

Certificates of authority expire on June 30 each year, unless renewed prior to that date or sooner revoked. The certificates are subject to subsequent annual renewal so long as the companies remain qualified (31 CFR Part 223). A list of qualified companies is published annual as of July 1 in Department Circular 570, with details as to underwriting limitations, areas in which licensed to transact surety business and other information. Federal bond-approving officers should annotate their reference copies of the Treasury Circular 570, 1981 Revision, at page 33973 to reflect this addition. Copies of the circular, when issued, may be obtained from the Audit Staff, Bureau of Government Financial Operations, Department of Treasury, Washington, D.C. 20226.

Dated: March 30, 1982.

W. E. Douglas,
Government Financial Operation.

[FR Doc. 82-9297 Filed 4-6-82; 8:45 am]

BILLING CODE 4810-35-M

Office of the Secretary

[Number 104-3]

Disestablishment of Energy Legislative and Regulatory Analysis Staff, Office of Special Studies, Office of the Assistant Secretary (Economic Policy); Position of Special Assistant to Assistant Secretary (Economic Policy) on Energy Matters Abolished

March 22, 1982.

By virtue of the authority vested in me as the Secretary of the Treasury,

including the authority vested in me by Reorganization Plan No. 26 of 1950, it is ordered that:

1. The Energy Legislative and Regulatory Analysis Staff, Office of Special Studies, Office of the Assistant Secretary (Economic Policy), is hereby disestablished.

2. The position of Special Assistant to the Assistant Secretary (Economic Policy) on Energy Matters is abolished.

3. This Order is effective May 1, 1982.

4. This Order amends Treasury Department Order No. 104-1, dated October 1, 1979.

Donald T. Regan,

Secretary of the Treasury.

[FR Doc. 82-9299 Filed 4-6-82; 8:45 am]

BILLING CODE 4810-25-M

Sunshine Act Meetings

Federal Register

Vol. 47, No. 67

Wednesday, April 7, 1982

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

CONTENTS

	Item
Consumer Product Safety Commission	1
Federal Deposit Insurance Corporation	2, 3, 4, 5, 6
Federal Reserve System	7, 8
International Trade Commission	9
Securities and Exchange Commission	10
Tennessee Valley Authority	11

1

CONSUMER PRODUCT SAFETY COMMISSION

TIME AND DATE: 10 a.m., Thursday, April 8, 1982.

LOCATION: Room 456, Westwood Towers, 5401 Westbard Avenue, Bethesda, Md.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED: Open to the public.

1. Aluminum Wire

The Staff will brief the Commission the status of the "old technology" aluminum wire project and will present options for the orderly completion of the project.

2. Chain Saws: ANPR

The staff will brief the Commission on issues related to an Advance Notice of Proposed Rulemaking concerning chainsaws.

Closed to the public:

3. Compulsory Process Matter

The staff will brief the Commission on a compulsory process matter.

CONTACT PERSON FOR ADDITIONAL

INFORMATION: Sheldon D. Butts, Deputy Secretary, Office of the Secretary, Suite 342, 5401 Westbard Avenue, Bethesda, MD 20207; Telephone (301) 492-6800.

[S-502-82- Filed 4-5-82; 3:50 pm]

BILLING CODE 6355-01-M

2

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 11:10 a.m. on Friday, April 2, 1982, the Board of Directors of the Federal

Deposit Insurance Corporation met in closed session, by telephone conference call, to (1) accept the bid of The Philadelphia Saving Fund Society, Horsham Township (P.O. Horsham), Pennsylvania, for an assisted merger with The Western Saving Fund Society of Philadelphia, Haverford, Pennsylvania; (2) approve the application of The Philadelphia Saving Fund Society for consent to merge, under its charter and title, with The Western Saving Fund Society of Philadelphia and to establish the main office and 36 branches of The Western Saving Fund Society of Philadelphia as branches of The Philadelphia Saving Fund Society; and (3) provide financial assistance to The Philadelphia Saving Fund Society, pursuant to section 13(e) of the Federal Deposit Insurance Act, in order to facilitate the merger and prevent the probable failure of The Western Saving Fund Society of Philadelphia.

In calling the meeting, the Board determined, on motion of Chairman William M. Isaac, seconded by Director Irvine H. Sprague (Appointive), concurred in by Director C. T. Conover (Comptroller of the Currency), that Corporation business required its consideration of the matters on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting pursuant to subsections (c)(6), (c)(8), (c)(9)(A)(ii), and (c)(9)(B) of the "Government in the Sunshine Act" (5 U.S.C. 552b (c)(6), (c)(8), (c)(9)(A)(ii), and (c)(9)(B)).

Dated: April 5, 1982.

Federal Deposit Insurance Corporation.

Margaret M. Olsen,

Assistant Executive Secretary,

[S-497-82 Filed 4-5-82; 3:40 pm]

BILLING CODE 6714-01-M

3

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 4:40 p.m. on Saturday, April 3, 1982, the Board of Directors of the Federal

Deposit Insurance Corporation met in closed session, by telephone conference call, to (1) accept appointment as Receiver of Aquia Bank and Trust Company, Stafford, Virginia, which was closed by the Virginia State Corporation Commission at 12:00 Noon (EST) on Saturday, April 3, 1982; and (2) authorize the execution of an indemnity bond for the faithful performance of the Corporation's duties as such Receiver.

In calling the meeting, the Board determined, on motion of Chairman William M. Isaac, seconded by Director Irvine H. Sprague (Appointive), concurred in by Mr. H. Joe Selby, acting in the place and stead of Director C. T. Conover (Comptroller of the Currency), that Corporation business required its consideration of the matters on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting pursuant to subsections (c)(8), (c)(9)(A)(ii), and (c)(9)(B) of the "Government in the Sunshine Act" (5 U.S.C. 552b (c)(8), (c)(9)(A)(ii), and (c)(9)(B)).

Dated: April 5, 1982.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,

Executive Secretary.

[S-498-82 Filed 4-5-82; 3:40 pm]

BILLING CODE 6714-01-M

4

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 11:35 p.m. on Sunday, April 4, 1982, the Board of Directors of the Federal Deposit Insurance Corporation met in closed session, by telephone conference call, to (1) accept the offer of Peoples Bank of Danville, Danville, Virginia, for the purchase of certain assets of and the assumption of the liability to pay deposits made in Aquia Bank and Trust Company, Stafford, Virginia, which was closed by the Virginia State Corporation Commission at 12:00 Noon (EST) on Saturday, April 3, 1982; and (2) provide such financial assistance, pursuant to section 13(e) of the Federal Deposit

Insurance Act (12 U.S.C. 1823(e)), as was necessary to effect the purchase and assumption transaction.

In calling the meeting, the Board determined, on motion of Chairman William M. Isaac, seconded by Director Irvine H. Sprague (Appointive), concurred in by Mr. H. Joe Selby, acting in the place and stead of Director C. T. Conover (Comptroller of the Currency), that Corporation business required its consideration of the matters on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting pursuant to subsections (c)(8), (c)(9)(A)(ii), and (c)(9)(B) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(8), (c)(9)(A)(ii), and (c)(9)(B)).

Dated: April 5, 1982.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,
Executive Secretary.

[S-499-82 Filed 4-5-82; 3:41 pm]

BILLING CODE 6714-01-M

5

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that the Federal Deposit Insurance Corporation's Board of Directors will meet in open session at 2:00 p.m. on Monday, April 12, 1982, to consider the following matters:

Summary Agenda: No substantive discussion of the following items is anticipated. These matters will be resolved with a single vote unless a member of the Board of Directors requests that an item be moved to the discussion agenda.

Disposition of minutes of previous meetings.

Applications for consent to merge and establish branches:

Penobscot Savings Bank, Bangor, Maine, for consent to merge, under its charter and with the title "Heritage Savings Bank," with Heritage Savings Bank, Rockland, Maine, and to establish the five officers of Heritage Savings Bank as branches of the resultant bank.

Caledonia State Bank, Caledonia, Minnesota, for consent to merge, under its charter and with the title "Minnesota State Bank of Caledonia," with Americana State Bank of Hokah, Hokah, Minnesota, and to establish the sole office of American State Bank of Hokah as a branch of the resultant bank.

Applications for consent to purchase assets and assume liabilities and to establish one branch:

Peoples Bank and Trust Company,

Anchorage, Alaska, for consent to purchase the assets of and assume the liability to pay deposits made in the Anchorage Financial Center Branch of First Bank, Ketchikan, Alaska, and to establish that office as branch of Peoples Bank and Trust Company.

First State Bank of the Oaks, Thousand Oaks, California, for consent to purchase the assets of and assume the liability to pay deposits made in the Newbury Park Branch of Union Bank, Los Angeles, California, and for consent to establish the Newbury Park Branch as a branch of First State Bank of the Oaks.

Recommendations regarding the liquidation of a bank's assets acquired by the Corporation in its capacity as receiver, liquidator, or liquidating agent of those assets:

Case No. 45,156-L—The Drovers' National Bank of Chicago, Chicago, Illinois

Case No. 45,169—The Greenwich Savings Bank, New York, New York

Recommendation with respect to payment for legal services rendered and expenses incurred in connection with receivership and liquidation activities:

Campbell, Woods, Bagley, Emerson, McNeer & Herndon, Huntington, West Virginia, in connection with the receivership of The Metro Bank of Huntington, Inc., Huntington, West Virginia.

Reports of committee and offices:

Minutes of the actions approved by the standing committees of the Corporation pursuant to authority delegated by the Board of Directors.

Report of the Division of Bank Supervision with respect to applications or requests approved by the Director or Associate Director of the Division and the various Regional Directors pursuant to authority delegated by the Board of Directors.

Reports of the Director, Office of Corporate Audits:

Audit Report re: Legal Division's Case Status System, dated October 19, 1981.

Audit Report re: Confirmation of Lodging Claims, dated December 31, 1981.

Audit Report re: Audit of Equipment Purchases and Rentals, dated January 12, 1982.

Report of the Director, Division of Liquidation:

Memorandum re: East Gadsden Bank, Gadsden, Alabama, Sale of Residential Mortgage Loans to the Federal National Mortgage Association (FNMA).

Discussion Agenda:

No matter scheduled.

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550 17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Dated: April 5, 1982.

Federal Deposit Insurance Corporation.

Margaret M. Olsen,

Assistant Executive Secretary.

[S-500-82 Filed 4-5-82; 3:41 pm]

BILLING CODE 6714-01-M

6

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 2:30 p.m. on Monday, April 12, 1982, the Federal Deposit Insurance Corporation's Board of Directors will meet in closed session, by vote of the Board of Directors pursuant to sections 552b (c)(2), (c)(6), (c)(8), and (c)(9)(A)(ii) of Title 5, United States Code, to consider the following matters:

Summary Agenda: No substantive discussion of the following items is anticipated. These matters will be resolved with a single vote unless a member of the Board of Directors requests that an item be moved to the discussion agenda.

Recommendations with respect to the initiation, termination, or conduct of administrative enforcement proceedings (cease-and-desist proceedings, termination-of-insurance proceedings, suspension or removal proceedings, or assessment of civil money penalties) against certain insured banks or officers, directors, employees, agents, or other persons participating in the conduct of the affairs thereof:

Names of persons and names and locations of banks authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(6), (c)(8), and (c)(9)(A)(ii) of the "Government in the Sunshine Act" (5 U.S.C. 552b (c)(6), (c)(8), and (c)(9)(A)(ii)).

Note.—Some matters falling within this category may be placed on the discussion agenda without further public notice if it becomes likely that substantive discussion of those matters will occur at the meeting.

Discussion Agenda:

Application for consent to change the general character of a bank's business from that of a mutual savings bank to that of a commercial bank pursuant to Part 333 of the Corporation's rules and regulations:

Alaska Mutual Bank, Anchorage, Alaska.

Personnel actions regarding appointments, promotions,

administrative pay increases, reassignments, retirements, separations, removals, etc.:

Names of employees authorized to be exempt from disclosure pursuant to the provisions of subsection (c)(2) and (c)(6) of the "Government in the Sunshine Act" (5 U.S.C. 552b (c)(2) and (c)(6)).

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550 17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Dated: April 5, 1982.

Federal Deposit Insurance Corporation.

Margaret M. Olsen,

Assistant Executive Secretary.

[S-501-82 Filed 4-5-82; 3:42 pm]

BILLING CODE 6714-01-M

7

FEDERAL RESERVE SYSTEM

TIME AND DATE: 10 a.m., Monday, April 12, 1982.

PLACE: Board Building, C Street entrance between 20th and 21st Streets, N.W., Washington, D.C. 20551.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. Consideration of continued weekly publication of money supply data.
2. Publication of notice inviting comment on an application by BankAmerica Corporation, San Francisco, California, to acquire the Charles Schwab Corporation and engage in securities brokerage activities.
3. Any items carried forward from a previously announced meeting.

Note.—This meeting will be recorded for the benefit of those unable to attend. Cassettes will be available for listening in the Board's Freedom of Information Office, and copies may be ordered for \$5 per cassette by calling (202) 452-3684 or by writing to: Freedom of Information Office, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

CONTACT PERSON FOR MORE

INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204.

Dated: April 2, 1982.

James McAfee,

Associate Secretary of the Board.

[S-492-82 Filed 4-5-82; 11:27 am]

BILLING CODE 6210-01-M

8

FEDERAL RESERVE SYSTEM

TIME AND DATE: Approximately 11 a.m., following a recess at the conclusion of the open meeting on Monday, April 12, 1982.

PLACE: 20th Street and Constitution Avenue, N.W., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE

INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204.

Dated: April 2, 1982.

James McAfee,

Associate Secretary of the Board.

[S-493-82 Filed 4-5-82; 11:28 am]

BILLING CODE 6210-01-M

9

INTERNATIONAL TRADE COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 47 FR 13093, March 26, 1982.

PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING: 10 a.m., Wednesday, April 14, 1982.

CHANGES IN THE MEETING: Emergency notice rescheduling the time for convening the meeting to be held on Wednesday, April 14, 1982.

By action jacket SE-82-04, the United States International Trade Commission, in conformity with 19 CFR 201.37(b), voted to reschedule the meeting of Wednesday, April 14, 1982, from 10:00 a.m., to 2:30 p.m.

Commissioners Alberger, Calhoun, Stern, Eckes, Frank, and Haggart determined by recorded vote that Commission business requires the change in schedule and affirmed that no earlier announcement of the change to the Agenda was possible and directed the issuance of this notice at the earliest practicable time.

CONTACT PERSON FOR MORE

INFORMATION: Kenneth R. Mason, Secretary; (202) 523-0161.

[S-494-82 Filed 4-5-82; 2:29 pm]

BILLING CODE 7020-02-M

10

SECURITIES AND EXCHANGE COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 47 FR 12713, March 24, 1982

STATUS: Closed meeting.

PLACE: Room 825, 500 North Capitol Street, Washington, D.C.

DATE PREVIOUSLY ANNOUNCED: Monday, March 22, 1982.

CHANGES IN THE MEETING: Additional items. The following additional items

were considered at a closed meeting on Thursday, April 1, 1982, following the 10:00 a.m. open meeting.

Formal order of investigation.

Subpoena enforcement action.

Institution of administrative proceeding of an enforcement nature.

Litigation matter.

The following item will be considered at a closed meeting scheduled for Monday, April 5, 1982, at 1:30 p.m.

Litigation matter.

Chairman Shad and Commissioners Loomis, Evans, Thomas and Longstreth determined by vote that Commission business required consideration of these matters and that no earlier notice thereof was possible.

At times changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact: Richard Starr at (202) 272-2467.

April 2, 1982.

[S-495-82 Filed 4-5-82; 2:46 pm]

BILLING CODE 8010-01-M

11

TENNESSEE VALLEY AUTHORITY

[Meeting No. 1286]

TIME AND DATE: 6 p.m. (EST), Monday, April 12, 1982.

PLACE: W.N. Neff Vocational Center Auditorium (Adjacent to Abingdon High School), I-81, Exit 9 (Turn left), Abingdon, Virginia.

STATUS: Open.

A—Project Authorizations

1. Project Authorization No. 3601—Computer systems replacement for the Browns Ferry and Sequoyah simulators at the Power Operations Training Center.
2. Project Authorization No. 3574.1—Amendment to Project Authorization for demonstration-scale unit for certain granulation of urea.

C—Power Items

1. Interagency subagreement between TVA and the U.S. Department of Energy, in accordance with TVA/DOE Memorandum of Understanding, covering arrangements for cooperation in the development of dry storage technologies for spent nuclear fuel.
2. Supplement to membership agreement with Electric Power Research Institute for TVA funding support of the Nuclear Safety Analysis Center.
3. Deed and bill of sale to Middle Tennessee Electric Membership Corporation covering conveyance of TVA's Smyrna Airport Substation located in Rutherford County, Tennessee.

*New power contract with Tennessee Chemical Company providing for power supply for operation of Cities Service Company's Copperhill, Tennessee, plant, which is being purchased by Tennessee Chemical; And assignment agreement among Cities Service, Tennessee Chemical, and TVA providing for assignment of power contract from Tennessee Chemical to Cities Service in the event sale of plant is not closed.

D—Personnel Items

1. Amendment to personal services contract with United Engineers & Constructors, Inc., Philadelphia, Pennsylvania for architectural engineering, and other related services, requested by the Office of Engineering Design and Construction.

E—Real Property Transactions

- *1. Amendment to resolution relating to sale to the City of Courtland, Alabama, of a permanent easement for the construction, operation, and maintenance of sewage treatment facilities and access road affecting approximately 25.59

* Item approved by individual Board members. This would give formal ratification to the Board's action.

acres of the Courtland Plant Site in Lawrence County, Alabama.

2. Proposed grant of 19-year lease for commercial recreation development to Stock Creek Marina, affecting approximately 2.5 acres of Fort Loudoun Reservoir Land on Tennessee Highway 33 (Old Maryville Pike)—Tract No. XTFL-118L.

F—Unclassified

1. Supplement to contract with Commonwealth of Virginia covering arrangements for cooperation in the development of a comprehensive plan for strip mine reclamation and flood damage reduction in the Straight Creek Watershed at St. Charles, Virginia.

CONTACT PERSON FOR MORE

INFORMATION: Craven H. Crowell, Jr., Director of Information, or a member of his staff can respond to requests for information about this meeting. Call (615) 632-3257, Knoxville, Tennessee. Information is also available at TVA's Washington Office (202) 245-0101.

Dated: April 5, 1982.

[S-496-82 Filed 4-5-82; 3:40 pm]

BILLING CODE 9120-01-M

Federal Register

Wednesday
April 7, 1982

Part II

Environmental Protection Agency

**Standards Applicable to Owners and
Operators of Hazardous Waste
Treatment, Storage, and Disposal
Facilities; Financial Requirements**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 264 and 265

[SWH-FRL-1942-76]

Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Financial Requirements

AGENCY: Environmental Protection Agency.

ACTION: Revised interim final rules.

SUMMARY: These regulations revise interim final regulations that were promulgated on January 12, 1981 (46 FR 2851-66, 2877-88). Under the January 12, 1981, regulations owners or operators of hazardous waste management facilities had to estimate the costs of closure and post-closure care of such facilities and had to assure financial responsibility for those costs through any of three mechanisms:

- A trust fund
- A letter of credit, or
- A surety bond.

State guarantees or State-required mechanisms that are equivalent to the mechanisms specified in the regulations could also be used to satisfy the requirements. Today's regulations provide two additional options that can be used by owners or operators to demonstrate financial responsibility:

- A financial test which demonstrates the financial strength of the company owning the facility (or a parent company guaranteeing financial assurance for subsidiaries), or
- An insurance policy that will provide funds for closure or post-closure care.

In addition, specifications for the mechanisms included in the January 12, 1981, regulations have been modified, and minor clarifications have been made to the rules for estimating the costs of closure and post-closure care.

These amendments thus deal only with closure and post-closure financial assurance requirements. Third-party liability insurance requirements were also included in the January 12, 1981, promulgation. They will be the subject of a separate Federal Register notice to be published shortly.

DATES: Effective Dates: July 6, 1982 for standards for financial assurance of closure and post-closure care (40 CFR 264.142-151 except 264.147, and 265.142-151 except 265.147); November 19, 1980, for the cost-estimating standards for interim status facilities (40 CFR 265.142 and 265.144), and July 13, 1981, for cost estimating standards for general status (40 CFR 264.142 and 264.144). The liability requirements (§§ 264.147 and

265.147) currently have an effective date of April 13, 1982.

Comment Date: EPA will accept public comments on the revised regulations until June 7, 1982.

ADDRESSES: Comments should be sent to Docket Clerk (Docket No. 3004), Office of Solid Waste (WH-562), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.

Public Docket: The public docket for these regulations is located in Room S269-C, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C., which is open to the Public from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays. Among other things, the docket contains background documents which explain, in more detail than the preamble to this regulation, the basis for the provisions in this regulation.

Submissions and Correspondence to the Regional Administrator: All documents and correspondence to be submitted to the Regional Administrator regarding these financial requirements should be marked "Attention: RCRA Financial Requirements" as part of the address.

Copies of Regulations: Single copies of these regulations will be available while the supply lasts from RCRA Hotline, (800) 424-9346 (toll-free) or (202) 382-3000.

FOR FURTHER INFORMATION CONTACT: For general information call the RCRA Hotline or write to Emily Sano, Desk Officer, Economic and Policy Analysis Branch, Hazardous and Industrial Waste Division, Office of Solid Waste (WH-565), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.

For information on implementation of these regulations, contact the EPA regional offices below:

Region I

Gary Gosbee, Waste Management Branch, John F. Kennedy Building, Boston, Massachusetts 02203, (617) 223-1591

Region II

Helen S. Beggan, Chief, Grants Administration Branch, 26 Federal Plaza, New York, New York 10007, (212) 264-9860

Region III

Anthony Donatoni, Hazardous Materials Branch, 6th and Walnut Streets, Philadelphia, Pennsylvania 19106, (215) 597-7937

Region IV

Dan Thoman, Residuals Management Branch, 345 Courtland Street, N.E., Atlanta, Georgia 30308, (404) 881-3067

Region V

Thomas B. Golz, Waste Management Branch, 230 South Dearborn Street, Chicago, Illinois 60604, (312) 886-4023

Region VI

Henry Onsgard, Attention: RCRA Financial Requirements, 1201 Elm Street, First International Building, Dallas, Texas 75270, (214) 767-3274

Region VII

Robert L. Morby, Chief, Hazardous Materials Branch, 324 E. 11th Street, Kansas City, Missouri 64106, (816) 374-3307

Region VIII

Carol Lee, Waste Management Branch, 1860 Lincoln Street, Denver, Colorado 80203, (303) 837-8258

Region IX

Richard Procunier, Hazardous Materials Branch, 215 Fremont Street, San Francisco, California 94105, (415) 974-8165

Region X

Kenneth D. Feigner, Chief, Waste Management Branch, 1200 6th Avenue, Seattle, Washington 98101, (206) 442-1260

SUPPLEMENTARY INFORMATION:

I. Authority

These regulations are issued under the authority of Sections 1006, 2002(a), and 3004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 USC 6905, 6912(a), and 6924.

II. Background

Section 3004(6) of RCRA requires EPA to establish financial responsibility standards for owners and operators of hazardous waste management facilities as may be necessary or desirable to protect human health and the environment. EPA has concluded that, at a minimum, financial responsibility standards are necessary and desirable to assure that funds will be available for proper closure of facilities that treat, store, or dispose of hazardous waste and for post-closure care of hazardous waste disposal facilities. The financial responsibility standards promulgated January 12, 1981, included requirements for such assurance and also for liability insurance coverage. The amendments

promulgated today, and this Preamble, are limited to the requirements for financial assurance for closure and post-closure care.

Financial responsibility standards for inclusion in Part 264 (general standards to be used in issuing permits) and Part 265 (interim status standards for existing facilities awaiting final disposition of permit applications) were first proposed on December 18, 1978 (43 FR 58995, 59006-07). Under the proposed regulations, the owner or operator could assure payment of closure and post-closure costs only with a trust fund. The closure trust fund had to be fully paid up when established, while the post-closure fund could be built up over 20 years or the remaining operating life of the facility, whichever was shorter.

As a result of commenters' suggestions and further Agency analysis, a reproposal was issued May 19, 1980 (45 FR 32260-32278), which allowed a variety of options in providing financial assurance for closure and post-closure care: trust fund, surety bond, letter of credit, financial test, guarantee of the owner's or operator's obligations by an entity meeting the financial test, and a revenue test for municipalities. The reproposal allowed both the closure and post-closure trust funds to build over 20 years or the remaining life of the facility, whichever was shorter. State guarantees or State-required mechanisms could be used to satisfy the financial requirements if they were substantially equivalent to the mechanisms specified.

Also on May 19, 1980, final regulations establishing interim status standards for estimating the costs of closure and post-closure care (40 CFR 265.140, 142, and 144) were promulgated (45 FR 33243-44). The compliance date for these cost-estimating standards was changed from November 19, 1980, to May 19, 1981, by an amendment issued October 30, 1980 (45 FR 72040).

Interim final regulations establishing requirements for mechanisms providing financial assurance for closure and post-closure care were promulgated on January 12, 1981 (46 FR 2851, 2877-2888) with an effective date of July 13, 1981. These regulations allowed the use of trust funds, surety bonds, and letters of credit to satisfy the requirements for financial assurance for closure and post-closure care. For interim status facilities, the closure and post-closure trust fund pay-in period was 20 years or the remaining life of the facility, whichever was shorter. The pay-in period was limited to the term of the permit for permitted status. State guarantees and State-required mechanisms that are equivalent to the mechanisms specified

in the regulations could also be used to satisfy the requirements.

At the time of the January 12 promulgation, the Agency had not yet decided whether to allow use of a financial test, a guarantee based on a financial test, or a revenue test for municipalities to satisfy the financial requirements. The Agency's analysis of the numerous issues raised by commenters regarding these mechanisms was not complete at that time. The Agency decided to proceed with promulgating regulations for the other mechanisms because of the need to begin assuring financial responsibility for hazardous waste management and also the need to meet the court-ordered schedule for issuing RCRA regulations. The Agency intended to publish its decisions or regulations on the financial test, guarantee, and revenue test within 3 months of the January 12, 1981, promulgation so that owners and operators would have adequate opportunity to consider any newly available options prior to the effective date of July 13, 1981. However, this work could not be completed in the expected time. Furthermore, comments on the January 12 regulations indicated that some revision of those regulations would be desirable. To allow adequate time for completing the work on the additional options and the revisions, the effective date was deferred from July 13 to October 13, 1981 (notice published May 18, 1981, 46 FR 27119). On October 1, 1981, the effective date was again deferred, to April 13, 1982, because the revised regulations were not ready for promulgation, and the Agency was considering whether to propose withdrawal of the liability requirements.

The effective date for the standards for financial assurance of closure and post-closure care is now July 6, 1982. The effective date is thus further extended because the Agency believes that owners and operators will need approximately 3 months after promulgation to review the revised regulations and make arrangements to establish financial assurance. Owners and operators who plan to use the new insurance option need only submit by the effective date a statement from a qualified insurer saying that the insurer is considering issuance of a closure or post-closure insurance policy meeting the specifications of the regulation to the owner or operator. Within 90 days after the effective date, these owners and operators must submit a certificate of insurance as specified in the regulations or, if the policy is not issued, evidence of having established other financial assurance. The Agency is making this special provision for prospective users

of the insurance option because the closure and post-closure insurance mechanisms are being published for the first time today; a competitive market in this insurance is not available; and the Agency believes an additional period should be allowed during which the market might develop and the price advantages of a competitive market might become available to owners and operators.

The current effective date for the liability requirements, April 13, 1982, is retained for the present; these requirements will be the subject of a separate Federal Register notice to be published shortly.

Today's promulgation consists essentially of the January 12, 1981, regulations with revisions to the mechanisms for financial assurance for closure and post-closure care, the addition of certain other mechanisms, and revisions to the cost-estimating provisions. The added mechanisms that may be used in providing financial assurance for closure and post-closure care are a financial test, a guarantee based on the financial test, and insurance. A revenue test for municipalities was not adopted for reasons explained below.

The following sections discuss the additions, significant changes, and major issues raised by commenters:

III. Financial Assurance for Closure and Post-Closure Care

A. The Financial Test and Guarantee

Following the original proposal of financial requirements in December 1978, commenters suggested that the Agency allow many different means of financial assurance as alternatives to the proposed trust fund, including a test of financial soundness. The Agency agreed that a financial test might provide adequate assurance of financial responsibility and developed such a test for inclusion in the repropounded regulations of May 19, 1980 (45 FR 33268, 33272). Evaluation of comments received on that test and further Agency analysis resulted in the financial test promulgated today.

1. *The Proposed Test.* Under the repropounded regulations of May 19, 1980, an owner or operator could satisfy the requirements for financial assurance of closure or post-closure care by having: (1) At least \$10 million in net worth in the United States; (2) a total-liabilities-to-net-worth ratio of not more than three; and (3) net working capital in the United States equal to at least twice the estimated closure and post-closure costs of the owner or operator. These

characteristics had to be demonstrated in a financial statement audited by an independent certified public accountant. The statement was to contain unconsolidated balance sheets dated no more than 140 days prior to the date that the test was applied. An owner or operator using the financial test had to notify the Agency within 5 days of learning that he no longer met the test; he was then obliged to substitute other financial assurance within 30 days. This financial test was intended to work so that an owner or operator who passed it had the financial capability to establish one of the alternative forms of financial assurance should he later fail the test. Firms passing the test were not likely to fail suddenly. This objective was retained in the subsequent development of the financial test.

2. The Financial Test Promulgated Today. After a detailed reevaluation, the Agency is promulgating regulations that allow an owner or operator to satisfy the financial assurance requirements by demonstrating that he meets either of the following sets of criteria.

Alternative I:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates.

Alternative II:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates.

In developing the financial test the Agency was particularly concerned with three general goals: (1) Funds should be available for closure and post-closure

care for protection of human health and the environment. (2) As a matter of equity, the parties responsible for closure and post-closure obligations, i.e., owners and operators, should pay those costs. (3) Costs to the regulated community of providing financial assurance should be as low as possible. The amount of direct public costs in the form of unfunded closure and post-closure care resulting from use of the test indicates the degree to which the first two goals are achieved, and the amount of private costs to owners and operators of providing financial assurance is the indicator for the third goal. In assessing the various possible test criteria, the Agency examined these costs and considered them in selecting the elements of the test.

The following sections summarize the comments received on the proposed financial test and how the final requirements were selected. This information is presented in detail in a Background Document which covers the financial test and revenue test for municipalities.

3. Comments on May 19, 1980, Proposed Test: General Aspects. Some commenters suggested that the minimum net worth and working capital requirements be higher, lower, or deleted entirely. Alternative tests or additional elements of a test were suggested, including net income, cash flow measures, "quick assets," and financial ratios. Bond ratings were suggested as an alternative to or substitute for the proposed financial test. Many commenters said the reporting requirements were not consistent with other financial reporting requirements and therefore represented high additional costs.

4. Separate Industry Tests. Some commenters suggested that each industry should have its own financial test. A review of the industries that provided comments of this kind, as well as a general analysis of industry data and previous studies of the forecasting of financial distress, suggest that a single test can be used for most firms engaged in manufacturing. However, financial tests found to be valid for distinguishing viable from nonviable firms engaged in manufacturing were often not valid or useful for establishing the viability of firms in industries with unique financial characteristics, such as utilities. Positive net working capital, for instance, is uncommon for electric utilities and firms in some other service-related industries. As a result, an alternative financial test option was developed (see Alternative II above), which is based on bond ratings and is more appropriate for utilities and firms

with similar financial characteristics. The Agency believes on the basis of its evaluation (see paragraph 8 below) that with these two options the financial test is valid for all industries likely to engage in hazardous waste management. However, anyone who believes that separate test criteria are necessary for a particular industry may submit a petition under Section 7004(a) of RCRA requesting inclusion of such criteria in the regulations. To enable the Agency to evaluate the petition adequately, it should describe the proposed criteria fully and how they may be routinely verified, and include data and analysis demonstrating the need for separate test criteria and their validity.

5. Net Working Capital Requirement. Some commenters strongly objected to the use of working capital as a test criterion, stating that their industries commonly did not maintain a positive net working capital position (excess of current assets over current liabilities). The Agency's analysis found that in manufacturing industries likely to engage in hazardous waste treatment, storage, or disposal, virtually all viable firms maintain positive net working capital. For a manufacturing firm, a negative net working capital position is an excellent indicator that the firm is in a difficult financial situation. The Agency's review of financial data for bankrupt manufacturing firms indicated that the vast majority experienced rapid decline in working capital in the years immediately prior to bankruptcy. As a result, the Agency decided to require that firms maintain a multiple of the cost estimates in the form of net working capital in one of the two test options. Firms that satisfy the other test option, which requires an investment-grade bond rating, will have proven access to credit and demonstrated viability.

Some commenters suggested modifications to the common definition of working capital that would allow owners and operators to use existing lines of credit, cash flow, or fixed assets that could be liquidated to satisfy part or all of the net working capital requirement. The Agency has decided to retain the present definition of working capital. Some of the alternatives proposed by the commenters (lines of credit, liquidation value of fixed assets) are not usual line items in financial statements and would therefore add to the administrative burden of these regulations. More importantly, the Agency believes that, given the significance of negative net working capital as an indicator of financial distress, it is useful to retain net working

capital, as currently defined, as an element in one of the test alternatives.

In the proposed test of May 19, 1980, the owner or operator had to have net working capital amounting to twice the cost estimates in order to use the financial test. This was intended to ensure that the payment of closure and post-closure costs could be made before insolvency occurred. However, given the possibility of rapid deterioration in net working capital of a firm experiencing serious financial distress, and the possibility that lengthy legal proceedings may be required before the owner or operator establishes other financial assurance, a higher multiple seemed advisable. The Agency conducted an analysis of firms which had experienced rapid deterioration of their financial condition for 2 to 3 years prior to business failure. This analysis showed that net working capital of these firms fell by an average of 66 percent in 2 years. The Agency believes that in order to ensure that adequate liquid assets, as indicated by net working capital, will be available for closure and post-closure care, net working capital of at least six times the estimated costs is an appropriate level. This figure is obtained by multiplying the factor of 2 (to ensure current ability to pay) times 3 (to ensure against a high rate of deterioration before payment can be brought about). With a multiple of 6, it is likely that even a rapidly deteriorating firm will have net working capital amounting to twice the cost estimates 2 years after failing the test.

6. Net Worth Requirements. The May 19, 1980, proposed financial test required net worth (total assets minus total liabilities) of at least \$10 million. The Agency has decided to retain that requirement for several reasons. The business failure rate for firms with \$10 million or more in net worth is significantly lower than for firms overall. The Agency estimates that it would enter into twice as many bankruptcy proceedings to recover funds for closure and post-closure care if the \$10 million in net worth criterion were dropped, even if other criteria were retained. In addition, the number of instances in which the hazardous waste facility itself represents the only significant income-producing asset of an owner or operator will be reduced by a \$10 million in net worth requirement. If the facility is the owner's or operator's only source of income, closure will cut off all his income and thus increase the risk that there will not be adequate funds to complete closure and post-closure care.

Since firms with \$10 million or more in net worth are more stable than smaller companies, the Agency believes these larger firms are less likely to abandon hazardous waste facilities or otherwise avoid closure or post-closure responsibilities. The Agency furthermore believes that retaining the \$10 million requirement will keep the burden of administering this new financial assurance mechanism at manageable levels; monitoring the use of the financial test by less stable firms can be expected to be more time-consuming and a greater administrative burden. The Agency will, however, continue to explore the possibilities of having a financial test for firms of less than \$10 million in net worth. Suggestions from the public are invited on this issue.

A number of commenters suggested that a firm passing the financial test should be required to have a net worth at least as great as the net working capital requirement. While it is unusual for firms to have less net worth than net working capital, the possibility does exist, and such a firm would be very weak financially. The Agency agrees with these commenters and has added a requirement that a firm have a net worth of at least six times the closure and post-closure cost estimates.

One commenter recommended that owners and operators be allowed to meet requirements for amounts of net worth with tangible net worth only. Assets of firms often include intangibles such as goodwill, patents, and trademarks which may be difficult to convert into cash to pay for closure or post-closure costs. The Agency agrees with the commenter and is providing that only tangible net worth may be used to meet the requirements for \$10 million in net worth and for net worth of at least six times the cost estimates. In the financial ratio requirements, however, net worth rather than tangible net worth is used since that is customary for financial ratios, which were found to be effective predictors of financial stability.

7. Financial Ratios. The third component of the proposed financial test was a required ratio of total liabilities to net worth of less than 3 to 1. A number of commenters suggested that this ratio was unrealistically high and that cutoff points of 2 to 1 or 1.5 to 1 would be better measures of viability. In reevaluating this requirement, the Agency found that a ratio of 2 to 1 to be a more appropriate ratio. Other commenters suggested adding other financial variables to the test, such as cash flow, net income, and current and

quick asset ratios. The Agency considered all of these in its evaluation of alternative tests, as described immediately below.

8. Evaluation of Alternative Tests. Following the suggestions of several commenters, the Agency conducted an extensive analysis of the performance of numerous financial tests and made detailed calculations of the costs they would entail.

A sample consisting of 178 viable firms and 66 bankrupt firms was constructed for the empirical testing of candidate financial tests. The bankrupt firms were identified from previous bankruptcy forecasting literature and an independent search; all had filed for bankruptcy between 1966 and 1979. The sample of nonbankrupt firms was designed to represent the expected asset size range and mix of industries likely to seek to use a financial test. Another sample of 26 nonbankrupt utilities was also studied. From the comments on the proposed test, and from the research results of previous bankruptcy forecasting, the Agency assembled a list of over 300 candidate financial tests.

For each test evaluated against the sample, the Agency computed two primary measures of effectiveness. One was the likely rate of bankruptcy for firms passing the test. This measure determines the effectiveness of a test in eliminating firms that would be major sources of direct public costs and also indicates the potential burden of the test on Agency resources (i.e., the burden of having to recover closure and post-closure costs from these firms in bankruptcy proceedings). The other primary measure was the percentage of viable firms that would be able to use the financial test as an option. This factor represents the test's potential for reducing private costs by allowing firms to use an alternative which costs less than a letter of credit or other financial mechanism.

The effectiveness of tests in eliminating firms in the bankrupt firm sample varied widely. Where several tests attained the same level of effectiveness in eliminating bankrupt firms, the test that simultaneously allowed the greatest number of viable firms to use it was judged a "best test." This methodology enabled the Agency to identify 16 "best test" options which could be further evaluated. Among these "best tests," those without the \$10 million in net worth requirement were eliminated because, as explained above, the Agency believes the requirement is necessary for assuring that funds will be available for closure and post-closure care.

Of the tests requiring \$10 million in tangible net worth, the one which resulted in the lowest sum of direct public and private costs was selected as one of the financial test options. It requires that an owner or operator have \$10 million in tangible net worth, have tangible net worth and net working capital each at least six times the sum of closure and post-closure costs, and pass two of the following three ratio tests: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5. (The "sum of net income plus depreciation, depletion, and amortization" used in the second ratio is often referred to as "cash flow.")

Finally, the owner or operator must have assets in the United States amounting to at least 90 percent of total assets or at least six times the sum of the closure and post-closure cost estimates. This requirement was included to help ensure accessibility to funds in the event of bankruptcy or other default. The Agency believes that allowing firms to meet this requirement by having 90 percent of their assets in the United States rather than requiring all firms using the test to have six times the cost estimates in U.S.-located assets will save some firms added reporting costs while providing equivalent assurance. The standards of the American Institute of Certified Public Accountants provide that information about the identifiable assets to a firm's foreign operations should be included in its financial statements if those assets are 10 percent or more of total assets. The Securities and Exchange Commission requires that firms filing Form 10K reports indicate those assets located outside the United States if 10 percent or more of their assets are located outside this country. A firm with less than 10 percent of its assets outside the country and filing a Form 10K will therefore not have to take the additional step of identifying the exact amount of assets in the United States in order to meet this requirement of the financial test.

Bond ratings are required in the alternate test option. An analysis of available data on the performance of the two major bond rating services (Moody's and Standard and Poor's) showed that firms receiving any of the four highest ratings (investment-grade bonds) have compiled a record of financial strength at least equal to that indicated by meeting the criteria of the first test option. In order to ensure that

adequate assets are available to cover possible closure and post-closure expenditures, a firm using the bond ratings test must also have (1) tangible net worth amounting to at least \$10 million and at least six times the sum of closure and post-closure cost estimates and (2) assets in the United States must represent at least 90 percent of total assets or at least six times the sum of cost estimates.

The Agency will initially accept bond ratings issued only by Moody's or Standard and Poor's. However, in order to determine whether there are other bond rating services that could also be used, EPA requests information establishing how well the ratings assigned by other bond-rating services have performed over time.

In its study of ratings that might be used in the financial test, the Agency focused on bond ratings because they relate to long-term debt, and closure and post-closure costs are generally long-term obligations. However, the Agency is considering the advisability of also using commercial paper ratings in the same manner. If its analysis indicates that they would be effective when so used, the Agency intends to amend the regulation to allow use of certain commercial paper ratings as an alternative to bond ratings in the financial test. The Agency invites comment on such use of commercial paper ratings.

The Agency estimates that amending the financial assurance requirements to allow use of the financial test significantly reduces the overall costs of the regulation. As much as 96 percent of currently viable firms with \$10 million in net worth would pass the test. If the test were not allowed as a financial assurance mechanism, the additional costs to those firms are estimated at \$3 million per year. The Agency's analysis indicates that only a very small percentage of the firms that pass this test could be expected to go bankrupt without providing alternative financial assurance (.01 percent).

The Agency concluded from its evaluation that the financial test should be allowed as a means of satisfying the financial requirements because it provides strong assurance of availability of funds and minimizes regulatory costs.

9. The Closure and Post-Closure Cost Estimates. An owner or operator may use the test to demonstrate financial assurance for closure, post-closure care, or both closure and post-closure care of one or more facilities.

The "current closure and post-closure cost estimates" referred to in the test criteria must include, first, all such

estimates for facilities of which the firm using the test is the owner or operator and for which it is demonstrating financial assurance through the financial test of Parts 264 or 265. Second, if the firm is providing one or more guarantees as specified in these regulations (see later discussion of corporate guarantee), the cost estimates of the facilities for which closure or post-closure care is being guaranteed must be included. Third, if the firm has facilities in States where EPA is not administering the financial requirements but the firm is demonstrating financial assurance to the State through a financial test equivalent or substantially equivalent to the test in Parts 264 and 265, the cost estimates covered by such tests must be included. Finally, if the firm is the owner or operator of facilities for which financial assurance for closure or required post-closure care is *not* being demonstrated, to a State or EPA, through the financial test or any of the other mechanisms specified in these regulations or equivalent or substantially equivalent State mechanisms, the closure and post-closure cost estimates for such facilities must be included. There are likely to be some facilities in this last category because, in the first phase of authorization of States to administer the RCRA regulations, States are not required to adopt requirements for establishment of financial assurance, although they are encouraged to do so. In later phases of authorization, States must have financial requirements equivalent or substantially equivalent to those in Parts 264 and 265.

The Agency's objective in these provisions is to assure that the sum of closure and post-closure costs against which the firm's financial condition is being tested through the financial test is complete. The sum should include all estimated closure and post-closure costs which the firm is obligated to cover, minus those covered by acceptable financial assurance mechanisms other than the financial test.

10. Reporting Requirements. The reporting requirements of the proposed test were revised following evaluation of the numerous comments on the requirements and further information obtained on financial reporting practices. To minimize reporting costs, and as recommended by commenters, the Agency evaluated only tests which it could administer without requiring the routine submission of financial data which would ordinarily not be obtained in the preparation of financial statements.

As evidence of satisfying the financial test, a firm must submit:

(1) A letter to the Regional Administrator signed by its chief financial officer that includes the required data from the firm's independently audited, year-end financial statements and the cost estimates for closure and post-closure care; and

(2) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(3) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that the accountant has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements and, in connection with this procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

The Agency believes that the independent accountant's reports add significantly to the reliability of the data submitted and therefore must be required. Independent accountants are guided by standards set by the Securities and Exchange Commission for auditors within the scope of the Federal securities laws and by a Code of Professional Ethics promulgated by the American Institute of Certified Public Accountants. In addition, the profession is regulated, to differing extents, by State licensing boards and State societies of certified public accountants.

If the auditor's opinion that is included in his report on examination of the owner's or operator's financial statements is an adverse opinion or contains a disclaimer of opinion, the owner or operator will be disallowed from using the financial test to satisfy the financial requirements. An adverse opinion states that the financial statements do not present fairly the financial condition of the firm in conformity with generally accepted accounting principles. A disclaimer of opinion states that the auditor does not express an opinion on the financial statements. The Agency believes that in either case it cannot rely on data from such financial statements to determine whether the firm passes the financial test.

The Regional Administrator may disallow use of the financial test based on other qualifications expressed in the auditor's opinion of the firm's financial statements. If the opinion raises questions as to whether the firm will

continue as a "going concern," the Regional Administrator will disallow use of the financial test. Other qualified opinions will be evaluated on a case-by-case basis. The owner or operator must provide alternative financial assurance within 30 days after disallowance.

After the initial submission of the letter from the chief financial officer and the accountant's reports, a new letter and new reports for each subsequent fiscal year must be submitted to the Regional Administrator within 90 days after the end of the firm's fiscal year. Alternatively, the owner or operator must deliver to the Regional Administrator, by the end of this 90-day period, a notice of intent to provide substitute financial assurance as specified in the regulations and, within 120 days after the end of the fiscal year, establish the substitute financial assurance.

If the Regional Administrator has reason to believe that the owner or operator may no longer meet the test criteria, he may request additional financial reports or other relevant information from the owner or operator. Upon a finding by the Regional Administrator that the owner or operator no longer meets the criteria, the owner or operator will be required to establish other financial assurance. Failure to provide alternate assurance when required, after disallowance or after no longer passing the test, will be considered a violation of RCRA regulations and cause for issuance of a compliance order or initiation of legal proceedings under Section 3008 of RCRA.

A number of firms will probably show part or all of the estimated costs of closure and post-closure care of their hazardous waste facilities as liabilities on their financial statements. However, since this may not yet be common practice, and it is not clear to what extent the estimated costs will appear as liabilities in the statements, the test as currently constituted does not assume that the statements include the estimated closure or post-closure costs as liabilities. In order not to penalize those firms that do include these costs in their liabilities, the chief financial officer is authorized to subtract any portion of closure and post-closure costs included in liabilities from the figure shown for total liabilities in his annual letter and add that amount to the figures for net worth and tangible net worth.

The effective date of the regulations may come too soon after the end of an owner's or operator's fiscal year to allow adequate time to prepare the required documents based on data for the just-completed fiscal year. To

resolve this problem, the financial test provisions in Part 265 allow a one-time extension if an owner's or operator's fiscal year ends during the 90 days before the effective date and if the firm's financial statements are being independently audited. The extension may last up to the date 90 days after the end of the fiscal year. To obtain the extension the chief financial officer of the firm must send a letter to the Regional Administrator by the effective date of these regulations. In the letter he must request the extension; certify that he has grounds to believe that his firm meets the financial test criteria; identify the facilities to be covered and their cost estimates; specify the date when the firm's fiscal year ended; specify the date no more than 90 days after the end of the fiscal year when he will submit the documents required; and certify that the firm's year-end financial statements are being independently audited.

The Agency is studying the possibility of reducing the reporting burden of the financial test for many owners and operators by using data they have already submitted in routine reports to the Securities and Exchange Commission. Such data are available on computer tapes from commercial companies. If this approach proves feasible, users of the test who file data regularly with the SEC may have to report only current closure and post-closure cost estimates annually to EPA. The Agency plans to examine the workability of this system during the first year that the financial test is in use. Following evaluation of the results, the Agency will decide whether to amend the regulations to eliminate reporting of data that is obtainable through the automated system.

11. *The Corporate Guarantee.* Under the May 19, 1980, proposal, an owner or operator could meet the financial assurance requirements by obtaining a guarantee from another entity that met the financial test requirements. The object was to allow qualified parent corporations to provide financial assurance for subsidiaries. In the guarantee requirements promulgated today, the guarantee is explicitly restricted to such use. Furthermore, the Agency has adopted a definition of parent and subsidiary (a parent must own at least 50 percent of the voting stock of the subsidiary) which ensures that the connection between the two firms will be close and direct. The parent company is likely to have a strong interest in the satisfactory performance of its subsidiary, and this incentive strengthens the guarantee, in the Agency's view. Nevertheless the

Agency invites comments on the question of whether a guarantee by a business entity other than a parent corporation, as defined in these regulations, should be allowed. Comments addressing the extent of need for such an option, how it should differ from the one promulgated today, and the enforceability of such a guarantee under State laws are particularly encouraged.

Under the regulations promulgated today, the parent-guarantor must meet the same requirements as an owner or operator using the financial test and has an independent contractual obligation to EPA. In effect, he "stands in the shoes" of the owner or operator, as far as assurance for closure or post-closure care is concerned, through this guarantee. If the owner or operator fails to perform closure or post-closure care as required, the guarantor must do so or fund a trust fund in the full amount of the cost estimates in the name of the owner or operator. If the guarantor falls below the test criteria or is disallowed from continuing as a guarantor because of qualifications in the auditor's opinion of the guarantor's financial statements, the guarantor must provide alternate assurance financial assurance in the name of the owner or operator if the owner or operator himself does not do so.

The cancellation provisions are comparable to those of the surety bonds and letters of credit (*infra*). The guarantor must give a 120-day notice of cancellation to the owner or operator and the Regional Administrator by certified mail. If the owner or operator does not establish alternate financial assurance and obtain the Regional Administrator's written approval of this assurance within 90 days after the notice is received, the guarantor must provide alternate assurance in the name of the owner or operator.

B. Closure and Post-Closure Insurance

This promulgation includes insurance as another mechanism that may be used to satisfy the financial assurance requirements (§§ 264.143(e), 264.145(e), 265.143(d), and 265.145(d)). The insurance mechanism was not sufficiently developed for inclusion in past proposals or in the interim final regulations of January 12, 1981, although the Agency's consideration of such a mechanism was noted in the Background Document for the January 12 regulations. The Agency believes that the insurance mechanism will provide strong financial assurance; add to the range of options available to owners and operators, especially small entities; and offer cost advantages to some owners and operators.

As explained above in the Background section, owners and operators who plan to use the insurance option have until 90 days after the effective date to submit evidence of having obtained the insurance. They do have to submit by the effective date a statement from a qualified insurer saying that the insurer is considering issuance to the owner or operator of a closure or post-closure insurance policy conforming to the specifications of the regulations. If such a policy is not issued, the owner or operator must submit evidence of other financial assurance as specified in these regulations within 90 days after the effective date.

The Agency decided to include the insurance option in the interim final regulations without first proposing it for several reasons. First, inclusion of the insurance option in today's regulations will provide a reasonable degree of assurance that owners and operators will be able to consider insurance along with the other mechanisms as the means they will use to satisfy the financial assurance requirements by the effective date. Later promulgation of the insurance option could mean that owners and operators who prefer this option would first have to obtain another instrument until the insurance mechanism was allowed and until they could review its provisions and make arrangements to obtain it. Second, promulgation of the insurance option at this time provides prospective suppliers of the insurance with a firm basis for analysis and planning. The Agency believes this may lead to the development of a more competitive market among insurers by the date certificates of insurance must be submitted by owners and operators, and that such competition would be conducive to reasonable prices for the insurance. Third, the insurance option does not impose additional regulatory burdens on the owner or operator but rather adds to his range of alternatives in meeting a regulatory requirement.

Because the financial requirements are being issued as interim final regulations, there will be a 60-day comment period. Any inadequacies in the closure and post-closure insurance provisions may be called to the Agency's attention during that time. The agency will make any necessary corrections before the date by which those who select the insurance option must submit a certificate of insurance (90 days after the effective date of the regulations).

1. *Face Amount of Policy.* The policy will be issued with a face amount (the

total amount the insurer is obligated to pay under the policy) equal to at least the current cost estimate for closure or post-closure care unless the policy covers only part of the estimated cost and the rest is covered by another instrument. When the cost estimate increases, the face amount of the policy must be increased by the owner or operator, unless the increase is covered by another instrument. When the estimate decreases, the face amount may be decreased following written approval by the Regional Administrator.

During the post-closure period, the face amount of the post-closure policy will increase annually to reflect earnings of the funds remaining under the policy. The minimum increase must be equal to the face amount, less any payments by the insurer for post-closure expenses, multiplied by 85 percent of the most recent investment rate or the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities. The Agency believes this provision ensures a rate of return that is reasonable compared with other low-risk investments and allows for compensation to the insurer for administrative costs. A higher rate of return may be agreed upon by insurer and insured.

2. *Maintenance of Coverage.* The owner or operator must continue to make premium payments which are due unless alternate financial assurance as specified in the regulations is substituted. Failure to pay the premium without alternate financial assurance will constitute a serious violation of these regulations, a violation that begins upon receipt by the Regional Administrator of a notice of cancellation, termination, or nonrenewal.

The insurer may cancel, terminate, or fail to renew the policy only if the premium is not paid. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If the cost estimates to which the policy applies have increased, the insurer and insured may agree to cover that increase in the renewal policy.

In order to cancel, terminate, or not renew the policy upon nonpayment of premium, the insurer must provide 120 days' notice to the owner or operator and the Regional Administrator, by certified mail. Cancellation, termination, or nonrenewal may not occur, however, if by the expiration date: the Regional Administrator deems the facility to be abandoned; the Regional Administrator terminates interim status or the permit,

whichever is in effect; closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; the owner or operator is named as a debtor in bankruptcy proceedings; or the premium is paid.

The owner or operator may cancel the policy if the Regional Administrator gives written consent based on his receipt of alternate financial assurance that meets the requirements of the regulations or on completion of the closure or post-closure obligations.

3. *Payment Provisions.* The insurer will make available the face amount of the policy for closure whenever closure occurs. The amount for post-closure care will be made available whenever post-closure care begins. These funds for closure and post-closure care will be made available regardless of the owner's or operator's ability to pay these costs. The insurer will pay out the funds at the direction of the Regional Administrator to the owner or operator or any other party authorized to conduct closure or post-closure care. The Regional Administrator will approve payments when they are in accordance with the closure or post-closure plan or otherwise justified.

The Regional Administrator may withhold reimbursement of a portion of closure expenditures as he deems prudent if he determines that the cost of closure appears to be significantly greater than the face amount of the policy. The purpose of such withholding is to extend financial assurance until completion of closure. Any funds withheld will be released when satisfactory certifications of closure are received by the Regional Administrator. These provisions for payment are the same as those for the trust fund.

4. *Costs and Availability.*

Development of the insurance plan was encouraged by the Agency in hopes of providing smaller entities with a widely available alternative to the trust fund. Insurance offers several advantages over the trust fund. The insurance plan assures that the full amount of the cost estimate will be available for closure or post-closure care whenever the funds are needed, even upon abandonment of the facility, financial incapacity of the owner or operator, or premature closure. By contrast, the trust fund can provide only that which has been paid into the fund plus trust earnings. The owner or operator as well as the public benefits from this complete coverage, as the owner or operator is relieved of the economic burden of the potential liability for closure and post-closure costs. With insurance coverage, these costs will not appear as liabilities on the financial statements of the firm.

The cost of the insurance to owners and operators will be strongly affected by the tax treatment of the premium payments. EPA plans to ask IRS to clarify how tax rules apply to this insurance plan. Individual owners and operators may request a ruling or determination letter under Revenue Procedure 80-20.

5. *Requirements for Insurers.* The requirements for this insurance include qualifications of the insurer. The insurer must, at a minimum, be licensed to transact the business of insurance, or be eligible to provide insurance as an excess or surplus lines insurer, in one or more States. The Agency is studying the need to include other qualifications and invites comments on this matter. Among the possible qualifications that the Agency is studying are those suggested by the National Association of Insurance Commissioners and others in connection with the liability requirements of §§ 264.147 and 265.147.

The NAIC recommended the following wording for a provision setting forth qualifications that must be met by providers of the liability insurance:

"The Regional Administrator shall not accept insurance policies as complying with this section unless such policies are underwritten by an insurance institution which:

"(1) Is domiciled in the United States and authorized to transact the business of insurance as an admitted or nonadmitted insurer in the state where the insured facility is located, or

"(2) Is a captive insurer licensed under a state law authorizing the formation and operation of captive insurers, or

"(3) Is an alien insurer in good standing on the Non-Admitted Insurers Quarterly List published by the Non-Admitted Insurers Information Office of the National Association of Insurance Commissioners."

Another commenter said a rating of at least "A" in *Best's Insurance Reports* and a Best's financial size rating, which may be related to the size of the risk involved, should be required of insurers. Other commenters advised that many companies rely heavily on captive insurers for liability coverage and captives should not be excluded by the regulations.

The Agency invites comments on the subject of qualifications for insurers providing insurance for costs of closure and post-closure care, including comments on the suggestions received regarding liability insurance.

C. *Trust Funds*

A number of revisions, mainly clarifications and corrections, have been made to the January 12, 1981, trust fund

provisions. The following describes the revisions and major comments received.

1. *The Trust Agreement.* The Agency has made the following changes to the wording of the trust agreement. In the revised agreement, the identification of facilities and cost estimates are on a separate Schedule A instead of in the agreement itself; this avoids amending the entire agreement when a cost estimate changes. Inadvertent carryovers from a trust agreement used as a model (an agreement for trusts under the Employee Retirement Income Security Act) were eliminated. A clarification was made to avoid the implication that the owner or operator could impose specific investment directions on the trustee. The section on annual valuations was revised to make it clear when the trustee must furnish the valuations (at least 30 days prior to the anniversary date of establishment of the fund, with securities valued as of no more than 60 days prior to the anniversary date). The section on successor trustees was revised to allow trustees to resign without first obtaining written agreement from the Regional Administrator and the owner or operator but with resignation effective only after a successor is appointed and accepts the trust, which is standard practice. These changes in the trust agreement resulted from evaluation of suggestions from the banking community.

2. *Updating Cost Estimates in the Trust Agreement.* The trust agreement must show the current cost estimate or portion thereof for which financial assurance is being demonstrated through the trust fund. The January 12, 1981, regulations did not explicitly state that the owner or operator must keep this information up to date. This information must be up to date in order for the Regional Administrator to monitor the amount of funds being assured through the trust fund and the adequacy of payments. A provision has therefore been added to the trust regulations stating that whenever the amount of the cost estimate being assured through the trust fund changes, the owner or operator must update Schedule A of the trust agreement, which contains this information, within 60 days after the change.

3. *The Pay-In Period.* Several commenters said that limiting the pay-in period for the trust funds under Part 264 to the term of the permit seemed unreasonable and recommended a period of 20 years or remaining operating life, whichever is shorter, as under Part 265. As stated in the preamble to the January 12 regulations,

however, the Agency does not want to be in the position of considering, at the end of the term of a permit, whether to allow a poorly managed facility to remain in operation so that it could continue to build its trust fund to cover the costs of closure and post-closure care. The trust must therefore be fully funded over the term of the initial permit or the remaining operating life of the facility, whichever is shorter, to assure that the money to provide proper closure and post-closure care will be available. In the January 12, 1981, regulations, the pay-in period under Part 264 was the term of the permit only; it was assumed that the term would never exceed operating life. The change to term of permit or operating life, whichever is shorter, was made since it is possible that operating life will not always extend to the formal term of the permit.

4. Initial Payment into Trust for a New Facility. The January 12, 1981, regulations required the first payment for a trust fund for a new facility 60 days before waste was first received for treatment, storage, or disposal. A commenter said that this was unnecessary and that it was also unfair because the surety bonds and letters of credit do not have to be effective until waste is received. The revised regulation requires the initial payment to be made before the first receipt of waste rather than 60 days before. The Agency agrees with the commenter that little is gained in added financial assurance by requiring payment 60 days in advance. The trust agreement, however, must be submitted to the Regional Administrator 60 days in advance of the initial receipt of waste at the facility.

5. Tax Treatment. One comment was received on the tax treatment of the trust fund. The Internal Revenue Service is currently considering the tax treatment of these trusts. Owners and operators who desire individual rulings may request them from the IRS.

6. Payments for Closure. Under the proposed regulations of December 18, 1978, the entire amount of the closure trust fund was retained by the trustee until completion of closure. Financial assurance for closure was thus maintained in case closure was not completed or not completed properly. The Agency decided, however, that this would impose a hardship on some owners and operators, since, in effect, they would have to pay for closure twice before they were reimbursed. Under the proposed regulations of May 19, 1980, therefore, owners and operators could be reimbursed even while closure was taking place. However, the Regional

Administrator was to withhold approval of payment of 20 percent of the fund until he received satisfactory certifications of closure. The January 12, 1981 regulations continued the withholding of 20 percent, and the trust agreement required the trustee to notify the Regional Administrator when 20 percent remained in the fund following payment of bills. The Agency has concluded, however, that it is more properly the Regional Administrator's role to keep track of the amount of funds remaining and therefore deleted that requirement in the trust agreement. In addition, the Agency is concerned that in some instances where the cost estimate is found to be seriously inadequate, more than 20 percent should be held in reserve. Therefore, the regulations now provide that if the cost of closure appears to be significantly greater than the value of the trust fund, the Regional Administrator may withhold such amounts from payment as he deems prudent until he receives satisfactory certifications of closure.

Both in the January 12, 1981 regulations and the revised regulations, the Regional Administrator has 60 days to make determinations regarding requests for payments out of the trust funds. One commenter stated that this provision penalized the owner or operator by restricting cash flow. The Agency believes that there will be instances when 60 days will be needed by the Agency to approve payments from the trust funds in order to adequately assess whether the bills are in accordance with the closure plan for the facility or are otherwise justified. The Regional Administrator may need part of this period to determine whether the cost of closure is significantly greater than the value of the trust fund, and if so, what portion of the fund should be withheld from disbursement until satisfactory completion of closure. The Agency recognizes that withholding approval of release of the funds can cause a problem to owners and operators and will follow a policy of expediting payment requests as quickly as possible, with 60 days as the limit.

D. Surety Bonds

The only substantive changes to the January 12, 1981 regulations for surety bonds used to satisfy the financial assurance requirements are changes in the cancellation provisions and in the timing of the guaranteed payment of funds for closure into a standby trust fund.

1. Cancellation Provisions. The requirements for the surety bonds and letters of credit in the January 12, 1981 regulations included a provision

preventing their cancellation or termination while a compliance procedure was pending. This prohibition has been eliminated and other related changes have been made in the cancellation provisions. The changes are the same for letters of credit and surety bonds and are discussed in the following section on letters of credit.

2. Time of Funding. The financial guarantee bond for closure now guarantees funding of the standby trust fund before the beginning of final closure, while in the January 12 regulation the trust had to be funded 60 days before the beginning of closure. (Alternatively, the standby trust must be funded 15 days after an order to begin closure is issued by the Regional Administrator or a court of competent jurisdiction.) The 60-day period was required to ensure that funds would be available by the expected date of closure, either from the owner or operator or the surety. Upon reconsideration, however, the Agency believes the added assurance of advanced funding is not necessary. In order to obtain and retain the surety bond, the owner or operator must assure the surety company of its continuing capacity to meet obligations. The Agency believes it is unlikely that the owner or operator with a surety bond will fail to fund the trust; however, if he does fail, under the terms of the bond the surety must fund the trust in his place.

3. Limits on Use of Performance Bonds. Financial guarantee bonds may be used as a financial assurance instrument during interim status (Part 265) and permitted status (Part 264), and they may be used to cover part or all of the closure or post-closure cost estimate. Performance bonds are allowed only for permitted status and must cover the whole amount of the estimate.

A few commenters disagreed with the Agency's decision to not allow use of performance bonds during interim status (Part 265). The Agency's reason for retaining this restriction is as follows. During interim status the closure and post-closure plans for a facility are generally not reviewed by the Regional Administrator until shortly before the time of closure. Upon such review the Regional Administrator may find that major changes are needed in the plans. The Agency believes a performance bond is not appropriate when the actual required performance for the particular facility may not be specified in any detail during most of the term of the bond.

One commenter said he disagreed with the Agency's decision not to allow

an owner or operator to cover a cost estimate partially with a performance bond and partially with other instruments. The commenter said the surety company would simply pay its pro rata share if the owner or operator defaulted. The Agency has decided to retain this restriction because putting together the performance guarantee with funds from sources other than the surety may necessitate protracted negotiations among financial institutions which would delay closure or post-closure care.

4. *Format.* The January 12, 1981 regulations had separate bond forms for closure and for post-closure care because the Agency believed combining them might be confusing. Commenters suggested that a combined format would be more convenient and save paperwork. The Agency accepted this suggestion. One financial guarantee bond or performance bond may now be written to cover closure, post-closure care, or both. Identifying information at the beginning of the form will indicate which type of coverage is being provided for each facility.

5. *Availability.* Several members of the surety industry commented that, because of the long periods of the obligations and the cancellation provisions requiring alternate financial assurance, they would either not write these bonds or do so only for their largest, strongest clients. Commenters from the regulated community, however, have recommended that bonds be included as an allowable option or indicated that they intended to obtain bonds. The Agency believes that the availability of surety bonds may increase as experience of sureties with hazardous waste facilities increases. Also, bonds may be more available for facilities that are nearing the time of closure since the period of the obligation would then be relatively short and definite.

E. Letters of Credit

Several changes were made in the letter of credit in the January 12, 1981 regulations. Most were recommended by banks and banking organizations to achieve conformity with current practices.

1. *Cancellation Provisions.* Under the January 12, 1981 regulations for termination or cancellation of letters of credit and surety bonds, the issuing institution had to provide at least 90 days' notice of intent to terminate or cancel the instrument. The notice was to be sent by certified mail to both the owner or operator and to the Regional Administrator. Upon receipt of the notice, the Regional Administrator was

to issue a compliance order requiring the owner or operator to provide, within 30 days, alternate financial assurance in accordance with the regulations. The issuing institution could not terminate the instrument while a compliance procedure was pending. If the owner or operator failed to establish alternate financial assurance, the Regional Administrator could direct the issuer of the letter of credit or bond to pay the amount of the credit or bond into the owner's or operator's standby trust. The Agency believes a compliance proceeding should be instituted to provide opportunity for a hearing in accordance with procedures under Section 3008 of RCRA prior to ordering such payment. Since it might not always be possible to hold a hearing within the 90-day period, it seemed necessary to prevent termination until the compliance procedure was completed.

Financial institutions that issue letters of credit expressed strong dissatisfaction with the provision preventing expiration while a compliance procedure is pending, since it did not permit a definite date of termination, which is considered an important feature of letters of credit. Staff of the U.S. Comptroller of the Currency confirmed that this cancellation provision went against accepted principles regarding letters of credit. Sureties did not cite the provision specifically but said that the cancellation provisions did not give them adequate opportunity to limit their risk.

One commenter opposed issuance of a compliance order by the Regional Administrator upon his receipt of a notice of cancellation from a surety. The commenter said it seemed unfair to the owner or operator since he would not have an opportunity to obtain alternate financial assurance before such an order was issued.

In response to the comments by financial institutions and others, the Agency modified its approach to cancellation of letters of credit and surety bonds. The prohibition of expiration while a compliance procedure is pending was eliminated. Under the revised regulations, notices of cancellation must be delivered to both the owner or operator and the Regional Administrator at least 120 days before actual cancellation. A compliance procedure will not be instituted because a cancellation notice is received. Owners or operators will have 90 days to provide alternate financial assurance and obtain written approval from the Regional Administrator based on his determination that the mechanism is in accordance with the required

specifications. If the owner or operator fails to provide such assurance and obtain such approval within the 90 days, the Regional Administrator will direct the issuing institution to make payment into the owner's or operator's standby trust. The Agency views such drawings on the instruments in the 30 days before cancellation as the normal and necessary means of maintaining financial assurance through these instruments.

The Agency believes that this provision avoids the problem of the uncertain expiration date and allows the owner or operator an adequate opportunity after a cancellation notice to clearly establish alternate financial assurance before the Regional Administrator draws on the instrument.

Several commenters said that uncertainty of the expiration date would also be caused by the provision in the January 12 regulations requiring that the 90-day period for notice of cancellation was to begin on the date of receipt of the notice by the Regional Administrator, as shown on the return receipt, rather than on the date such notice was sent. The Agency believes, however, that the amount of uncertainty should be minimal in most instances and that the possibility of delay in delivery can be planned for and monitored by the sender. The provision is necessary to prevent expiration from taking place without the knowledge of the Regional Administrator or the owner or operator and to prevent shortening of the effective notification period due to delays between mailing and actual receipt. As explained above, under the revised regulations 120 days' notice is required to allow adequate time for the owner or operator to obtain substitute financial assurance and approval of such assurance by the Regional Administrator. This period is to begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.

2. *Standby Trust.* Comments were received on the requirement that the issuing institution deposit any payments it makes into the owner's or operator's standby trust. Banks said that letters of credit do not usually entail such a responsibility, and furthermore the bank cannot know whether it has deposited the money into the right trust. They recommended that the Regional Administrator make the deposit or at least have the bank depend on the Regional Administrator's instructions in making the deposit. Under the revised regulations the bank still must deposit the funds into the standby trust, since

EPA does not have authority to directly receive funds derived from financial assurance mechanisms under RCRA, but the deposit must be made in accordance with the Regional Administrator's instructions.

3. Separate Letter Identifying Facilities and Cost Estimates. The letter of credit in the January 12, 1981, regulations incorporated information identifying the facilities for which funds were being assured and the amounts of the credit designated for financially assuring closure or post-closure care of each facility. Commenters said that such information is usually not included in letters of credit, which should be written as simply and briefly as possible. Since the information could be in an accompanying letter from the owner or operator, the Agency decided to require such a letter and remove the requirement for having the information in the letter of credit itself.

4. Certifications. Certification of authority to execute the letter of credit was part of the required language for the letter of credit included in the January 12, 1981, regulations. Commenters said such a certification is not part of other letters of credit and serves no purpose. One commenter said that a person who would write a letter of credit without authority to do so would not be stopped by a certification in the letter. The Agency agrees that it provides little added protection and has removed it.

Commenters also recommended that certification that the wording of the letter is identical to the wording specified in the regulations be eliminated, but the Agency believes the requirement is necessary to ensure that the specified wording is used. Standard language is necessary because infinite variations are otherwise possible, and the Agency does not have the resources or expertise to review unlimited numbers of variations to determine whether they adequately assure availability of funds for closure and post-closure care.

One commenter stated that it was unreasonable to require wording identical to that specified in the regulations because regulations change. To clarify the Agency's intent, the revised regulations now state that the wording of the letter of credit must be identical to that specified in the regulations as these regulations were constituted on the date the letter was executed. This change has been made also in each of the other financial assurance instruments.

5. Facilities in Different Regions. Several commenters from the regulated community said they should be allowed to cover facilities in different Regions

with one letter of credit. The Agency did not allow this in the January 12, 1981, regulations because it appeared that, under the policies of some banks, increasing and decreasing the amount of the credit could be a complex procedure when multiple beneficiaries were involved. However, the Agency has now decided to allow coverage of facilities in different Regions with a single letter of credit. Where banking procedures are cumbersome the owner or operator is likely to use a separate letter of credit for each Region since he must still meet the time requirements for increasing the amount of the credit if the cost estimate goes up. In instances where coverage in different Regions through one letter is not complicated, there may be paperwork savings for the owner or operator in obtaining such a letter of credit.

F. Revenue Test for Municipalities

A revenue test for municipalities was part of the May 19, 1980 reproposal (45 FR 33268, 33273). A municipality passed the test and thereby demonstrated financial assurance if it had annual general tax revenues which were 10 times the cost estimates to be covered. As with the financial test, however, the Agency could not reach a decision as to whether to include or not include the revenue test in time for the January 12, 1981, regulations.

After intensive study the Agency has decided not to include the revenue test for municipalities among the allowed mechanisms. The analysis leading to this decision is described in the Background Document for the financial test and revenue test. The Agency is concerned that if funds are not set aside specifically for closure and post-closure care, the municipality will face difficulties in allocating funds for that purpose when they are needed. If budgetary and legislative processes, bond issues, or voter approval of new taxes are necessary, there is the possibility that necessary closure and post-closure activities will not be performed in a timely manner. A majority of comments received from local officials and other individuals knowledgeable about local government finances, as well as the literature on the subject, stress the fact there is little leeway in most local budgets and some municipalities are presently in severe financial straits. A 10-percent budget reallocation would be possible only in extreme situations. Also, the Agency has not been able to find strong empirical support for the argument that a larger multiple will provide satisfactory assurance. It is not clear that municipalities will be able to shift

expenditures rapidly to closure or post-closure care regardless of the multiple adopted. Furthermore, enforcement proceedings to bring about such a reallocation by a municipality may engender difficult issues in Federal-State-local relations.

The Agency considered the use of a test for municipalities based on detailed financial information indicative of current financial solvency. Accounting and reporting procedures of municipalities in general vary greatly, however. The Agency concluded that a requirement which would be based upon the quantification of assets and tangible net worth would not be uniformly applicable because of these various accounting and reporting methods presently employed by municipalities. The Agency does not believe that municipal bond ratings, a criterion suggested by several commenters, would be adequate as a sole indicator of ability to pay the amounts of the estimated closure or post-closure costs. The Agency was thus unable to develop a set of financial indicators, similar to the financial test criteria, that would be suitable for municipalities in general. A number of special-purpose, fee-based municipalities are essentially identical to private entities; because of their financial characteristics and accounting and reporting practices they may be able to use the financial test to satisfy the financial assurance requirements.

The Agency believes that other municipalities that are financially sound will be able to use a trust fund or one of the other financial assurance mechanisms allowed. The guarantee by the State (§§ 264.150 and 265.150) may be an especially appropriate mechanism for municipalities. Municipalities are created by State law, and the States are in a far better position to gauge the financial condition of their municipalities than is EPA. Consequently, in the event a State wishes to reduce the cost of the program upon its municipalities, it may choose to guarantee the obligations of certain or all of its municipalities. In the event a State lacks sufficient confidence in the fiscal strength of its municipality to extend such a guarantee, it would clearly not be appropriate for EPA to allow the municipal entity to avoid providing adequate financial assurance.

G. Use of State Mechanisms

States in which EPA is administering the RCRA financial requirements may also have issued their own financial requirements applicable to owners and operators. Under the financial requirements of Parts 264 and 265, an

owner or operator may use State-required mechanisms to meet EPA's requirements for financial assurance for closure and post-closure care and liability coverage if such mechanisms are equivalent to those specified by EPA. Commenters on this provision (§§ 264.149 and 265.149) in the January 12, 1981, regulations said it was inadequate because it did not say who would decide whether the mechanism was equivalent or how equivalency would be determined. The Agency agreed with these comments and revised the Section. It now provides that the Regional Administrator will decide whether the mechanism is equivalent. Two principal factors will be evaluated: whether availability of funds for financial assurance for closure or post-closure care or for liability coverage is of a least equivalent certainty, and whether the amount of funds assured is at least equivalent. The Regional Administrator also has discretion to consider other factors. If a mechanism is equivalent except in the amount of funds it will make available, the owner or operator may still use the mechanism in satisfying the EPA financial requirements but must make up the difference in amount by increasing the funds available through the State mechanism or through use of the EPA-specified mechanisms.

An owner or operator who wishes to use a State-required mechanism to satisfy the financial requirements of Parts 264 or 265 must submit a request to do so and evidence of establishment of the State-required mechanism. He will be considered to be in compliance with the relevant portion of the financial requirements of Parts 264 or 265 pending a determination of equivalency by the Regional Administrator.

These same provisions for determining equivalency were incorporated into §§ 264.150 and 265.150, which allow owners and operators to use State guarantees to satisfy the financial requirements of Parts 264 and 265 if they are equivalent to mechanisms specified in those Parts.

H. Exemption of Facilities With Small Cost Estimates

Several commenters recommended that the Agency exempt facilities with small closure cost estimates from the requirements for financial assurance for closure because the cost of establishing financial assurance would amount to more than the cost of closure. The Agency has concluded that, on the basis of current available information, an exemption should not be allowed on the grounds that the cost estimate is small. A small cost estimate is not an

indication that the risk of damage is small. The failure to perform necessary closure or post-closure activities at sites at which even a small amount of hazardous waste is present could result in a great deal of damage. Many large firms will be able to use the financial test to easily cover small estimates. Small firms should be able to reduce the administrative costs of financial assurance for small amounts to a minimum by using a fully collateralized letter of credit.

The Agency believes a facility for which the cost estimate is as small as the minimum cost of providing financial assurance will usually be a small storage facility owned or operated by a hazardous waste generator. Under existing rules for hazardous waste generators (§ 262.34), waste generators can avoid providing financial assurance by not storing waste on site longer than 90 days. This practice would also promote environmental protection.

Over the next year, the Agency plans to study actual facilities with relatively small closure cost estimates to evaluate the potential risks posed to human health and the environment should an exemption be allowed. The Agency will then review the question of exempting facilities with small estimates in light of the study findings. For purposes of this review the Agency also solicits information from owners and operators with closure cost estimates of up to \$10,000 on the specific costs of the mechanisms they are using to satisfy the financial assurance requirement.

I. Restricting Means of Financial Assurance

Several commenters have stated that EPA should not require specific means of financial assurance and specific wording of financial instruments because alternate methods and wording may be preferable to some owners and operators and equally effective for the Agency's purposes.

As discussed in the Preamble to the January 12, 1981, regulations (46 FR 2823), the Agency has concluded that it must require specific mechanisms for financial assurance. An open-ended approach would impose an intolerable administrative burden on the Agency, especially in light of its limited experience and resources in the area of evaluating financial mechanisms. EPA believes it has allowed those mechanisms which adequately provide financial assurance and are feasible, and EPA will continue to be receptive to proposals and petitions for additions and improvements to the allowed options.

J. Notice of Release From Financial Assurance for Post-Closure Care

The January 12, 1981, regulations in Part 264 provided that when an owner or operator completed all post-closure care requirements to the satisfaction of the Regional Administrator for the period of post-closure care specified in the permit for the facility or the period specified by the Regional Administrator after closure, whichever period was shorter, the Regional Administrator would, at the request of the owner or operator, notify him that he is no longer required to maintain financial assurance for post-closure care of the facility. In Part 265, this provision was the same except that, rather than the period specified in the permit, a period of 30 years for post-closure care was used, in accordance with Subpart G of Part 265. In the revised regulations, the notice of release is contingent on completion of all post-closure care requirements in accordance with the post-closure plan. The Agency intends that the post-closure plan for the facility will continuously reflect the post-closure care requirements for the facility, including the period of post-closure care. The Agency therefore decided that financial assurance for post-closure care should be explicitly tied to the plan and the period set forth in the plan.

During the post-closure period, if the owner or operator can demonstrate that the amount of funds assured by a mechanism specified in these regulations exceeds the amount that will be needed over the entire period of post-closure care, the Regional Administrator may approve a decrease in the amount assured by the mechanism. Potential effects of inflation as well as requirements specified in the post-closure plan will be major considerations in evaluating requests for decreases in the amounts of funds assured.

K. Incapacity of Owners, Operators, Guarantors, and Issuing Institutions

The January 12, 1981, regulations required that if the institution that has issued the surety bond, letter of credit, or insurance policy used by an owner or operator to satisfy the financial requirements become incapacitated by bankruptcy, insolvency, or suspension or revocation of its license or charter, the owner or operator must establish other financial assurance within 60 days after such an event. The Agency decided to eliminate insolvency of the issuing institution from this provision in the revised regulations because of its

conclusion that insolvency is not a readily identifiable condition.

Under the revised regulations, an owner or operator using a trust fund to satisfy the financial requirements must also obtain alternate financial assurance if the trustee institution becomes bankrupt or its authority to act as trustee is suspended or revoked. The Agency decided that maintenance and quality of financial assurance are better protected if trust funds are also covered by this provision. The affected owner or operator may comply with the requirement simply by arranging for a successor trustee that meets the qualifications of the regulations.

One commenter said that the period during which alternate assurance must be provided should be extended to 120 days and should begin after public notice of the event rather than the event itself. The Agency has retained the provision in its original form since it believes 60 days is adequate time for an owner or operator to become aware of incapacity of the issuing institution and to obtain an alternate mechanism.

The Agency has added a provision requiring an owner or operator named as a debtor in a bankruptcy proceeding under Title 11 of the U.S. Code to notify the Regional Administrator within 10 days after commencement of the proceeding. It is important that the Regional Administrator be aware of such an event since it may have important implications for continuity of operations at the facility and the owner's or operator's ability to meet financial obligations such as costs of closure and post-closure care. Under the terms of the guarantee based on the financial test, a guarantor is also obligated to notify the Regional Administrator if he is named as debtor in a bankruptcy proceeding.

IV. Estimating Costs of Closure and Post-Closure Care

Several clarifications have been made to the cost-estimating regulations (§§ 264.142, 264.144, 265.142, 265.144). The cost-estimating regulations for interim status facilities were issued as final regulations on May 19, 1980 (45 FR 33243-33244). The compliance date for these regulations was changed from November 19, 1980, to May 19, 1981, by an amendment issued on October 30, 1980. The cost-estimating regulations for permitted status were issued as interim final regulations on January 12, 1981 (46 FR 2852 and 2856) and were effective July 13, 1981. The clarifications include:

In the revised Part 265 cost-estimating regulations, it is made clear that the adjustment for inflation must be done on the anniversary of the date on which the

first estimate was prepared, rather than on the anniversary of the effective date of the regulations (November 19, 1980). This is consistent with the specifications for Part 264 and the Agency's intent that the adjustments should be done on an annual basis.

In the previous regulations, the required annual inflation adjustments to the post-closure cost estimates were clearly limited to the operating life of the facility, but changes in the estimates due to changes in the post-closure plan were not. The revised regulations state that the latter changes are also required only during the operating life of the facility. This revision makes the regulation internally consistent and consistent with the Agency's intent that cost-estimating be required only during operating life.

The previous regulations required that all cost estimates be retained at the facility because the Agency was concerned that the estimates showing a breakdown of costs as well as the adjustments be available at the facility. To reduce the possible burden on owners and operators if they were required to keep every cost estimate over the years and because of the Agency's conclusion that having all prior estimates available at the facility is not necessary, the revised regulation states explicitly that only the latest cost estimate based on the closure or post-closure plan and the latest adjusted cost estimate have to be kept at the facility.

In the January 12, 1981, regulations, the term "adjusted cost estimate" was used to represent the latest estimate as required in the regulations. In the revised regulations, the term "current cost estimate" is used instead to avoid confusion in instances where the latest estimate is one which has not yet been adjusted for inflation.

Because the Agency has received several inquiries from owners and operators as to whether the first estimates were to be prepared in current dollars, the revised regulations state explicitly that current dollars are to be used.

V. Regulatory Impact Analysis

Executive Order 12291 (46 FR 13193, February 19, 1981) requires that EPA prepare a Regulatory Impact Analysis for each major rule. The Order defines a "major rule" as any regulation that is likely to result in:

- An annual effect on the economy of \$100 million or more;
- A major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies or geographic regions; or

- Significant adverse effects on competition, employment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

These revised regulations are not "major" in themselves; rather, they are changes to existing regulations. These changes reduce the cost of meeting RCRA financial responsibility requirements by providing additional options that will be less expensive. Nevertheless, a preliminary Regulatory Impact Analysis of these interim final requirements was completed in September 1981 because they constitute a significant component of the body of RCRA regulations. The final analysis is scheduled to be completed in the spring of 1983, after the Agency determines how it will comply with Executive Order 12291 and publishes that guidance in the *Federal Register*. The following is a summary of the preliminary analysis:

A. Benefits of the Regulation

The financial assurance requirements will result in the following benefits:

1. *Greater Equity.* The requirements will ensure the equitable result that the persons who benefit directly from hazardous waste treatment, storage, and disposal activities will pay the costs of proper closure and post-closure care.

2. *Other Economic Benefits.* The requirements will also provide the following benefits:

- A reduction in the number of accidents resulting from releases of hazardous wastes;
- A reduction in the costs of disposal of hazardous wastes;
- Avoidance of increases in cost of closure and post-closure care by ensuring available funds; and
- Elimination of unfair competition.

a. *Accident Reduction.* The requirements will result in the costs of closure and post-closure care being included in the cost of managing hazardous waste. This should result in reduced amounts of hazardous waste being generated, which will itself reduce the chance of accidents. More importantly, however, facility owners and operators will have greater incentive to improve operating procedures and reduce the risk of accidents. In particular, the funds to be set aside for closure depend directly on the maximum extent of operation (amount of waste exposed) and the maximum amount of inventory. Thus there is a built-in incentive to minimize waste exposed to the environment,

which should reduce the risk of accidents.

b. *Reduced Costs of Proper Disposal.* Owners and operators of hazardous waste treatment, storage, and disposal facilities will now almost certainly be faced with assuming the cost of closure and post-closure care. This creates an incentive to locate, design, and operate facilities to minimize closure and post-closure costs. For example, design and operating procedures which would leave a costly post-closure care responsibility are more likely to be avoided.

c. *Avoidance of Increases in Closure and Post-Closure Costs by Ensuring Available Funds.* The regulations will ensure that nearly every owner or operator will have funds available to cover the costs of proper closure and post-closure care. Past incidents confirm that the absence of funds for closure and post-closure care can lead to significant deterioration in the condition of the facility and that this deterioration results in much higher closure and post-closure costs than would have occurred if funds had been available to take immediate measures. For example, it is less costly to handle hazardous waste in a container before it has ruptured, rusted, or otherwise spilled on the ground, into an aquifer or surface body of water, or in an ecologically sensitive area. Therefore, the regulations will help to reduce the total costs of managing hazardous waste by ensuring that funds will be available for timely closure and post-closure care.

d. *Elimination of Unfair Competition.* In the past, some owners and operators have chosen to ignore costs of closure and post-closure care, which has enabled them to gain a competitive edge over owners and operators who assumed these responsibilities. These regulations will help to discourage unfair competition and ensure that owners and operators bear these costs of their operations.

B. Costs of the Regulation

The annual private costs of these regulations are \$9.4 million for closure assurance and \$10.6 million for post-closure assurance, for a total annual private cost of \$20 million. The annual social costs of the regulations—the value of resources actually used, disregarding transfers of money between private parties and between private parties and the government—are \$6.7 million, or 34 percent of annual private costs. Owners and operators of landfills and surface impoundments will incur over 84 percent of the annual private costs and over 53 percent of the annual social costs of these regulations.

C. Comparison of Costs and Benefits

Even if no value is assigned to greater equity in distribution of costs and to reduction in unfair competition, the benefits of these regulations are likely to exceed their social costs if:

- This regulation causes 4.5 percent of the accidents at hazardous waste sites to be prevented, and there is no reduction in the cost of disposal and no avoidance of growth in costs of closure and post-closure care; or
- This regulation causes the costs of closure and post-closure care to be reduced 11 percent, on average, by proper location, design, and operation of hazardous waste facilities, and there is no reduction in accidents; or
- This regulation causes some combination of these two factors such as a 2 percent reduction in the number of accidents at hazardous waste facilities and a 6 percent reduction in the costs of closure and post-closure care.

Because the Agency believes that such savings are likely, because there is considerable value to equitable cost distribution and reduction of unfair competition, and because the record shows considerable irreversible damage from abandonment of hazardous waste facilities, the Agency has concluded that the benefits of these regulations outweigh their costs.

VI. Paperwork Reduction Act

Under the Federal Reports Act of 1942, as amended by the Paperwork Reduction Act of 1980, the Office of Management and Budget (OMB) reviews reporting requirements in regulations in order to minimize the reporting burden on respondents and the cost to government. EPA submitted an information collection report to OMB in March 1981 covering the financial responsibility mechanisms promulgated as interim final regulations on January 12, 1981. EPA believes the reporting of the information required by the additional financial assurance mechanisms promulgated today represents no additional burden to the regulated community. The financial test requirements could result in added reporting burden, if, as provided by the regulations, the Regional Administrator requests financial information in addition to the documents routinely required because of his reasonable belief that the firm may not meet the test criteria. However, the financial test is one of several options; the firm may choose to substitute other financial assurance if it does not wish to supply the requested information. The reporting burden for the closure and post-closure

insurance provisions promulgated today corresponds closely to that of the trust fund, surety bond, or letter of credit.

In other revisions to the January 12, 1981, regulations, the Agency has reduced the paperwork burden. Owners and operators are no longer required to keep all their estimates for closure and post-closure care (only the latest ones). The same bond form can be used to cover financial assurance for closure and post-closure care. A single letter of credit may be used to cover facilities in different Regions. Instruments specified in both Parts 264 and 265 are now worded identically, so that an owner or operator with multiple facilities can provide financial assurance for those facilities through one instrument even if some facilities are permitted and others are under interim status. (The instruments appear in Part 264 and are incorporated by reference in Part 265.)

An amended information collection report covering the additional mechanisms and revisions will be submitted to OMB. EPA anticipates that OMB review will be completed well before the reporting requirements take effect.

VII. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), Federal agencies must, in developing regulations, analyze their impact on small entities (small businesses, small governmental jurisdictions, and small organizations). This requirement applies to Federal regulations proposed after January 1, 1981. Of the financial responsibility regulations promulgated today, the only portion that was not proposed before January 1, 1981, is the portion on the insurance for closure and post-closure costs (which was developed specifically with small businesses in mind). In keeping with the spirit of the Regulatory Flexibility Act, however, the following summary is presented of the expected effects of the requirements on small entities.

EPA studies indicate that treaters, storers, and disposers of hazardous waste represent a wide spectrum of U.S. industry. Governmental bodies and other types of organizations are also represented among owners and operators. Large entities are predominant: of a sample of facilities for which notifications were received under Section 3010 of RCRA, two-thirds were located at plants with over 500 employees. A definition of "small entities" for the purposes of the RCRA regulations has not yet been set; however, entities with 500 or more employees at a plant would probably

not be considered small under any such definition. In this same sample, among facilities located at plants with less than 100 employees, the following industries were most frequently represented: Chemicals and Allied Products; Fabricated Metal Products; Agricultural Services; Machinery, Except Electrical; Business Services; Printing and Publishing, Miscellaneous Manufacturing Industries; Electric and Electronic Equipment; Petroleum and Coal Products; Transportation Equipment; and Primary Metal Industries.

In developing the array of financial assurance mechanisms to be included in the regulations the Agency considered every suggested means and has greatly widened the range of alternatives allowed since the first proposal of December 1978. The Agency has sought to allow maximum flexibility within the constraints of the need for reliable financial assurance and for administrative feasibility. The Agency believes that this approach will prove beneficial to owners and operators of all sizes.

Of the financial assurance mechanisms allowed as means of satisfying the requirements, the Agency expects that the trust fund and the insurance plan will be the ones most frequently used by small entities because their availability will not be dependent on the size of the owner or operator. The Agency believes that fully collateralized letters of credit will also be widely available, but except for assurance of small amounts, such instruments would be comparatively expensive for long-term financial assurance. Some small entities will be able to use corporate guarantees written by their parent firms which pass the financial test. Small entities themselves are not likely to pass the financial test, and often will not be able to obtain surety bonds or unsecured letters of credit.

Following are major actions and decisions of the Agency affecting the means of financial assurance available to small entities:

- The Agency developed insurance as an alternative for small entities that would otherwise have only trust funds as available means of financial assurance. As described earlier, the insurance plan may offer cost advantages to small owners and operators as well as provide more effective financial assurance.
- Allowing the trust funds to be built during a pay-in period will lessen the impact of the cost of this instrument. The Agency is concerned that

requiring immediate full funding may lead to many premature closures by small and other entities with closure costs that are large in relation to operating income. This could lead to less overall environmental protection as a result of poorly closed or abandoned sites as well as undue economic hardship for small owners and operators.

- The Agency obtained a "no-action" letter from the Securities and Exchange Commission which will allow banks to commingle trust funds for investment purposes. The Agency took this action after it was informed that more banks would be willing to act as trustees for smaller trust funds if the funds could be so commingled.
- The savings to the regulated community resulting from the Agency's decision to allow the financial test as a financial assurance mechanism will not be shared in by small entities. On the basis of its analysis, however, the Agency believes these criteria are necessary to clearly demonstrate financial soundness for purposes of these regulations.
- The Agency believes that its decision not to allow the revenue test as a means by which municipalities could satisfy the financial requirements will affect very few small entities. This test could not be justified as a means of assuring availability of funds for closure and post-closure care, as explained above, under "Revenue Test."
- The Agency's decision not to allow an exemption for facilities with small cost estimates will affect some small entities, although small estimates are not necessarily associated with small entities. The Agency believes that small estimates are likely to be for small hazardous waste storage facilities that may be part of the operations of small or large entities. As discussed above, the Agency has concluded on the basis of currently available information that such an exemption for facilities with small estimates would not be consistent with the need to assure funds for protection of human health and the environment, and that administrative costs of financial assurance for small amounts could be limited through use of collateralized letters of credit. The Agency plans to reevaluate this issue after studying the environmental risks posed by actual facilities with small closure cost estimates.

As a result of the mandates of RCRA, entities of all sizes must incorporate into their management of hazardous waste

certain measures to protect human health and the environment. The Agency has concluded that one such measure is assurance of funds for closure and post-closure care of hazardous waste management facilities. Within this context, the Agency has given consideration to the impact of the costs on small entities, as summarized above, and will continue to look for possible ways to reduce costs without sacrificing the goal of the regulations.

VIII. Supporting Documents

Background Documents supporting the financial requirements and providing responses to public comments include:

(1) The Background Document prepared for the regulations as promulgated January 12, 1981. All significant issues raised by commenters on the January 12 regulations regarding financial assurance for closure and post-closure care are discussed in this preamble. Responses to other comments in this area are presented in a summary that has been included in the docket for these regulations.

(2) A Background Document for the Agency's decisions regarding the financial test and the revenue test for municipalities, including responses to comments.

(3) A Background Document for the new insurance option for providing financial assurance for closure and post-closure care.

Copies of these documents and the preliminary Regulatory Impact Analysis are available for review in the EPA regional office libraries and at the EPA headquarters library, Room 2404, Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460.

EPA is also preparing guidance manuals on the financial requirements to assist owners and operators and regulatory officials and expects to make them available from EPA headquarters and the regional offices.

IX. Deletion of "Comments" From Regulations

The financial regulations issued January 12, 1981, included numerous explanatory comments set off from the regulatory text by brackets. On the advice of the Office of the Federal Register, EPA has deleted the comments from the regulations. Most of this explanatory material will be included in the guidance manuals for these regulations.

This regulation and the preliminary Regulatory Impact Analysis were submitted to the Office of Management and Budget for review as required by Executive Order 12291.

Dated: March 31, 1982.

Anne M. Gorsuch,
Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended as follows:

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

Subpart H—Financial Requirements

1. Amend 40 CFR Part 264 by revising §§ 264.140, 264.141(a), 264.142–264.146, and 264.148–264.151(a)–(f) and by adding paragraphs (c)–(g) to § 264.141 and paragraph (h) to § 264.151 as follows:

§ 264.140 Applicability.

(a) The requirements of §§ 264.142, 264.143, and 264.147–151 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this section or in § 264.1.

(b) The requirements of §§ 264.144, 264.145, and 264.146 apply only to owners and operators of disposal facilities.

(c) States and the Federal government are exempt from the requirements of this subpart.

§ 264.141 Definitions of terms as used in this Subpart.

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of § 264.112.

(c) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 264.142(a), (b), and (c).

(d) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 264.144(a), (b), and (c).

(e) "Parent corporation" means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(f) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of §§ 264.117–264.120.

(g) The following terms are used in the specifications for the financial test for closure and post-closure care. The definitions are intended to represent the common meanings of the terms as they are generally used by the business community.

"Assets" means all existing and all probable future economic benefits

obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

§ 264.142 Cost estimate for closure.

(a) The owner or operator must prepare a written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan as specified in § 264.112. The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.

(b) The owner or operator must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(i) and (b)(ii) of this section, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(i) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted

closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in § 264.142(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with §§ 264.142 (a) and (c) and, when this estimate has been adjusted in accordance with § 264.142(b), the latest adjusted closure cost estimate.

§ 264.143 Financial assurance for closure.

An owner or operator of each facility must establish financial assurance for closure of the facility. He must choose from the options as specified in paragraphs (a) through (f) of this section.

(a) *Closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. An owner or operator of a new facility must submit the originally signed duplicate of the trust agreement to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

(i) For a new facility, the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment must be

submitted by the owner or operator to the Regional Administrator before this initial receipt of hazardous waste. The first payment must be at least equal to the current closure cost estimate, except as provided in § 264.143(g), divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{CE} - \text{CV}}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(ii) If an owner or operator establishes a trust fund as specified in § 265.143(a) of this chapter, and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in paragraph (a)(3) of this section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to Part 265 of this chapter. The amount of each payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{CE} - \text{CV}}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this section or in § 265.143 of this chapter, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this paragraph and § 265.143(a) of this chapter, as applicable.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraphs (a)(7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.

(10) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the value of the trust fund, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 264.143(i), that the owner or operator is no longer required to maintain financial assurance for closure.

(11) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(b) *Surety bond guaranteeing payment into a closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 264.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in § 264.143(g).

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Surety bond guaranteeing performance of closure.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on

Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(c).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust must meet the requirements specified in § 264.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Perform final closure in accordance with the closure plan and other requirements of the permit for the facility whenever required to do so; or

(ii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform final closure as guaranteed by the bond or will deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate.

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the

increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent. The Regional Administrator will provide such written consent when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(10) The surety will not be liable for deficiencies in the performance of closure by the owner or operator after the Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(d) *Closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. An owner or operator of a new facility must submit the letter of credit to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also

establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of the trust fund specified in § 264.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Region Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in § 264.143(g).

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as

specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the Regional Administrator may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(10) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(e) *Closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. An owner or operator of a new facility must submit the certificate of insurance to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in § 264.143(g). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 264.143(i), that the owner or operator is no longer required to maintain financial assurance for closure of the facility.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (e)(10) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of a notice of future cancellation, termination, or failure to renew due to

nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

- (i) The Regional Administrator deems the facility abandoned; or
- (ii) The permit is terminated or revoked or a new permit is denied; or
- (iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or
- (iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or
- (v) The premium due is paid.

(9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(10) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:

- (i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(f) *Financial test and corporate guarantee for closure.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of either paragraph (f)(1)(i) or (f)(1)(ii) of this section:

- (i) The owner or operator must have:
 - (A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
 - (B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and
 - (C) Tangible net worth of at least \$10 million; and
 - (D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

- (A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and
- (B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and
- (C) Tangible net worth of at least \$10 million; and
- (D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

- (i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and
- (ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
- (iii) A special report from the owner's or operator's independent certified

public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility must submit the items specified in paragraph (f)(3) of this section to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (f)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (f)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a

disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in paragraph (f)(3) of this section when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(10) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (f)(1) through (f)(8) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (f)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 264.143(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative

financial assurance in the name of the owner or operator.

(g) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a), (b), (d), and (e), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for closure of the facility.

(h) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for closure assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(i) *Release of the owner or operator from the requirements of this section.* Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that closure has been accomplished in accordance with the closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer

required by this section to maintain financial assurance for closure of the particular facility, unless the Regional Administrator has reason to believe that closure has not been in accordance with the closure plan.

§ 264.144 Cost estimate for post-closure care.

(a) The owner or operator of a disposal facility must prepare a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in §§ 264.117–264.120. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under Subpart G of Part 264.

(b) During the operating life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 30 days after each anniversary of the date on which the first post-closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(i) and (b)(ii) of this section, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(i) The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the post-closure cost estimate during the operating life of the facility whenever a change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in § 264.144(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: The latest post-closure cost estimate prepared in accordance with §§ 264.144 (a) and (c) and, when this estimate has been adjusted in accordance with § 264.144(b), the latest adjusted post-closure cost estimate.

§ 264.145 Financial assurance for post-closure care.

An owner or operator of each disposal facility must establish financial assurance for post-closure care of the facility. He must choose from the options as specified in paragraphs (a) through (f) of this section.

(a) *Post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a post-closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. An owner or operator of a new facility must submit the originally signed duplicate of the trust agreement to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:

(i) For a new facility, the first payment must be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Regional Administrator before this initial receipt of hazardous waste. The first payment must be at least equal to the current post-closure cost estimate, except as provided in § 264.145(g), divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{CE} - \text{CV}}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(ii) If an owner or operator establishes a trust fund as specified in § 265.145(a) of this chapter, and the value of that trust fund is less than the current post-closure cost estimate when a permit is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the fund must be paid in over the pay-in period as defined in paragraph (a)(3) of this section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to Part 265 of this chapter. The amount of each payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{CE} - \text{CV}}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in this section or in § 265.145 of this chapter, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this paragraph and § 265.145(a) of this chapter, as applicable.

(6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the

current post-closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraphs (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.

(10) During the period of post-closure care, the Regional Administrator may approve a release of funds if the owner or operator demonstrates to the Regional Administrator that the value of the trust fund exceeds the remaining cost of post-closure care.

(11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(12) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(b) *Surety bond guaranteeing payment into a post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among

those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 264.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in § 264.145(g).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal

sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Surety bond guaranteeing performance of post-closure care.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(c).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 264.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of

this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Perform post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or

(ii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days of receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, under the terms of the bond the surety will perform post-closure care in accordance with the post-closure plan and other permit requirements or will deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate.

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) During the period of post-closure care, the Regional Administrator may approve a decrease in the penal sum if the owner or operator demonstrates to

the Regional Administrator that the amount exceeds the remaining cost of post-closure care.

(9) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(10) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent. The Regional Administrator will provide such written consent when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or
(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(11) The surety will not be liable for deficiencies in the performance of post-closure care by the owner or operator after the Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(d) *Post-closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. An owner or operator of a new facility must submit the letter of credit to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of

the trust fund specified in § 264.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in § 264.145(g).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following

written approval by the Regional Administrator.

(8) During the period of post-closure care, the Regional Administrator may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Regional Administrator that the amount exceeds the remaining cost of post-closure care.

(9) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, the Regional Administrator may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(11) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(e) *Post-closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining post-closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. An owner or operator of a new facility must submit the certificate of insurance to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance, or

eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in § 264.145(g). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy must also guarantee that once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (e)(11) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

(i) The Regional Administrator deems the facility abandoned; or

(ii) The permit is terminated or revoked or a new permit is denied; or

(iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

(11) The Regional Administrator will give written consent to the owner or

operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i)

(f) *Financial test and corporate guarantee for post-closure care.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of either paragraph (f)(1)(i) or (f)(1)(ii) of this section:

(i) The owner or operator must have:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility must submit the items specified in paragraph (f)(3) of this section to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (f)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (f)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed

by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) During the period of post-closure care, the Regional Administrator may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Regional Administrator that the amount of the cost estimate exceeds the remaining cost of post-closure care.

(10) The owner or operator is no longer required to submit the items specified in paragraph (f)(3) of this section when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(11) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (f)(1) through (f)(9) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (f)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 264.145(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the

owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

(g) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a), (b), (d), and (e), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for post-closure care of the facility.

(h) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Regional

Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(i) *Release of the owner or operator from the requirements of this section.* When an owner or operator has completed, to the satisfaction of the Regional Administrator, all post-closure care requirements in accordance with the post-closure plan, the Regional Administrator will, at the request of the owner or operator, notify him in writing that he is no longer required by this section to maintain financial assurance for post-closure care of the particular facility.

§ 264.146 Use of a mechanism for financial assurance of both closure and post-closure care.

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both §§ 264.143 and 264.145. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

§ 264.148 Incapacity of owners or operators, guarantors, or financial institutions.

(a) An owner or operator must notify the Regional Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in §§ 264.143(f) and 264.145(f) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (§ 264.151(h)).

(b) An owner or operator who fulfills the requirements of §§ 264.143, 264.145, or 264.147 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other

financial assurance or liability coverage within 60 days after such an event.

§ 264.149 Use of State-required mechanisms.

(a) For a facility located in a State where EPA is administering the requirements of this Subpart but where the State has hazardous waste regulations that include requirements for financial assurance of closure or post-closure care or liability coverage, an owner or operator may use State-required financial mechanisms to meet the requirements of §§ 264.143, 264.145, or 264.147, if the Regional Administrator determines that the State mechanisms are at least equivalent to the financial mechanism specified in this Subpart. The Regional Administrator will evaluate the equivalency of the mechanisms principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator evidence of the establishment of the mechanism together with a letter requesting that the State-required mechanism be considered acceptable for meeting the requirements of this Subpart. The submission must include the following information: The facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage assured by the mechanism. The Regional Administrator will notify the owner or operator of his determination regarding the mechanism's acceptability in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of §§ 264.143, 264.145, or 264.147, as applicable.

(b) If a State-required mechanism is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by increasing the funds available through the State-required mechanism or using additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this Subpart.

§ 264.150 State assumption of responsibility.

(a) If a State either assumes legal responsibility for an owner's or operator's compliance with the closure, post-closure care, or liability requirements of this Part or assures that funds will be available from State sources to cover those requirements, the owner or operator will be in compliance with the requirements of §§ 264.143, 264.145, or 264.147 if the Regional Administrator determines that the State's assumption of responsibility is at least equivalent to the financial mechanisms specified in this Subpart. The Regional Administrator will evaluate the equivalency of State guarantees principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator a letter from the State describing the nature of the State's assumption of responsibility together with a letter from the owner or operator requesting that the State's assumption of responsibility be considered acceptable for meeting the requirements of this Subpart. The letter from the State must include, or have attached to it, the following information: the facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage that are guaranteed by the State. The Regional Administrator will notify the owner or operator of his determination regarding the acceptability of the State's guarantee in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of §§ 264.143, 264.145, or 264.147, as applicable.

(b) If a State's assumption of responsibility is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by use of both the State's assurance and additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this Subpart.

§ 264.151 Wording of the instruments.

(a)(1) A trust agreement for a trust fund, as specified in §§ 264.143(a) or 264.145(a) or §§ 265.143(a) or 265.145(a) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Trust Agreement

Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert "incorporated in the State of —" or "a national bank"], the "Trustee."

Whereas, the United States Environmental Protection Agency, "EPA," an agency of the United States Government, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A [on Schedule A, for each facility list the EPA Identification Number, name, address, and the current closure and/or post-closure cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement].

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EPA. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to

collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EPA.

Section 4. Payment for Closure and Post-Closure Care. The Trustee shall make payments from the Fund as the EPA Regional Administrator shall direct, in writing, to provide for the payment of the costs of closure and/or post-closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EPA Regional Administrator from the Fund for closure and post-closure expenditures in such amounts as the EPA Regional Administrator shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EPA Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created

managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee.

Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate EPA Regional Administrator a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to

object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EPA Regional Administrator shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EPA Regional Administrator, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EPA Regional Administrator to the Trustee shall be in writing, signed by the EPA Regional Administrators of the Regions in which the facilities are located, or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the

appropriate EPA Regional Administrator, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by the Trustee and the appropriate EPA Regional Administrator if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Regional Administrator, or by the Trustee and the EPA Regional Administrator, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EPA Regional Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of [insert name of State].

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in 40 CFR 264.151(a)(1) as such regulations were constituted on the date first above written.

[Signature of Grantor]
[Title]

Attest:
[Title]
[Seal]

[Signature of Trustee]
Attest:
[Title]
[Seal]

(2) The following is an example of the certification of acknowledgment which

must accompany the trust agreement for a trust fund as specified in §§ 264.143(a) and 264.145(a) or §§ 265.143(a) or 265.145(a) of this chapter. State requirements may differ on the proper content of this acknowledgment.

State of _____
County of _____

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

(b) A surety bond guaranteeing payment into a trust fund, as specified in §§ 264.143(b) or 264.145(b) or §§ 265.143(b) or 265.145(b) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Financial Guarantee Bond

Dated bond executed: _____
Effective date: _____

Principal: [legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: _____

Surety(ies): [name(s) and business address(es)]

EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond [indicate closure and post-closure amounts separately]: _____

Total penal sum of bond: \$ _____
Surety's bond number: _____

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA), to have a permit or interim status in order to own or operate each

hazardous waste management facility identified above, and

Whereas said principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit or interim status, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after an order to begin closure is issued by an EPA Regional Administrator or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate financial assurance, as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the EPA Regional Administrator(s) from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by an EPA Regional Administrator that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the EPA Regional Administrator.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded facility(ies) is (are) located.

[The following paragraph is an optional rider that may be included but is not required.]

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum

does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 264.151(b) as such regulations were constituted on the date this bond was executed.

Principal

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: _____

Liability limit: \$ _____

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: \$ _____

(c) A surety bond guaranteeing performance of closure and/or post-closure care, as specified in §§ 264.143(c) or 264.145(c), must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Performance Bond

Date bond executed: _____

Effective date: _____

Principal: [legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: _____

Surety(ies): [name(s) and business address(es)] _____

EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond [indicate closure and post-closure amounts separately]: _____

Total penal sum of bond: \$ _____

Surety's bond number: _____

Know All Persons By These Presents. That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action

or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA), to have a permit in order to own or operate each hazardous waste management facility identified above, and

Whereas said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully perform closure, whenever required to do so, of each facility for which this bond guarantees closure, in accordance with the closure plan and other requirements of the permit as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

And, if the Principal shall faithfully perform post-closure care of each facility for which this bond guarantees post-closure care, in accordance with the post-closure plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

Or, if the Principal shall provide alternate financial assurance as specified in Subpart H of 40 CFR Part 264, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the EPA Regional Administrator(s) from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the closure requirements of 40 CFR Part 264, for a facility for which this bond guarantees performances of closure, the Surety(ies) shall either perform closure in accordance with the closure plan and other permit requirements or place the closure amount guaranteed for the facility into the standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the post-closure requirements of 40 CFR Part 264 for a facility for which this bond guarantees performance of post-closure care, the Surety(ies) shall either perform post-closure care in

accordance with the post-closure plan and other permit requirements or place the post-closure amount guaranteed for the facility into the standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has failed to provide alternate financial assurance as specified in Subpart H of 40 CFR Part 264, and obtain written approval of such assurance from the EPA Regional Administrator(s) during the 90 days following receipt by both the Principal and the EPA Regional Administrator(s) of a notice of cancellation of the bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the EPA Regional Administrator.

The surety(ies) hereby waive(s) notification of amendments to closure plans, permits, applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded facility(ies) is (are) located.

[The following paragraph is an optional rider that may be included but is not required.]

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

In Witness Whereof, The Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 264.151(c) as such regulation was constituted on the date this bond was executed.

Principal

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: _____

Liability limit: \$ _____

[Signature(s)]

[Name(s) and title(s)]

Corporate seal:

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: \$ _____

(d) A letter of credit, as specified in §§ 264.143(d) or 264.145(d) or §§ 265.143(c) or 265.145(c) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Irrevocable Standby Letter of Credit

Regional Administrator(s)

Region(s) _____

U.S. Environmental Protection Agency

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. _____ in your favor, at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars \$_____, available upon presentation [insert, if more than one Regional Administrator is a beneficiary, "by any one of you"] of

(1) your sight draft, bearing reference to this letter of credit No. _____, and

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the Resource Conservation and Recovery Act of 1976 as amended."

This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and [owner's or operator's name], as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner's or operator's name] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in 40 CFR 264.151(d) as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution] [Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].

(e) A certificate of insurance, as specified in §§ 264.143(e) or 264.145(e) or §§ 265.143(d) or 265.145(d) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Certificate of Insurance for Closure or Post-Closure Care

Name and Address of Insurer

(herein called the "Insurer"): _____

Name and Address of Insured

(herein called the "Insured"): _____

Facilities Covered: [List for each facility: The

EPA Identification Number, name, address, and the amount of insurance for closure and/or the amount for post-closure care (these amounts for all facilities covered must total the face amount shown below).]

Face Amount: _____

Policy Number: _____

Effective Date: _____

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for [insert "closure" or "closure and post-closure care" or "post-closure care"] for the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of 40 CFR 264.143(e), 264.145(e), 265.143(d), and 265.145(d), as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the EPA Regional Administrator(s) of the U.S. Environmental Protection Agency, the Insurer agrees to furnish to the EPA Regional Administrator(s) a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in 40 CFR 264.151(e) as such regulations were constituted on the date shown immediately below.

[Authorized signature for Insurer]

[Name of person signing]

[Title of person signing]

Signature of witness or notary: _____

[Date]

(f) A letter from the chief financial officer, as specified in §§ 264.143(f) or 264.145(f) or §§ 265.143(e) or 265.145(e) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Letter From Chief Financial Officer

[Address to Regional Administrator of every Region in which facilities for which financial

responsibility is to be demonstrated through the financial test are located.)

I am the chief financial officer of [name and address of firm]. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in Subpart H of 40 CFR Parts 264 and 265.

[Fill out the following four paragraphs regarding facilities and associated cost estimates. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.]

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: _____

2. This firm guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure or post-closure care of the following facilities owned or operated by subsidiaries of this firm. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: _____

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 or 265, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: _____

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: _____

This firm [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended [date].

[Fill in Alternative I if the criteria of paragraph (f)(1)(i) of §§ 264.143 or 264.145, or of paragraph (e)(1)(i) of §§ 265.143 or 265.145 of this chapter are used. Fill in Alternative II if the criteria of paragraph (f)(1)(ii) of §§ 264.143 or 264.145, or of paragraph (e)(1)(ii) of §§ 265.143 or 265.145 of this chapter are used.]

ALTERNATIVE I

1. Sum of current closure and post-closure cost estimates [total of all cost estimates shown in the four paragraphs above].....	\$.....
*2. Total liabilities [if any portion of the closure or post-closure cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4].....	
*3. Tangible net worth.....	
*4. Net worth.....	
*5. Current assets.....	
*6. Current liabilities.....	
7. Net working capital [line 5 minus line 6].....	
*8. The sum of net income plus depreciation, depletion, and amortization.....	
*9. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.).....	

	Yes	No
10. Is line 3 at least \$10 million?.....		
11. Is line 3 at least 6 times line 1?.....		
12. Is line 7 at least 6 times line 1?.....		
*13. Are at least 90% of firm's assets located in the U.S.? If not, complete line 14.....		
14. Is line 9 at least 6 times line 1?.....		
15. Is line 2 divided by line 4 less than 2.0?.....		
16. Is line 8 divided by line 2 greater than 0.1?.....		
17. Is line 5 divided by line 6 greater than 1.5?.....		

ALTERNATIVE II

1. Sum of current closure and post-closure cost estimates [total of all cost estimates shown in the four paragraphs above].....	\$.....
2. Current bond rating of most recent issuance of this firm and name of rating service.....	
3. Date of issuance of bond.....	
4. Date of maturity of bond.....	
*5. Tangible net worth [if any portion of the closure and post-closure cost estimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line].....	\$.....
*6. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.).....	\$.....

	Yes	No
7. Is line 5 at least \$10 million?.....		
8. Is line 5 at least 6 times line 1?.....		
*9. Are at least 90% of firm's assets located in the U.S.? If not, complete line 10.....		
10. Is line 6 at least 6 times line 1?.....		

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(f) as such regulations were constituted on the date shown immediately below.

[Signature]
[Name]
[Title]
[Date]

(h) A corporate guarantee, as specified in §§ 264.143(f) or 264.145(f) or §§ 265.143(e) or 265.145(e) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Corporate Guarantee for Closure or Post-Closure Care

Guarantee made this [date] by [name of guaranteeing entity], a business corporation

organized under the laws of the State of [insert name of State], herein referred to as guarantor, to the United States Environmental Protection Agency (EPA), obligee, on behalf of our subsidiary [owner or operator] of [business address].

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in 40 CFR 264.143(f), 264.145(f), 265.143(e), and 265.145(e).

2. [Owner or operator] owns or operates the following hazardous waste management facility(ies) covered by this guarantee: [List for each facility: EPA Identification Number, name, and address. Indicate for each whether guarantee is for closure, post-closure care, or both.]

3. "Closure plans" and "post-closure plans" as used below refer to the plans maintained as required by Subpart G of 40 CFR Parts 264 and 265 for the closure and post-closure care of facilities as identified above.

4. For value received from [owner or operator], guarantor guarantees to EPA that in the event that [owner or operator] fails to perform [insert "closure," "post-closure care" or "closure and post-closure care"] of the above facility(ies) in accordance with the closure or post-closure plans and other permit or interim status requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of [owner or operator] in the amount of the current closure or post-closure cost estimates as specified in Subpart H of 40 CFR Parts 264 and 265.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located and to [owner or operator] that he intends to provide alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of [owner or operator]. Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless [owner or operator] has done so.

6. The guarantor agrees to notify the EPA Regional Administrator by certified mail, of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

7. Guarantor agrees that within 30 days after being notified by an EPA Regional Administrator of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor of closure or post-closure care, he shall establish alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of [owner or operator] unless [owner or operator] has done so.

8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of

the closure or post-closure plan, amendment or modification of the permit, the extension or reduction of the time of performance of closure or post-closure, or any other modification or alteration of an obligation of the owner or operator pursuant to 40 CFR Parts 264 or 265.

9. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable financial assurance requirements of Subpart H of 40 CFR Parts 264 and 265 for the above-listed facilities, except that guarantor may cancel this guarantee by sending notice by certified mail to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located and to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by both EPA and [owner or operator], as evidenced by the return receipts.

10. Guarantor agrees that if [owner or operator] fails to provide alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, and obtain written approval of such assurance from the EPA Regional Administrator(s) within 90 days after a notice of cancellation by the guarantor is received by an EPA Regional Administrator from guarantor, guarantor shall provide such alternate financial assurance in the name of [owner or operator].

11. Guarantor expressly waives notice of acceptance of this guarantee by the EPA or by [owner or operator]. Guarantor also expressly waives notice of amendments or modifications of the closure and/or post-closure plan and of amendments or modifications of the facility permit(s).

I hereby certify that the wording of this guarantee is identical to the wording specified in 40 CFR 264.151(h) as such regulations were constituted on the date first above written.

Effective date: _____

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary: _____

Title 40 of the Code of Federal Regulations is amended as follows:

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

Subpart H—Financial Requirements

Amend 40 CFR Part 265 by revising §§ 265.140, 265.141(a), 265.142–265.146, 265.148–265.150, by deleting § 265.151, and by adding new paragraphs (c)–(g) to § 265.141 to read as follows:

§ 265.140 Applicability.

(a) The requirements of §§ 265.142, 265.143, and 265.147–151 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this section or in § 265.1.

(b) The requirements of §§ 265.144, 265.145, and 265.146 apply only to owners and operators of disposal facilities.

(c) States and the Federal government are exempt from the requirements of this Subpart.

§ 265.141 Definitions of terms as used in this Subpart.

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of § 265.112.

(b) * * *

(c) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 265.142 (a), (b), and (c).

(d) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 265.144 (a), (b), and (c).

(e) "Parent corporation" means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(f) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of §§ 265.117–265.120.

(g) The following terms are used in the specifications for the financial test for closure and post-closure care. The definitions are intended to represent the common meanings of the terms as they are generally used by the business community.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

§ 265.142 Cost estimate for closure.

(a) On May 19, 1981, the owner or operator must prepare a written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan as specified in § 265.112. The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.

(b) The owner or operator must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(i) and (b)(ii) of this section, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(i) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in § 265.142(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with §§ 265.142 (a) and (c) and, when this estimate has been adjusted in accordance with § 265.142(b), the latest adjusted closure cost estimate.

§ 265.143 Financial assurance for closure.

By the effective date of these regulations, an owner or operator of each facility must establish financial assurance for closure of the facility. He must choose from the options as specified in paragraphs (a) through (e) of this section.

(a) *Closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning with the effective date of these regulations or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

(i) The first payment must be made by the effective date of these regulations, except as provided in paragraph (a)(5) of this section. The first payment must be at least equal to the current closure cost estimate, except as provided in § 265.143(f), divided by the number of years in the pay-in period.

(ii) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{CE} - \text{CV}}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this section, his

first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made as specified in paragraph (a)(3) of this section.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraphs (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.

(10) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the value of the trust fund, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 265.143(h), that the owner or operator is no longer required to maintain financial assurance for closure.

(11) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(b) *Surety bond guaranteeing payment into a closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 265.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's

written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in § 265.143(f).

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all

amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of the trust fund specified in § 265.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in § 265.143(f).

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure

cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other interim status requirements when required to do so, the Regional Administrator may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(10) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(d) *Closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. By the effective date of these regulations the owner or operator must submit to the Regional Administrator a letter from an insurer stating that the insurer is considering issuance of closure insurance conforming to the requirements of this paragraph to the owner or operator. Within 90 days after the effective date of these regulations, the owner or operator must submit the certificate of insurance to the Regional Administrator or establish other financial assurance as specified in this section. At a minimum, the insurer must

be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in § 265.143(f). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 265.143(h), that the owner or operator is no longer required to maintain financial assurance for closure of the facility.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (d)(10) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of

a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

(i) The Regional Administrator deems the facility abandoned; or

(ii) Interim status is terminated or revoked; or

(iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(10) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(e) *Financial test and corporate guarantee for closure.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of either paragraph (e)(1)(i) or (e)(1)(ii) of this section:

(i) The owner or operator must have:

(A) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's

financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain an extension of the time allowed for submission of the documents specified in paragraph (e)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letter from the chief financial officer must:

- (i) request the extension;
- (ii) certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;
- (iii) specify for each facility to be covered by the test the EPA Identification Number, name, address, and current closure and post-closure cost estimates to be covered by the test;
- (iv) specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;
- (v) specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in paragraph (e)(3) of this section; and

(vi) certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in paragraph (e)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (e)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section.

The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (e)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (e)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (e)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in paragraph (e)(3) of this section when:

- (i) An owner or operator substitutes alternate financial assurance as specified in this section; or
- (ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(10) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (e)(1) through (e)(8) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be

identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (e)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 265.143(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

(f) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a) through (d), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for closure of the facility.

(g) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance

mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for closure assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(h) *Release of the owner or operator from the requirements of this section.* Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that closure has been accomplished in accordance with the closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this section to maintain financial assurance for closure of the particular facility, unless the Regional Administrator has reason to believe that closure has not been in accordance with the closure plan.

§ 265.144 Cost estimate for post-closure care.

(a) On May 19, 1981, the owner or operator of a disposal facility must prepare a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in §§ 265.117-265.120. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under Subpart G of Part 265.

(b) During the operating life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 30 days after each anniversary of the date on which the first post-closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(i) and (b)(ii) of this section, using an inflation

factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(i) The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the post-closure cost estimate during the operating life of the facility whenever a change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in § 265.144(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: the latest post-closure cost estimate prepared in accordance with §§ 265.144 (a) and (c) and, when this estimate has been adjusted in accordance with § 265.144(b), the latest adjusted post-closure cost estimate.

§ 265.145 Financial assurance for post-closure care.

By the effective date of these regulations, an owner or operator of each disposal facility must establish financial assurance for post-closure care of the facility. He must choose from the options as specified in paragraphs (a) through (e) of this section.

(a) *Post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a post-closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning with the effective date of these regulations or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:

(i) The first payment must be made by the effective date of these regulations, except as provided in paragraph (a)(5) of this section. The first payment must be at least equal to the current post-closure cost estimate, except as provided in § 265.145(f), divided by the number of years in the pay-in period.

(ii) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{CE} - \text{CV}}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in this section, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made as specified in paragraph (a)(3) of this section.

(6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other

financial assurance as specified in this section to cover the difference.

(7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraphs (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.

(10) During the period of post-closure care, the Regional Administrator may approve a release of funds if the owner or operator demonstrates to the Regional Administrator that the value of the trust fund exceeds the remaining cost of post-closure care.

(11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(12) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(b) *Surety bond guaranteeing payment into a post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular

570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 265.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in § 265.145(f).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at

least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Post-closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of the trust fund specified in § 265.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in § 265.145(f).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) During the period of post-closure care, the Regional Administrator may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Regional Administrator that the amount exceeds the remaining cost of post-closure care.

(9) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other interim status requirements, the Regional Administrator may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(11) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(d) *Post-closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining post-closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. By the effective date of these regulations the owner or operator must submit to the Regional Administrator a letter from an insurer stating that the insurer is considering issuance of post-closure insurance conforming to the requirements of this paragraph to the owner or operator. Within 90 days after the effective date of these regulations, the owner or operator must submit the certificate of insurance to the Regional Administrator or establish other financial assurance as specified in this section. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in § 265.145(f). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy must also guarantee that once post-closure care begins the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (d)(11) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in the section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail

to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

- (i) The Regional Administrator deems the facility abandoned; or
- (ii) Interim status is terminated or revoked; or
- (iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or
- (iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or
- (v) The premium due is paid.

(9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amounts of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

(11) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(e) *Financial test and corporate guarantee for post-closure care.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria either of paragraph (e)(1)(i) or (e)(1)(ii) of this section:

(i) The owner or operator must have:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets in the United States amounting to a least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least \$10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's

financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain an extension of the time allowed for submission of the documents specified in paragraph (e)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letter from the chief financial officer must:

(i) Request the extension;

(ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(iii) Specify for each facility to be covered by the test the EPA Identification Number, name, address, and the current closure and post-closure cost estimates to be covered by the test;

(iv) Specify the date ending the owner's or operator's latest complete fiscal year before the effective date of these regulations;

(v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in paragraph (e)(3) of this section; and

(vi) Certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in paragraph (e)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of

all three items specified in paragraph (e)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (e)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (e)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (e)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) During the period of post-closure care, the Regional Administrator may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Regional Administrator that the amount of the cost estimate exceeds the remaining cost of post-closure care.

(10) The owner or operator is no longer required to submit the items specified in paragraph (e)(3) of this section when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(11) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (e)(1) through (e)(9) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (e)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 265.145(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

(f) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a) through (d), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a

letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for post-closure care of the facility.

(g) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(h) *Release of the owner or operator from the requirements of this section.* When an owner or operator has completed, to the satisfaction of the Regional Administrator, all post-closure care requirements in accordance with the post-closure plan, the Regional Administrator will, at the request of the owner or operator, notify him in writing that he is no longer required by this section to maintain financial assurance for post-closure care of the particular facility.

§ 265.146 Use of a mechanism for financial assurance of both closure and post-closure care.

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both §§ 265.143 and 265.145. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate

mechanism had been established and maintained for financial assurance of closure and of post-closure care.

§ 265.148 Incapacity of owners or operators, guarantors, or financial institutions.

(a) An owner or operator must notify the Regional Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in §§ 265.143(e) and 265.145(e) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (§ 264.151(h)).

(b) An owner or operator who fulfills the requirements of §§ 265.143, 265.145, or 265.147 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

§ 265.149 Use of State-required mechanisms.

(a) For a facility located in a State where EPA is administering the requirements of this Subpart but where the State has hazardous waste regulations that include requirements for financial assurance of closure or post-closure care or liability coverage, an owner or operator may use State-required financial mechanisms to meet the requirements of §§ 265.143, 265.145, or 265.147 if the Regional Administrator determines that the State mechanisms are at least equivalent to the financial mechanisms specified in this Subpart. The Regional Administrator will evaluate the equivalency of the mechanisms principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care

activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator evidence of the establishment of the mechanism together with a letter requesting that the State-required mechanism be considered acceptable for meeting the requirements of this Subpart. The submission must include the following information: The facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage assured by the mechanism. The Regional Administrator will notify the owner or operator of his determination regarding the mechanism's acceptability in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of §§ 265.143, 265.145, or 265.147, as applicable.

(b) If a State-required mechanism is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by increasing the funds available through the State-required mechanism or using additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this Subpart.

§ 265.150 State assumption of responsibility.

(a) If a State either assumes legal responsibility for an owner's or operator's compliance with the closure, post-closure care, or liability requirements of this Part or assures that funds will be available from State sources to cover those requirements, the owner or operator will be in compliance with the requirements of §§ 265.143, 265.145, or 265.147 if the Regional Administrator determines that the

State's assumption of responsibility is at least equivalent to the financial mechanisms specified in this Subpart. The Regional Administrator will evaluate the equivalency of State guarantees principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator a letter from the State describing the nature of the State's assumption of responsibility together with a letter from the owner or operator requesting that the State's assumption of responsibility be considered acceptable for meeting the requirements of this Subpart. The letter from the State must include, or have attached to it, the following information: the facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage that are guaranteed by the State. The Regional Administrator will notify the owner or operator of his determination regarding the acceptability of the State's guarantee in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of §§ 265.143, 265.145, or 265.147, as applicable.

(b) If a State's assumption of responsibility is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by use of both the State's assurance and additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this Subpart.

[FR Doc. 82-9262 Filed 4-6-82; 8:45 am]

BILLING CODE 5580-50-M

United States Federal Register

Wednesday
April 7, 1982

Part III

Environmental Protection Agency

Emissions Trading Policy Statement;
General Principles for Creation, Banking,
and Use of Emission Reduction Credits

ENVIRONMENTAL PROTECTION AGENCY

[PRM-FRL-1994-5]

Emissions Trading Policy Statement; General Principles for Creation, Banking, and Use of Emission Reduction Credits

May 12, 1982.

AGENCY: Environmental Protection Agency.

ACTION: Proposed policy statement and accompanying technical issues document.

SUMMARY: It is the policy of EPA to encourage use of emissions trades to achieve more flexible, rapid and efficient attainment of national ambient air quality standards.

This Policy Statement describes emissions trading, sets out general principles EPA will use to evaluate emissions trades under the Clean Air Act, and expands opportunities for states and industry to use these less-costly control approaches. Emissions trading includes several alternatives to traditional regulation: bubbles, netting, and offsets, as well as banking (storage) of emission reduction credits (ERCs) for future use. These alternatives do not alter existing air quality requirements; they simply give states and industry more flexibility to meet these requirements. EPA endorses emissions trading and supports its accelerated use by states and industry to meet the goals of the Clean Air Act more quickly and inexpensively.

This Policy Statement replaces the original bubble policy (44 FR 71779, Dec. 11, 1979) and sets forth minimum legal requirements for creation, storage or use of emission reduction credits in any emissions trade. It also provides criteria for "generic" SIP rules under which states can approve bubble or other trades without case-by-case federal SIP review.

EPA encourages states to continue adopting generic trading rules and approving individual trades. Until EPA takes final action on this proposal, it will evaluate state actions under the principles set forth here and illustrated in the accompanying Technical Issues Document.

EFFECTIVE DATE: This Policy Statement is effective as interim guidance upon publication. The deadline for submitting written comments is July 6, 1982.

ADDRESSES: Comments should be sent in triplicate if possible to: Central Docket Section (A-130), U.S. Environmental Protection Agency,

Washington, D.C. 20460, Attn: Doc. No. G-81-2.

DOCKET: EPA has established docket number G-81-2 for this action. This docket is an organized and complete file of all significant information submitted to or otherwise considered by EPA. The docket is available for public inspection and copying between 8:00 a.m. and 4:00 p.m., Monday through Friday, at EPA's Central Docket Section. A reasonable fee may be charged for copying.

FURTHER INQUIRIES:

Ivan Tether, Regulatory Reform Staff (PM-223), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460, (202) 382-2765,

or

Leo Stander, Office of Air Quality Planning and Standards (MD-15), Research Triangle Park, North Carolina 27711, (919) 541-5516.

SUPPLEMENTARY INFORMATION: Under Executive Order 12291, EPA must judge whether this action is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. This action is not major because it establishes policies that are voluntary and can substantially reduce costs of complying with the Clean Air Act. Furthermore, it can reduce administrative complexity by reducing the number of trades which must be approved by EPA, can stimulate innovation in pollution control, and can allow state and local pollution control agencies to conserve scarce resources.

This Policy Statement was submitted to the Office of Management and Budget for review. Any comments from OMB to EPA are available for public inspection in Docket G-81-2. Pursuant to 5 U.S.C. 605(b), I hereby certify that this action will not have a significant economic impact on a substantial number of small entities. As a policy designed to allow firms flexibility and to reduce administrative complexity, it will impose no burdens on either small or large entities.

I. Introduction: Components of Emissions Trading

This statement details EPA policy on emissions trading. It presents the minimum conditions EPA considers necessary for emissions trades to satisfy the Clean Air Act. It simplifies past requirements and expands opportunities to use these more efficient alternatives.

A. What Is Emissions Trading?

Emissions trading consists of bubbles, netting, emission offsets, and emission reduction banking. These alternatives involve the creation of surplus reductions at certain emission sources

and use of these reductions to meet requirements applicable to other emission sources. Emission trades can provide more flexibility, and may therefore be used to reduce control costs, encourage faster compliance, and free scarce capital for industrial revitalization. Moreover, by developing "generic" trading rules (see section III below) states¹ and industry can be excused from SIP revisions, and attendant delay and uncertainty, for many individual bubbles or other trades.

B. The Bubble Policy and Today's Improvements

EPA's bubble policy lets *existing* plants (or groups of plants) decrease or be excused from pollution controls at one or more emissions sources in exchange for compensating increases in control at other emission sources. Bubbles give plant managers flexibility to develop less costly ways of meeting air quality requirements. Each bubble must be equivalent to the original emission limits in terms of ambient impact and enforceability. Bubbles cannot be used to meet technology-based requirements applicable to new sources.

This Policy Statement replaces the original bubble policy (Dec. 11, 1979; 44 FR 71779) and broadens opportunities for the bubble's use. Major changes include:

- Authorizing generic trading rules for all criteria pollutants;
- Extending use of the bubble to areas which lack approved demonstrations of attainment of the national ambient air quality standards;
- Expanding opportunities for use of bubbles as an alternative means of meeting reasonably available control technology (RACT) requirements;
- Reducing unnecessary requirements for detailed air quality modeling of the ambient impact of each trade;
- Reducing unnecessary constraints on trades involving open dust sources of particulate emissions;
- Allowing VOC and CO sources more time to implement bubbles under administrative compliance schedules, consistent with reasonable further progress and statutory deadlines for attaining ambient standards;
- Allowing sources to use the bubble to come into compliance, instead of having to be on a compliance schedule with original SIP limits to be eligible to bubble; and

¹ "States" includes any entity properly delegated authority to administer relevant parts of a State Implementation Plan (SIP) under the Clean Air Act.

- Allowing broader use of emission reductions from shutdowns.

These and other changes are explained below and in the accompanying Technical Issues Document.

C. Netting

Netting removes the burden of new source review requirements from plants expanding or modernizing in PSD and nonattainment areas, so long as any increase in plant-wide emissions is insignificant. By "netting out" of review the new facility may be exempted from preconstruction permits and associated requirements, including monitoring and modeling, installation of BACT or LAER control technology, the offset requirement, and applicable bans on new construction. The new facility must still meet emission limits established by new source performance standards (NSPS) under Section 111 of the Clean Air Act. Rules governing netting for sources in attainment (PSD) areas were published on August 7, 1980 (45 FR 52676) and rules for nonattainment areas were expanded on October 14, 1981 (46 FR 50766).

D. Emission Offsets

In nonattainment areas, new major stationary sources and modifications may be required to secure sufficient surplus emission reductions to more than "offset" their increased emissions. This requirement is designed to permit industrial growth in nonattainment areas while improving air quality. It is currently implemented by rules published at 40 CFR 51.18(j) and 51.18 (Appendix S), as amended by 45 FR 52676 (August 7, 1980) and 46 FR 50766 (October 14, 1981).

E. Emission Reduction Banking

Banking lets firms store qualified emission reductions for later use in bubble, netting or offset transactions. Banked emission reduction credits (ERCs) can also be sold to firms seeking alternate ways to meet regulatory requirements more quickly flexibly.

EPA's revised offset ruling (40 CFR 51.18, Appendix S) authorized states to establish banking rules as part of their SIPs. This Policy Statement and the Technical Issues Document are EPA's first detailed articulation of the necessary components of a complete state banking rule under the Clean Air Act.

F. Effect of This Policy Statement

Emissions trading is voluntary. States are free to adopt generic rules or let trades continue to be implemented as individual SIP revisions. They may

adopt rules which incorporate all or any combination of these trading approaches.

EPA is issuing this Policy Statement as a proposal because elements of emissions trading, particularly banking, raise issues which have not yet been subject to public comment. EPA urges interest parties to address all relevant issues in their comments.

However, until final action the Agency intends to use the principles in this Statement to evaluate trading activities which become ripe for decision, including state adoption of generic bubble and banking rules. Many states are now implementing such rules and should continue to do so.

This Policy Statement is accompanied by a Technical Issues Document for use by states and industry in further understanding emissions trading. The Document offers more detail on minimum requirements and available options under the Clean Air Act. EPA also invites comment on any aspect of the Technical Issues Document.

This notice reflects the current Clean Air Act and existing regulations. A Policy Statement cannot legally alter such requirements. However, it establishes EPA policy in areas not governed by applicable regulations and sets out general principles which states and industry may use to apply those regulations in individual cases. Pending litigation or future rulemaking may alter the general principles outlined here and reflected in the Technical Issues Document. Future federal or state rulemaking, such as additional RACT requirements or changes in ambient standards, may also affect firms that have engaged in emissions trading activities.

II. Minimum Legal Requirements for Creating, Using, and Banking Emission Reduction Credits²

A. Creating Emission Reduction Credits

Emission reduction credits (ERCs) are the common currency of all trading activity. To assure that emissions trades do not contravene relevant requirements of the Clean Air Act, only reductions which are *surplus, enforceable, permanent, and quantifiable* can qualify

²Because this Policy Statement and accompanying Technical Issues Document reflect general Clean Air Act principles, states and individual sources are free to show that a general principle does not apply to particular circumstances or could be satisfied using approaches other than those described. States and sources have this option under current law, and nothing in this Policy Statement or the accompanying Technical Issues Document restricts their opportunity to make such showings.

as emission reduction credits and be banked or used in an emissions trade.

1. *Surplus*: Only emission reductions not currently required by law can be considered surplus. To define what is surplus, the state must first establish an appropriate emissions baseline against which surplus reductions can be calculated.

In nonattainment areas with approved demonstrations of attainment, the baseline must be consistent with assumptions used to develop the area's SIP. Only reductions not assumed in the area's demonstration of reasonable further progress and attainment can be considered surplus. This generally means that actual emissions must be the baseline where actual emissions were used for such demonstrations, and that allowable emissions may be the baseline where allowable emissions were used for such demonstrations.

In nonattainment areas lacking a demonstration of attainment, states may use a variety of baselines which do not jeopardize attainment by statutory deadlines. In general, states may use as baselines either actual emissions (with source commitment to future reductions if needed for attainment) or emission levels which reflect reasonably available control technology. However, where such areas must attain primary ambient air quality standards by December 1982, baselines reflecting reasonably available control technology for emission sources involved in the trade must be used.

In attainment areas, to be consistent with air quality requirements established in prevention of significant deterioration (PSD) programs under Section 110 and Part C of the Clean Air Act, actual emissions would normally be the baseline. States may use allowable emissions as the baseline, if proper consideration of increment consumption is assured.

2. *Enforceable*: To assure that Clean Air Act requirements are met, each transaction must be approved by the state and be enforceable. Enforceable emission limits may be created through SIP revisions (see Section IV), under generic trading rules (see Section III), through new source construction permits, or through state permits issued under 40 CFR 51.18, among other ways.

3. *Permanent*: Only permanent reductions in emissions can qualify for credit. Permanence can generally be assured by requiring changes in source permits to reflect a reduced level of permissible emissions.

4. *Quantifiable*: Emission reductions must be quantifiable in terms of both measuring the amount of the reduction

and characterizing that reduction for future use. Quantification may be based on emission factors, stack tests, monitored values, operating rates and averaging times, process or production inputs, modeling, or other reasonable measurement practices. The same method of calculating emissions should generally be used to quantify emission levels before and after the reduction.

B. Using Emission Reduction Credits

ERCs may be used by sources in bubble, netting, or offset transactions. The general principles below will assure that all uses of ERCs are consistent with ambient attainment and maintenance considerations under the Clean Air Act.

1. *Emissions trades must involve the same criteria pollutant.* An emission reduction may only be traded against an increase in the same criteria pollutant. For example, only reductions of particulates can be substituted for increases of particulates, reductions of VOCs for increases in VOCs.

2. *All uses of ERCs must satisfy applicable ambient tests.* The Clean Air Act requires that all areas throughout the country attain and maintain national ambient air quality standards. The ambient effect of a trade depends on the dispersion characteristics of the pollutant involved. Ambient considerations will generally not affect trades involving VOC or NO_x, whose impacts occur across broad geographic areas. For these pollutants "pound for pound" trades may be treated as equal in ambient effect. However, dispersion characteristics are important for bubble and offset trades of SO₂, TSP, or CO whose ambient impact may vary with where the emission increases and decreases occur. Trades of these pollutants must demonstrate equivalent ambient impact under the three-tiered modeling screen discussed in the Technical Issues Document or under a similar approach.

3. *Trades should not increase hazardous pollutants.* Except as may be specifically permitted by future national emission standards for hazardous air pollutants (NESHAPs), a source may not use a bubble to meet NESHAPs requirements or increase emissions beyond the levels they prescribe. Where a significant fraction of a criteria pollutant stream has been listed under Section 112 but not yet regulated, the hazardous emissions involved in the trade should either remain equal or should decrease (i.e., be traded down).

4. *Emission trades cannot be used to meet applicable technology-based requirements.* New or expanding sources cannot use ERCs to meet new source performance standards, best

available control technology requirements in PSD areas, or lowest achievable emission rate control technology requirements in nonattainment areas.

5. *States may allow bubbles in areas without approved demonstrations of attainment.* States are authorized to approve bubbles in such areas, so long as timely attainment of air quality standards will not be jeopardized. (See Section II.A above and the Technical Issues Document).

6. *Sources may use the bubble to achieve compliance.* States may allow sources to use a bubble to achieve rapid compliance once applicable emission limits and deadlines are established as part of a bubble application. States need not require sources to develop and go forward with detailed plans (including ordering equipment) to meet original emission limits when new limits which will supercede them are pending under a bubble application.

7. *States may extend certain compliance schedules.* States may give sources more time to implement bubbles by granting compliance extensions as part of approvals under generic rules, where (i) the area has received an attainment extension under Section 172(a)(2) of the Clean Air Act (applicable to VOC or CO); and (ii) the total amount of reductions required to satisfy the state's reasonable further progress demonstration will not be reduced for each year in question. States may grant similar compliance extensions for VOC or CO bubbles approved as individual SIP revisions subject to (i) above, provided the extension is consistent with reasonable further progress requirements (See section IV below).

8. *States may approve bubbles involving open dust sources of particulate emissions, based on modeling demonstrations.* This action reduces past restrictions on trades involving open dust sources of particulate emissions. Such trades may be approved based on acceptable modeling and/or monitoring demonstrations, provided sources agree to post-approval monitoring to determine if predicted air quality results have been realized.

C. Banking Emission Reduction Credits

Only emission reductions that are surplus, permanent, enforceable, and quantifiable can be banked. To provide maximum protection for sources and avoid future legal problems, state banking rules should specify the ownership rights established, the types of sources eligible to bank ERCs, and any additional conditions placed on

certifying, holding, or using banked ERCs.

As a legal minimum, state banking rules must establish ownership rights which are consistent with Clean Air Act requirements, including the requirement that SIPs provide for attainment and maintenance of ambient air quality standards "as expeditiously as practicable." States have considerable latitude in meeting this requirement, and may guarantee banked ERCs against any ambient-based reduction in quantity, so long as that guarantee does not interfere with reasonable further progress and attainment should ambient standards change or additional emission reductions be required.

In most states banking will be an extension of ongoing permit activities. The state or its designee will accept and evaluate requests to certify an ERC, maintain a publicly available ERC registry or similar instrument describing the quantity and types of banked credits, and track transfers and withdrawals of ERCs.

III. State Generic Trading Rules

Use of emission reduction credits under state generic rules approved by EPA will not require individual SIP revisions. The Technical Issues Document explains acceptable generic rules and procedures which states may adopt to reduce the need for individual SIP revisions.

Emissions trades can be approved without SIP revisions if evaluated under EPA-approved state procedures that assure no trade will interfere with timely attainment and maintenance of ambient standards. State generic rules are approvable only if their procedures are sufficiently replicable in operation to meet this test. By approving the generic rule, EPA approves in advance an array of acceptable emission limits, and no further case-by-case federal approval is required for individual trades developed under the rule.

Any trade under a generic rule will involve emission increases at some sources and emission decreases at others. For trades to be approvable under a generic rule, the sum of these increases and decreases (i.e., applicable net baseline emissions) must be zero or less. States may adopt generic rules which exempt from individual SIP revisions: (1) *de minimis* trades whose sum of the emission increases, looking only at the increasing sources, totals less than 100 tons per year after applicable control requirements; (2) trades involving VOC or NO_x emissions; (3) trades between SO₂ sources, between CO sources, or between TSP

sources, provided those sources are located in the same immediate vicinity and emissions do not increase at the source with the lower effective plume height; and (4) other SO₂, CO or TSP trades which do not increase emissions and for which carefully defined use of a screening model predicts no significant increase in ambient concentrations. EPA encourages states to adopt such rules or develop alternative approaches that equally assure attainment and maintenance of ambient standards.

To the extent state procedures for rulemaking or permit changes do not assure reasonable public notice and opportunity for comment on proposed trades, states should incorporate such provisions as part of their generic rules.

IV. Trades Not Covered by Generic Rules

States and sources may continue to use the SIP revision process to implement trades which are not covered by a generic rule. Because the SIP revision process can take account of many more individual variations, trades which could not be accomplished under a generic rule may still be implemented as site-specific SIP revisions.

EPA will take action on generic rules and individual trades submitted as SIP revisions as quickly as possible after a state has adopted a SIP revision and submitted the action to EPA. EPA encourages "parallel processing" of such revisions, with EPA and the state conducting concurrent review so that both agencies can propose and take final action at roughly the same time. EPA will also publish noncontroversial SIP revisions as immediate final actions, converting them to proposals only if requests to submit comments are received within 30 days (see 46 FR 44477; Sept. 4, 1981).

V. Conclusion

This Policy Statement sets out basic principles for individual trades and approvable generic trading rules. EPA encourages states to use these principles as a framework and refer to the accompanying Technical Issues Document for further discussion and examples. States are encouraged to design other rules which satisfy these principles but meet their specific needs.

As a policy statement, this notice does not establish conclusively how EPA will resolve issues in individual cases. EPA will accept public comment on this proposal as well as on specific SIP changes submitted under it, and will review individually each generic rule and those emissions trades submitted as SIP revisions to determine their acceptability under the Clean Air Act.

Interested parties will have full opportunity to scrutinize application of these general principles to specific cases, and to seek subsequent judicial review of such cases, when particular generic rules or individual trades are proposed and approved.

This Statement expands opportunities to use emissions trading. If implemented by states it can allow industry to use the bubble and other trading approaches in additional circumstances and geographic areas. The policy will also reduce adversary tensions, allow states to benefit from industrial knowledge, and encourage quicker compliance, while reducing unnecessary federal review. It represents important regulatory reform, for states as well as industry, by encouraging greater flexibility in meeting air quality goals.

Dated: April 2, 1982.

Anne M. Gorsuch,
Administrator.

Emissions Trading: Technical Issues Document

TABLE OF CONTENTS

I. Components of Emissions Trading

A. Creating Emission Reduction Credits

1. All Reductions Must Be Surplus
2. Alternative Emission Limits Must Be Enforceable
3. All Reductions Must Be Permanent
4. All Reductions Must Be Quantifiable

B. Using Emission Reduction Credits

1. Substantive Principles for Using ERCs
 - a. Emission Trades Must Involve the Same Pollutant
 - b. All Uses of ERCs Must Satisfy Ambient Tests
 - c. Trades Should Not Increase Net Baseline Emissions
 - d. Trades Should Not Increase Hazardous Emissions
 - e. Trades Cannot Be Used to Meet Technology-Based Requirements
 - f. Trades Involving Open Dust Emission Sources

2. Procedural Steps for Using ERCs

- a. Bubbles Can Be Used to Achieve Compliance
- b. Extensions of Compliance Deadlines
- c. Pending Enforcement Actions

C. Banking Emission Reduction Credits

1. Rules Must Designate Administering Agency
2. Only ERCs May Be Banked
3. Procedures for Banking
4. Banking Rules Must Establish Ownership Rights
5. Rules Must Establish An ERC Registry
6. Possible Enforcement Adjustments to ERCs
7. Possible Ambient Adjustment to ERCs

II. Trades Covered by Generic Rules

A. General Principles for Evaluating Generic Rules

B. Scope of Generic Rules

C. Applicability To Process Fugitive and Open Dust Trades

D. Enforcing Emission Limits Under Generic Rules

E. EPA Oversight of Trades Under Generic Rules

F. Public comment

III. Trades not Covered by Generic Rules

Appendix: Regional EPA Emissions Trading Coordinators

Emissions Trading: Technical Issues Document

This Document offers more detail on technical issues for firms and pollution control agencies seeking to implement individual emission trades or generic trading rules that meet the principles in EPA's Emissions Trading Policy Statement.¹ It describes both the minimum legal requirements for emissions trades under the Clean Air Act, and a range of legal options which states² may consider. States and industry are encouraged to pursue other approaches consistent with those discussed here.

Emissions trading is voluntary. States may implement emissions trades on a case-by-case basis or develop generic trading rules covering one or more classes of transactions. Trades under approved generic rules will be exempt from individual SIP revisions. Such rules can also provide greater certainty by specifying which trades are quickly approvable.

Section I of this Document explains general legal principles governing all emissions trading. Section II explains principles governing state generic rules. Section III discusses special considerations for emission trades implemented as individual SIP revisions.

Because these sections reflect general Clean Air Act principles, states and individual sources remain free to show that a general principle does not apply to particular circumstances or can be satisfied using another approach. States and sources have this option under current law, and nothing in the Policy Statement or this Document restricts their opportunity to make such showings. (See Section III below).

¹ Emissions trading was formerly known as "controlled trading".

² "States" includes any entity properly delegated authority to administer relevant parts of a State Implementation Plan (SIP) under the Clean Air Act.

I. Components of Emissions Trading

The components of any emissions trade are the creation of an emission reduction credit (ERC), its use in a trade, and its possible storage in a bank.

A. Creating Emission Reduction Credits

States may grant credit only to those emission reductions that are surplus, enforceable, permanent, and quantifiable. Otherwise use of ERCs might degrade air quality, threaten the viability of the area's SIP, and result in more stringent controls.

1. *All Reductions Must Be Surplus.* Only surplus reductions not currently required by law can be substituted for required reduction as part of an emissions trade without jeopardizing air quality goals.

The first step in qualifying a reduction as "surplus" is to establish a level of baseline emissions. The baseline identifies the level of required emissions beyond which reductions must occur for a source to receive credit. It will generally be determined by whether the area is attainment or nonattainment, and by the way the state developed its SIP.

a. *Use of Actual or Allowable Emissions as the Baseline.* In attainment areas the baseline will generally be actual emissions—only reductions below a source's actual level of historical emissions can be considered surplus. Because current regulations specify actual air quality as the basis for determining increment consumption, these rules normally require that actual emissions be used for the area's maintenance strategy. (See 45 FR 52717; Aug. 7, 1980). However, allowable emissions may be used as the baseline if proper consideration is given to increment usage.

In nonattainment areas the baseline may be either maximum allowable emissions or actual historical emissions.³ To determine which baseline is appropriate, the state should examine the assumptions used in developing its demonstration of attainment.

In nonattainment areas which used allowable emissions as the basis for their attainment strategy, sources can use their SIP allowable limits as the baseline for creating ERCs. Many states used allowable limits in developing their SO₂ and TSP attainment plans.

Other nonattainment areas used inventories that were either substantially deficient or based on

actual emissions, or they relied on measured (and therefore "actual") ambient values as the primary basis for determining SIP emission limits needed to demonstrate attainment. Under current EPA regulations, in these areas some level of actual historical emissions would generally be the baseline. However, these areas may approve use of allowable emissions as the baseline on a case-by-case basis, where that use comports with reasonable further progress and the source shows it will neither create a new ambient violation nor prevent the planned removal of an existing violation. (See Section III)

b. *Surplus Reductions in Areas Lacking Approved Demonstrations.* In several jurisdictions demonstrations of attainment are not yet complete. Some of these jurisdictions are uncertain where to secure sufficient emission reductions; others have not yet adopted enforceable emission limits based on reasonably available control technology (RACT) for specific industrial processes. Additional emission controls on these or other sources generally are needed to reach attainment. The question is how "surplus" should be defined for sources lacking SIP-defined RACT emission limits in these areas. Where RACT is already defined in the SIP, it will of course be the baseline. Where RACT for relevant source categories has not been defined, credit for surplus reductions may be granted in at least two general ways which are consistent with Clean Air Act requirements for reasonable further progress and attainment.

(i) *Use of a RACT Baseline.* If RACT has not been defined in the SIP, the source may agree with the State and EPA to an acceptable RACT limit for the emission sources involved in the trade. A surplus would then consist of any emission reductions in excess of those required to meet RACT. Where sources voluntarily agree to such a RACT level, EPA encourages states not to reexamine the agreed-upon individual emission levels for a period of time consistent with the statutory deadlines for attainment, unless there is no other practical way to satisfy requirements of the Clean Air Act.

A RACT baseline is the only option in areas that will not attain the relevant primary ambient standard by December 1982 and have not received attainment extensions for such standard. Because of the extremely short time period remaining for attainment and the practical difficulty of securing further reductions prior to the December 1982 deadline, this limitation is necessary to assure that trades in these areas comport with the statutory deadline and

the mandate for RACT "as expeditiously as practicable."

(ii) *Use of Actual Emissions Baseline.* Areas that will not attain the primary ozone or CO ambient standard by December 1982, but have received attainment extensions until 1987, as well as areas with plans that will attain the primary (but not the secondary) TSP or SO₂ ambient standard by December 1982, may use current actual emissions (or "old" Section 110 SIP limits if applicable) as the baseline. Under this option, sources in these areas could trade using individual emission sources not yet subject to RACT limits, so long as states clearly advise sources of their responsibility to find or produce reductions equivalent to future RACT requirements if and when the state imposes them and sources commit to meet these future requirements. This would give industry flexibility to create and use ERCs at the earliest date. It would also avoid having to negotiate individual RACT baselines through case-by-case SIP revisions.

States that choose not to require negotiated RACT baselines should be aware that their SIPs must still comply with Section 172(b)(2), which requires imposition of RACT "as expeditiously as practicable."

c. *No Double-Counting of Reductions.* To be considered surplus, an emission reduction cannot already have been included as part of the area's baseline emissions. Double-counting of reductions—granting credit for the same emission reduction, once to the state and a second time to a source for use in an emissions trade—must be addressed in the following situations.

(i) *Crediting Pre-Existing Emission Reductions.* In nonattainment areas credit generally cannot be granted for emission reductions made before monitoring data was collected for use in SIP planning. Because monitored ambient levels may have already reflected these emission decreases, they would have been assumed in calculating the reductions needed to attain ambient standards. States should clearly identify in their rules the date before which reductions will not qualify for credit. The earliest acceptable baseline date would normally be the year of the most recent emission inventory or monitoring data used in planning Part D SIP revisions under the Clean Air Act Amendments of 1977.

In attainment areas emission reductions that occurred before the PSD emissions baseline was established generally cannot qualify for credit. States have already assumed these reductions in their PSD baselines. If

³ See, 45 FR 52728 (Aug. 7, 1980). Several aspects of EPA's August 7th regulations, including the definition of baseline, are currently under judicial review. Any rulemaking changes which result from that litigation may be controlling here.

credited and later used, they could undermine the area's strategy to maintain air quality.

(ii) *Crediting Reductions From Shutdowns.* In general, a state may credit reductions from shutdowns for bubble trades if the SIP has not already assumed credit for these reductions in its attainment strategy. So long as reductions from shutdowns have not already been counted in developing an area's attainment strategy, they are an appropriate source of surplus reductions for bubble trades.

Many SIPs assumed a set quantity of reductions from new plant openings and existing plants shutdowns. These SIPs incorporated into their attainment strategy a net "turnover" reduction in emissions because new sources are generally cleaner than those that shut down. Double-counting would occur if a specific source received credit for reductions from such a shutdown, since that reduction was already assumed in the SIP's demonstration of attainment.

States have at least three options to grant sources credit without this kind of double-counting. *First*, they may re-examine any "turnover" credits in their SIP and decide not to take credit for these reductions. *Alternatively*, they may allow credit only after the total quantity of shutdown reductions assumed in the SIP has occurred. *Finally*, they may allow credit for a percentage of the total emission reductions realized from a shutdown, if they can show that such credit is consistent with the SIP's demonstration of attainment and reasonable further progress.

d. *Multiple Use of ERCs.* Once surplus reductions are credited, states should guard against their multiple use. In general, the same ERCs must not be banked by two different entities or used to satisfy two different regulatory requirements at the same time. To prevent these results, states should adopt an ERC registry or equivalent means of accounting for the creation, banking, transfer, or use of all ERCs. (See Section I.C.5)

e. *Reductions from Uninventoried Sources.* Sources not included in an area's SIP emission inventory may apply for credit. In general, so long as granting credit for reductions from these sources will not jeopardize an area's demonstration of attainment or reasonable further progress, there are no legal restrictions on such credits.

In attainment areas all sources, regardless of whether they have been included in an inventory, may create ERCs using actual emissions as the baseline. Those emissions need only

have been included in the area's PSD baseline.

In nonattainment areas, whether sources not on the inventory can create ERCs will turn on how the SIP's demonstration of attainment was designed.

Some areas first monitored ambient values to determine required SIP reductions, then required a proportionate reduction in emissions from certain source categories in order to attain. These areas may grant credit for reductions from uninventoried sources in at least three ways. *First*, they could require the source to use a RACT baseline and grant credit only for reductions below that baseline. *Alternatively*, they could require the same percentage reductions as imposed on inventoried sources, and grant credit only for reductions in excess of that amount. *Finally*, where no demonstration of attainment exists, they may use either a negotiated RACT baseline or (in appropriate circumstances) an actual emissions baseline. (See Section I.A.1.B above)

Other areas developed SIP demonstrations based on ambient air quality models rather than area-wide proportionate reductions. To the extent these SIPs demonstrated ambient attainment through reductions required from inventoried sources, reductions from sources not on the inventory can be credited using actual emissions as the baseline.

2. *Alternative Emission Limits Must Be Enforceable.* Each bubble, netting, offset or banking transaction must be enforceable and must be approved by the state. Under current EPA regulations reductions used in bubble, offset and netting trades must be federally enforceable.⁴ This requirement for enforceability can generally be satisfied either through existing procedures (including individual SIP revisions or state permits issued under 40 CFR 51.18) or through generic rules, since any enforceable compliance instrument imposing emission limits within the scope of a generic rule is deemed part of the SIP.

Emission limits established by a trade must also be incorporated in a compliance instrument which is legally binding and practicably enforceable. Trades involving individual SIP revisions automatically satisfy this requirement.

⁴ In July 1981 EPA administratively stayed certain rules relating to federal enforceability requirements for netting and offsets. 46 FR 36695 (July 15, 1981). This stay has expired and has not been renewed. Requirements of existing regulations accordingly remain applicable.

For trades under generic rules, a compliance instrument could take the form of an agreement between the source and state, and operating or preconstruction permit, or a consent decree. Many State permits and permit procedures may need revisions to assure that they provide adequate compliance information. However, such revisions need only occur on a case-by-case basis as individual trades are approved.

Compliance instruments should assure that enforcement officials do not have to test simultaneously every emission source involved in a trade. This generally means source-specific emission limits. However, states may use an overall emission limit that applies to a group of emission sources which can be monitored simultaneously. This will generally require a reliable method of determining compliance through production records, input factors, or similar indirect means. (See 45 FR 80824; Dec. 8, 1980)

The compliance instrument should also specify applicable restrictions on hours of operation, production rates or input rates; enforceable test methods for determining compliance; and necessary recordkeeping or reporting requirements. To be enforceable, these limits must state the minimum time period over which they will be averaged (e.g., lbs/hour, lbs/MMBtu averaged over 24 hours, production rate/day).

3. *All Emission Reductions Must Be Permanent.* An emission reduction credit must be a permanent reduction in the level of pollution emitted by a source. Use of an ERC which is not permanent could adversely affect air quality by allowing increased emission from both the source creating the ERC and the source where it is used.⁵

To receive credit for reductions in operations (e.g., a reduction from 3 to 2 workshifts), a source must have its permit or other compliance instruction altered to reflect the curtailment in production. Future increases in production beyond the permit amount would generally require compensating emission reductions.

⁵ As an alternative, states may allow trades whose emissions increases and emissions decreases are equal in duration rather than strictly permanent. This is the minimum legal requirement under the Clean Air Act, but may require states to track trades over time to assure ambient equivalence.

Permanence may present special but resolvable problems for reductions from small sources not subject to permits, offset requirements, or production constraints. States which grant credit from these source categories should address the possibility that reductions from one source may be followed by equal or greater increases from similar sources in adjacent areas.

4. *All Reductions Must Be Quantifiable.* Before an emission reduction can be credited it must be quantified. This generally means the state must establish a reliable basis for *Measuring the amount and rate of the reduction and describing its characteristics.*

a. *Measuring the Reduction.* To quantify ERCs, emissions must be calculated both before and after the reduction. Although many different methods of calculation are available (e.g., emission factors, stack tests, monitored values, production or process inputs), the same method and averaging time should generally be used to quantify emissions before and after the reduction.

b. *Describing the Reduction.* If an ERC is to be used at the time of creation, only characteristics necessary to evaluate that proposed use need be described. Where the ERC is to be banked and its eventual use is not yet known, a more detailed description is advisable.

B. Using Emission Reduction Credits

This section explains the substantive and procedural principles applicable to use of ERCs in bubble, netting or offset transactions.

1. Substantive Principles for Using ERCs.

a. *Emissions Trades Must Involve the Same Pollutant.* The Clean Air Act requires states to develop separate plans to attain and maintain the national ambient air quality standard for each criteria pollutant. Thus, all individual bubble, netting or offset cases must involve the same pollutant. Only reductions of particulates can substitute for increases of particulates, reductions of SO₂, for increases in SO₂, etc.

b. *All Uses of ERCs Must Satisfy Ambient Tests.* The Clean Air Act requires that all areas throughout the country attain and maintain ambient standards. In *nonattainment areas*, use of ERCs cannot create a new violation of an ambient standard or prevent the planned removal of an existing violation. In *attainment areas*, use of ERCs cannot violate an increment or ambient standard. The ambient effect of a trade generally depends on the dispersion characteristics of the pollutant involved.

VOC or NO_x Trades. Ambient considerations will not affect trades involving VOC or NO_x, whose impacts occur across broad geographic areas. Within such areas one ton of decreased emissions is generally equivalent in ambient effect to one ton of increased emissions, since the precise location of those increases and decreases ordinarily does not matter. For these pollutants,

"pound for pound" trades may be treated as equal in ambient effect.

TSP, SO₂, or CO Trades. Ambient considerations are critical for trades involving SO₂, particulates, or carbon monoxide, whose air quality impact may vary with where the emission increases and decreases occur. One hundred tons of ERCs for these pollutants created at one site may balance the ambient impact of a 100-ton increase at a site nearby, but may only balance the effect of an 80-ton increase at a site further away. In addition to distance between sources, plume parameters, pollutant characteristics, meteorology, and topography will also affect the ambient impact of such a trade.

As a general principle, bubble applications must demonstrate ambient "equivalence" and offset transactions must demonstrate ambient progress. Such demonstrations have typically been made through mathematical dispersion modeling which predicts the ambient impact of various emissions.

This Document authorizes use of a three-tiered screen with the degree of required modeling linked to the likely ambient impact of the proposed trade. The following sections describe use of this modeling screen to approve many trades without full-scale ambient modeling. Use of this modeling screen to define the scope of generic rules is discussed in Section II below.

(i) *Level I:* In general no modeling is needed if the proposed TSP, SO₂, or CO trade does not result in a net increase in applicable baseline emissions, the relevant emission sources are located in the same immediate vicinity, and no increase in emissions occurs at the source with the lower effective plume height. In such cases it can reasonably be assumed that "pound-for-pound" trades will produce ambient effects equivalent to what current modeling would predict, and modeling is not required.

(ii) *Level II:* Only limited modeling involving the specific emission sources in the trade is needed for trades not included in Level I, if there is no net increase in applicable baseline emissions and if emissions after the trade will not cause a significant air quality impact at the receptor of maximum predicted impact. In determining "significant" impact, states may use the significance levels established by EPA for determining when air quality monitoring is necessary for PSD cases: 10 µg/m³ for the 24-hour standard for TSP; 13 µg/m³ (24-hr) for SO₂; and 575 µg/m³ (8-hr) for CO. (See, 45 FR 52709, Aug. 7, 1980). These levels appropriately identify trades whose

potential ambient impact need not be further evaluated before approval.

(iii) *Level III:* Full dispersion modeling, considering all sources in the area of impact, is required if net applicable baseline emissions will increase as a result of the trade or if the trade will have a significant impact on air quality at the receptor showing maximum ambient impact.

This modeling screen will ensure that the air quality impact of trades is equivalent to the impact of the original SIP limits.

c. *Trades Should Not Increase Net Baseline Emissions in Nonattainment Areas.* Congress required *nonattainment areas* to demonstrate reasonable further progress (RFP) by reducing emissions each year in amounts sufficient to attain ambient standards by statutory deadlines. In general, RFP is measured by an areawide quantity of reduced emissions.

Trades in such areas which increase total emissions can generally occur only as individual SIP revisions in which the state either demonstrates that the trade is consistent with RFP or revises RFP as part of the proposed SIP revision. EPA will approve such revisions as amendments to the SIP, provided they comport with ambient air quality standards and reasonable further progress.

However, such trades may occur under generic rules where existing sources were required to reduce emissions beyond the amount required to bring the area into attainment. In such cases a growth margin was created which may be used at the discretion of the state to compensate for any increases in emissions without violating reasonable further progress requirements.

In *attainment areas* trades increasing total emissions could generally be permitted, but may consume some or all of the increment, trigger PSD review, or both.

d. *Emissions Trades Should Not Increase Hazardous Pollutants.* Under the Clean Air Act all sources must meet applicable Section 112 (NESHAPs) regulations for hazardous air pollutants. Except as may be specifically permitted in future Section 112 regulations, a source may neither use a bubble to meet these requirements, nor increase emissions beyond the levels they prescribe.

Where pollutants have been listed under Section 112, but are not yet subject to specific regulations, states may allow trades consisting of equivalent increases and decreases of the same listed pollutant at reasonably

close emission points. States may also approve trades in which reductions in hazardous emissions compensate for increases in non-hazardous emissions. For example, a source may trade benzene for any non-hazardous VOC, if the benzene emissions are decreased (i.e., "traded down").

e. Emissions Trades Cannot Be Used to Meet Technology-Based Requirements. The Clean Air Act specifically requires new or expanding sources to meet technology-based new source performance standards (NSPS), regardless of the attainment status of the area in which they are located. This requirement prohibits use of bubbles to meet or avoid NSPS, and has been interpreted to bar use of such a bubble to meet new source review requirements for best available control technology (BACT) in PSD areas, or lowest achievable emission rate control technology (LAER) in nonattainment areas. Thus, new emissions sources subject to new source review cannot use ERCs from existing sources to satisfy these requirements.

Expanding or modernizing sources can, however, use *internal* emission reductions from within the same plant to "net out" of new source review. Such sources still must meet NSPS, but are not subject to BACT in attainment areas (45 FR 52676; Aug. 7, 1980) or LAER in nonattainment areas (46 FR 50766; Oct. 14, 1981), since they are not considered new sources under Parts C and D of the Clean Air Act.

f. Trades Involving Open Dust Emissions. Trades involving open dust sources of particulate emissions may be approved based on modeled demonstrations of ambient equivalence. Sources proposing such trades should be required to undertake a post-approval monitoring program to evaluate the impact of their control efforts. If the results of monitoring indicate that initial open dust controls do not produce the predicted air quality impact, further enforceable reductions may be required. States must either require sources to acknowledge their responsibility for further reductions, or deem trading applications to be such an acknowledgment, as a condition of approval.

2. Procedural Steps for Using ERCs. Emission trades may be implemented through individual SIP revisions or state generic rules. This section describes principles applicable to either procedure. General principles for generic rules are discussed in Section II below. Special considerations for trades which still require individual SIP revisions are discussed in Section III.

a. Bubbles Can Be Used to Achieve Compliance. The bubble policy required that sources be subject to binding compliance schedules based on original SIP emission limits before being eligible to apply for bubbles. This requirement threatened sources with tight milestones for the purchase of conventional control equipment and tended to discourage both rapid compliance and flexibility. Under today's Policy Statement states may promote rapid compliance by allowing sources to agree to emission limits established as part of their bubble application, instead of requiring sources to agree to compliance plans based on their original SIP limits before an application can be filed.

b. Extensions of Compliance Deadlines. States may extend compliance deadlines for VOC or CO sources on a case-by-case basis as part of bubble approvals. The Clean Air Act limits such extensions to sources which are located in areas that have received VOC or CO attainment extensions until 1987, and whose bubble will be consistent with reasonable further progress requirements. Because this will usually require a revision of the state's reasonable further progress demonstration, such extensions must generally be submitted as SIP revisions.

However, states may also grant compliance extensions without case-by-case SIP revisions as part of bubble approvals under a generic rule. The rule should provide that: (1) Extensions may only be granted in areas which have received attainment extensions to 1987; and (2) the total amount of reductions claimed in the state's approved RFP demonstration will not be reduced for each year in question. For example, if a source wishes to defer 100 tons per year of reductions from 1982 to 1985, then as part of the bubble approval, the state must show that an additional 100 tons per year of reductions has already occurred in 1982, or that provisions for such additional reductions already exist.

c. Pending Enforcement Actions. A bubble cannot be approved for an individual emission source which is presently the subject of a federal enforcement action or outstanding enforcement order unless EPA (and where necessary the appropriate court) approves the proposal and the compliance schedule it contains. This applies to civil actions filed under Clean Air Act Section 113(b), criminal actions filed under Section 113(c), a notice imposing noncompliance penalties issued under Section 120, administrative orders issued under Section 113(a), or a citizen suit filed under Section 304 where EPA has intervened.

This requirement need not preclude bubble approvals under generic rules, provided an appropriate mechanism for securing and recording EPA approval is used. Sources should, however, be aware that such approvals cannot be finally effective until approved by the appropriate court.

C. Banking Emission Reduction Credits

State SIP rules may include a banking provision which addresses ownership and holding of ERCs over time. Without such a provision, firms risk losing surplus reductions should a major SIP revision or new set of control requirements be instituted. Generic banking rules can afford such ERCs substantial protection consistent with the Act's mandate to attain and maintain ambient standards.

The bank can accept and evaluate requests to certify an ERC, serve as a clearinghouse for credits on deposit, and account for transfers and withdrawals of ERCs. These roles will generally be performed by the state as part of its normal permitting activities.

The following sections address both minimum legal requirements for state banking rules and issues states should consider. States may adopt other approaches which produce equivalent results.

1. Banking Rules Must Designate an Administering Agency. Banking rules must identify the entity responsible for specific functions. While the state will ordinarily be responsible for verifying and processing ERC requests, all or part of this responsibility may be delegated to other organizations. Such organization(s) must possess the resources and legal authority to implement delegated activities.

2. Only ERCs May Be Banked. Banked emission reductions must be *surplus, permanent, quantifiable and enforceable*. This generally means that such reductions must be made at the time they are deposited in the bank as ERCs. However, if a firm commits to produce a specific reduction in the future, a state may allow a conditional deposit to be made. In all cases the reduction must actually be achieved before it can be used in an emissions trade.

3. Procedures for Banking ERCs Should Be Defined. To speed approval of trades and provide greater certainty for potential ERC creators and users, state banking rules should clearly identify which proposed emission reductions can qualify to be credited and banked, the information required of sources to substantiate their claim for credit, and any required application forms.

4. *Banking Rules Must Establish Ownership Rights.* To prevent two entities from claiming the same ERCs, state banking rules must specify who can own ERCs. For example, while the source creating the ERC will generally be its owner, the state could, as part of its rule, reserve ownership of certain classes of ERCs to itself or local governments.

5. *Banking Rules Must Establish an ERC Registry or Its Equivalent.* An ERC registry or equivalent instrument lets states track ownership, use, and transfer of all banked ERCs. Banking rules must provide that no transfer of title to a banked ERC will take effect until the transaction is reflected in the registry. This tracking system is important to minimize disputes over ownership and provide a central list of certified ERCs which may be available. It can also provide useful information for quickly evaluating any proposed use of a banked ERC.

Information which may help evaluate proposed use of a banked ERC should be recorded at the time of its creation and entered as part of its banking record. This information should include the location of the source creating the ERCs, its stack parameters, the temperature and velocity of its plume, particle size, the existence of any hazardous pollutants, daily and seasonal emission rates, and any other data which might reasonably be necessary to evaluate future use.

To perform these tracking and clearinghouse functions the ERC registry must be accessible to the public. Subject to confidentiality considerations, states should make copies of the ERC registry available at convenient locations and times, and may want to publish a periodic summary of banked ERCs.

6. *Possible Adjustments to ERCs Based on Enforcement Considerations.* To avoid legal problems, banking rules should clearly state what, if any, changes may occur to ERCs after they have been banked. Once an ERC has been used by another source to meet a permit requirement, any violation of the conditions under which that ERC was created should result in enforcement against the source producing that emission reduction and not the source using the ERCs. If a state attempted to enforce against the source using purchased ERCs, a complex set of third-party lawsuits would ensue. This would likely discourage sources from purchasing ERCs in the future.

7. *Possible Adjustments to ERCs Based on Ambient Attainment Considerations.* To assure the validity of its demonstration(s) of attainment, a state with a banking rule should assume

that all banked emissions will ultimately be used. Thus, in evaluating their ability to attain national standards, states should add to their inventory or measured ambient value, all unused banked reductions at the site at which they were created.

Additional emission reductions may be required from sources because of their area's failure to attain ambient standards, because of an increment violation, or because new RACT requirements are being imposed under a SIP schedule. The existence of banked ERCs must not interfere with states' ability to obtain these additional reductions. For this reason state banking rules should specifically address how ERCs will be treated if additional reductions are required. Available options include:

a. *ERCs Are Absolutely Guaranteed Against Adjustment.* The state would determine the required quantity of reductions and assess necessary controls on the inventory. Sources with banked ERCs would not be exempt from any requirement for additional reductions, but could satisfy that requirement by using their banked ERCs, by reducing emissions elsewhere, or by purchasing equivalent ERCs.

To effectively implement this option, it would be particularly important to state new control requirements in terms of "RACT-equivalent" reductions.

b. *Current ERCs Are Fully Preserved,* but either their use or future ERC deposits are suspended until the SIP has committed to secure reductions sufficient to reestablish reasonable further progress or cure an increment violation. Use of either type moratorium would be consistent with air quality objectives while allowing sources to retain or use their entire quantity of banked ERCs. However, this option may be undesirable because of uncertainty regarding the moratorium's start, duration, or potential interference with user planning.

c. *Across-the-Board Discounting.* Under this option, all ERCs in the bank would be discounted by the same factor. For example, if a 10% additional reduction is required from a category of sources for the SIP's new demonstration of attainment, the state would discount all banked ERCs from those types of sources by 10%. Although the quantity of ERCs held by a firm will be reduced, the overall supply of ERCs will decrease, while demand will increase. Therefore, the overall value of remaining ERCs is likely, at minimum, to remain the same. Indeed, other sources may purchase banked ERCs to meet the 10% reductions required of them.

This option is relatively straightforward for VOC or NO_x. For SO₂ or TSP more detailed, source-specific modeling would generally be required to allocate the discount necessary to demonstrate attainment.

States may adopt any of these methods of accommodating possible additional reductions. They may also adopt any equivalent method which achieves the same objectives.

II. Trades Covered by State Generic Rules

This section explains expanded opportunities for states to develop generic rules under which certain classes of emissions trades will be exempt from individual SIP revision.

A. General Principles for Evaluating Generic Rules

A generic rule is approvable if it assures that (1) applicable net baseline emissions will not increase; (2) emissions trades otherwise requiring SIP revisions under §§ 110(i) and 110(a)(3) of the Clean Air Act will be evaluated under procedures that are sufficiently replicable in operation; and (3) emission limits produced under the rule will not interfere with ambient attainment and maintenance. Replicability generally means that specific modeling procedures are prescribed and that states have appropriately defined their choice of models, model inputs, and modeling techniques in applying these procedures to specific trades. Thus, these trades should not create new ambient violations or interfere with the planned removal of existing violations. By approving such generic rules EPA approves in advance an array of acceptable SIP emission limits, and no further case-by-case EPA approval is required.⁶

B. Scope of Generic Rules

States may use a range of mechanisms to exempt trades from EPA review as individual SIP revisions. While several mechanisms are explained below, states may submit other generic rules that satisfy these basic principles.

1. *De Minimis Trades.* Trades in which net baseline emissions do not increase and in which the sum of the emission increases, looking only at the increasing sources, totals less than 100 tons per year after applicable control requirements, may proceed without a

⁶Replicability more generally means a high likelihood that two decision-makers applying the rule to a given trade would reach the same conclusion. For one example of a generic rule incorporating a very simple formula that meets the test of replicability, see 46 FR 20551 (Apr. 6, 1981).

SIP revision. Such trades will have at most a *de minimis* impact on local air quality because only minor quantities of emissions are involved. Moreover, because only trades which produce no net increase in emissions can be exempt, overall air quality will not suffer. The Federal resources required to evaluate these trades could best be used to evaluate actions that have a potential impact on air quality.⁷

2. *VOC or NO_x Trades.* All VOC or NO_x trades under a generic rule that assures no net increase in applicable baseline emissions may occur without individual SIP revisions.

The ambient impacts of VOC and NO_x emissions are area-wide rather than source-specific. All such emissions within a broad area are considered comparable, regardless of plume height, topography or related factors. Thus, the ambient impact of trades involving VOC or NO_x will by definition be equivalent to that of the sum of the SIP emission limits for the emission sources involved in the trade. As long as the sum of these emission limits is not exceeded, the limits for each specific emission source can be reallocated without adversely affecting air quality. This essentially arithmetical task is so mechanical that VOC or NO_x trades developed in this manner cannot reasonably interfere with ambient attainment and maintenance.

3. *SO₂, CO, or TSP Trades.* For trades involving SO₂, CO, or TSP it is more difficult, but by no means impractical, to develop a generic rule which assures that valid ERC uses cannot reasonably interfere with attainment and maintenance.

The ambient impact of these pollutants depends on site-specific factors such as topography and plume height which are ordinarily evaluated by ambient modeling. However, if the emission sources are located in the same immediate vicinity and emissions decrease at the source with the lower effective plume height, therefore minimizing localized ambient impact, equal increases and decreases in emissions from these sources will ordinarily produce equivalent ambient effects (See Level I of the Modeling Screen). As a result, trades involving emission sources within Level I may be treated in the same manner as trades involving VOC or NO_x and may be exempted from individual SIP revisions.

EPA will normally approve generic rules that define "same immediate vicinity" as up to 250 meters between the individual emission sources involved in a trade. However, where such trades involve areas with complex terrain, some modeling might still be required to assure that ambient impact is properly considered. Generic rules should specify criteria for identifying such circumstances and for defining what modeling will be required.

4. *Other Mechanisms for Exempting TSP, SO₂, or CO Trades from Individual SIP Revisions.* Other TSP, SO₂, or CO trades can be exempted from individual SIP revisions if they occur under state generic rules which satisfy the replicability and air quality requirements stated above.

Possible generic approaches include:

(a) Developing SIP rules which allow identified sources to meet an array of specific emission limits consistent with ambient attainment and maintenance. For example, states could approve a modeled formula for two or more specific emission sources which would both satisfy ambient concerns and let firms determine particular permit limits at each emission source. This formula would have to be adopted as part of the SIP.⁸

(b) Developing criteria for use of simplified Level II modeling (see section I.B.1.b, above) for specified trades. This approach would exempt trades which (1) produce no net increase in applicable baseline emissions, (2) can routinely be modeled in a prescribed manner, and (3) will not have significant ambient impact. The generic rule must specify either the particular model that will be employed in a given situation, or criteria for selecting models in specified circumstances. To limit variability in modeling results the rule must also specify procedures for selecting input data (e.g., wind speed, stability class, source emission rate) which are sufficiently definite to meet the test of replicability. To determine whether a trade will have significant ambient impact these procedures should assess whether the change in emissions after the trade from the increasing source has the potential to cause an increase of more than 10 µg/m³ over at 24-hour period for TSP, 13 µg/m³ (24 hours) for SO₂, or 575 µg/m³ (8 hours) for CO at the receptor of maximum predicted impact.

⁸For example, the emission limits for the four stacks at the Stuart Power Plant in Adams County, Ohio are 3.16 pounds of SO₂ per million BTU at each stack, or at the plant's choice (after notification to EPA), any limit in pounds per BTU which satisfies the following equation: $0.0791 (EL_1 + EL_2 + EL_3 + EL_4) < 1$. See 40 CFR 5.1881(11).

C Applicability of Generic Rules To Process Fugitive and Open Dust Emissions Trades

Trade involving process fugitive emissions of VOC or NO_x may routinely be approved under generic rules. However, because of their dispersion characteristics, it is more difficult to define generic rules that can be applied in a sufficiently replicable fashion to trades involving process fugitive or open dust TSP emissions.

In general TSP trades involving process fugitive emissions can be approved under generic rules if: (1) process fugitive emissions are traded against similar sources of process fugitive emissions, or (2) emissions from point sources are traded against process fugitive emissions which can reasonably be represented by a point-source dispersion pattern. This means that relevant parameters such as emission release height must be readily determinable. Unless such trades fall within Level I of the modeling screen or are *de minimis*, only processes whose fugitive emissions can be adequately represented by the dispersion model(s) specified in an approved generic rule can be included in a trade under that rule.

For TSP trades involving open dust emissions states should be aware that approvable generic rules which appropriately limit the choice of screening models and relevant inputs (including acceptable emission factors) will currently be difficult to formulate. Accordingly, open dust trades generally will have to be submitted as individual SIP revisions.

D. Enforcing Emission Limits Under Generic Rules

Alternative emission limits approved under generic rules are considered by EPA to be federally enforceable. Generic rules should specify that such alternative limits become applicable requirements of the SIP for purposes of §§ 113 and 304 of the Clean Air Act and are enforceable in the same manner as other SIP requirements. To assure that EPA and citizens know what emission limits apply, generic rules should also specify that EPA be informed of applicable emission limits before and after the trade, following approval of the trade by the state.

E. EPA Oversight of Trades of Under Generic Rules

The Clean Air Act requires EPA to monitor administration of SIPs, including generic rules. See § 110(a)(2)(H). EPA will audit the information supplied for each trade and

⁷Although states may exempt *de minimis* trades from federal SIP revisions, these trades are still subject to ambient tests. They should accordingly be evaluated by the state under the modeling screen (See Section I.B.1.b. above) or an equivalent approach.

may request additional relevant information. Should EPA determine that approved trades are substantially inconsistent with generic rules in the SIP, it will notify the state and specify any necessary remedial measures.⁹

F. Public Comment

For trades occurring under generic rules, existing state statutes or regulations will generally provide reasonably adequate notice and comment opportunities. If these opportunities are not provided generic rules should explicitly address this issue.

To ensure public awareness consistent with § 304 of the Clean Air Act, states should also, at a minimum, publish any changes to emission limits which result from trades approved under a generic rule (see 46 FR 20554; April 6, 1981).

III. Trades Not Covered by State Generic Rules

In the absence of a generic rule, states and sources may continue to use SIP revisions to effect bubble or external offset trades. Individual trades may also fall outside the scope of an approved generic rule and still be implemented as individual SIP revisions. The principles described in the Policy Statement and this Document will generally be used to evaluate these emission trades.

Because of the ability of the SIP revision process to take account of individual variations, many trades which could not be accomplished under a generic rule may be acceptable use individual SIP revisions. For example, proposed bubbles which produce a net

increase in baseline emissions could nevertheless be approved through a SIP revision showing that requirements for attainment and maintenance were satisfied. In submitting such a bubble application, the state would have to revise its reasonable further progress demonstration to account for the increase in emissions and EPA would review the proposal to determine if the demonstration of attainment and RFP were satisfactory. Without such a SIP revision, trades increasing net baseline emissions would generally be acceptable only if compensating additional controls were already required in the SIP.

Through the SIP revision process, states and sources may also demonstrate that a general principle discussed in Section I above does not apply to their particular circumstances, or that such a principle may be satisfied in other ways. For example, they may show that a RACT baseline is unnecessary for a particular source because resulting reductions are not needed for attainment; that despite general requirements for use of an actual emissions baseline, an allowable baseline is acceptable in a particular situation based on air quality modeling; or that reductions from specific shutdowns or uninventoried sources can be fully credited without interfering with reasonable further progress and attainment.

EPA will make reasonable efforts to take prompt action on SIP trading proposals after a state has ruled on an individual application and submitted it to the Agency. EPA will encourage "parallel processing" of proposals, with EPA and state officials conducting concurrent review so that both agencies can give public notice of proposed action at roughly the same time. EPA can then take prompt final action after the state completes its proceedings, provided the state does not substantially

alter the proposal after public notice. EPA will also publish non-controversial SIP revisions as immediate final actions, converting them to proposals only if adverse comments are received within 30 days (see generally 46 FR 44477; Sept. 4, 1981).

Appendix.—Regional EPA Emissions Trading Coordinators

- Region I: Marcia Spink, Stationary Source Section, Air Programs Branch, John F. Kennedy Federal Building, Boston, Massachusetts 02203, (617) 223-4448; FTS 223-4448
- Region II: Linda Comerchi, Permits Administration Branch, Planning and Management Division, 26 Federal Plaza, New York, New York 10007, (212) 264-4333; FTS 264-4333
- Region III: David Arnold, Air Programs Branch, 6th and Walnut Streets, Philadelphia, Pennsylvania 19102, (215) 597-7936; FTS 597-7936
- Region IV: Archie Lee, Air Programs Branch, 345 Courtland Street, N.E., Atlanta, Georgia 30308, (404) 257-3286; FTS 257-3286
- Region V: Dick Dalton, Mary Ryan, Air Programs Branch, 230 South Dearborn Street, Chicago, Illinois 60604, (312) 886-6053; FTS 886-6053
- Region VI: Michael Mendias, Air Programs Branch, First International Building, 1201 Elm Street, Dallas, Texas 75270, (214) 767-2734; FTS 729-2734
- Region VII: Charles Whitmore, Air Support Branch, 324 East 11th Street, Kansas City, Missouri 64106, (816) 374-6525; FTS 758-6525
- Region VIII: Dale Wells, Air Programs Branch, 1860 Lincoln Street, Denver, Colorado 80296, (303) 837-3763; FTS 327-3763
- Region IX: Wally Woo, Air and Hazardous Materials Section, 215 Freemont Street, San Francisco, California 94105, (415) 974-8210; FTS 454-8210
- Region X: Dave Bray, Air Programs Branch, 1200 6th Avenue, Seattle, Washington 98101, (206) 442-1352; FTS 399-1352

[FR Doc. 82-9293 Filed 4-6-82; 8:45 am]

BILLING CODE 6560-50-M

⁹ A trade which does not meet the requirements of a generic SIP rule is not part of an SIP and by definition cannot replace prior value emission limits in the SIP. (See 46 FR 20554-5; April 6, 1981). In these cases EPA must reserve the right to take remedial action to assure attainment and maintenance, including as a last resort enforcement of the original SIP limits.