United States
Environmental Protection
Agency

Office of
Drinking Water
Washington, DC 20460

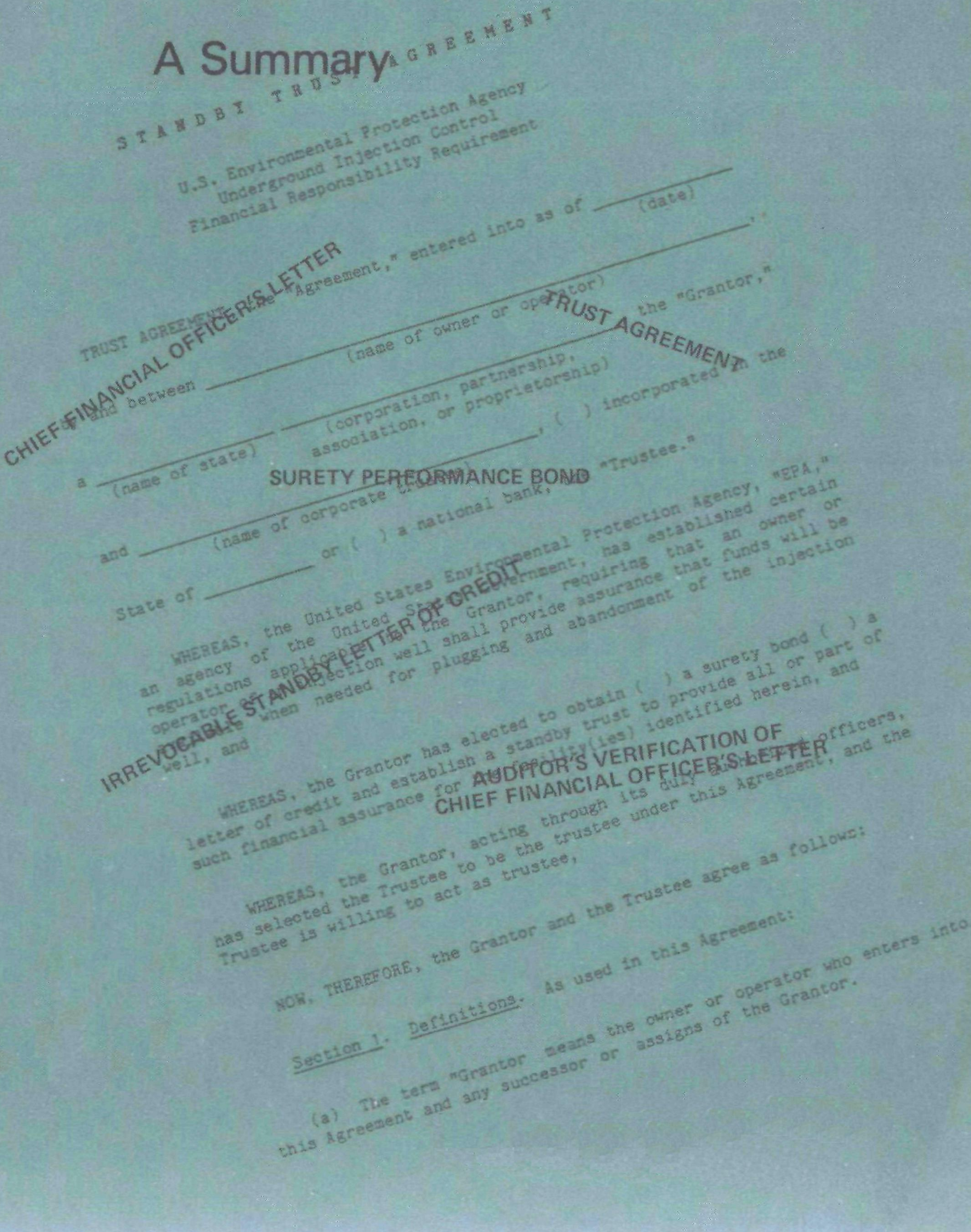
May 1985
EPA 570/9-84-007

Underground Injection Control

EPA

Federal Financial Demonstrations for Owners and Operators of Class II Injection Wells

A Summary



ACKNOWLEDGMENT

This summary was prepared for the U.S. Environmental Protection Agency under Contract No. 68-01-6827. Mr. George Denning, EPA Project Officer, and Mr. A. Roger Anzzolin, EPA Assignment Manager, provided valuable guidance to the project. Technical support to prepare this summary was provided by Jasbinder Singh of Policy Planning & Evaluation, Inc., of McLean, Virginia.

UNDERGROUND INJECTION CONTROL PROGRAM

FEDERAL FINANCIAL RESPONSIBILITY DEMONSTRATIONS FOR OWNERS AND OPERATORS OF CLASS II INJECTION WELLS

A SUMMARY

TABLE OF CONTENTS

		Page No.
A.	INTRODUCTION	1
B.	APPLICABILITY	2
C.	FINANCIAL RESPONSIBILITY OPTIONS	3
D.	FINANCIAL COVERAGE CRITERIA	4
E.	SUBMISSION OF APPLICATION	6
	1. Selection of Mechanism	7
	2. Information Submitted	7
F.	FINANCIAL INSTRUMENTS	11
	1. Surety Bond	11
	2. Letter of Credit	12
	3. Trust Fund	13
	4. Standby Trust Fund	14
G.	DESCRIPTION OF THE FINANCIAL TEST	15
	1. Financial Ratio Alternative	15
	2. Bond Rating Alternative	16
H.	USE OF STATE MECHANISMS	17
I.	COST OF FINANCIAL MECHANISMS	17
APPENDIX A—FEDERALLY ADMINISTERED UNDERGROUND INJECTION CONTROL PROGRAMS—CLASS II INJECTION WELLS		19
APPENDIX B—EPA REGIONAL OFFICES		22

FEDERAL FINANCIAL RESPONSIBILITY DEMONSTRATIONS FOR OWNERS AND OPERATORS OF CLASS II INJECTION WELLS

A. INTRODUCTION

Under the Safe Drinking Water Act of 1974 (SDWA), the U.S. Environmental Protection Agency (EPA) has established an Underground Injection Control (UIC) program. As a part of this program, Class II oil and gas operators, whether authorized by rule or by permit, are required to "... maintain financial responsibility and resources to close, plug, and abandon the underground injection operation ..." in accordance with an approved plugging and abandonment plan. This requirement is found in Sections 144.28(d) and 144.52(a) (7) in the Code of Federal Regulations.[1]

To satisfy this requirement, operators must demonstrate financial responsibility by submitting a financial mechanism that meets the approval of the EPA Regional Administrator. An applicant may choose one of several mechanisms to demonstrate financial assurance: a financial instrument, such as a surety bond, trust fund, or letter of credit; or a financial statement.

This booklet explains what operators and owners (applicants) should do to comply with these requirements. It discusses the following five basic elements:

- financial responsibility options;
- types of financial coverages;
- procedures for demonstrating financial responsibility;
- submission requirements; and
- requirements of the financial instruments and statements.

[1]The UIC program regulations are found in Parts 124, 144, 145, 146, and 147 of Title 40 of the Code of Federal Regulations (cited as 40 CFR Parts 124, 144, 145, 146, 147) and are available from the Regional EPA offices.

Furthermore, this booklet explains the criteria and guidelines EPA will use to evaluate the major types of possible financial responsibility demonstrations that apply to owners and operators of Class II wells. Each demonstration will be evaluated on a case-by-case basis with close cooperation between the applicant and EPA. Surety associations and other organizations providing financial services also may find this booklet useful in their business with Class II applicants. All information in this booklet is offered only as guidance to the operator or owner; this booklet contains no new binding regulations, and no new requirements for submitting information to EPA. Any method of demonstrating financial responsibility, which fulfills the UIC regulation and which is acceptable to EPA's Regional Administrator, may be used.

B. APPLICABILITY

Federal financial responsibility requirements apply to owners and operators in all states and U.S. territories. This booklet applies only to owners/operators of Class II injection wells in those states, territories, or Indian lands that have Federally administered UIC programs. It is not applicable to operators in states which have been approved by EPA to assume primary enforcement responsibility. EPA administers the program only for states which have either not applied to administer the program, or which have not submitted a program meeting the requirements of the Safe Drinking Water Act. See 40 CFR Part 147 for detailed information about whether EPA or the state administers the UIC program for the state in question.

Operators applying for a new permit should submit evidence of financial responsibility which is effective at the time of permit issuance. A new owner or new operator requesting a permit transfer should demonstrate financial responsibility by the effective date of permit transfer. Operators authorized under rule in the states marked with an asterisk in Appendix A are required to show evidence by June 24, 1985. The operators in the remaining states listed in Appendix A are required to show financial responsibility by December 29, 1985. Owners and operators who are not certain of their need to comply with these financial requirements or the UIC regulations should contact the appropriate EPA regional office. Appendix B lists the EPA offices, their addresses, and telephone numbers.

C. FINANCIAL RESPONSIBILITY OPTIONS

As stated in the introduction, the applicant may choose one of several mechanisms to demonstrate financial responsibility. The two basic types of mechanisms are:

1. **Financial Instruments** — Agreements such as surety bonds, letters of credit, and trust funds. Through these instruments a third party, such as a surety or bank, guarantees the availability of a specified amount of funds for plugging the applicant's wells.

2. **Financial Statements** — Financial statement data which demonstrate the company's financial strength.

The applicant has several options for demonstrating financial responsibility. The first is to submit a financial instrument that guarantees funds that cover the cost of plugging all of the applicant's injection wells. This option is known as **full coverage.** If the coverage amount of the financial instrument meets or exceeds the plugging cost specified in the Plugging and Abandonment Plan (EPA Form 7520-14), then financial responsibility is demonstrated.

A second option is to submit information, such as financial statements, which demonstrate the likelihood of future successful operation and proper well abandonment. This option is known as **financial statement coverage.** An applicant's eligibility to use this option depends on his ability to satisfy certain criteria. By meeting these basic criteria and passing the financial test, an applicant shows a low risk of abandoning his injection wells and successfully demonstrates financial responsibility.

A third option exists for applicants that meet some, but not all, of the criteria for the second option. In this case EPA will allow the applicant to submit a financial instrument for a coverage amount that is less than the total cost of plugging all injection wells. The coverage under this option, known as **blanket coverage,** is specified by the EPA regional office and generally will not be less than the cost of plugging ten injection wells.

Thus, depending on an applicant's circumstances, three types of coverage are available and can be summarized as follows:

- **Full Coverage** — A financial instrument that guarantees funds equal to the total plugging cost of all wells. This plugging cost corresponds to the amount in the Plugging and Abandonment Plan submitted to EPA (EPA Form 7520-14). This option is available to any applicant.

- **Financial Statement Coverage** — Financial statements and other information that is evidence of the applicant's ability to plug his wells in the future. This verification is based on meeting various criteria including passing a financial test.

- **Blanket Coverage** — A financial instrument that guarantees funds amounting to an EPA-specified portion of the plugging cost of all wells. Generally, the minimum blanket coverage amount is equal to the cost of plugging ten injection wells. This option is available to applicants that pass certain criteria, but do not qualify for the financial statement coverage option.

The criteria applied by EPA to qualify an applicant for either blanket coverage or financial statement coverage are described in the next section.

D. FINANCIAL COVERAGE CRITERIA

EPA will use several criteria to determine whether an applicant can use blanket or financial statement coverage. These criteria will help EPA identify those operators that are likely to properly plug their wells. Operators that meet all of the criteria are not required to obtain a financial instrument, but instead will be allowed to demonstrate their financial responsibility through a financial statement. However, if an operator fails to meet certain criteria, then he should submit a financial instrument for full coverage. For example, if an operator has a history of abandoning wells without plugging them, then EPA probably will request that he submit a financial instrument providing full coverage. An operator meeting other criteria may be allowed to submit a financial instrument providing blanket coverage. EPA will use the following six criteria to determine the likelihood of proper well abandonment.

1. **History of plugging wells** — Has the applicant plugged his wells in accordance with regulations in the past? If the applicant has plugged wells properly in the past then he is likely to do so in the future.

2. **Remaining economic life of production fields/leases** — Is the applicant producing from at least one field or lease with an estimated remaining economic life exceeding five years within the state or territory? If the remaining economic life of at least one field is more than five years, an operator is more likely to remain in business until another periodic review by EPA.

3. **Number of years in business** — Has the applicant been in the oil business more than five years? The financial performance of a business has more significance after five years of operation.

4. **Number of production fields** — Is the applicant producing from more than one field within the state or territory? A company producing from several production fields is less likely to deplete all its resources simultaneously. Hence, it is more likely to remain in business until another periodic review by EPA.

5. **Number of injection wells** — Is the applicant operating more than ten injection wells? Since the usual minimum blanket coverage amount will be for ten injection wells, applicants considering that option should operate more than ten wells.

6. **Financial condition** — Does the company pass the financial test requirements given in Section G? A company in strong financial condition is more likely to be able to plug its wells in the future.

EPA generally will use the criteria and the guidelines outlined below to determine the options available to the applicant.

- **Companies in business less than five years may submit:**

  A financial instrument providing full coverage; or

  A financial instrument providing blanket coverage, if they have a history of plugging wells, produce from at least one field or lease with an estimated remaining economic life exceeding five years, and operate ten or more injection wells (meet Criteria 1, 2, and 5 above).

- **Companies with one or no production fields may submit:**

  A financial instrument providing full coverage; or

  A financial instrument providing blanket coverage, if they have a history of plugging wells, produce from at least one field or lease with an estimated remaining economic life exceeding five years, have been in business five or more years, operate ten or more injection wells, and pass the financial test (meet Criteria 1, 2, 3, 5, and 6 above).

- **Companies in business five years or longer with two or more production fields or leases may submit:**

  A financial instrument providing full coverage; or

  Financial statements, if they have a history of plugging wells, produce from two or more fields at least one of which has an estimated remaining economic life exceeding five years, have been in business five or more years, and pass the financial test (meet Criteria 1, 2, 3, 4, and 6 above).

E. SUBMISSION OF APPLICATION

The applicant's procedure for demonstrating financial responsibility will depend on which financial coverage option and financial mechanism is selected. The applicant therefore should:

- Select the preferred type of financial mechanism and the corresponding financial coverage; and
- Obtain and submit the appropriate information and financial mechanism.

1. Selection of Mechanism

The applicant should first determine the financial coverage options for which he thinks he can qualify. If the applicant cannot submit the information needed to verify qualification (described in the preceding section), EPA may request the applicant to apply under another option.

Next, the applicant should select a financial responsibility mechanism for which he qualifies. He may want to review the mechanisms and consult various providers of financial instruments. Brief descriptions of the various financial mechanisms are found in Section F.

If the applicant has selected a financial instrument for full coverage, the coverage amount would be based on the cost estimate to plug the well(s) given in the Plugging and Abandonment Plan (EPA Form 7520-14). If the applicant has selected the blanket coverage option, he should contact the EPA office in his region to ascertain the coverage amount. At that time, the applicant should know the plugging cost estimate in his own Plugging and Abandonment Plan. If qualification for an option depends on financial statements, the applicant should meet the financial test requirements described in Section G.

2. Information Submitted

Finally, the applicant should obtain the required information and documents and submit them to EPA. This step could involve obtaining a bond from a surety agent, requesting financial statement information from the firm's accounting department, or obtaining a letter of credit and standby trust fund from a bank.

The following list describes information that could be required by EPA, depending on the financial coverage option selected by the applicant. A particular option may not require all of the information contained in this list. The applicant should consult the table following this list for the information that EPA could require to be submitted under a particular coverage option.

a. History of Plugging Wells: An applicant may be requested to furnish prior proof of plugging and abandoning his injection wells by submitting plugging records of injection activities.

b. Remaining Economic Life of a Field: An applicant should provide a certification by a registered professional engineer or a certified professional geologist that the remaining economic life of at least one field exceeds five years. This statement should be co-signed by the Manager of Field Operations or a person with similar authority.

c. Statement of Years in Business: An applicant should submit a statement of the company's original date of operation and number of years in business certified by a person of sufficient authority in the company.

d. Number of Production Fields and Number of Injection Wells: An applicant should provide a list of producing fields or leases and their location in the state (region), number of production wells associated with injection well operations, and number of injection wells. This information should be certified by a person of sufficient authority in the company or a consulting engineer.

e. Estimated Cost of Plugging Wells: The estimate should correspond to the cost of plugging wells described in the Plugging and Abandonment Plan submitted to EPA (EPA Form 7520-14). This estimate could be obtained from a service company.

f. Financial Statement Information: An applicant not submitting a financial instrument submits a financial statement for the most recent fiscal year. The statement should be accompanied by:

   - a letter from the Chief Financial Officer (CFO), or the person of sufficient authority to legally bind the company, that includes required financial information for the financial test;

- a report expressing an opinion on the financial statements prepared by an independent certified public accounting firm; and

- a verification of the information in the letter from the CFO prepared by an independent certified public accounting firm.

g. Financial Instruments: An applicant must submit a financial instrument that provides adequate coverage and meets EPA UIC requirements. The financial instrument options are:

   (1) a Surety Bond and a Standby Trust Fund;
   (2) a Letter of Credit and a Standby Trust Fund; or
   (3) a Trust Fund.

   Section F contains descriptions of these financial instruments.

Model forms for the requested information and documents are available from the EPA regional offices. However, an applicant may use any documents or financial instruments which comply with EPA regulations and are acceptable to the Regional Administrator. Table I summarizes the items requested for each of the three financial coverage options. An (X) indicates that the information or document should be submitted to satisfy the requirements of the indicated financial coverage option.

All necessary certifications and representations should be submitted before a financial mechanism can be evaluated by EPA. If the applicant submits items and information that meet EPA criteria, then he has satisfied the financial responsibility requirements. Typical information which EPA may request the applicant to submit is detailed in the following sections.

TABLE I

TYPICAL INFORMATION
TO BE SUBMITTED

	Information and Documents	Full Coverage	Financial Statement Coverage	Blanket Coverage
a.	History of Plugging Wells		X	X
b.	Remaining Economic Life of a Field		X	X
c.	Statement of Years in Business		X	X
d.	Number of Production Fields and Number of Injection Wells		X	X
e.	Estimated Cost of Plugging Wells	X	X	X
f.	Financial Statements		X	X[1]
g.	Financial Instruments	X		X

[1]Companies in business less than five years need not submit financial statements.

Note: The EPA Regional Administrator may require that the financial statements be submitted on an annual basis.

F. FINANCIAL INSTRUMENTS

Financial instruments are designed to assure continued availability of plugging resources under a variety of circumstances that can occur during well life. These circumstances include: a change in financial mechanism by an applicant; a change in ownership of wells; proper plugging and abandonment of wells; and improper plugging and abandonment of wells. Financial mechanisms submitted by an applicant should meet specific requirements mentioned below. Sample forms of the instruments are available upon request from the EPA regional offices. Instruments similar to these model forms and meeting the regulatory requirements also are acceptable to EPA.

1. Surety Bond

A surety bond is a guarantee by a surety company that obligations specified in the bond will be fulfilled. Two types of surety bonds are allowed. One kind, the Financial Guarantee Bond, guarantees that the surety company will fund a standby trust fund (described below) in the amount guaranteed by the bond. The other kind of bond, a Performance Bond, guarantees that if the owner or operator does not properly plug specified wells, the surety company will perform these duties or pay the amount of the bond into the standby trust fund.

When either kind of surety bond is used, a standby trust fund also must be established. The purpose of the standby trust fund is to receive any funds that may eventually be paid by the surety company. (Standby trust funds are explained in Section 4.) Both the bond and the standby trust agreement should be submitted as evidence of financial assurance.

A surety bond should:

- Be issued by a surety company on the U.S. Treasury list (Circular 570) of acceptable sureties on Federal bonds.
- Specify the wells it covers; hence, if new wells are started, a new bond will be required by EPA.
- Guarantee that if the owner or operator does not properly plug specified wells, the surety company will pay the amount of the bond into a standby trust fund. Hence, a standby trust fund where the beneficiary is EPA must also be established. (See Section 4 for further information.)

- Provide for a 120-day notice of cancellation to the owner or operator <u>and</u> EPA.

- Provide for payment of its face value into the standby trust fund if the owner or operator does not provide substitute assurance to EPA within 90 days of such notice.

The owner or operator may cancel the bond only after written consent by the EPA Regional Administrator. Such consent may be given after a substitute financial assurance is provided or the obligations guaranteed have been fulfilled. An owner or operator interested in obtaining a surety bond should consult his insurance agent. The agent should be able to help the owner or operator assess the availability and costs of a surety bond for his facility, including possible requirements for collateral.

2. <u>Letter of Credit</u>

A letter of credit guarantees the availability of funds to a specified party subject to the conditions in the agreement. The letter of credit, normally issued by a bank, should provide for payment of funds into a standby trust fund. The payment of the credit amount occurs if the operator fails to plug his injection wells as required. Both a standby trust fund and a letter of credit should be established. The letter of credit should:

- Be issued by a bank or other institution whose operations are regulated and examined by a state or Federal agency.

- Require that funds in it be deposited into the operator's standby trust fund if the owner or operator fails to fulfill plugging requirements. Hence, an operator using a letter of credit must also submit to EPA a standby trust agreement, of which EPA is the sole beneficiary. (See Section 4 for further information.)

- Identify the covered wells.

- Provide for a 120-day notice of nonrenewal from the issuing institution.

- Provide that the Regional Administrator may draw upon the letter of credit if the owner or operator does not provide substitute assurance within 90 days.

- Provide that the operator may cancel the letter of credit only with the EPA Regional Administrator's written consent.

Commercial banks and some savings and loan institutions and credit unions meet the qualifications in the regulations for institutions which may issue letters of credit.

3. Trust Fund

Another financial assurance option is the trust fund. The owner/operator establishing a trust fund deposits funds equivalent to the required financial coverage into the trust fund. The trustee's responsibilities generally will include: (1) investing the funds; (2) providing an annual valuation to the owner or operator and to EPA; and (3) accepting further deposits or releasing funds as wells are plugged or new wells drilled. In investing the funds the trustee will follow the general guidance of the owner or operator as long as it is in accordance with the trust provisions.

EPA approves payments from the fund to the owner or operator in reimbursement for costs of plugging as completed. If the cost of plugging appears to be significantly higher than the value of the trust fund at the time plugging begins, EPA may delay releasing funds until plugging is completed and certified. EPA will approve refunds if the value of the trust fund exceeds the estimated costs of plugging, or if other financial assurance is substituted for the trust fund, or if plugging is completed and funds still remain in the trust.

There are about 4,000 banks in the country, plus trust companies and some savings and loan institutions, which are qualified to manage trust funds. Financial institutions with which an owner or operator normally does business should be able to assist him in establishing a trust fund for plugging, either by serving as trustee or by referring him to trust institutions.

A trust fund should:

- Be established at a bank or other institution with authority to act as a trustee and whose trust activities are examined and regulated by a state or Federal agency.
- Contain funds equal to the required financial coverage.
- Designate EPA as the beneficiary.

- Specify the acceptable ways of investing money in the fund (by the Trustee).
- Be accompanied by a "certificate of acknowledgment."
- Specify conditions under which EPA may authorize disbursement of the money from the fund for the plugging of wells or for returning it to the operator.

4. Standby Trust Fund

An applicant submitting either a surety bond or letter of credit should also establish a standby trust fund. The standby trust fund is simply a trust fund that is not fully funded. This instrument is used as a payment mechanism in case of forfeiture of the primary financial instrument, either the surety bond or letter of credit. It differs from a regular trust fund in that periodic payments are not required to be made into it and its cost is much lower. An acceptable sample form is available from the EPA regional offices.

G. DESCRIPTION OF THE FINANCIAL TEST

The financial test described below is designed to identify financially healthy companies. Companies that pass the test and meet the other criteria described in Section D need not submit a financial instrument. A company failing the test should submit a financial instrument providing full coverage. A company may pass the test by meeting the requirements of either the financial ratio alternative or the bond rating alternative.

1. Financial Ratio Alternative

Under this alternative, data from an applicant's annual financial statements are used to determine if certain financial ratios meet specified thresholds. An applicant can pass the financial test under either of the following two conditions:

- he passes the following ratio test in the latest fiscal year; or
- he fails the ratio test in the latest fiscal year but passes it in the previous two years.

An applicant should meet at least three of the following four ratio requirements.

a. $\dfrac{\text{Current liabilities}}{\text{Net worth}} < 1.0$

and

$\dfrac{\text{Long term liabilities}}{\text{Net worth}} < 2.0$

b. $\dfrac{\text{Current assets less current liabilities}}{\text{Total assets}} > -0.10$

c. $\dfrac{\text{Net income plus depreciation, depletion and amortization}}{\text{Total liabilities}} > 0.10$

d. Net profit > 0

To demonstrate that he passes this test, the applicant submits the information described in Section E under the financial statement coverage option. Initially he should submit data only for the latest fiscal year. Only when he fails the test for that year should he submit the data for the previous two years. Upon failing the test or being disallowed from using the test, the owner or operator should provide a bond or other financial instrument for a coverage amount specified by EPA.

If an operator is a subsidiary of a large corporation, the financial statements of the parent corporation may be submitted if the parent also guarantees that it will provide funds sufficient to plug the subsidiary's wells. Such a guarantee should be from a parent that directly owns at least 50% of the operator's voting stock. The parent corporation is bound by the guarantee until released by EPA. If the subsidiary is audited as a separate entity, its financial statements may be submitted.

2. Bond Rating Alternative

This alternative is available to those companies that have issued bonds to raise capital. For the applicant to pass the financial test, a bond rating of the most recent bond issuance should be within the four highest categories of ratings by Standard and Poor's (AAA, AA, A, or BB) or Moody's (Aaa, Aa, A, or Baa). The applicant should submit a statement of the firm's latest bond rating by one of these two rating services on an annual basis.

H. USE OF STATE MECHANISMS

States in which EPA is administering the UIC program may have their own financial responsibility requirements for plugging and abandonment of wells. Under certain circumstances, owners or operators may use a State-required mechanism to satisfy the Federal requirements, if it provides assurance at least equivalent to that of mechanisms specified in the Federal regulations. The Agency will evaluate the equivalency of the mechanism primarily on the basis of the certainty of availability of funds for the required plugging and abandonment activities, and the amount of funds that will be made available. Other factors also may be considered. The owner or operator should submit to EPA evidence of having established the State-required mechanism, and a letter requesting that it be considered acceptable for meeting the Federal requirements. The Regional Administrator will evaluate the equivalency of the mechanism and determine its acceptability.

I. COST OF FINANCIAL MECHANISMS

To determine which method of financial assurance is least costly, the owner or operator should review all the mechanisms and consult various providers of financial services.

For each mechanism, the owner or operator should consider any fees or premiums charged, requirements for collateral to secure the mechanism, tax consequences, possible effect on credit standing, and "opportunity cost" — the cost to him of using funds which could otherwise be invested in ways that would bring a higher return.

The financial test or corporate guarantee is probably the least expensive mechanism for owners or operators who meet the requirements for these mechanisms. However, there may be the additional burden of submitting these statements on an annual basis.

The fees or premiums charged for letters of credit, trust funds, and surety bonds will vary. They are determined by the issuing institutions on a case-by-case basis. The amounts are usually in terms of percentages of the amount of the letter of credit or bond. For a trust fund the amount is generally either a fixed fee or a percentage of funds managed. The owner's or operator's financial condition, history, and size would be important factors affecting these charges. These factors will also determine any requirements for collateral.

APPENDIX A

FEDERALLY ADMINISTERED UNDERGROUND INJECTION CONTROL PROGRAMS
CLASS II INJECTION WELLS

EPA REGION II

New York (including Indian lands except for Seneca)*
Puerto Rico
Virgin Islands

EPA REGION III

District of Columbia*
Pennsylvania*
Virginia*

EPA REGION IV

Florida
Kentucky*
Mississippi
Tennessee*

EPA REGION V

Indiana*
Michigan (including Indian lands)*
Minnesota (including Indian lands)
Wisconsin (Indian lands only)

EPA REGION VI

Osage Mineral Reserve, Oklahoma

EPA REGION VII

Iowa (including Indian lands)*
Nebraska (Indian lands only)*
Kansas (Indian lands only)

APPENDIX A (Continued)

EPA REGION VIII

Colorado (Indian lands only except for the Ute Mountain Reservation)*
Montana (including Indian lands)*
South Dakota (Indian lands only)

EPA REGION IX

American Samoa*
Arizona (including Indian lands except Navajos)*
California (Indian lands only)*
Hawaii
Nevada (including Indian lands)*
Northern Mariana Islands*
Trust Territories*

EPA REGION X

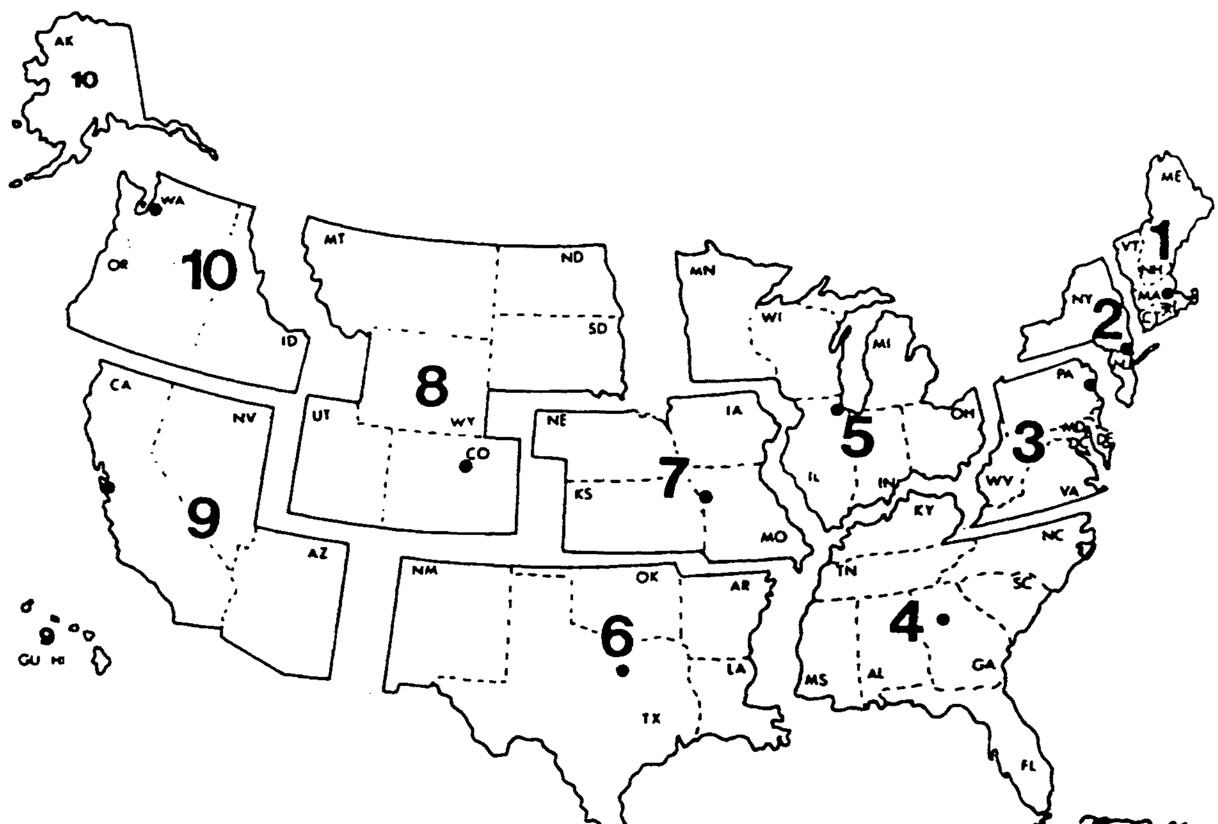
Alaska (including Indian lands)*
Idaho (including Indian lands)*

Notes:

(1) EPA is in the process of reviewing state applications to administer the UIC program. Therefore, this list is subject to change.

(2) States and territories with an asterisk are required to demonstrate financial responsibility by June 24, 1985. All other states and territories are required to demonstrate financial responsibility by December 29, 1985.

U.S. EPA REGIONAL MAP



APPENDIX B

EPA REGIONAL OFFICES

Questions may be addressed to the following individuals at EPA Regional Offices.

Jerome Healey
Water Supply Branch Chief
EPA, Region I
JFK Federal Building
Room 2113, 21st Floor
Boston, MA 02203
(617) 223-6486

Walter Andrews
Water Supply Branch Chief
EPA, Region II
26 Federal Plaza
Room 824, 8th Floor
New York, NY 10278
(212) 264-1800

Joseph T. Piotrowski
Water Supply Branch Chief
EPA, Region III
841 Chestnut Street
13th Floor
Philadelphia, PA 19107
(215) 597-8227

Donald J. Guinyard
Water Supply Branch Chief
EPA, Region IV
345 Courtland Street
Room 305, 3rd Floor
Atlanta, GA 30365
(404) 881-3781

Joe Harrison
Safe Drinking Water Branch Chief
EPA, Region V
230 S. Dearborn Street
12th Floor
Chicago, IL 60604
(312) 353-2650

Oscar Cabra, Jr., P.E.
Water Supply Branch Chief
EPA, Region VI
1201 Elm Street
Room 2930, 29th Floor
Dallas, TX 75270
(214) 767-2618

Ralph N. Langemeier
Water Supply Branch Chief
EPA, Region VII
726 Minnesota Avenue
Kansas City, KS 66101
(913) 236-2812

Roger Frenette
Drinking Water Branch Chief
EPA, Region VIII
999 18th Street
1 Denver Place, 24th Floor
Denver, CO 80295
(303) 844-1413

Steve Pardieck
Water Supply Branch Chief
EPA, Region IX
215 Fremont Street
5th Floor
San Francisco, CA 94105
(415) 974-8226

Richard R. Thiel, P.E.
Water Supply Branch Chief
EPA, Region X
1200 Sixth Avenue
Room 10-A, 10th Floor
Seattle, WA 98101
(206) 442-4092

GPO : 1985 O - 481-863