator and Legal Owner of the Site.

(10) Type of Regulated Waste Activity.

(11) Certification.

(c) An eligible academic entity must keep a copy of the withdrawal notice on file at the eligible academic entity for three years from the date of the notification.

§ 262.205 Summary of the requirements of this subpart.

An eligible academic entity that chooses to be subject to this subpart is not required to have interim status or a RCRA Part B permit for the accumulation of unwanted material and hazardous waste in its laboratories, provided the laboratories comply with the provisions of this subpart and the eligible academic entity has a Laboratory Management Plan (LMP) in accordance with § 262.214 that describes how the laboratories owned by the eligible academic entity will comply with the requirements of this subpart.

§ 262.206 Labeling and management standards for containers of unwanted material in the laboratory.

An eligible academic entity must manage containers of unwanted material while in the laboratory in accordance with the requirements in this section.

(a) Labeling: Label unwanted material as follows:

(1) The following information must be affixed or attached to the container:

(i) The words "unwanted material" or another equally effective term that is to be used consistently by the eligible academic entity and that is identified in Part I of the Laboratory Management Plan, and

(ii) Sufficient information to alert emergency responders to the contents of the container. Examples of information that would be sufficient to alert emergency responders to the contents of the container include, but are not limited to:

(A) The name of the chemical(s),

(B) The type or class of chemical, such as organic solvents or halogenated organic solvents.

(2) The following information may be affixed or attached to the container, but

must at a minimum be associated with the container:

(i) The date that the unwanted material first began accumulating in the container, and

(ii) Information sufficient to allow a trained professional to properly identify whether an unwanted material is a solid and hazardous waste and to assign the proper hazardous waste code(s), pursuant to § 262.11. Examples of information that would allow a trained professional to properly identify whether an unwanted material is a solid or hazardous waste include, but are not limited to:

(A) The name and/or description of the chemical contents or composition of the unwanted material, or, if known, the product of the chemical reaction,

(B) Whether the unwanted material has been used or is unused,

(C) A description of the manner in which the chemical was produced or processed, if applicable.

(b) Management of Containers in the Laboratory: An eligible academic entity must properly manage containers of unwanted material in the laboratory to assure safe storage of the unwanted material, to prevent leaks, spills, emissions to the air, adverse chemical reactions, and dangerous situations that may result in harm to human health or the environment. Proper container management must include the following:

(1) Containers are maintained and kept in good condition and damaged containers are replaced, overpacked, or repaired, and

(2) Containers are compatible with their contents to avoid reactions between the contents and the container; and are made of, or lined with, material that is compatible with the unwanted material so that the container's integrity is not impaired, and

(3) Containers must be kept closed at all times, except:

(i) When adding, removing or consolidating unwanted material, or

(ii) A working container may be open until the end of the procedure or work shift, or until it is full, whichever comes first, at which time the working container must either be closed or the contents emptied into a separate container that is then closed, or

(iii) When venting of a container is necessary.

(A) For the proper operation of laboratory equipment, such as with in-line collection of unwanted materials from high performance liquid chromatographs, or

(B) To prevent dangerous situations, such as build-up of extreme pressure.

§ 262.207 Training.

An eligible academic entity must provide training to all individuals working in a laboratory at the eligible academic entity, as follows:

(a) Training for laboratory workers and students must be commensurate with their duties so they understand the requirements in this subpart and can implement them.

(b) An eligible academic entity can provide training for laboratory workers and students in a variety of ways, including, but not limited to:

(1) Instruction by the professor or laboratory manager before or during an experiment; or

(2) Formal classroom training; or

(3) Electronic/written training; or

(4) On-the-job training; or

(5) Written or oral exams.

(c) An eligible academic entity that is a large quantity generator must maintain documentation for the durations specified in § 265.16(e) demonstrating training for all laboratory workers that is sufficient to determine whether laboratory workers have been trained. Examples of documentation demonstrating training can include, but are not limited to, the following:

(1) Sign-in/attendance sheet(s) for training session(s); or

(2) Syllabus for training session; or

(3) Certificate of training completion;

or

(4) Test results.

(d) A trained professional must:

(1) Accompany the transfer of unwanted material and hazardous waste when the unwanted material and hazardous waste is removed from the laboratory, and

(2) Make the hazardous waste determination, pursuant to § 262.11, for unwanted material.

§ 262.208 Removing containers of unwanted material from the laboratory.

(a) Removing containers of unwanted material on a regular schedule. An eligible academic entity must either:

(1) Remove all containers of unwanted material from each laboratory on a regular interval, not to exceed 6 months; or

(2) Remove containers of unwanted material from each laboratory within 6 months of each container's accumulation start date.

(b) The eligible academic entity must specify in Part I of its Laboratory Management Plan whether it will comply with paragraph (a)(1) or (a)(2) of this section for the regular removal of unwanted material from its laboratories.

(c) The eligible academic entity must specify in Part II of its Laboratory Management Plan how it will comply

with paragraph (a)(1) or (a)(2) of this section and develop a schedule for regular removals of unwanted material from its laboratories.

(d) Removing containers of unwanted material when volumes are exceeded.

(1) If a laboratory accumulates a total volume of unwanted material (including reactive acutely hazardous unwanted material) in excess of 55 gallons before the regularly scheduled removal, the eligible academic entity must ensure that all containers of unwanted material in the laboratory (including reactive acutely hazardous unwanted material):

(i) Are marked on the label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) with the date that 55 gallons is exceeded; and

(ii) Are removed from the laboratory within 10 calendar days of the date that 55 gallons was exceeded, or at the next regularly scheduled removal, whichever comes first.

(2) If a laboratory accumulates more than 1 quart of reactive acutely hazardous unwanted material before the regularly scheduled removal, then the eligible academic entity must ensure that all containers of reactive acutely hazardous unwanted material:

(i) Are marked on the label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) with the date that 1 quart is exceeded; and

(ii) Are removed from the laboratory within 10 calendar days of the date that 1 quart was exceeded, or at the next regularly scheduled removal, whichever comes first.

§ 262.209 Where and when to make the hazardous waste determination and where to send containers of unwanted material upon removal from the laboratory.

(a) Large quantity generators and small quantity generators—an eligible academic entity must ensure that a trained professional makes a hazardous waste determination, pursuant to § 262.11, for unwanted material in any of the following areas:

(1) In the laboratory before the unwanted material is removed from the laboratory, in accordance with § 262.210;

(2) Within 4 calendar days of arriving at an on-site central accumulation area, in accordance with § 262.211; and

(3) Within 4 calendar days of arriving at an on-site interim status or permitted treatment, storage or disposal facility, in accordance with § 262.212.

(b) Conditionally exempt small quantity generators—an eligible academic entity must ensure that a trained professional makes a hazardous

waste determination, pursuant to § 262.11, for unwanted material in the laboratory before the unwanted material is removed from the laboratory, in accordance with § 262.210.

§ 262.210 Making the hazardous waste determination in the laboratory before the unwanted material is removed from the laboratory.

If an eligible academic entity makes the hazardous waste determination, pursuant to § 262.11, for unwanted material in the laboratory, it must comply with the following:

(a) A trained professional must make the hazardous waste determination, pursuant to § 262.11, before the unwanted material is removed from the laboratory.

(b) If an unwanted material is a hazardous waste, the eligible academic entity must:

(1) Write the words "hazardous waste" on the container label that is affixed or attached to the container, before the hazardous waste may be removed from the laboratory; and

(2) Write the appropriate hazardous waste code(s) on the label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the hazardous waste is transported off-site.

(3) Count the hazardous waste toward the eligible academic entity's generator status, pursuant to § 261.5(c) and (d), in the calendar month that the hazardous waste determination was made.

(c) A trained professional must accompany all hazardous waste that is transferred from the laboratory(ies) to an on-site central accumulation area or on-site interim status or permitted treatment, storage or disposal facility.

(d) When hazardous waste is removed from the laboratory:

(1) Large quantity generators and small quantity generators must ensure it is taken directly from the laboratory(ies) to an on-site central accumulation area, or on-site interim status or permitted treatment, storage or disposal facility, or transported off-site.

(2) Conditionally exempt small quantity generators must ensure it is taken directly from the laboratory(ies) to any of the types of facilities listed in § 261.5(f)(3) for acute hazardous waste, or § 261.5(g)(3) for hazardous waste.

(e) An unwanted material that is a hazardous waste is subject to all applicable hazardous waste regulations when it is removed from the laboratory.

§ 262.211 Making the hazardous waste determination at an on-site central accumulation area.

If an eligible academic entity makes the hazardous waste determination,

pursuant to § 262.11, for unwanted material at an on-site central accumulation area, it must comply with the following:

(a) A trained professional must accompany all unwanted material that is transferred from the laboratory(ies) to an on-site central accumulation area.

(b) All unwanted material removed from the laboratory(ies) must be taken directly from the laboratory(ies) to the on-site central accumulation area.

(c) The unwanted material becomes subject to the generator accumulation regulations of § 262.34(a) (or § 262.34(j) and (k) for Performance Track members) for large quantity generators or § 262.34(d)–(f) for small quantity generators as soon as it arrives in the central accumulation area, except for the "hazardous waste" labeling requirements of § 262.34(a)(3) (or § 262.34(j)(6) for Performance Track members).

(d) A trained professional must determine, pursuant to § 262.11, if the unwanted material is a hazardous waste within 4 calendar days of the unwanted materials' arrival at the on-site central accumulation area.

(e) If the unwanted material is a hazardous waste, the eligible academic entity must:

(1) Write the words "hazardous waste" on the container label that is affixed or attached to the container, within 4 calendar days of arriving at the on-site central accumulation area and before the hazardous waste may be removed from the on-site central accumulation area, and

(2) Write the appropriate hazardous waste code(s) on the container label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the hazardous waste may be treated or disposed of on-site or transported off-site, and

(3) Count the hazardous waste toward the eligible academic entity's generator status, pursuant to § 261.5(c) and (d) in the calendar month that the hazardous waste determination was made, and

(4) Manage the hazardous waste according to all applicable hazardous waste regulations.

§ 262.212 Making the hazardous waste determination at an on-site interim status or permitted treatment, storage or disposal facility.

If an eligible academic entity makes the hazardous waste determination, pursuant to § 262.11, for unwanted material at an on-site interim status or permitted treatment, storage or disposal facility, it must comply with the following:

(a) A trained professional must accompany all unwanted material that is transferred from the laboratory(ies) to an on-site interim status or permitted treatment, storage or disposal facility.

(b) All unwanted material removed from the laboratory(ies) must be taken directly from the laboratory(ies) to the on-site interim status or permitted treatment, storage or disposal facility.

(c) The unwanted material becomes subject to the terms of the eligible academic entity's hazardous waste permit or interim status as soon as it arrives in the on-site treatment, storage or disposal facility.

(d) A trained professional must determine, pursuant to § 262.11, if the unwanted material is a hazardous waste within 4 calendar days of the unwanted materials' arrival at an on-site interim status or permitted treatment, storage or disposal facility.

(e) If the unwanted material is a hazardous waste, the eligible academic entity must:

(1) Write the words "hazardous waste" on the container label that is affixed or attached to the container (or on the label that is affixed or attached to the container, if that is preferred) within 4 calendar days of arriving at the on-site interim status or permitted treatment, storage or disposal facility and before the hazardous waste may be removed from the on-site interim status or permitted treatment, storage or disposal facility, and

(2) Write the appropriate hazardous waste code(s) on the container label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the hazardous waste may be treated or disposed on-site or transported off-site, and

(3) Count the hazardous waste toward the eligible academic entity's generator status, pursuant to § 261.5(c) and (d) in the calendar month that the hazardous waste determination was made, and

(4) Manage the hazardous waste according to all applicable hazardous waste regulations.

§ 262.213 Laboratory clean-outs.

(a) One time per 12 month period for each laboratory, an eligible academic entity may opt to conduct a laboratory clean-out that is subject to all the applicable requirements of this subpart, except that:

(1) If the volume of unwanted material in the laboratory exceeds 55 gallons (or 1 quart of reactive acutely hazardous unwanted material), the eligible academic entity is not required to remove all unwanted materials from the laboratory within 10 calendar days

of exceeding 55 gallons (or 1 quart of reactive acutely hazardous unwanted material), as required by § 262.208. Instead, the eligible academic entity must remove all unwanted materials from the laboratory within 30 calendar days from the start of the laboratory clean-out; and

(2) For the purposes of on-site accumulation, an eligible academic entity is not required to count a hazardous waste that is an unused commercial chemical product (listed in 40 CFR part 261, subpart D or exhibiting one or more characteristics in 40 CFR part 261, subpart C) generated solely during the laboratory clean-out toward its hazardous waste generator status, pursuant to § 261.5(c) and (d). An unwanted material that is generated prior to the beginning of the laboratory clean-out and is still in the laboratory at the time the laboratory clean-out commences must be counted toward hazardous waste generator status, pursuant to § 261.5(c) and (d), if it is determined to be hazardous waste; and

(3) For the purposes of off-site management, an eligible academic entity must count all its hazardous waste, regardless of whether the hazardous waste was counted toward generator status under paragraph (a)(2) of this section, and if it generates more than 1 kg/month of acute hazardous waste or more than 100 kg/month of hazardous waste (i.e., the conditionally exempt small quantity generator limits of § 261.5), the hazardous waste is subject to all applicable hazardous waste regulations when it is transported off-site; and

(4) An eligible academic entity must document the activities of the laboratory clean-out. The documentation must, at a minimum, identify the laboratory being cleaned out, the date the laboratory clean-out begins and ends, and the volume of hazardous waste generated during the laboratory clean-out. The eligible academic entity must maintain the records for a period of three years from the date the clean-out ends; and

(b) For all other laboratory clean-outs conducted during the same 12-month period, an eligible academic entity is subject to all the applicable requirements of this subpart, including, but not limited to:

(1) The requirement to remove all unwanted materials from the laboratory within 10 calendar days of exceeding 55 gallons (or 1 quart of reactive acutely hazardous unwanted material), as required by § 262.208; and

(2) The requirement to count all hazardous waste, including unused hazardous waste, generated during the laboratory clean-out toward its

hazardous waste generator status, pursuant to § 261.5(c) and (d).

§ 262.214 Laboratory management plan.

An eligible academic entity must develop and retain a written Laboratory Management Plan, or revise an existing written plan. The Laboratory Management Plan is a site-specific document that describes how the eligible academic entity will manage unwanted materials in compliance with this subpart. An eligible academic entity may write one Laboratory Management Plan for all the laboratories owned by the eligible academic entity that have opted into this subpart, even if the laboratories are located at sites with different EPA Identification Numbers. The Laboratory Management Plan must contain two parts with a total of nine elements identified in paragraphs (a) and (b) of this section. In Part I of its Laboratory Management Plan, an eligible academic entity must describe its procedures for each of the elements listed in paragraph (a) of this section. An eligible academic entity must implement and comply with the specific provisions that it develops to address the elements in Part I of the Laboratory Management Plan. In Part II of its Laboratory Management Plan, an eligible academic entity must describe its best management practices for each of the elements listed in paragraph (b) of this section. The specific actions taken by an eligible academic entity to implement each element in Part II of its Laboratory Management Plan may vary from the procedures described in the eligible academic entity's Laboratory Management Plan, without constituting a violation of this subpart. An eligible academic entity may include additional elements and best management practices in Part II of its Laboratory Management Plan if it chooses.

(a) The eligible academic entity must implement and comply with the specific provisions of Part I of its Laboratory Management Plan. In Part I of its Laboratory Management Plan, an eligible academic entity must:

(1) Describe procedures for container labeling in accordance with § 262.206(a), including:

(i) Identifying whether the eligible academic entity will use the term "unwanted material" on the containers in the laboratory. If not, identify an equally effective term that will be used in lieu of "unwanted material" and consistently by the eligible academic entity. The equally effective term, if used, has the same meaning and is subject to the same requirements as "unwanted material."

(ii) Identifying the manner in which information that is "associated with the container" will be imparted.

(2) Identify whether the eligible academic entity will comply with § 262.208(a)(1) or (a)(2) for regularly scheduled removals of unwanted material from the laboratory.

(b) In Part II of its Laboratory Management Plan, an eligible academic entity must:

(1) Describe its intended best practices for container labeling and management, including how the eligible academic entity will manage containers used for in-line collection of unwanted materials, such as with high performance liquid chromatographs and other laboratory equipment (see the required standards at § 262.206).

(2) Describe its intended best practices for providing training for laboratory workers and students commensurate with their duties (see the required standards at § 262.207(a)).

(3) Describe its intended best practices for providing training to ensure safe on-site transfers of unwanted material and hazardous waste by trained professionals (see the required standards at § 262.207(d)(1)).

(4) Describe its intended best practices for removing unwanted material from the laboratory, including:

(i) For regularly scheduled removals—Develop a regular schedule for identifying and removing unwanted materials from its laboratories (see the required standards at § 262.208(a)(1) and (a)(2)).

(ii) For removals when maximum volumes are exceeded:

(A) Describe its intended best practices for removing unwanted materials from the laboratory within 10 calendar days when unwanted materials have exceeded their maximum volumes (see the required standards at § 262.208(d)).

(B) Describe its intended best practices for communicating that unwanted materials have exceeded their maximum volumes.

(5) Describe its intended best practices for making hazardous waste determinations, including specifying the duties of the individuals involved in the process (see the required standards at § 262.11 and §§ 262.209 through 262.212).

(6) Describe its intended best practices for laboratory clean-outs, if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in § 262.213, including:

(i) Procedures for conducting laboratory clean-outs (see the required standards at § 262.213(a)(1) through (3)); and

(ii) Procedures for documenting laboratory clean-outs (see the required standards at § 262.213(a)(4)).

(7) Describe its intended best practices for emergency prevention, including:

(i) Procedures for emergency prevention, notification, and response, appropriate to the hazards in the laboratory; and

(ii) A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when they exceed their expiration date and/or as they degrade; and

(iii) Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date and/or as they degrade; and

(iv) Procedures for the timely characterization of unknown chemicals.

(c) An eligible academic entity must make its Laboratory Management Plan

available to laboratory workers, students, or any others at the eligible academic entity who request it.

(d) An eligible academic entity must review and revise its Laboratory Management Plan, as needed.

§ 262.215 Unwanted material that is not solid or hazardous waste.

(a) If an unwanted material does not meet the definition of solid waste in § 261.2, it is no longer subject to this subpart or to the RCRA hazardous waste regulations.

(b) If an unwanted material does not meet the definition of hazardous waste in § 261.3, it is no longer subject to this subpart or to the RCRA hazardous waste regulations, but must be managed in compliance with any other applicable regulations and/or conditions.

§ 262.216 Non-laboratory hazardous waste generated at an eligible academic entity.

An eligible academic entity that generates hazardous waste outside of a laboratory is not eligible to manage that hazardous waste under this subpart; and

(a) Remains subject to the generator requirements of §§ 262.11 and 262.34(c) for large quantity generators and small quantity generators (if the hazardous waste is managed in a satellite accumulation area), and all other applicable generator requirements of 40 CFR part 262, with respect to that hazardous waste; or

(b) Remains subject to the conditional exemption of § 261.5(b) for conditionally exempt small quantity generators, with respect to that hazardous waste.

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