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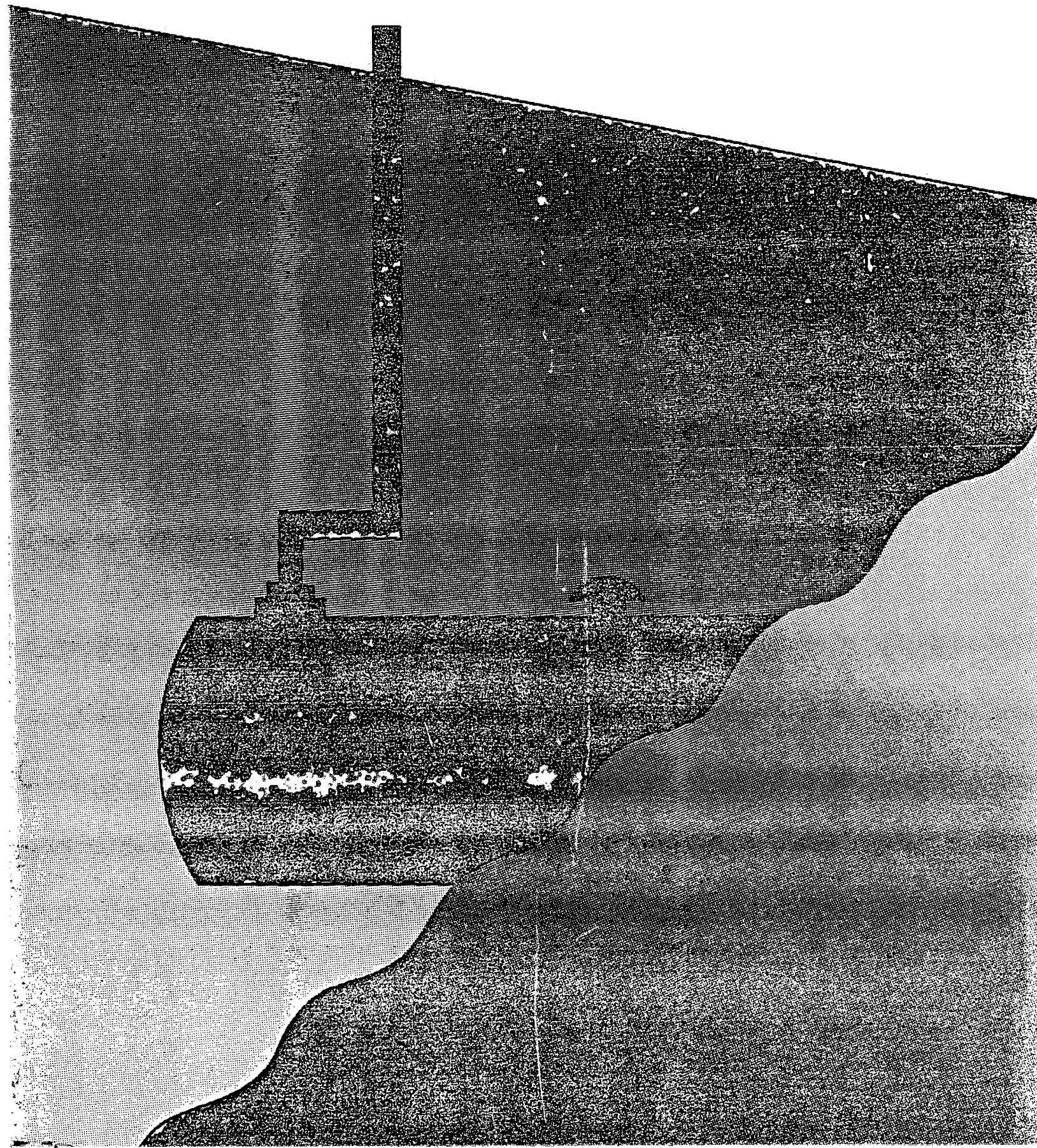
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State Program Approval Handbook





United States Environmental Protection Agency
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The handbook provides guidance for EPA Regions and the States in applying for State program approval

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☒

No

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What directive (number, title)

b. Does It Supplement Previous Directive(s)?

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Yes

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A - Signed by AA/DAA

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B - Signed by Office Director

☐

C - For Review & Comment

☐

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☐

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9. Signature of Lead Office Directives Coordinator

Beverly Thomas
Beverly Thomas, Directives Coordinator, OUST

Date

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10. Name and Title of Approving Official

Ronald Brand
Ronald Brand, Director, Office of Underground Storage Tanks

Date

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STATE PROGRAM APPROVAL HANDBOOK

*U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF UNDERGROUND STORAGE TANKS*

March 1989

TABLE OF CONTENTS

1.	INTRODUCTION	3
A.	Purpose of This Handbook	3
B.	The Goals of This Handbook	3
C.	How This Handbook Can Help You	4
D.	EPA's Approach to Regulating UST Systems	6
E.	EPA's Approach for Implementing the UST Program	10
2.	STATE PROGRAM APPROVAL PROCESS	11
A.	Purpose of State Program Approval	11
B.	Approval Criteria	12
C.	Application Process for Approval	14
3.	COMPONENTS OF THE STATE PROGRAM APPROVAL APPLICATION	18
A.	Introduction	18
B.	Components of the Application	18
1.	Governor's Letter	18
2.	Attorney General's Certification and Statement	19
3.	Demonstration of "Adequate Enforcement" Procedures	23
4.	Memorandum of Agreement	23
5.	Program Description	23
6.	Interim Approval Schedule	24
7.	State Statutes and Regulations	25
4.	ATTORNEY GENERAL'S STATEMENT: DEMONSTRATION OF "NO LESS STRINGENT" OBJECTIVES AND "ADEQUATE ENFORCEMENT" AUTHORITIES	27
A.	Introduction	27
B.	Objectives of the Federal Technical Requirements	27
1.	New UST Systems and Notification	30
2.	Upgrading Existing UST Systems	35
3.	General Operating Requirements	39
4.	Release Detection	45
5.	Release Reporting, Investigation and Confirmation	54
6.	Release Response and Corrective Action	58
7.	Out-of-Service UST Systems and Closure	67
8.	Financial Responsibility for USTs Containing Petroleum	72
C.	Adequate Enforcement Authorities	78
D.	Scope of the State Program	85
5.	DEMONSTRATION OF ADEQUATE ENFORCEMENT PROCEDURES	88
A.	Introduction	88
B.	Procedures for Compliance Monitoring	89
1.	Identifying the Regulated Community	90
2.	Record Review	92
3.	Inspections	95
4.	Public Reporting	97
5.	Data Maintenance	97

C.	Procedures for Enforcement Response	98
1.	Informal Means of Encouraging Voluntary Compliance	100
2.	Formal Enforcement Responses	102
3.	Enforcement Outreach	103
6.	MEMORANDUM OF AGREEMENT	104
A.	Explanation	104
1.	Who Signs	104
2.	Federal/State Partnership	104
3.	State Program Appraisal Process	105
4.	Compliance Monitoring and Enforcement	107
5.	Scope of the UST Program.	107
6.	Variances.	108
B.	Sample Memorandum of Agreement	110
7.	PROGRAM DESCRIPTION	119
A.	Introduction	119
B.	Local Implementation	120
C.	Program Description Questions	121
1.	General Questions	121
2.	Program Scope	122
3.	Organization and Structure of Program	125
4.	Resource Information	127
5.	State Funds for Financial Responsibility.	128
APPENDICES		
Appendix A	Sample Application	A-1
Appendix B	Federal Subtitle I Program	B-1
Appendix C	Statutory Checklist	C-1
Appendix D	Tools for Implementing State Programs	D-1
Appendix E	Table of National Industry Codes	E-1
Appendix F	Public Participation	F-1
Appendix G	Definitions of Terms in the Federal Technical Rule	G-1

Federal Rule 24(a)(2)

RULES OF CIVIL PROCEDURE

Rule 24. Intervention

(a) Intervention of Right. Upon timely application anyone shall be permitted to intervene in an action: (1) when a statute of the United States confers an unconditional right to intervene; or (2) when the applicant claims an interest relating to the property or transaction which is the subject of the action and the applicant is so situated that the disposition of the action may as a practical matter impair or impede the applicant's ability to protect that interest, unless the applicant's interest is adequately represented by existing parties.

(b) Permissive Intervention. Upon timely application anyone may be permitted to intervene in an action: (1) when a statute of the United States confers a conditional right to intervene; or (2) when an applicant's claim or defense and the main action have a question of law or fact in common. When a party to an action relies for ground of claim or defense upon any statute or executive order administered by a federal or state governmental officer or agency or upon any regulation, order, requirement or agreement issued or made pursuant to the statute or executive order, the officer or agency upon timely application may be permitted to intervene in the action. In exercising its discretion the court shall consider whether the intervention will unduly delay or prejudice the adjudication of the rights of the original parties.

(c) Procedure. A person desiring to intervene shall serve a motion to intervene upon the parties as provided in Rule 5. The motion shall state the grounds therefor and shall be accompanied by a pleading setting forth the claim or defense for which intervention is sought. The same procedure shall be followed when a statute of the United States gives a right to intervene. When the constitutionality of an act of Congress affecting the public interest is drawn in question in any action to which the United States or an officer, agency, or employee thereof is not a party, the court shall notify the Attorney General of the United States as provided in Title 28, U.S.C. § 2403.

(As amended Dec. 27, 1946, eff. Mar. 19, 1948; Dec. 29, 1948, eff. Oct. 20, 1949; Jan. 21, 1963, eff. July 1, 1963; Feb. 28, 1966, eff. July 1, 1966; Mar. 2, 1987, eff. Aug. 1, 1987.)

APPENDIX F

Definitions of Terms in the Federal Technical Rule

Definition of Terms in the Federal Technical Rule

Operator -- any person in control of, or having responsibility for, the daily operation of the UST system.

Person -- an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of state or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States Government.

Regulated Substance -- (a) any substance defined in Section 101(14) of CERCLA (but not including any substance regulated as a hazardous waste under Subtitle C); and (b) petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). Section 101(14) of CERCLA reads as follows:

"The term 'hazardous substance' means (A) any substance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act, (B) any element, compound, mixture, solution, or substance designated pursuant to section 102 of this Act, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of the Federal Water Pollution Control Act, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act, and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Release -- any spilling, leaking, emitting, discharging, escaping, leaching or disposing from an underground storage tank into groundwater, surface water or subsurface soils.

Petroleum Substances -- crude oil, crude oil fractions, and refined petroleum fractions, including gasoline, kerosene, and diesel fuels.

Underground Storage Tank -- any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground.

1. Introduction

CHAPTER 1. INTRODUCTION**A. Purpose of This Handbook**

This handbook was developed for State and EPA officials who are building and evaluating State UST programs to be approved to operate in lieu of the Federal UST program. As provided in Subtitle I of the Hazardous and Solid Waste Amendments of 1984, States may be approved by EPA to administer and enforce their UST programs if their technical requirements are no less stringent than the corresponding Federal requirements, and if they provide adequate enforcement of these requirements. EPA has promulgated regulations for State program approval (53 FR 37212 - 53 FR 37247) that were published in the September 23, 1988, Federal Register (40 CFR Part 281). This handbook provides further explanation and discussion to increase the States' understanding of how EPA intends to implement these regulations.

B. The Goals of This Handbook

The goals for this handbook are:

- To encourage State applications by making the application process as easy and straightforward as possible;
- To clearly describe EPA's expectations and criteria for an approvable State program. Clear expectations will help States with existing UST programs anticipate any legislative or regulatory changes that may be necessary for approval, and may help other States in designing approvable programs. Clear expectations will also promote consistency in the approach that EPA Regional offices use to review State programs; and

- To encourage a wide range of State UST programs. EPA recognizes that there are many different ways to design an UST program that can meet the basic environmental and public health goals of the Federal regulations, while also reflecting the unique environmental characteristics and governmental institutions of each State.

C. How This Handbook Can Help You

The handbook is written for two audiences: State agencies and EPA Regional offices. This document should assist States as they design their UST programs and assemble applications for program approval. In addition, it should assist EPA Regional offices as they work with States before applications for program approval are submitted, and as the Regional offices review the official State applications.

Because not all the material presented here will be useful for every situation, the reader need not feel obligated to read the handbook from cover to cover. The handbook is divided into seven chapters and Appendices as follows:

Chapter 2 discusses the State program approval process and defines EPA's goal of allowing approved State programs to operate "in lieu of" the Federal program. This chapter also describes the criteria that will be used to determine a State program's suitability for approval, and outlines the steps in the application process.

Chapter 3 provides a brief description and explanation of each component of the State program approval application. Sample letters and other forms are included in some sections of this chapter to aid States in developing their own application package. More detailed discussions of some of these

components are provided in the subsequent chapters. Finally, the procedure of interim approval is explained for States that choose to use it. (However, EPA does not expect many States to use this procedure.)

Chapter 4 discusses the Attorney General's statement that the statutes and regulations of the State provide adequate authority to carry out the "no less stringent" technical requirements, and ensure adequate enforcement of the State's UST program. A worksheet and examples are provided for each of the "no less stringent" objectives to help States interpret these Federal objectives.

Chapter 5 explains the requirements for compliance monitoring and enforcement procedures, and includes detailed discussions to aid States in describing how their own programs demonstrate "adequate enforcement" procedures.

Chapter 6 describes the purpose of the Memorandum of Agreement (MOA) that the State may provide to EPA. This MOA, to be negotiated with EPA, describes the coordination and shared responsibilities of the State and EPA. A sample MOA is also provided in this chapter to aid States in preparing their own applications.

Chapter 7 provides additional guidance for completing the Program Description section of the State program approval application. The guidance covers the five major areas of the Program Description including: general questions, program scope, organization and structure of the program, resource information, and State funds for financial responsibility.

The Appendices contain a sample program approval application, the applicable Federal statute and regulations, other regulatory and statutory tools, and a list of codes and standards written by nationally-recognized organizations and national independent testing laboratories.

D. EPA's Approach to Regulating UST Systems

EPA's approach to the regulation of underground storage tank systems on a national scale must be different from that undertaken by most of its other regulatory programs because the UST problem is significantly different. This difference is mainly a result of three factors: the large number of facilities to be regulated; the nature of the regulated community; and the nature of the regulatory work.

1. Large size of regulated community.

The most significant problem is the sheer size of the regulated community. Nationally, over 700,000 UST facilities account for about 2 million UST systems. Estimates indicate that roughly 75 percent of existing UST systems are unprotected from corrosion (and thus, present a serious environmental risk). A relatively high proportion of UST facilities (10-30 percent) have already had a leak, and soon others will leak unless measures are taken to upgrade them.

The amount of activity it takes to properly manage an UST system throughout its operating life has led EPA to conclude that the national UST program is most effectively carried out at State and local levels of government. For example, a small city with about 700 facilities and 2,000 UST systems within its jurisdiction can run a manageable regulatory program. If each of those 700 facilities installs one new tank during the next five years, that would be an average of 140 installations per year, or three per week. If that small city requires a city inspector to be present at each installation, an inspector would have to be in the field three times a week just for installations of new USTs. This estimate does not include "spot" inspections that might be needed for periodic tank testings, closures, upgrading or retrofit and cleanups. This task would be challenging, but the city could

probably manage to oversee at least its small percentage of the national regulated community. However, if the above figures are multiplied by the number of cities across the country, the idea of a Federally-implemented program that would oversee all of these facilities becomes practically and effectively impossible.

A consideration of the large numbers of UST owners and UST systems also led EPA to design the Federal UST regulations with a phase-in period for certain requirements on existing UST systems. While all Federal requirements are in effect immediately for new UST systems, owners have until December 22, 1998, or ten years, to upgrade existing UST systems to the corrosion protection standard for new UST systems, and 1 to 5 years to install release detection equipment for existing UST systems. These phased-in requirements are a recognition of the fact that there are some limitations on the capability of 700,000 UST owners and supporting service and manufacturing industries to respond immediately to new regulations. The experience of States that have been operating UST regulatory programs shows that it takes several years for most owners of existing UST systems to understand and respond to new regulations that require significant changes in the day-to-day management of their businesses.

2. Nature of the regulated community.

Many UST facilities are owned and operated as small local businesses: "Mom and Pop" gasoline service stations and convenience stores. These small entrepreneurs, who are used to operating their businesses with minimal regulation, will be significantly affected by environmental regulations for UST systems.

The experience of State and local agencies with UST programs shows that large businesses that own USTs are generally willing and have already begun to

comply with UST requirements, but that small owners, with limited resources and knowledge of Federal regulations, often need more direct attention and immediate assistance to bring them into compliance and to maintain that compliance. Given the nature of this particular regulated community, EPA believes this regulatory program often will be most effectively carried out by the level of government nearest to the problem. State and local governments know their regulated communities and are best able to respond quickly and effectively to their individual problems.

3. Nature of the regulatory work.

The problem of releases from USTs is multi-faceted. There are three major sources of release incidents: product delivery piping failures; corrosion of unprotected tanks and piping; and spills and overfills. Environmental regulations for UST systems must be aimed at preventing these different types of petroleum and hazardous substance releases as well as increasing the ability to quickly detect and minimize the contamination of soil and ground water caused by such releases, and ensuring adequate cleanup of contamination. To do this, UST regulatory requirements must address every phase of the lifecycle of a storage tank system: selection of the UST system, installation, operation and maintenance, closure, financial responsibility, and cleanup of the site where releases have occurred. Many State and local governments have found that a great deal of visible, on-site monitoring and a constant enforcement "presence" is needed to effectively ensure many owners' compliance with requirements at each stage of the life of the UST system. Therefore, a regulatory program will be most successful in achieving this compliance (and thus preventing environmental contamination and ensuring cleanups of contamination) if it can be implemented by the level of government

most capable of performing these close and constant checks on the regulated community.

4. State and local UST programs needed.

While the task of regulating USTs poses unique problems, it also presents opportunities that are not available to some other environmental regulatory programs. First, over 30 States already have begun to develop UST regulatory programs, and a number of local programs are also in operation. These State and local programs provide a range of existing program designs and experiences that can be useful models for the remaining States and localities as they design and implement their new programs. Second, in many instances, the large number of petroleum UST facilities to be regulated could provide an opportunity for States and localities to impose fees or taxes that may raise enough revenue to support a successful UST regulatory program. Finally, State and local governments may have a number of effective regulatory mechanisms and informal enforcement tools that can be applied to underground storage tank systems that are not available to the Federal government. For example, some State and local agencies may be able to require installation permits for UST systems and regulate petroleum distributors, while local enforcement actions may include the revocation of a facility's business license.

The task of regulating USTs presents EPA with both the need and the opportunity to work with States to encourage the development of State and local UST programs. The "national" UST program will continue to be primarily a network of State and local programs, with EPA providing leadership and assistance, and enforcement backup as necessary. This approach is based on substantial evidence that, in the long run, UST systems will be most successfully regulated by State and local governments. EPA's focus is on the achievement of long-range goals and the need to build a relationship with

State and local governments so that we can work together to improve the implementation of the UST program over the next decade.

E. EPA's Approach for Implementing the UST Program

OUST has adopted the franchise model as its implementation approach in managing the national UST program. It should be noted here that the franchise approach is simply a model of organizing and administering a service organization. While the main goal of businesses is to make a profit, EPA's goal is to protect human health and the environment, and this difference is reflected in how the model is used. The State, as franchisee, operates independently, under a signed agreement with EPA, to operate the UST program. Regions serve as the field representatives or liaisons between EPA Headquarters and the States to relay ideas, needs, and information between the EPA and the States. This model permits both uniformity and distinction in management styles. Headquarters provides general operating guidelines to ensure that all of the States are achieving the same basic objectives in managing underground storage tanks. Simultaneously, the States run their programs using a management style that is tailored to meet the specific needs and demands of their own regulated community. The demand for service and support varies in each State, and is affected by such factors as UST population, ground-water usage, weather and climate conditions, and financial conditions of owners and operators. The aim of State program approval is to develop the State-Federal partnership that will allow both parties to focus on preventing leaking USTs from causing further environmental contamination.

2. State Program Approval Process

CHAPTER 2. STATE PROGRAM APPROVAL PROCESS

As an important step toward achieving the long-range goal of developing a network of effective State and local programs, EPA is encouraging States to apply for formal approval of State UST programs to operate "in lieu of" the Federal program. EPA plans to approve acceptable State UST programs as quickly as possible, and follow up with activities that provide continual assistance to States and localities for improving their capability and performance.

A. Purpose of State Program Approval

Subtitle I of RCRA allows State UST programs approved by EPA to operate in lieu of the Federal program if such programs contain requirements for UST systems that are "no less stringent" than the Federal requirements and for which there is "adequate enforcement" of compliance. The requirements and procedures for approval of State programs are contained in the Federal regulations at 40 CFR Part 281 and are described in further detail elsewhere in this handbook.

Approval by EPA of a State program means that the requirements in the State's laws and regulations will be in effect rather than the Federal requirements. Program approval ensures that a single set of requirements (the State's) will be enforced in that State, thus eliminating the duplication and confusion that would result from having separate State and Federal requirements. Once a State program is approved, the State program will operate under an agreement with EPA that clearly delineates EPA's limited role in an approved State, and assures the State of its lead role in administering and enforcing the UST program.

Approval of a State program also means that the basic environmental protection afforded by the Federal program is contained in the State program as well. The primary focus of EPA's approval review will be on basic State authorities (laws and regulations) needed to achieve the underlying objectives of the Federal regulations covering the prevention, detection, and cleanup of UST releases.

B. Approval Criteria

Subtitle I allows EPA to authorize States to operate their own program in lieu of the Federal program if certain conditions are met. The State program must address the same UST system universe and include requirements for each of the elements in the Federal program. Those requirements must be "no less stringent" than corresponding Federal requirements and the State must provide for adequate enforcement of the requirements.

Over half the States are recently developing and beginning to implement their own comprehensive UST programs. EPA has encouraged these developments and believes that States must continue to have the flexibility to develop and carry out "homegrown" initiatives. EPA wishes to allow States to develop UST programs that best suit their own needs; it does not want to create arbitrary requirements defining program size (for example, number of staff members), or the amount of detail to be included in an application's description of the roles of State and local governments. EPA just wants to know that all States have a complete program. For example, if States demonstrate that local governments and agencies contribute to a complete State UST program, then that level of detail will be appropriate for inclusion in the application, and will be judged accordingly. States should gauge their own needs and use their own judgment in developing their individual UST programs. EPA intends for its

approval criteria to result in as little unnecessary disruption of these ongoing initiatives as possible. A State should not have to go back and make revisions to its program to receive EPA's approval unless those revisions are necessary to meet Federal objectives designed to protect human health and the environment.

EPA's determination of whether State programs are no less stringent will be based on a comparison of the State's technical requirements with the Federal objectives for each of these program elements. Chapter 4 of this handbook discusses the Federal objectives in detail. The specific Federal requirements in the Agency's technical regulations for UST systems do not provide the only definitive approach for protection of human health and the environment. In developing the Federal requirements, EPA recognized that there could be other approaches that would meet EPA's overall performance objectives. The Federal Technical Standards are by necessity more detailed and specific than the objectives they are designed to meet, because the Federal regulations must be complied with by the regulated community and must be enforceable in those States without approved State programs. The individual requirements set forth in the Federal regulations should not be interpreted as to preclude States from developing other approaches that will still achieve the overall objectives of performance specified for State program approval.

The Federal objectives presented in Chapter 4 represent the Agency's expectations of what will constitute an approvable State program. Federal objectives have been identified for the following program elements: (1) new UST system design, construction, installation and notification; (2) upgrading of existing UST systems; (3) general operating requirements; (4) release detection; (5) release reporting, investigation, and confirmation; (6)

corrective action; (7) out-of-service or closed UST systems; and (8) financial responsibility. To satisfy the "no less stringent" requirements using this approach, the State must have requirements for all UST systems that meet these objectives.

EPA's criteria for "adequate enforcement" of compliance require that a State have in place adequate legal authorities for inspection and compliance monitoring, enforcement, and public participation, plus appropriate written procedures for implementing those authorities. Chapter 4 provides guidance on the enforcement authorities, and Chapter 5 contains guidance on these enforcement procedures. EPA seeks to maintain its flexibility to approve a variety of State programs, and to encourage States to use innovative as well as traditional approaches in achieving compliance.

C. Application Process for Approval

EPA has two goals for the approval process: to make the application process as simple and easy to understand as possible; and to develop a close working relationship between EPA Regional offices and the States long before official applications are received, so that all major problems can be resolved ahead of time.

Federal regulations require that a State application contain the following components:

- (1) A letter from the Governor requesting approval of the State program;
- (2) A certification and statement from the State Attorney General (or the attorney for those State or interstate agencies which have independent legal counsel) demonstrating that the laws of the State or compact achieve the "no less stringent" objectives of the

Federal UST program, and provide legal authorities for adequate enforcement;

- (3) A description of the compliance monitoring and enforcement procedures that demonstrate the State's basis for adequate enforcement of compliance;
- (4) A draft Memorandum of Agreement (MOA) that outlines the responsibilities of EPA and the State's implementing agency(ies) (the MOA becomes final at the time the State's program takes effect);
- (5) A program description that provides background information on the State's organization and resources for implementing its program;
- (6) A schedule for developing additional authorities under interim approval, if applicable; and
- (7) Copies of all applicable State statutes and regulations, including those governing State administrative procedures and compacts, if relied upon.

Detailed guidance on each of these elements is included in the following chapters. A suggested application form, that the State can tear out and fill in, is provided in Appendix A of this handbook. If a State prefers to use a different format, that choice will not hinder program approval.

Approval authority has been delegated to the Regional Administrators. Headquarters will be involved in this process only on a limited, consultative basis. First, Headquarters will assist with the initial applications to ensure that the approval criteria work well and that the Regions apply these criteria consistent with OUST philosophy and with each other. After this initial period, Regions may choose to discuss approval issues with

Headquarters, but will be required to do so only when a tentative determination is made to disapprove a program.

A great deal of informal contact should be occurring between the State and EPA's Regional offices well before the clock starts running on the 180-day period set by statute for the review of, and decision on, a State's application for approval. As the State begins developing its application, the State and the Region, working together, will identify as soon as possible any legislative modifications that need to be made in order to satisfy the "no less stringent" and "adequate enforcement" requirements in the regulations. The State Attorney General or other legal representative may also be consulted during these early statutory and regulatory reviews so that later conflicts may be avoided. In addition, the Region will work closely with the State to ensure the completeness of the various other components of the State's draft application (for example, the program description).

In general, the Region should relay comments back to the State as quickly as possible. This process will alert the State very early to issues that otherwise could cause a delay in the review and approval of the final application. OUST considers these pre-application reviews to be invaluable and stresses their importance because they will assure the State of being able to develop an official program approval application with confidence and timeliness.

Within two and one-half months following submission of the final application, and following consultations between State and Regional staff, the Regional Administrator will make a tentative determination of approval or disapproval and notify the State Agency Director. This tentative determination is then published in the Federal Register to provide an opportunity for public comment. A final determination on the State's program

will be made by the Regional Administrator within 180 days of submission of the State's application. (These procedures are described in greater detail in a companion document entitled Suggested Procedures for Review of State UST Applications.)

After a State program is approved, it is codified for publication in the Code of Federal Regulations (CFR). EPA codifies the entire approved State UST program (including more stringent but not broader in scope) to identify the specific elements of the State program that are RCRA Subtitle I requirements. The codification of State programs also enables the public to discern the current status of the approved State program. This will be of particular importance as States adopt additional Federal requirements or revise their approved UST programs.

After a State program is approved, the State may need to submit certain program revisions to EPA for approval. Such a need may arise if: (1) Federal authorities or requirements are changed by new legislation or rulemaking; (2) State authorities or requirements are revised; or (3) local authorities or requirements that are part of the approved State program change. EPA will treat revised applications by reviewing those program areas specifically affected by the change. The process will be streamlined; instead of publishing a tentative determination in the Federal Register, EPA will publish a proposed determination that may become final immediately after 60 days. Additional discussion on the process of revising approved State programs may be found in the preamble to the State Program Approval Rule (53 FR 37239).

3. Components of State
Program Approval Application

CHAPTER 3. COMPONENTS OF THE STATE PROGRAM APPROVAL APPLICATION**A. Introduction**

In order to qualify for program approval, a State must submit an official application to its Regional office. This packet must contain various components, including letters and certifications, descriptions of relevant State regulations, descriptions of the program, a Memorandum of Agreement, and actual copies of State statutes and regulations. This chapter briefly describes each of these components, and in some cases, provides sample forms that may aid States in developing their own applications. More detailed discussions of the various sections of the program approval application appear in separate chapters of this handbook.

B. Components of the Application**1. Governor's Letter.**

A letter from the Governor transmits the State's application for approval of its underground storage tank program and acts as a formal request for EPA approval. The letter to EPA should include a reference to the Federal statute, a request for approval of the State program, and the Governor's signature. The letter is a formal tool to designate the responsible lead State agency.

Sample Letter

Ms. Jane Jones
Regional Administrator
Region XI, U.S. Environmental Protection Agency
Street Address
City, State

Dear Ms. Jones:

In accordance with Section 9004 of Subtitle I of the Resource Conservation and Recovery Act as amended on November 8, 1984, I am forwarding an application for approval of the Underground Storage Tank Program of _____ (State) _____. I believe you will find it contains the provisions necessary to implement an effective Underground Storage Tank Program.

Should you require further information, please contact _____ (Director) _____ of _____ (Lead Agency) _____. Thank you for your assistance.

Sincerely,

Jane Smith
Governor

2. Attorney General's Certification and Statement.

States applying for program approval must submit an Attorney General's Statement that certifies that the statutes and regulations of the state provide adequate authority to carry out the technical requirements in a "no less stringent" manner and for "adequate enforcement" of these requirements. All statutes and regulations cited by the Attorney General must be fully effective by the time the program is approved. In addition, if the State has any authority over Indian lands, or agreements with a tribe or tribes to do so, this must be described here. The Attorney General's Statement certifies to State authorities only. The requirement that the State have the authority to carry out the technical requirements and enforce those requirements does not change if certain aspects of the State program are implemented by local government agencies. The Attorney General's Statement must be signed by the

State Attorney General or the attorney for those State or interstate agencies that have independent legal counsel. This provision allows the following persons to sign the Attorney's General's Statement: (1) the State Attorney General or an attorney in his/her office who is authorized to sign for the Attorney General; or, (2) a Deputy or Assistant Attorney General if authorized to do so. Authorization should be in writing, case law, or statute. An independent counsel for the State may submit the "no less stringent" certification in place of the Attorney General, provided that the independent counsel has full authority to represent independently the State agency in court on all matters pertaining to the State program.

Where a State has incorporated by reference any Federal regulation, the Attorney General should demonstrate the authority to adopt State regulations in this manner. The Attorney General should cite the State statutes and regulations, listing the comparable CFR cite and date of incorporation. If the State's incorporation is intended to include any EPA revisions that may occur in the future, then the Attorney General should cite State authority both to promulgate and to enforce regulations in this manner. The State should note that the Attorney General's Statement includes a certification that State statutes and regulations shall be fully effective by the time the program is approved.

Sample Attorney General's Certification. Following is a suggested format for the State Attorney General's certification. The certification consists of two parts: (1) the Attorney General's letter of certification and (2) the Attorney General's Statement. A form letter that certifies to the State's complete authorities is provided below.

Sample Letter

Ms. Jane Jones
Regional Administrator
Region XI, U.S. Environmental Protection Agency
Street Address
City, State, Zip code

Dear Ms. Jones:

I hereby certify pursuant to my authority as [insert official title] and in accordance with Section 9004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act and the Superfund Amendments and Reauthorization Act of 1986, and 40 CFR Part 281 that in my opinion the laws of the (State) provide adequate authority to (1) carry out the "no less stringent" technical requirements submitted by the (Lead Agency), (2) adequately enforce compliance with such program, and (3) regulate, at a minimum, the same UST universe as the Federal program. I hereby certify, to the best of my knowledge, that the application submitted by (Date) is legally accurate. The specific authorities provided are contained in statutes or regulations lawfully adopted at the time this Statement is signed and which will be effective by the time the program is approved, [or are provided by judicial decisions issued at the time this Statement is signed].

Seal of Office

Signature

In addition, a sample form of the Attorney General's Statement is presented in Appendix A, following the Governor's letter. The State may use this sample format to cite and explain its authorities for each objective. Please note that EPA personnel responsible for approving the State program will not be familiar with all the State's laws; therefore, the Attorney General's Statement should specify and analyze relevant State legal authority. Clarity is necessary because: (1) the Attorney General's Statement will be subject to review and comment by the public through its inclusion in the administrative record to the Federal State program approval process; (2) the Attorney General's Statement will comprise the administrative record upon which could hinge interpretations for future lawsuits challenging the implementing agency actions during an enforcement proceeding taken under the

State program; (3) the laws and regulations submitted in the application will form the basis of the codified program. Finally, in the event that EPA would take enforcement action in the State after the State program is approved, EPA would rely on the Attorney General's Statement for a basic understanding of State law since EPA would be enforcing the State law in lieu of the Federal law. The approved State program operates "in lieu of" the Federal program under Section 9004(d). Since EPA retains the right to enforce under Section 9006, it enforces the codified State regulations.

The purpose of these requests is not to "second guess" the State Attorney General on matters of State law, but to assure that he has not overlooked major legal issues in arriving at his opinion. Most importantly, EPA must have a sound legal record for authorizing the State program. For example, if the State Attorney General provides a general opinion that a State statute allows the State to regulate all UST systems, but the statute appears to exempt compressed oil tank systems, EPA would bring this issue to his attention and ask him to address it. EPA would ask the State Attorney General to reconcile the difference in coverage. Once he has specifically addressed an issue requiring an interpretation of State law, however, EPA would defer to his opinion where it is supported by a plausible argument.

EPA does not defer to a State Attorney General on matters of Federal law, including the issue of whether a State program (as interpreted by the State Attorney General) meets applicable Federal regulations. In the example, EPA attorneys would accept the conclusion that State law provides authority to regulate compressed oil tank systems but would draw on their own conclusions about whether the State authority is adequate to meet EPA requirements for program approval.

3. Demonstration of "Adequate Enforcement" Procedures.

To ensure that States have adequate enforcement, EPA requires that States have certain compliance monitoring and enforcement procedures, in addition to the legal authorities discussed above. These procedures are necessary to ensure compliance with the technical and financial responsibility requirements for underground storage tanks. The procedural requirements cover the following program areas:

- Compliance Monitoring;
- Enforcement Response; and
- UST Inventory.

Chapter 5 provides a detailed discussion of these procedural requirements.

4. Memorandum of Agreement.

The appropriate official of the State's lead agency must negotiate a Memorandum of Agreement (MOA) with the Regional Administrator before the State program is approved. The MOA describes the coordination and shared responsibilities between the State and EPA in areas including, but not limited to: implementation of partial State programs and other program scope issues; compliance monitoring and enforcement; EPA appraisal of State programs; and reporting of information. Chapter 6 provides a detailed discussion of the MOA requirement and includes a sample agreement.

5. Program Description.

This section provides an overview of the State's program for managing underground storage tanks. Information requested includes the scope of the State program, the organization and structure of the implementing agencies, and staff resources for implementation. There is also a segment requesting information on the State trust fund for corrective action and third-party liability, if appropriate. This information will be used to inform the

general public about the approved State program and will serve as a baseline for EPA to work with the State over the long term. The information in the Program Description will only rarely be used to judge a State program for approval or disapproval. Chapter 7 contains additional guidance on the questions in the Program Description.

6. Interim Approval Schedule.

Interim approval, while an available option, is not expected to be used by States. A State may be granted interim approval following promulgation of the Federal regulations if the State authorities are no less stringent in the following program areas:

- New UST standards;
- Notification;
- Corrective action; and
- Financial responsibility.

States applying for interim approval may find it useful to complete the worksheets that outline these four "no less stringent" program areas required for interim approval. The remaining worksheets may be helpful to these States in later fulfilling the remaining requirements for final approval.

Interim approval is a process Congress provided to allow greater flexibility for the States. Although the State program is required to have no less stringent requirements in the four areas listed above, they are required only to have requirements in the remaining four areas (leak detection, prevention recordkeeping, reporting, and closure); these requirements do not need to be no less stringent for the State to receive interim approval and thus to operate in lieu of the Federal program for a limited period of time. Before final approval may be granted to a State that has received interim approval, States are required to have program requirements that are "no less

stringent" than all eight elements of the Federal program. The timeframe for developing the authorities needed for final approval ranges from 1 to 3 years depending on whether the State needs additional statutory or regulatory authority, or both. The State must submit a schedule according to which the State will finalize its legislation and regulations in these areas in preparing for final approval of its entire UST program.

Sample Schedule

<u>Program Element</u>	<u>Schedule</u>
1. Release Prevention and Detection	
A. Statutory Authority	
- Revising of Legislation as necessary during the grace period	XX, XX, XX
- Submission to the legislature	
- Consideration in the legislature	
- Final passage into law	
B. Regulatory Authority	
- Revision of regulations	XX, XX, XX
- Formal regulation approval procedures including public notice and comment	
- Effective date	
C. Application for Approval	
- Draft application	XX, XX, XX
- Formal public notice and comment	
- Submittal to EPA	

7. State Statutes and Regulations.

Integral to the State program approval application are the copies of all applicable State statutes and regulations which must be submitted by a State. These include those statutes and regulation governing State administrative procedures and interstate compacts, if relied upon. These documents should also include any general statutes that are used by the State to establish UST

program authorities. This information will help EPA to establish a record of the State laws and regulations regarding USTs in approved States. The Agency will codify State programs by incorporating State laws and regulations by reference as part of its final approval of the State program. If the Federal government were ever to pursue an enforcement action within a particular State, it would use that State's own UST statutes and regulations to do so. For that reason, the Federal government must be able to easily locate and implement all State UST standards and requirements that would be effective in that State for purposes of Federal enforcement. This section of the application is self-contained, and may be attached to the rest of the packet. This application requirement is not discussed elsewhere in this handbook.

4. Attorney General's Statement

CHAPTER 4. ATTORNEY GENERAL'S STATEMENT: DEMONSTRATION OF "NO LESS STRINGENT" OBJECTIVES AND "ADEQUATE ENFORCEMENT" AUTHORITIES

A. Introduction

Under Subtitle I, a State must demonstrate that its requirements and standards for existing and new USTs are "no less stringent" than the Federal requirements and standards in 40 CFR Part 280 and provide for adequate enforcement. The State's demonstration that its authorities are "no less stringent" and allow for adequate enforcement will be provided with the Attorney General's Statement. This chapter describes and explains the criteria States must meet in order to be "no less stringent" in the technical program areas and how the State Attorney General will certify their legal authority. Chapter 5 provides an explanation of the adequate enforcement procedures.

B. Objectives of the Federal Technical Requirements

Since an introduction to the purpose and requirements for the Attorney General's Statement is provided in the preamble to the State Program Approval Rule, it is not repeated here. If you are not familiar with this material, we recommend that you read it now before proceeding.

This section is organized by objective. For each objective, there is a worksheet, notes on fulfilling the objective, and some examples of State requirements that do or do not meet the objective. The worksheet is organized so that citations can be written in where the State has a requirement that corresponds to each subsection of the objective. The State should cite all relevant statutes and regulations, if more than one is applicable. The worksheets are intended to be used by both the State and the EPA Regional Office, but only the Regional EPA Office can make the judgment of whether the

State's requirement is no less stringent than the Federal objective. The State is strongly encouraged to provide additional explanation on the back of the worksheets or on extra pages to describe how their regulations meet the objective in cases when the State's regulations are organized differently from the Federal approach. The State should also consider attaching relevant policies and procedures that may influence the interpretation of statutes or regulations. The notes on fulfilling the objective provide some key data for interpreting the objective and the last note for each objective references the page in the September 23, 1988 Federal Register where further information may be found. Finally, Appendix E includes a section called Tools for Implementing State Regulations, which describes certain approaches that several States have used to implement their laws and that other States might wish to consider in developing or improving their own programs.

Please note that great effort was expended to make these examples as "true to life" as possible. Readers are asked to remember that these examples are simply a means by which EPA can more clearly demonstrate how the States should examine their technical requirements in terms of the Federal objectives. Thus, States should not take the evaluations provided in the examples as the last word on State program approval for that given program element. Please remember that these examples also serve as samples of the type of thinking and documentation that should be included in the explanation sections that follow the regulatory citations in the Attorney General's Statement. EPA is concerned that some readers will infer from these examples that if their State regulations are not identical to the example given that their State program is not approvable. Such an inference would be mistaken. By providing these examples, EPA is suggesting simply one interpretation out of many possibilities. Regional EPA Offices will be making the actual

decisions as to what is "no less stringent" when reviewing the State program application. If a State has specific questions on whether their regulations meet the objectives, they should ask the Regional EPA Office for assistance and advice.

As an alternative to developing new, or revising existing, State UST regulations, States may choose to adopt or incorporate by reference the Federal Technical Standards. Obviously those States that do so can be considered no less stringent. The Federal Technical Standards are written with the intention that some States will choose to adopt them. Therefore, some language was added to several sections to allow the State some flexibility to substitute their own procedural and administrative requirements for those set forth in the Federal requirements. A discussion of this additional decision-making authority for State agencies can be found in the preamble to the Federal Technical Standards (53 FR 37186). It is EPA's intent to allow States a significant amount of discretion in this matter, as long as States can demonstrate that overall program performance in each element will not be adversely affected by their use of differing administrative practices and procedures. An example of the flexible language is §280.50 under Release Reporting, Investigation, and Confirmation: "Owners and operators of UST systems must report to the implementing agency within 24 hours, or another reasonable time period specified by the implementing agency..." The State should be aware that when adopting or copying this language, if the State does not specify another time period in the requirement, then the Federally-specified time period (the 24-hour time period in the example) is automatically in effect. An alternative time period must be specified in the State requirement in place of the Federally-specified time period in order for the State to exercise the decision-making flexibility allowed in the Federal Rule.

NEW UST SYSTEMS AND NOTIFICATION

OBJECTIVE § 281.30

The State must have requirements that ensure that all new UST systems conform with the following:	Regulation	Cite Statute
(a) Be designed, constructed, and installed in a manner that will prevent releases for their operating life due to manufacturing defects, structural failure, or corrosion. [Note: Codes of practice developed by nationally-recognized organizations may be used to demonstrate that the State program requirements are no less stringent in this area.]		
(b) Be provided with equipment to prevent spills and tank overfills when new tanks are installed or existing tanks are upgraded, unless the tank does not receive more than 25 gallons at one time.		
(c) All UST system owners and operators must notify the implementing State agency of the existence of any new UST system using a form designated by the State agency.		

NOTES ON FULFILLING THE OBJECTIVE

- Codes of practice developed by nationally-recognized organizations and national independent testing laboratories may be used to demonstrate that the State program requirements are no less stringent in the area of design, construction, installation, and corrosion protection.
- Currently available equipment to provide spill and tank overfill protection includes small catchment basins for spills, alarms, automatic flow restrictors, or shut off devices for overfill prevention.
- Under RCRA 9002, notification was required for existing UST systems nationwide. State programs that only require owners and operators of new UST systems to notify the State agency may be approved because notification by owners of existing USTs was already required after Subtitle I was enacted.

NEW UST SYSTEMS AND NOTIFICATION (CONTINUED)

OBJECTIVE § 281.30

4. The Federal notification form has been revised to require updated notifications from owners and operators of new USTs; however, States may use their discretion as to whether or not they collect this information.
5. More discussion on new UST systems may be found in the preamble to the final State Program Approval Rule (53 FR 37224) and in the preamble to the final Federal Technical Standards Rule (53 FR 37125).

*** * ***

State Examples for New UST System Design, Construction, Installation, and Notification

Standards for Design and Installation. The following requirements of State A demonstrate one way to fulfill the design criteria of subsection (a) of this objective. In general, State A requires the use of national standards for the design, construction, and installation of all UST systems. For example, the State requires that tanks be built according to the following recognized engineering standards: UL 58 and API 650 for steel tanks, and UL 1316-83 and ASTM D4021-81 for fiberglass tanks. Steel tanks must be coated with a non-corrosive, impermeable material other than asphalt paint and be equipped with sacrificial anode or impressed current cathodic protection. Cathodic protection must be designed and installed using one or a combination of these 4 standards: API 1632, UL of Canada SG03.1M, STI-P3, or NACE RP-02-85. Both sacrificial anode and impressed current systems must be designed with test stations so that routine operation checks can be performed. Because EPA believes that the design, construction, and installation of a new UST system according to any code of practice of a nationally-recognized organization or testing laboratory will prevent releases during the operating life of an UST, these State requirements fulfill the proper tank design criteria of subsection (a) of this objective. State A could have met the criteria in subsection (a) by adopting just one of these codes of practices. Some aspects of the State's standards, while showing excellent forethought, are not necessary to meet the objective, such as the requirement that anode and current systems must be designed so routine checks can be performed.

This State's requirements also demonstrate one way to fulfill the proper tank installation criteria of subsection (a). The State mandates that installers follow practices outlined in PEI RP 100-86, API 1615, and the

manufacturer's instructions that come with the tank. All fittings must be wrapped or coated using a manufacturer-approved method. The State also requires that defects in the tank's coating that occur during shipping must be repaired according to the manufacturer's instructions. The State lists the specifications for backfilling the UST system, which are derived from NFPA 30; additional requirements are specified by the State for anchoring USTs that are in areas with high water tables. Again not all of these requirements may be necessary to achieve subsection (a) of this objective.

Because piping is part of the UST system, the State's requirements for the design, construction, and installation of piping must also meet subsection (a) of this objective. State A demonstrates one way of meeting the objective, again by specifying the codes to be used for designing and installing new underground piping. All new underground pipes in this State must be made of fiberglass reinforced plastic or cathodically protected, coated, iron or steel and must be designed using one of the recognized standards such as NACE RP-02-85, UL, and API 1632. The use of galvanized piping for product lines is prohibited. State regulations specify how the piping must be installed in terms of backfill thickness, product line slope, and the strength of unions and fittings (250 pounds or 300 pounds with metal seats). On UST systems using sacrificial anodes where electrical isolation is essential for adequate corrosion protection, the State requires all underground piping to be isolated from the tanks and dispensing units by means of non-conductive bushings and fittings, which are to be designed and installed in accordance with NACE RP-0285, API 1632, or Sti-P3. In addition, vent and fill lines must be coated but need not be cathodically protected. As part of the installation, all product piping must be tested for tightness. These State requirements for the design and installation of piping in combination with corresponding State

requirements for tanks demonstrate one way that a State could fulfill subsection (a) of this objective.

Spill and Overfill Protection. State B allows two options for spill and overfill protection. The first option consists of an in-tank product level sensor that is equipped with an audible or visual alarm and is triggered when the tank is 95 percent full, and a spill catchment basin of at least 15 gallon capacity. The second option consists of a device designed to restrict the flow of the regulated substance into the tank when the tank is 95 percent full, and a spill catchment basin of at least 5 gallon capacity. The State's explanation for the difference in the capacity of the spill catchment basin is that the sensor only triggers an alarm in the first option as opposed to a flow restrictor in the second option. [EPA notes that the flow restrictor, unless it is an automatic shut-off device, does not actually shut off inflow completely, which means that both options require the operator to quickly shut off the hose used to fill the tank.] Although EPA believes the distinction the State makes between alarms and restrictors is somewhat artificial (because both approaches similarly rely on rapid action by the person filling the tank to avoid overfilling when the filling operation approaches the tank's capacity), the above State B requirements demonstrate one way to fulfill subsection (b) of this objective.

Although the Federal Technical Standards require that flow restrictors or alarms be triggered when the tank is 90 percent full. State B's requirements, however, can still be considered no less stringent. They still accomplish the Agency's main goal: getting equipment and devices to prevent spills and overfills on all new and upgraded USTs.

UPGRADING EXISTING UST SYSTEMS

OBJECTIVE § 281.31

<p>The State must have requirements that ensure existing UST systems will be replaced or upgraded before December 22, 1998, to prevent releases for their operating life due to corrosion, and spills or overfills.</p>	<p style="text-align: right;">Cite Regulation Statute</p>
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NOTES ON FULFILLING THE OBJECTIVE

1. Within 10 years all existing UST systems must meet essentially the same standards of release prevention as new UST systems, which includes corrosion protection and spill and overfill equipment.
2. The 10-year schedule cannot include phase-in of leak detection requirements, which must be completed within 5 years (see Objective 281.33(b) on Release Detection).
3. The State may develop a phase-in schedule that will bring all existing USTs into compliance incrementally during the 10-year period or the State may establish a deadline without specifying a schedule.
4. Commonly accepted practices for protecting a structurally sound existing steel tank from failure due to corrosion consist of internal lining, retrofitting with a cathodic protection system, or both. EPA believes all of these methods are protective of human health and environment.
5. The proposed objective for upgrading existing UST systems included a provision that allowed States to demonstrate in their application how other State requirements will achieve this Federal goal without an explicit 10-year deadline. This provision has been deleted in the final State Program Approval Rule. EPA was concerned that the provision in the proposed objective would lead States to believe that a time period greater than 10 years for upgrading was allowable. In addition, it was unclear what information would provide an adequate demonstration. Therefore, States must require existing UST systems to be replaced or upgraded before December 22, 1998.
6. More discussion on upgrading existing UST systems may be found in the preamble to the final State Program Approval Rule (53 FR 37225) and in the preamble to the final Federal Technical Standards (53 FR 37130).

* * *

State Examples for Upgrading Existing UST Systems

Defining When a Tank Needs To Be Upgraded. The following example shows State requirements that do not meet the Federal objective for upgrading existing UST systems. State C requires owners and operators to explicitly determine how long each tank will last without developing a leak. This regulatorily-defined lifetime is considered to be the tank's life expectancy. When the end of the life expectancy is reached, the UST system must be replaced, upgraded, or closed, whether or not a leak has occurred. Life expectancy of the UST system is calculated using the tank's age, the tank manufacturer's guarantee, and the type of corrosion protection in use on the tank. If the tank's age is unknown, the calculation is more complicated and requires the assistance of a corrosion expert. Once the life expectancy of the tank is defined, the tank will fall into one of two groups as defined by the State. If the life expectancy ends after November 1, 1988, the UST system may be used for up to five years beyond the calculated life expectancy. If the life expectancy ends before November 1, 1988, the UST system may be used until November 1, 1988 or up to five years beyond the calculated life expectancy, whichever is later.

Under the State's current approach, State C's requirements cannot be approved as no less stringent for two reasons. First, to properly upgrade an UST system under this objective, spill and overfill equipment must be added. State C does not require that existing USTs be retrofitted with this equipment. Second, under this objective, all unprotected USTs in the State must be upgraded by 1998. While the State requirements for USTs with life expectancies that end before November 1, 1988, will fulfill the objective, the State's requirements will allow some USTs with life expectancies that end after that date to be upgraded sometime after 1998. Hypothetically, if a

tank without corrosion protection was installed in April 1985 (before interim prohibition) and the life expectancy was determined to be 10 years (April 1995), the tank may be operated until April 2000 before it is upgraded, replaced or closed, according to State law. State C could meet the objective by revising their requirement so that all USTs must be brought into compliance by the time their life expectancy is reached or by December 22, 1998, whichever is earlier; and by requiring the addition of overfill and spill protection equipment on upgraded USTs.

Defining What Upgrade Consists Of. State E takes another approach to this objective by requiring scheduled closure of UST systems that are not corrosion resistant. The State prohibits the use and operation of all non-conforming UST systems (all bare steel tanks, asphalt coated steel tanks and other unprotected steel tanks and piping) after October 1, 1997. Replacement USTs are subject to the new UST system standards, and existing USTs cannot be upgraded. Thus, all non-conforming tanks and piping must be closed within the remaining 9 years of the State's mandatory closure period according to a phase-in schedule based on UST system age and location. If the tank's age is unknown, it is presumed to be 20 years old on October 1, 1989. The State requirements cannot be considered no less stringent because existing corrosion-protected USTs without spill and overfill equipment are not required to be retrofitted with that equipment.

State D fulfills the Federal upgrading objective of §281.31 by requiring both corrosion protection and overfill and spill protection systems to be present on existing UST systems by 1998. [State D, however, also considers the addition of leak detection equipment to be part of an UST system upgrade. In other words, release detection is also phased-in over a 10-year period, and therefore, the State program does not meet the release detection objective

found at §281.33 (see examples pertaining to the release detection objective).]

GENERAL OPERATING REQUIREMENTS

OBJECTIVE § 281.32

The State must have requirements that ensure all new and existing UST systems conform to the following:

Cite
Regulation Statute

- (a) Prevent spills and overfills by ensuring that the space in the tank is sufficient to receive the volume to be transferred and that the transfer operation is monitored constantly;
- (b) Where equipped with cathodic protection, be operated and maintained by a person with sufficient training and experience in preventing corrosion, and in a manner that ensures that no releases occur during the operating life of the UST system [Note: Codes of practice developed by nationally-recognized organizations and national independent testing laboratories may be used to demonstrate the State program requirements are no less stringent.];
- (c) Be made of or lined with materials that are compatible with the substance stored;
- (d) At the time of upgrade or repair, be structurally sound and upgraded or repaired in a manner that will prevent releases due to structural failure or corrosion during their operating lives;
- (e) Have records of monitoring, testing, repairs, and closure maintained that are sufficient to demonstrate recent facility compliance status, except that records demonstrating compliance with repair and upgrading requirements must be maintained for the remaining operating life of the facility. These records must be made readily available when requested by the implementing agency.

GENERAL OPERATING REQUIREMENTS (CONTINUED)

OBJECTIVE § 281.32

NOTES ON FULFILLING THE OBJECTIVE

1. Codes of practice developed by nationally recognized organizations and national independent testing laboratories may be used to demonstrate that the State requirements are no less stringent in the areas of: repairing and relining tanks; operation and maintenance of corrosion protection; and compatibility.
2. Under the Federal Technical Standards, cathodic protection systems must be tested within 6 months of installation and every 3 years thereafter; and impressed current systems must be inspected every 60 days to ensure that the equipment is turned on. Each State must require that cathodic protection systems be periodically tested and that such tests include the checking of impressed current systems.
3. Compatibility is an issue for concern primarily when high-ethanol/methanol content fuels are stored in certain fiberglass tanks.
4. National codes of practices and warranties from tank lining companies generally require that internal inspections be conducted with 10 years after lining, and every 5 years after that.
5. A national code for the repair of fiberglass reinforced plastic tanks is currently being developed. Until there is a national code that is accepted by industry, the only people who know how to repair FRP tanks are usually authorized representatives of tank manufacturers. These repairs are generally done under warranty. More discussion on the repair of FRP tanks may be found beginning at the bottom of the third column on page 53 FR 37139.
6. More discussion on upgrading existing UST systems may be found in the preamble to the final State Program Approval Rule (53 FR 37225) and in the preamble to the final Federal Technical Standards (53 FR 37130).

* * *

State Examples for General Operating Requirements

Defining Product Transfer Practices. State F meets the first subsection of this objective because it requires that API-recommended practices concerning product deliveries to underground storage tanks be followed at all UST systems in the State. A different approach, which also fulfills this part of the objective, is used in State G. The State's regulations hold both the carrier (or transporter) and the operator responsible for employing practices to prevent spills and overfills. The carrier and the operator must be trained in the mechanics of proper transfer and emergency response procedures. Before transfer, the operator must determine that the tank has enough receiving capacity to accommodate the volume of petroleum to be transferred. During the transfer, the carrier must be at the controls to monitor the delivery operation.

Maintaining Corrosion Protection. State H's requirements demonstrate one way to satisfy subsection (b) of this objective concerning the operation and maintenance of corrosion protection by qualified people. The State requires that UST systems protected by galvanic cathodic protection systems (also known as sacrificial anodes) have an accurate structure-to-soil potential reading performed by a qualified person upon installation and annually thereafter. In addition, when underground work is performed at the site, the State requires the cathodic protection system to be monitored 6 to 12 weeks after the work has been completed to ensure that the system is still functioning properly. UST systems protected by impressed current systems are required by State regulations to have their rectifier meter inspected monthly and the readings recorded in a log book; and a person who is qualified (by training and experience) to measure the structure-to-soil and structure-to-structure potentials, the rectifier voltage, and current output must conduct

an onsite test and inspection at least once a year. Finally, State H provides a list of procedures detailing how the cathodic protection system must be monitored, which includes following practices recommended by the National Association of Corrosion Engineers (Recommended Practice 0285).

Ensuring Proper Repairs and Upgrades. State I's regulations provide an example of requirements that satisfies subsection (d) of this objective, which concerns the repair and upgrade of UST systems. The State mandates that a determination must be made by fire department officials on whether the tank or its components may be repaired or must be removed and replaced. The only form of repair allowed by the State is lining the tank. Before a steel tank can be repaired by lining, the tank must be physically inspected and a local fire department official must determine whether the tank meets all of the following conditions:

- Has not experienced a leak as a result of corrosion;
- Possesses a minimum design shell thickness of 0.18 inch (7 gauge);
- Has no open seam or split;
- Contains less than 10 holes after removal of thin metal by reaming, with none larger than 1/2 inch in diameter and no more than 2 holes within a 1-foot radius; and
- Satisfies all standards of the lining manufacturer for structural soundness.

These requirements are no less stringent in the area of determining structural integrity before lining a tank. The State also requires that any tank replacement or repair as well as piping repairs must be performed: (1) by a State-approved tank lining company and in accordance with API 1631 (if the repair consists of tank lining), (2) by qualified technicians, and (3) in accordance with manufacturers' instructions. If a leaking tank is repaired,

the State requires that it be tank tightness tested at 2-year intervals for 10 years and annually thereafter.

EPA would recommend that the State consider a requirement specifying the design life of a lined tank. Unless a cathodic protection system is applied when the tank is lined or within 10 years, the tank must be internally inspected periodically after the initial 10 year life of the lining to make sure that tank's structural integrity will continue for the remainder of its operating life. Tank lining company warranties and the codes generally require that internal inspections be conducted after 10 years, and then every five years thereafter, because the tank relining is expected to prevent releases only for the first 10 years.

Defining Adequate Recordkeeping. State J has developed recordkeeping requirements that satisfy subsection (e) of this Federal objective. The State mandates the on-site maintenance of written records of all monitoring activities for at least 3 years from when the monitoring was performed. In addition, the State requirements enable local implementing agencies to mandate the owner or operator to provide the local agency with monitoring records or a monitoring summary on a routine basis. Monitoring records must include:

- Date and time of all monitoring and sampling;
- Monitoring equipment calibration and maintenance records;
- Results of any visual observations;
- Results of all sample analysis performed in the laboratory or in the field, including laboratory data sheets;
- Logs of all readings of gauges or other monitoring equipment, ground-water elevations, or other test results; and
- Results of inventory readings and reconciliations.

Another recordkeeping provision in this State program requires that UST system permits be renewed every five years. To get a permit renewed, an UST inspection must have been performed within the 3 previous years, and the UST system must have been found to be in compliance with applicable regulations for design, construction, and monitoring. Thus, the UST must be upgraded and have records that show the upgrade has taken place before the permit can be renewed. In this way, the State is aware of and can, if it chooses, maintain its own records relating to UST system repair, upgrade, and replacement. For UST closure by removal, State J requires the owner or operator to completely describe all disposal and recycling procedures used for all UST system components. When an UST system is closed, the owner or operator must demonstrate to the satisfaction of the State that no release has occurred. These State requirements clearly fulfill subsection (e) of this objective.

RELEASE DETECTION

OBJECTIVE § 281.33

- | | | Cite |
|-----|---|-----------------------|
| | | Regulation Statute |
| (a) | Release detection requirements for owners and operators must consist of a method, or combination of methods, that is: | |
| (1) | capable of detecting a release of the regulated substance from any portion of the UST system that routinely contains regulated substances -- as effectively as any of the methods allowed under the Federal Technical Standards -- for as long as the UST system is in operation. In comparing methods, the implementing agency shall consider the size of release that the method can detect and the speed and reliability with which the release can be detected. | |
| (2) | designed, installed, calibrated, operated and maintained so that releases will be detected in accordance with the capabilities of the method; | |
| (b) | Release detection requirements must, at a minimum, be scheduled to be applied at all UST systems: | |
| (1) | immediately when a new UST system is installed: | |
| (2) | on an orderly schedule that completes a phase-in of release detection at all existing UST systems (or their closure) before December 22, 1993, except that release detection for the piping attached to any existing UST that conveys a regulated substance under greater than atmospheric pressure must be phased-in before December 22, 1990. | |

RELEASE DETECTION (CONTINUED)

OBJECTIVE § 281.33

- | | Cite
Regulation Statute |
|---|------------------------------|
| (c) All petroleum tanks must be sampled, tested, or checked for releases at least monthly, except that: | |
| (1) new or upgraded tanks (that is, tanks and piping protected from releases due to corrosion and equipped with both spill and overfill prevention devices) may temporarily use monthly inventory control (or its equivalent) in combination with tightness testing (or its equivalent) conducted every 5 years for the first 10 years after the tank is installed or upgraded, or until December 22, 1998, whichever is later; and | |
| (2) existing tanks unprotected from releases due to corrosion or without spill and overfill prevention devices may use monthly inventory control (or its equivalent) in combination with annual tightness testing (or its equivalent) until December 22, 1998. | |
| (d) All underground piping attached to the tank that routinely conveys petroleum must conform to the following: | |
| (1) if the petroleum is conveyed under greater than atmospheric pressure: | |
| (i) the piping must be equipped with release detection that detects a release within an hour by restricting or shutting off flow or sounding an alarm; and | |
| (ii) the piping must have monthly monitoring applied or annual tightness tests conducted. | |
| (2) if suction lines are used: | |
| (i) tightness tests must be conducted at least once every 3 years, unless a monthly method of detection is applied to this piping; or | |

RELEASE DETECTION (CONTINUED)

OBJECTIVE § 281.33

	Cite
	Regulation Statute
(ii) the piping is designed to allow the contents of the pipe to drain back into the storage tank if the suction is released and is also designed to allow an inspector to immediately determine the integrity of the piping system.	
(e) All UST systems storing hazardous substances must meet the following:	
(1) all existing hazardous substance UST systems must comply with all the requirements for petroleum UST systems in sections 281.33(c) and (d) above, and after December 22, 1998, they must comply with the following subsection (e)(2).	
(2) all new hazardous substance UST systems must use interstitial monitoring within secondary containment of the tanks and the attached underground piping that conveys the regulated substance stored in the tank, unless the owner and operator can demonstrate to the State (or the State otherwise determines) that another method will detect a release of the regulated substance as effectively as other methods allowed under the State program for petroleum UST systems and that effective corrective action technology is available for the hazardous substance being stored that can be used to protect human health and the environment.	

NOTES ON FULFILLING THE OBJECTIVE

1. In comparing methods of release detection, the implementing agency must consider the size of release that the method can detect and the speed and reliability with which the release can be detected.

RELEASE DETECTION (CONTINUED)

OBJECTIVE § 281.33

2. The Federal Technical Standards allow six specific methods of release detection. These are: in-tank monitors or tank gauging, interstitial monitoring within a secondary barrier, ground-water monitoring, vapor monitoring, and periodic tank tightness tests combined with monthly inventory control. The Federal Technical Standards also allow any method that achieves a release detection rate of 0.2 gallons per hour (280.43(h)(ii)). Finally, in a manner similar to the release detection objective in paragraph (a)(1), the Federal Technical Standards allow the use of a release detection method that the owner or operator demonstrates is as effective as any of the listed methods.
4. State requirements for release detection on piping do not have to address release detection for fill pipes and vent pipes to be considered no less stringent, as release detection is required only for piping that routinely conveys petroleum.
5. Discussion on European-style design of a suction piping system may be found in the preamble to the proposed Federal Technical Standards (52 FR 12744), in the preamble to the final Federal Technical Standards (53 FR 37154), and the preamble to the final State Program Approval Rule (53 FR 37227).
6. Discussion on release detection methods may be found in the preamble to the final Federal Technical Standards (53 FR 37145).

* * *

State Examples for Release Detection

Defining the General Methods. State K's regulations may fulfill subsection (a) of the release detection objective. Release detection has already been mandated for all UST sites in this State. State K has allowed owners and operators of existing UST systems containing petroleum to choose from among eight release detection alternatives (one is a three-year interim alternative):

- Monthly tank tightness testing;
- Daily/continuous vadose monitoring, semi-annual ground-water monitoring, and one-time soil testing;
- Weekly static inventory control and annual tank testing (which is limited to small tanks that do not have frequent inputs or withdrawals and where the liquid level in the tank can be measured to the accuracy of + or - 5 gallons); and
- Daily inventory reconciliation or daily or weekly gauging, and annual tank testing (three-year interim alternative).
- Daily inventory reconciliation, continuous pipeline release detection attached to either audible/visual alarm or automatic flow restrictor, and annual tank testing; or
- Same as above with less stringent accuracy limits and the addition of variable frequency vadose and ground-water monitoring that must be performed at least semi-annually.

As illustrated above, most of the methods involve a primary release detection system combined with at least one backup system, except that no backups are required for monthly tank tightness testing and monthly ground-water monitoring. To determine whether each alternative is acceptable it is necessary to decide if it can detect " a release...as effectively as any method allowed under the Federal Technical Standards (§280.40) ..." State K's first alternative, monthly tank testing, would be acceptable as long as tightness tests were required, at a minimum, to reliably detect a 0.2 gallon

per hour release. This determination is based on the standard for "other methods" in §280.43(h). The second alternative is also acceptable as long as the vadose monitoring meets the standards for vapor monitoring described in §280.43(e). The third method would be acceptable for tanks under 2000 gallons until 1998 and for tanks under 550 gallons after 1998 as long as the static inventory control and tank testing methods were as effective as those described in §280.43(b) and (c) respectively. The fourth method is acceptable except that the weekly gauging alternative may only be applied to tanks under 2000 gallons. Once again, this assumes the methods described are as effective as the corresponding ones in the Federal standards. The fifth method will be good enough until 1998, but will not fulfill subsection (c) of this objective after 1998. The sixth alternative would also be acceptable until 1998. After 1998, the method would be acceptable only if the vadose or groundwater monitoring were performed at least monthly and that these methods were as effective as those in the Federal Standards. Any of the last five alternatives could also be approved if State K could demonstrate that the combination of methods met the performance standard for other methods in §280.43(h). In addition, most of these methods do not appear strict enough on piping to meet the objective.

Defining the Phase-In Schedule. State K's program requires that release detection systems be in place at all new and existing UST systems by July 1, 1985. Thus, the State program has already completed phase-in of release detection and is an example of one way to satisfy subsection (b) of this objective.

While State L's regulations show another approach to this objective, their regulations cannot be considered no less stringent. The State requires that release detection be phased-in at existing UST systems based on the following schedule:

- USTs with no corrosion control need to have release detection applied by September 1990;
- USTs with corrosion control need to have release detection applied by September 1991; and
- Federally-regulated agricultural USTs must have release detection applied by 1998.

(By the term, "Federally-regulated agricultural USTs", the State is referring to those farm tanks not exempted from the final EPA technical standards; that is, farms tanks with a capacity of more than 1,100 gallons used for storing motor fuel for commercial purposes.) These State criteria for phasing-in release detection are based on the presence of corrosion protection and on the type of UST owner (agricultural vs. non agricultural), whereas EPA's phase-in criteria are based on the age of the UST system. State L generally has an earlier phase-in deadline for release detection than that found in the objective, with the exception of the phase-in for "agricultural USTs". State L's phase-in for release detection will be completed for most USTs by September 1991, and for "agricultural USTs" by 1998. To meet the objective, however, release detection must be phased in at all existing UST systems by 1993. Because one segment of the tank universe (Federally-regulated agricultural tanks) will not have release detection until 1998, the State cannot be considered no less stringent for this category of USTs, although it is no less stringent for the other USTs discussed.

Defining Release Detection for Piping. State K's regulations provide an example of requirements for piping that do not achieve subsection (d) of this objective. Owners and operators are required by the State to:

- Monitor all pressurized piping with an automatic on-line pressure loss detector and flow restriction device; the detector must be connected to an audible/visual alarm system unless it provides for at least a 50 percent reduction from the normal flow rates; and

- Monitor suction lines daily for indications of possible leaks.

These State requirements meet the first part of subsection (d), which addresses the problem of identifying major piping failures within an hour. These State requirements do not go far enough, however, because under the objective, pressurized piping must also have monthly monitoring or annual tightness tests performed to check for very small slow releases. The State's requirement for suction piping may or may not be sufficient to meet the objective and further clarification from the State probably would be needed for the EPA Regional Office to make a decision. If by "monitoring suction lines daily" the State means that the owner or operator must do a visual inspection every day, this requirement would not replace the need to do a pressurized line test every three years. However, if the State can produce evidence that the State's method is as reliable as monthly leak detection, then it probably would be acceptable as no less stringent. Alternatively, the State could demonstrate that the State's design standards for suction piping only allow the use of European style piping in which the contents of the pipe drain back into the storage tank if the suction is released and the check valve on the piping system can be inspected. In this case, the State's requirements for suction piping could be considered no less stringent than subsection (d) of this objective.

Defining Release Detection for Hazardous USTs. State K's requirements demonstrate one way to address subsection (e) of this objective, but they do not fulfill the objective. The State requires that all new (petroleum and hazardous substance) USTs have secondary containment and interstitial monitoring. However, State K does not require existing hazardous substance USTs to be upgraded with secondary containment and interstitial monitoring.

) To fulfill subsection (e) of this objective, State K will need to require that within 10 years all existing hazardous substance USTs use interstitial monitoring within secondary containment of tanks and attached underground piping, unless the State chooses to allow variances. The State may allow variances only if the owner and operator demonstrates to the State (or the State otherwise determines) that (1) another method will detect a release of the regulated substance as effectively as other methods allowed under the state program for petroleum UST systems, and (2) effective corrective action technology is available for the hazardous substance being stored that can be used to protect human health and the environment.

RELEASE REPORTING, INVESTIGATION AND CONFIRMATION

OBJECTIVE § 281.34

All owners and operators must conform with the following:	Cite Regulation	Statute
(a) Promptly investigate all suspected releases, including:		
(1) when unusual operating conditions, release detection signals and environmental conditions at the site suggest a release of regulated substances may have occurred; and		
(2) when required by the implementing agency to determine the source of a release having an impact in the surrounding area; and		
(b) Promptly report all confirmed underground releases and any spills and overfills that are not contained and cleaned up.		
(c) Ensure that all owners and operators contain and clean up unreported spills and overfills in a manner that will protect human health and the environment.		

NOTES ON FULFILLING THE OBJECTIVES

1. State requirements will need to establish how and when a suspected release is determined to be a confirmed release and corrective action must begin. It is important that State requirements for release investigation be clear on this point. Ambiguity on how a suspected release must be investigated and when it is confirmed may result in delays on the part of the owner and operator in initiating clean-up actions.
2. The Federal objective requires "prompt" investigation because EPA believes the precise definition of what constitutes a prompt investigation should be left to the discretion of the States within reason. The ability to investigate a site can depend on the site and on the availability of the existing service community. However, if a State program allows owners and operators to carry out the same or similar investigations as required by EPA

RELEASE REPORTING, INVESTIGATION AND CONFIRMATION (CONTINUED)

OBJECTIVE § 281.34

significantly beyond 7 days, that State program is not likely to meet the objective.

3. A State with reporting levels for spills and overfills greater than 25 gallons can be considered no less stringent if two conditions are satisfied:
 - (a) The State mandates that the unreported spill be completely contained and cleaned up; and
 - (b) The State has requirements that identify the specific steps an owner and operator must take to ensure unreported spills and overfills are contained and cleaned up in a manner that will protect human health and the environment.
4. A spill or overfill of a hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under CERCLA (40 CFR Part 302) must be reported IMMEDIATELY to the National Response Center and to appropriate State and local authorities.
5. More discussion on release reporting, investigation, and confirmation methodology may be found in the preamble to the final State Program Approval Rule (53 FR 37229) and in the preamble to the final Federal Technical Standards (53 FR 37169).

* * *

State Examples for Release Reporting, Investigation, and ConfirmationDefining a "suspected" release and confirming it. State M's

requirements demonstrate one way to fulfill subsection (a) of this objective for release investigation and confirmation. The State mandates that owners and operators complete an investigation within 7 days of identifying a "suspected" release. This requires prompt reporting of releases and is also the same as EPA's technical standards for investigation.

As part of the investigation process, State M requires the owner or operator to do some immediate double-checking of equipment and other site check activities at all sites where the owner or operator suspects a release may be occurring. The State, however, may need to clarify for the EPA Regional Office as to whether or not the State has the authority required in (a)(2) of this objective. The question that needs to be answered is: when the State has reason to believe that a release is having an impact in the surrounding area and that the source needs to be determined, can the State require a nearby owner or operator to investigate his tanks and site for the source of the release? Is a potential off-site impact a suspected release that the State can require a nearby UST owner to investigate his site? The State must have this authority to fulfill subsection (a)(2) of this objective, however, such authority does not have to appear in the regulations and may instead be present under enforcement authorities; this is the reason a clarification might be necessary.

Defining a "confirmed" release and reporting it. The following example of State criteria for confirming and reporting a release demonstrates one way to fulfill subsection (b) of this objective. According to regulations in State M, a release is confirmed when any of the following conditions exists: (1) test, sampling or monitoring results from a leak or discharge detection

method that indicate a release has occurred when the monitoring equipment has been checked and found to be operational; (2) test results from a precision test of the UST and piping, conducted separately, which is performed after the top of the tank is excavated and all loose fittings, vent pipes or other equipment is checked, replaced or tightened, and which indicate that a release may have occurred; (3) results from a closure plan indicate the presence of contamination in excess of State standards and indicate that a release has occurred; and (4) any other method, including visual inspection, that confirms that a release has occurred. Once the release is confirmed, the State mandates that "any person" must immediately report the release to the State hotline and to any local agencies, if required by local regulations. The term "any person" includes but is not limited to, the owner or operator of an UST system or contractor hired to install, remove or test an UST system.

Reporting on Spills. State M's regulations illustrate one possible approach for reporting and cleaning up spills that will fulfill subsections (b) and (c) of this objective. State M, like many other States, does not distinguish between aboveground and belowground releases in their reporting and corrective action requirements. The State requires that all confirmed releases be reported, and that all confirmed releases be contained and cleaned up in a manner that protects human health and the environment. The State does not set a limit for reporting spills, which means all spills must be reported. The State chooses to direct owners and operators on how to contain and clean up all spills.

RELEASE RESPONSE AND CORRECTIVE ACTION

OBJECTIVE § 281.35

The State must have requirements that ensure:

Cite
Regulation Statute

- (a) All releases from UST systems are promptly assessed and further releases are stopped;
- (b) Actions are taken to identify, contain and mitigate any immediate health and safety threats that are posed by a release (such activities include investigation and initiation of free product removal, if present);
- (c) All releases from UST systems are investigated to determine if there are impacts on soil and ground water, and any nearby surface waters. The extent of soil and ground-water contamination must be delineated when a potential threat to human health and the environment exists.
- (d) All releases from UST systems are cleaned up through soil and ground water remediation and any other steps, as necessary to protect human health and the environment;
- (e) Adequate information is made available to the State to demonstrate that corrective actions are taken in accordance with the requirements of (a) through (d) of this section. This information must be submitted in a timely manner that demonstrates its technical adequacy to protect human health and the environment; and
- (f) In accordance with section 280.67, the State must notify the affected public of all confirmed releases requiring a plan for soil and ground water remediation, and upon request provide or make available information to inform the interested public of the nature of the release and the corrective measures planned or taken.

RELEASE RESPONSE AND CORRECTIVE ACTION (CONTINUED)

OBJECTIVE § 281.35

NOTES ON FULFILLING THE OBJECTIVE

1. Actions appropriate to stop a release will vary depending on how the release was confirmed as well as the conditions at the site. If the confirmation of the release identifies the tank or piping component responsible for the release, then actions to prevent future releases could include emptying the problem tank or not using the suspect piping until it is replaced or repaired.
2. The use of the word "promptly" in the objective is intended to mean that the State must require that owners and operators take such steps quickly to minimize future releases. To provide adequate enforcement of such a requirement, the State must clearly define, using a number, the time frame within which an owner or operator is expected to respond to this requirement.
3. The immediate threats to health and safety that normally are a concern at release sites include: explosive gas levels or vapor threats due to the exposure of contaminated soils; the off-site impacts of free product or resulting vapors on nearby water, sewer lines, or building basements; and the location of any nearby ground-water users who could be exposed to or threatened by dissolved contaminants in their drinking water.
4. Extent of cleanup of contaminated soil and ground water may be based on a site-specific risk analysis that includes potential human exposure or on State-wide numerical standards that establish clean-up levels at every site.
5. Reporting on corrective action plans must result in information being made available to the State quickly to ensure that steps are being taken to prevent further contamination, and so that technical direction can be provided by the State.
6. Information on the site and surrounding areas should be reported so that the corrective action can be tailored to the specific conditions of the site and nature of the release.
7. Initial corrective action steps, results of investigation of soils and ground water, and plans and status reports on long-term remediation of contamination at the site are among the types of specific information that the State might require.

RELEASE RESPONSE AND CORRECTIVE ACTION (CONTINUED)

OBJECTIVE § 281.35

8. Under the Federal Technical Standards (280.66(b)), in making a determination that a corrective action plan will adequately protect human health, safety, and the environment, the State implementing agency should consider the following factors as appropriate:

The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration;

The hydrogeologic characteristics of the facility and the surrounding area;

The proximity, quality, and current and future uses of nearby surface water and ground water;

The potential effects of residual contamination on nearby surface water and ground water;

An exposure assessment; and

Any information assembled in compliance with the State corrective action requirements.

9. More discussion on release response and corrective action may be found in the preamble to the final State Program Approval Rule (53 FR 37230) and in the preamble to the final Federal Technical Standards (53 FR 37173).

* * *

State Examples for Release Response and Corrective Action

Prompt Assessment and Stopping of Releases. State O requires that "where a confirmed tank failure has occurred," the owner or operator must empty the UST system within 5 days. The term "tank failure" in this State requirement may be too narrow to meet the objective because it could be interpreted to not include piping failures or spills and overfills. The regulation does not specify the circumstances for when this requirement applies. If this is the State's only requirement to ensure prompt action be taken to stop a confirmed release of a regulated substance, then this requirement will be considered less stringent than the objective because 5 days is not necessarily prompt enough for all circumstances. For example, action must be taken within a shorter period of time than in five days if a large release is suspected, and can only be stopped by rapid (if not immediate) removal of the product. EPA also notes that emptying the tank, as is required by this State, may not always be necessary. In the case of a piping failure, merely preventing continued use of the suspect piping run until it was repaired would be sufficient to stop further releases of regulated substances from the UST system.

Finally, State O does not require that the site of the "confirmed tank failure" be assessed to determine if and how cleanup should begin. The State will need to clarify how its regulations address this subject or revise its regulations in order to be considered no less stringent in meeting this aspect of the objective.

Defining the Steps Needed to Mitigate Hazards and Investigate Impacts. State P's regulations show one approach to satisfying subsection (b) of the Federal objective, which addresses mitigation of immediate health and safety hazards including the investigation and recovery of free product. The State

requires that UST owners and operators: (1) mitigate any fire, safety, or health hazard, including hazards from combustible vapor or vapor inhalation and the removal of ignition sources; and (2) conduct a visual inspection to detect any above-ground discharge, and where any above-ground discharge is evident, mitigate the effects of the discharge. In addition, the State requires that the owner or operator must: (3) remove free product from the water table or any aquifer material; (4) remove or decontaminate contaminated soil, storing contaminated soil if necessary in such a manner that provides complete isolation of the soil from the environment, and any hazardous substances in the soil must be prevented from coming into contact with or being released into the environment; and (5) repair, replace, or close the UST system. These requirements satisfy aspect (b) of the objective.

Defining Investigative Actions. State P's regulations also demonstrate one way to fulfill subsection (c) of this objective. The State requires that every owner or operator collect the following information about the release: (1) the anticipated migration route of the regulated substance; (2) characteristics of the surrounding soil including composition, geology, hydrogeology, and climate; (3) the results of any monitoring or sampling conducted in connection with the discharge that has been collected and analyzed in accordance with State procedures; (4) the proximity of the discharge to potable water supplies, surface water bodies, and populated areas; (5) a detailed description of corrective actions taken and any planned; and (6) any other relevant information requested by the State. These State requirements fulfill subsection (c) of this Federal objective. It should be noted, however, that subsection (e) of this objective requires timely reporting of the activities completed in each phase of the cleanup in order to determine its technical adequacy. State P does not identify in its

regulations when the information (collected during the investigations listed above) must be submitted. The EPA Regional Office may ask the State additional questions to make sure that subsection (e) of the objective is met. For example, can the State ask for the site assessment information at any time before the cleanup is completed? Does the State have access to enough information regarding each release site to determine that each cleanup operation will protect human health and the environment? In the site-specific approach to cleaning up UST releases, reporting is important because the consideration accorded to some factors, such as aquifer resource value and its current and potential use, is largely left to State (or local) policy. Given the number of releases that are expected to be detected in the near future, EPA acknowledges that there is potential for delayed cleanups under this approach if the State is unable to review all the reported information in a timely manner. The act of reporting information does not necessarily have to be formal, however, and the State may choose to accept information over the telephone or through personal interviews on site. Alternatively, the State may use previously collected information to categorize separately those releases that need to have more extensive reporting than others. In order to be no less stringent overall than this objective, State P may need to clarify the specifics as to when the information gathered under these State regulations must be reported to ensure that the need for prompt action and timely reporting is fulfilled.

Defining "Clean Up". State Q has requirements for corrective action that consist of requiring the owner or operator to repair damage caused by the release and restore the environment to a condition and quality acceptable to the State agency. This requirement is not sufficient to fulfill subsection (d) of this objective because the State does not define the criteria that will

be used to determine what "acceptable to the State" is. The State must elaborate on what the criteria or basis will be for deciding when to continue and when to stop clean up. To make this requirement no less stringent, the State must at a minimum, require that the release be cleaned up as necessary to protect human health and the environment. Although this is a fairly general criteria, several States already have opted for such general requirements in their regulations because it gives them the authority to oversee all aspects of the corrective action effort while at the same time, providing them with flexibility to tailor State requirements for corrective action to each site. However, this type of regulatory language also places a greater burden on the State program because it must be prepared to individually oversee every action on every site. To avoid the tasks of such close oversight, a State that employs a general standard in its regulations (for example, "as necessary to protect human health and the environment") could issue basic guidelines for corrective action that would alleviate some of the responsibilities of such site-specific direction.

Reporting On Corrective Actions Taken. The following requirements of State P illustrate one approach to subsection (e) of the objective, which does not clearly fulfill the objective. The State may need to make some changes or provide some clarification to the EPA Regional Office. State P requires owners and operators, in an initial notification of a confirmed release, to provide information on the type and quantity of the substance released, the location of the release, and the actions being taken to clean up the release. In addition, the State requires owners and operators to submit a corrective action plan (with an implementation schedule) within 120 days of release confirmation date, and to implement the plan in accordance with the schedule. The implementation schedule must include target dates to carry out the

following: (1) soil, surface and ground water sampling; (2) monitor well installation; (3) the staging and/or disposal of soils; (4) the construction of soil or ground-water treatment systems; (5) the provision of alternate water supplies; and 6) the periodic re-evaluation of the effectiveness of clean-up measures instituted. The release confirmation notification and the corrective action plan submission make up the entire body of reporting requirements in this State; thus the reporting on the initial actions taken and the upfront release assessment steps, as well as the corrective action plan, must be provided at 120 days. To be considered no less stringent in subsection (e) of the objective, the State must require that the owner or operator provide information concerning the immediate corrective action steps required in subsections (b) and (c) (such as the abatement of fire hazards and the investigation and removal of free product) well before 120 days have passed. Provided that the owner and operator has mitigated any immediate health and environmental threats posed by the site and has provided this information to the State, the information required by State P in steps 3, 4, 5, and 6 focus on long-term corrective actions and reporting at 120 days is sufficient.

Using a different approach, State R shows another way to fulfill subsection (e) of this objective. State R provides a corrective action manual to owners and operators of leaking USTs that presents detailed technical guidance and instructions on reporting information in terms of: (1) investigating suspected or known leaks for underground fuel storage sites; (2) assessing risk to human health and the environment when leaks have occurred; (3) determining cleanup levels in soil, ground water, and air for contaminated sites; (4) screening out sites that represent an acceptable degree of risk from further study; and (5) taking remedial action. This manual is an example

of guidance material that is used to support relatively general State regulations; it provides specific direction to the regulated community on what is expected from them, what actions they must take and when they must report. As long as the procedures outlined in this guidance are enforceable, this approach can be considered no less stringent than subsection (e), as well as subsections (a), (b), (c), and (d) of this Federal objective.

Providing Public Notice. State S does not adequately fulfill subsection (f) of this objective. In major corrective action cases, where ground-water recovery and treatment are involved, State S issues a permit for treatment of contaminated water and discharge of the treated waters. Before a permit is issued, the public is notified. The Federal objective, however, requires that the public must be notified when any long-term cleanup is undertaken. Generally, issuing a water treatment permit requires a public hearing because of concerns about discharges into surface water, and this hearing or meeting serves an entirely different purpose than that of notifying the public of long-term cleanups of petroleum releases. EPA believes that this requirement is not an onerous burden, as a public hearing or meeting, or even formal response to comments, is not necessary to fulfill this objective. The problem with State S's approach is that not all long-term cleanups require a water treatment permit and so there will be instances under this State program when the affected public is not notified when they should be notified.

State T's policy, however, is a good example of a State approach that does meet subsection (f) of this objective. The State requires a press release to be issued for all releases affecting ground water and all other releases involving corrective action. The press release must describe the location, the nature of the release, and announce that cleanup will be performed. This State will hold a public meeting if it appears warranted and allows public access to its files.

OUT-OF-SERVICE UST SYSTEMS AND CLOSURE

OBJECTIVE § 281.36

The State must have requirements that ensure UST systems conform with the following:	Cite Regulation Statute
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- (a) All new and existing UST systems temporarily closed must:
- (1) continue to comply with general operating requirements, release reporting and investigation, and release response and corrective action;
 - (2) continue to comply with release detection requirements if regulated substances are stored in the tank;
 - (3) be closed off to outside access; and
 - (4) be permanently closed if the UST system has not been protected from corrosion and has not been used in one year, unless the State approves an extension after the owner and operator conducts a site assessment.
- (b) All tanks and piping must be cleaned and permanently closed in a manner that eliminates the potential for safety hazards and future releases.

The owner or operator must notify the State of permanent UST system closures.

The site must also be assessed to determine if there are any present or were past releases, and if so, release response and corrective action requirements must be complied with.

- (c) All UST systems taken out of service before December 22, 1988, must permanently close in accordance with paragraph (b) of this section when directed by the State.

OUT-OF-SERVICE UST SYSTEMS AND CLOSURE (CONTINUED)

OBJECTIVE § 281.36

NOTES ON FULFILLING THE OBJECTIVE

1. The State program must specify when a tank system is considered to be temporarily out-of-service due to the fact that it has been removed from service.
2. The time limit for the temporary closure of UST systems has been set at one year to ensure that owners and operators of unprotected USTs that are unused are held responsible for protecting the UST system from corrosion or permanently closing it. (See part (4) in subsection (a)).
3. Assessing the site at closure is not necessary if an external release detection method was in operation at the time of closure and it indicates no release has occurred.
4. More discussion on out-of-service UST systems and closure may be found in the preamble to the final State Program Approval Rule (53 FR 37233) and in the preamble to the final Federal Technical Standards (53 FR 37181).

*** * ***

State Examples For Out-of-Service USTs and Closure

Defining Temporarily Out-of-Service. State U's regulations do not fulfill the criteria for temporary closure set out in subsection (a) of this objective. State U requires owners and operators of UST systems containing regulated substances that are temporarily out of service for 90 days or less to continue to comply with all provisions of the State's regulations (for example, release detection and corrective action). UST systems containing regulated substances that are out of service for an extended period of time, that is 3 months to 2 years, are required to comply with the following additional requirements: (1) leave vent lines open and functioning; and (2) cap and secure all other lines, pumps, manways, and ancillary equipment. Owners or operators of temporarily or extended out-of-service UST systems that have been emptied and do not contain a regulated substance are required by the State to maintain cathodic protection. Finally, the State requires UST systems that have been removed from service for a period of 2 years or more to be permanently closed. State U's requirements do fulfill the objective for USTs that are temporarily out-of-service one year or less. However, these requirements are less stringent concerning USTs closed for more than 1 year. To be considered no less stringent than aspect (a) of this objective, State U's requirement needs to be changed to mandate that an UST system that does not have corrosion protection and has been removed from service for one year or longer must permanently close, unless the State allows an extension based on the results of a site assessment.

Defining Permanent Closure. The following examples illustrate two different States' approaches to the issue of permanent tank closure. The first, State V, has regulations that do not fulfill subsection (b) of this objective. State V requires that all UST systems being permanently closed be

removed (the State must be notified 10 days in advance). The State allows abandonment in place only if it is not physically possible or practicable to remove the UST system (the State lists instances of when this would be allowed). For both methods of closure, the State provides detailed lists of procedures that must be followed to avoid causing safety hazards and future releases, including emptying and cleaning out the tanks. These regulations, however, are less stringent than subsection (b) of EPA's closure objective only because they do not specify that a site assessment must be performed at permanent closure to identify any past or on-going releases. The State program must require a site assessment to satisfy this objective.

State W uses a different approach to permanent closure. In addition, the State's requirements do fulfill the objective. The State requires that procedures for permanent closure include: (1) removal of all residual liquid, solids, or sludges from the tank and appurtenant piping by draining, pumping, or in-tank cleaning; (2) discharging such material in accordance with all applicable Federal, State, and/or local regulations; and (3) purging all flammable vapors. The State further requires that closure be performed in accordance with the State's Uniform Construction Code; American Petroleum Institute Standard 1604, "Recommended Practices for Abandonment and Removal of Used Underground Storage Tanks;" and any standard or device that the State determines to be protective of human health and the environment. In addition, the State requires owners or operators to submit a closure plan to the State agency that includes provisions for performing a site assessment. This report triggers release response and corrective action requirements if it is determined that an on-going or past release has occurred at the site. The above State requirements fulfill subsection (b) of EPA's Federal objective.

Requiring Retroactive Closure. State Y's regulations illustrate one way to fulfill subsection (c) of this objective. State Y mandates that all USTs that have been taken out of service for more than 1 year be properly closed by the owner or operator of the UST system or, if the owner or operator is unknown, by the current owner of the property where the UST is located. Because no date is specified, this requirement allows the State to go far back in time, even prior to the effective date of the State regulations, and requires owners, operators, or property owners to properly close abandoned tanks. For example, State Y can require a property owner that has a 20-year-old abandoned UST system to close the tank properly. This requirement satisfies subsection (c) of this objective.

FINANCIAL RESPONSIBILITY FOR USTs CONTAINING PETROLEUM

OBJECTIVE § 281.37

- | | Cite |
|---|-------------------------|
| | Regulation Statute |
| (a) State requirements for financial responsibility must ensure that: | |
| (1) owners and operators have \$1 million per occurrence for corrective action and third-party claims in a timely manner to protect human health and the environment; | |
| (2) owners and operators not engaged in petroleum production, refining, and marketing and who handle a throughput of 10,000 gallons of petroleum per month or less have \$500,000 per occurrence for corrective action and third-party claims in a timely manner to protect human health and the environment; | |
| (3) owners and operators of 1 to 100 petroleum USTs must have an annual aggregate of \$1 million; and | |
| (4) owners and operators of 101 or more petroleum USTs must have an annual aggregate of \$2 million. | |
| (b) Phase-in requirements. Financial responsibility requirements for petroleum UST systems must, at a minimum, be scheduled to be applied to all UST systems on an orderly schedule that completes a phase-in of the financial responsibility requirements within 18 months (see Note 2) after the effective date of the Federal regulations. | |
| (c) States may allow the use of a wide variety of financial assurance mechanisms to meet this requirement. Each financial mechanism must meet the following criteria: be valid and enforceable; be issued by a provider that is qualified or licensed in the State; not permit cancellation without allowing the State to draw funds; ensure that funds will only and directly be used for corrective action and third-party liability costs; | |

FINANCIAL RESPONSIBILITY FOR USTs CONTAINING PETROLEUM (CONTINUED)

OBJECTIVE § 281.37

	Cite
	Regulation Statute
and require that the provider notify the owner or operator of any circumstance that would impair or suspend coverage.	
(d) States must require owners and operators to maintain records and demonstrate compliance with the State financial responsibility requirements, and these records must be made readily available when requested by the implementing agency.	

NOTES ON FULFILLING THE OBJECTIVE

1. States may establish a fund to provide financial assurance for certain classes of owners and operators or for all owners and operators. The general criteria for State funds are identified in paragraphs (a) and (c) above.
2. There is an error in the Federal Register printing of the financial responsibility phase-in schedule. The 18-month timeframe is incorrect; the correct time period for phasing in the requirements is October 26, 1990, or 21 months after the effective date of the Federal regulations. This error was corrected in a supplemental notice to the Federal Register on December 21, 1988 (53 FR 51273).
3. More discussion on financial responsibility for UST owners and operators may be found in the preamble to the Federal financial responsibility requirements (53 FR 43365), and in the preamble to the State Program Approval Financial Responsibility objective (53 FR 43382).

* * *

Discussion of Financial Responsibility Requirements for States

The objective for financial responsibility for USTs containing petroleum was published separately from the rest of the State Program Approval Rule. The objective appeared in the Federal Register on October 26, 1988 (53 FR 43382) with the Federal Financial Responsibility Requirements for Petroleum USTs (Part 280, Subpart H).

While many States have developed and are implementing technical standards for USTs, few States have financial responsibility statutes or regulations in place. Many States delayed development of that portion of their program until they had an opportunity to see the final Federal Financial Responsibility Rule.

There are two basic approaches that a State can follow to meet the objective for Federal Financial Responsibility for Petroleum USTs:

- Adopt the standards described in the objective; and/or
- Develop a State fund that provides the full coverage required or that meets the full coverage required when combined with another mechanism.

A State does not have to create a fund to meet the financial responsibility objective. A State could have a statute requiring owners and operators in their State to have the required amounts of per occurrence and aggregate coverage to cover corrective action costs and third party damages. In addition, a State could phase-in the financial responsibility requirements on an orderly schedule within 21 months of the effective date of the Federal regulations. In order for a State to be no less stringent than the Federal requirement, there must be more than one group being phased-in between now and October 26, 1990. Of these, at least one must be required to comply by no later than July, 1990. For example, State A might require some owners and

operators in the State to comply by April, 1990, and the remainder by October, 1990.

States may allow the use of a variety of financial assurance mechanisms to meet the requirements. These mechanisms must:

- Be valid and enforceable;
- Be issued by a provider that is qualified or licensed in the State;
- Permit cancellation without allowing the State to draw funds if the mechanism is a guarantee, surety bond, or letter of credit;
- Ensure that funds will only and directly be used for corrective action and third-party liability costs;
- Require that the provider notify the owner or operator of any circumstance that would impair or suspend coverage, (i.e., bankruptcy of provider).

The mechanisms cited in the Federal financial responsibility regulation meet the above criteria.

Finally, States must require owners and operators to maintain records and demonstrate compliance with the State financial responsibility requirements. These records must be made readily available when requested by the State implementing agency.

With one exception, States developing financial responsibility programs have been focusing on the feasibility of using State trust funds to provide financial assurance. A number of States have either proposed or passed statutes creating State assurance funds to help owners and operators of petroleum USTs in their State comply with financial responsibility requirements. So far, two basic types of funds have been considered: insurance funds and guarantee funds (clean-up funds). The variety of approaches that States are using, including these two basic types, can be illustrated by the following examples. No assessment is made of whether the

various programs mentioned meet the objective for financial responsibility by being "no less stringent".

In the area of insurance-type funds, Vermont has passed a statute authorizing the formation of an UST insurance pool with the Banking and Insurance Commissioner's approval. Oregon has proposed a State insurance fund that provides the authority to establish a fee-supported fund covering financial assurance requirements for corrective action and third-party liability.

In the area of guarantee-type funds, Georgia has passed a statute establishing a fund in which the owner/operator pays the first \$10,000 and then after cleanup submits eligible corrective action costs for reimbursement. Georgia will establish reimbursement criteria. Delaware's fund covers corrective action costs over \$2,500 for releases reported by December 1988, after which time, corrective action costs will be covered up to \$1 million after a \$100,000 deductible. The fund covers third-party claims from \$300,000 to \$1 million per occurrence per facility. Finally, Iowa has proposed a minimum fund of \$5 million to cover corrective action and third-party liability costs of up to \$1 million after a \$20,000 deductible.

It is important to note that, due to limitations in their coverage, the Georgia, Delaware, and Iowa trust funds cannot function as an owner's or operator's sole financial assurance mechanism. Section 281.37, the financial responsibility State program approval regulation, requires that an owner or operator has \$1 million of coverage (\$500,000 for petroleum non-marketers) per occurrence for taking corrective action and compensating third parties for bodily injury and property damage caused by a release. Where a State trust fund does not cover either corrective action or some aspect of third party liability, the owner or operator must obtain the full amount of required

coverage through another financial assurance mechanism. This same principle applies to State trust funds, such as those of Georgia, Iowa, and Delaware, that do not cover the full dollar amount of required coverage, because the fund has a deductible. Those owners and operators using the trust fund created by these States must obtain financial assurance that covers corrective action and third party liability for the amount of the deductible. Some States may wish to develop a financial test for the amount of the deductible and submit a description of the test along with a description of the State fund to the appropriate Regional Administrator for approval of the two combined as a "State-required mechanism" under §280.100.

These examples demonstrate the types of possible approaches that are available to States. The reader is cautioned that EPA has not determined that each State approach described here is considered no less stringent than the Federal program. That evaluation is made by the EPA Regional Administrator on a State-by-State basis. EPA has developed a Handbook (September, 1988), entitled Financial Assurance Programs: A Handbook for States, that will assist States in developing financial assurance programs. This handbook contains a summary of approaches that are being used by the States, and the information provided above is taken from that summary.

Readers should note that there is an error in the Federal Register printing of the financial responsibility objective under §281.37(b), which concerns the phase-in of requirements. The language in the objective says that "financial responsibility requirements for petroleum USTs must be scheduled to be applied at all UST systems on an orderly schedule that completes a phase-in of the financial responsibility requirements within 18 months after the effective date of the Federal regulations." The 18 months is incorrect. The correct time period for phasing in the requirements is October

26, 1990 or 21 months after the effective date of the Federal regulations. This error was corrected in a supplemental notice to the Federal Register, published on December 21, 1988 (53 FR 51273).

C. Adequate Enforcement Authorities

In the Attorney General's Statement, the State must demonstrate that its enforcement authorities meet the criteria specified in Subpart D of the State Program Approval Rule which requires legal authorities for: (1) compliance monitoring; (2) enforcement response; and (3) public participation. These authorities are the minimum necessary for a program to provide "adequate enforcement." Although a State may use local agencies to implement certain aspects of its compliance monitoring and enforcement program, the application for program approval must demonstrate that the State has adequate legal authorities to enforce its requirements; the State cannot rely on local authorities in its demonstration of adequate enforcement. Worksheets outlining and explaining the specific requirements of the compliance monitoring and enforcement response authorities are provided below. The regulatory requirements for public participation in enforcement proceedings include options for both legal authorities and procedural requirements. However, the handbook discussion of public participation in enforcement proceedings is located in this chapter (rather than Chapter 5) because EPA believes most States will probably choose one of the authority options. A worksheet is also provided for the public participation in enforcement proceedings requirement. Additional information on this subject is available in the preamble to the State Program Approval Rule (53 FR 37234).

LEGAL AUTHORITIES FOR COMPLIANCE MONITORING

(§ 281.40)

The State must have the following specific compliance monitoring authorities:	Cite Regulation Statute
(a) Any authorized representative of the State engaged in compliance inspections, monitoring, and testing must have authority to obtain by request any information from an owner or operator with respect to the UST system(s) that is necessary to determine compliance with the regulations.	
(b) Any authorized representative of the State must have authority to require an owner or operator to conduct monitoring or testing.	
(c) Authorized representatives must have the authority to enter any site or premises subject to UST system regulations or in which records relevant to the operation of the UST system(s) are kept, and to copy these records, obtain samples of regulated substances, and inspect or conduct the monitoring or testing of UST system(s).	

NOTES ON FULFILLING THE REQUIREMENTS

1. The proposed rule limited inspection authority solely to "employees of the State." However, EPA believes that States may also wish to delegate implementation responsibility to individuals such as the local building inspector or fire marshall. Thus, in order to broaden the scope of this authority to include such persons, the Agency has in the final rule substituted the word "employee" with "representative," as provided for in Subtitle I, Section 9005 of RCRA.
2. More discussion on legal authorities for compliance monitoring may be found in the preamble to the final State Program Approval Rule (53 FR 37234).

* * *

LEGAL AUTHORITIES FOR ENFORCEMENT RESPONSE

(§ 281.41)

The State must have the following specific enforcement response authorities for State program approval:

Cite
Regulation Statute

- (a) Any State agency administering a program must have the authority to implement the following remedies for violations of State program requirements:
 - (1) To restrain immediately and effectively any person by order or by suit in State court from engaging in any unauthorized activity that is endangering or causing damage to public health or the environment;
 - (2) To sue in courts of competent jurisdiction to enjoin any threatened or continuing violation of any program requirement;
 - (3) To assess or sue to recover in court civil penalties as follows:
 - (i) Civil penalties for failure to notify or for submitting false information pursuant to tank notification requirements must be capable of being assessed up to \$5,000 or more per violation.
 - (ii) Civil penalties for failure to comply with any State requirements or standards for existing or new tank systems must be capable of being assessed for each instance of violation, up to \$5,000 or more for each tank for each day of violation. If the violation is continuous, civil penalties shall be capable of being assessed up to \$5,000 or more for each day of violation.

LEGAL AUTHORITIES FOR ENFORCEMENT RESPONSE (CONTINUED)

(§ 281.41)

NOTES ON FULFILLING THE REQUIREMENTS

1. "Unauthorized activity" is considered to include any activity by an UST owner or operator that results in noncompliance with a State's UST regulations.
2. States may find these standard legal authorities in general enforcement statutes and not necessarily in UST-specific statutes.
3. More discussion on legal authorities for compliance monitoring may be found in the preamble to the final State Program Approval Rule (53 FR 37237).

*** * ***

PUBLIC PARTICIPATION IN ENFORCEMENT PROCEEDINGS

(§ 281.42)

Any State administering a program must provide for public participation in the State enforcement process by providing any one of the following three options:

Cite
Regulation Statute

- (a) Authority that allows intervention analogous to Federal Rule 24(a)(2), and assurance by the appropriate State enforcement agency that it will not oppose intervention under the State analogue to Rule 24(a)(2) on the ground that the applicant's interest is adequately represented by the State.
- (b) Authority that allows intervention as of right in any civil action to obtain the remedies specified in 281.41 by any citizen having an interest that is or may be adversely affected; or
- (c) Assurance by the appropriate State agency that:
 - (1) It will provide notice and opportunity for public comment on all proposed settlements of civil enforcement actions (except where immediate action is necessary to adequately protect human health and the environment);
 - (2) It will investigate and provide responses to citizen complaints about violations; and
 - (3) It will not oppose citizen intervention when permissive intervention is allowed by statute, rule, or regulation.

NOTES ON FULFILLING THE REQUIREMENTS

1. These requirements are separate from the public participation requirement under the corrective action objective on page 58 of this chapter.

PUBLIC PARTICIPATION IN ENFORCEMENT PROCEEDINGS (CONTINUED)

(§ 281.42)

2. EPA expects that States will not have difficulty in fulfilling one of the three options presented here, particularly because most States already have an authority analogous to Federal Rule 24(a)(2) as a result of involvement in the RCRA hazardous waste management program. Federal Rule 24(a)(2) is presented in Appendix E.
3. The "right of intervention" required in the second option is considered to be the right of a citizen, having an interest that is or may be adversely affected by an UST system that is in violation of the State's requirements, to intervene in a civil action brought by the State against the owner or operator. The citizen has all the rights of an intervenor, including the right to submit a statement, the right to notice, and the right to receive motions for arguments filed by other parties to the action.

*** * ***

Additional Explanation of the Public Participation Requirements

The purpose of providing public participation in the enforcement decision-making process is to meet the Federal statutory requirement, reflected in Section 7004 of RCRA, that the public be provided with a reasonable opportunity to participate in the implementation of the program. The final State program approval regulations (§281.42) require that States allow opportunities for the public to be informed and participate in the enforcement decision-making process. To provide such public participation, States may choose one of three options. The first two of these options allow States to obtain legal authorities that permit public participation in the enforcement process. The third option allows States to develop procedures that assure that the implementing agency will respond to citizen input.

States that choose not to obtain either of the two legal authorities, however, must develop procedures that assure public participation in enforcement proceedings. States choosing this option are required to provide opportunity for public comments on all proposed enforcement settlements and to respond to citizen complaints about violations. States have the flexibility to determine whether the citizen complaint is valid and to provide the appropriate response depending on the significance of the violation. To inform the public of proposed settlements for minor violations, for example, States may consider submitting to a local newspaper a public notice of the plan for returning to compliance. Public hearings may be held if enough public interest is expressed. To handle citizen complaints, States may determine the most appropriate follow-up action, depending upon the validity of the complaint.

D. Scope of the State Program

A State has the option to develop an UST program to regulate either all petroleum tanks, all hazardous substance tanks, or both. Depending upon which of these options a State chooses, the State must have jurisdiction over at least the same categories of tanks as the Federal program. For this reason, the Attorney General must certify that the State UST program covers the same scope of jurisdiction within each option as the Federal program, and does not exclude any part of the UST universe regulated under the Federal rule. Those categories of USTs that EPA had proposed to defer but now regulates in the final Technical Standards must be included within the scope of the State program. For example, used oil USTs need to be regulated under State programs.

Certain UST systems are currently deferred from regulation in the final Federal rule because EPA has insufficient information to regulate these USTs. However, these deferred systems are subject to interim prohibition and the corrective action requirements under the Federal Technical Standards. UST systems storing fuel for emergency generators are subject to all but the release detection requirements. Thus, the EPA and the State must agree on how to oversee compliance of the regulatory requirements applicable to any deferred USTs in the Memorandum of Agreement (explained in Chapter 6). States should consider including the list of deferred USTs within their statutory authority from the start to avoid the necessity for future changes to expand their jurisdiction when complete Federal regulations for the deferred systems are published.

EPA has exempted by regulation certain other categories of UST systems entirely, and States will not need to include these systems within their jurisdictions in order to have adequate program scope for approval.

States are free to implement a State program that is broader in scope than the Federal program (§281.12(a)(3)). A State program, for example, may regulate all heating oil tanks, although tanks used for storing heating oil for consumptive use on the premises where stored are excluded from the Federal UST program. In such cases, the additional scope of coverage is not reviewed by EPA as part of the State program approval process. In addition, if EPA were asked to provide enforcement assistance, EPA cannot enforce the States' requirements against the tanks within the additional scope of coverage.

The following checklist contains the categories of tanks that are exempted from the Federal Technical Standards. State programs must have the authority to regulate all categories of UST systems except for those UST systems contained in this checklist. (As noted above, Federally-deferred tanks are only subject to the interim prohibition and corrective action requirements.) If the State exempts or defers any category of UST systems that are in the jurisdiction of the Federal program, a discussion must be provided in the Memorandum of Agreement on how those tanks will be covered along with a schedule for expanding the State's jurisdiction. Additional discussion on the State program scope and universe may be found in the preamble to the State Program Approval Rule (53 FR 37219).

SCOPE OF THE STATE PROGRAM

The State must have authority to regulate all UST systems except those UST systems outside the jurisdiction of the Federal program, listed as follows:

Excluded by Congress

1. Farm or residential tanks of 1,100 gallons or less capacity storing motor fuel for non-commercial purposes;
2. Tanks storing heating oil for consumptive use on the premises where stored;
3. Septic tanks;
4. Pipeline facilities (including gathering lines) regulated under the National Gas Pipeline Safety Act of 1968, the Hazardous Liquid Pipeline Act of 1979, or State laws comparable to these Acts;
5. Surface impoundments, pits, ponds, or lagoons;
6. Storm-water or waste-water collection systems;
7. Flow-through process tanks;
8. Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; and
9. Storage tanks situated on or above the floor of underground areas, such as basements or cellars.

Excluded by EPA

1. Any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and other Subtitle I regulated substances;
2. Any waste-water treatment tank system that is part of a waste-water treatment facility regulated under section 402 or 307(b) of the Clean Water Act;
3. Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
4. Any UST system whose capacity is 110 gallons or less;
5. Any UST system that contains a de minimis concentration of regulated substances; and
6. Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

5. Demonstration of Adequate
Enforcement Procedures

CHAPTER 5. DEMONSTRATION OF ADEQUATE ENFORCEMENT PROCEDURES**A. Introduction**

To ensure that States have adequate enforcement, EPA requires that States have certain compliance monitoring and enforcement procedures in addition to the legal authorities discussed in the previous chapter. These procedures are necessary to ensure compliance with all UST requirements in both the technical and financial responsibility rules. Furthermore, EPA expects that any State program that incorporates these required procedures will also have the ability to carry them out. That is, EPA will not approve an apparent "paper" program. Beyond this, EPA will not set any numerical resource minimums to determine a State's enforcement capability.

Under §281.22 of the regulations, States seeking program approval are required to submit descriptions of their compliance monitoring and enforcement program in their application. In general, EPA considers a comprehensive enforcement program to include procedures for the following areas:

- Compliance monitoring and data collection; and
- Enforcement responses.

As discussed in more detail below, §§281.40(d) - (g) set forth the procedural requirements for compliance monitoring and enforcement. In developing these requirements, EPA seeks to maintain the flexibility to approve a variety of State programs, and encourages States to use innovative approaches to monitoring compliance and taking enforcement actions. For that reason, the final regulations for State program approval do not specify details of compliance monitoring and enforcement procedures, but rather describe general procedural areas that are necessary for program approval.

To provide guidance on fulfilling these procedural requirements, this chapter reiterates the overall purpose of each requirement and provides examples of compliance monitoring and enforcement procedures that may accomplish these purposes. Some of these procedures are currently being used in existing State programs. It should be noted, however, that none of the actual compliance monitoring and enforcement procedures described represent an "ideal" or unique UST enforcement program, but serve only as examples of methods that fulfill the purpose of the particular requirement. Further detail on these examples and additional information on State compliance monitoring and enforcement techniques can be found in the EPA handbook on Building State Compliance Programs (August, 1988).

B. Procedures for Compliance Monitoring

An important purpose of the Federal requirements for adequate enforcement is that States be able to identify violators and bring them into compliance. The final State program approval regulations for adequate enforcement require that States develop certain sets of procedures for collecting and maintaining data on violators. In addition, the State implementing agency must maintain data on the compliance status of the regulated community to monitor the effectiveness of the compliance program and ensure that violations are not repeated.

Specifically, States are required to develop procedures in each of the following four areas:

1. Record Review: Procedures to receive, evaluate, retain, and investigate records and reports that owners and operators are required to submit to the implementing agency, and procedures to enforce against failure to submit such mandatory reports (§ 281.40(d));
2. Inspections: Systematic inspection procedures to determine compliance with program requirements, independent of information supplied by the regulated community, and to provide for enforcement of failure to comply with program requirements (§ 281.40(e));
3. Public Reporting: Programs to encourage public effort in reporting violations and to investigate information obtained from the public about suspected violations (§ 281.40(f)); and
4. Data Maintenance: Procedures for maintaining the data collected through inspections and record reviews so that the implementing agency can monitor over time the compliance status of the regulated community (§ 281.40(g)).

In addition, for any compliance monitoring program to be effective, a State should also be able to identify and characterize the regulated community. Thus, procedures for developing an UST inventory are also fundamental to a State's ability to ensure compliance with the regulations.

Guidance for each requirement and examples of compliance monitoring procedure and techniques that fulfill the requirements in each of these areas are described below. Enforcement procedures that fulfill the requirements in §§281.40(d) and (e) are discussed in Section C of this chapter.

1. Identifying the Regulated Community.

To structure an effective compliance monitoring program, a State implementing agency must have a thorough awareness of its regulated community. Examples are provided below of some optional procedures that have been developed for identifying and characterizing UST systems and for keeping track

of changes in facility status over time. These are only examples, however, and it is assumed that States do have other procedures that may be perfectly acceptable.

Registration and Permitting. One customary and versatile method for keeping inventory is to require that every facility in the regulated community obtain a registration or permit. Registration and permitting programs vary in the level of information required from the owners and operators, the means of enforcing the program, and the consequences of noncompliance. In general, registration programs require that UST owners and operators obtain an annual license to operate their UST system. In doing so, owners and operators will supply the implementing agency with little more detailed data than that required for notification. For example, the registration programs in Rhode Island and Texas merely require that owners and operators notify the State of changes in the status of the UST system. Permit programs also serve to provide inventory data, although they are usually developed primarily to monitor compliance (as discussed in the following section on Record Review) and thus provide more detailed UST information.

Another means of identifying USTs is to require certain actions from the owner or operator. For example, a State may require that when property containing an UST system is sold, the seller notify the purchaser of State notification and reporting requirements applicable to the UST system. This requirement would not only help keep the data updated, but also would ensure that information is passed on to the next owner or operator.

Alternative Means of Identification. To supplement their data on the regulated community, States may rely upon other State or local government agencies, such as building inspectors or fire departments, to identify UST systems. For example, some State and county agencies incorporate UST

requirements into local construction standards by requiring building permits for UST system installation, alteration, or removal, much like any other construction activity. The State or county typically requires these other agencies to submit their observations and information to the UST implementing agency.

States have also used commercial activities to help identify UST systems. For example, Iowa requires that for all property transfers, real estate agents must file a "Real Estate Ground-Water Hazards Statement," in which the agent must note if the property involved contains any UST systems. This statement is filed with the County Records Office and can be compared with information submitted by the owners and operators to verify the accuracy of their reports.

2. Record Review.

Under §281.40(d) of the final State program approval regulations, States must develop procedures for collecting and analyzing data submitted by UST system owners and operators. Although owners and operators will be required to submit certain information under State and Federal regulations (for example, reporting releases), States may require additional information as a means of expanding compliance monitoring efforts. By developing a program that encourages owners and operators to submit accurate data on their compliance status, States can reduce the need for resource-intensive inspections. Several techniques for incorporating record reviews into a compliance monitoring program are described below. Compliance outreach, which can enhance the effectiveness of a reporting program, is also discussed.

Permit Programs. Some State programs have reduced their need for resource-intensive inspections by implementing comprehensive permit programs that provide data on compliance. Many States and counties require that all

UST systems obtain annual permits as a condition of operation. To obtain these permits, UST system owners and operators must demonstrate by independent means that their UST systems have passed performance standards. States can verify compliance in several ways, such as by inspecting the facility prior to issuing the permit, or by requiring the owner or operator to submit results of tank tightness tests. Once an initial inspection is conducted, States can rely more heavily on periodic reports submitted by owners and operators with permitted systems. States can also reduce the number of comprehensive inspections conducted by increasing the time between major inspections at permitted facilities.

California has developed a comprehensive permit program that is implemented at the county level (and delegated to certain cities). The permit requirements vary from county to county but are generally extensive. In San Mateo County, for example, owners and operators applying for a permit must complete a number of requirements, including conducting a precision test, undergoing an inspection by the county, and installing leak detection equipment. All UST systems in the State require permits for operation, and any tank system that does not pass its county's requirements is taken out of service.

Self-certification. States may also reduce the need for extensive inspections by allowing some owners and operators to certify that they are in compliance. Such self-certification programs have been used in the Occupational Safety and Health Administration for large, independent business chains. In these programs, companies that demonstrate an understanding of the regulations and a good compliance record are given the freedom to self-inspect and submit results to the implementing agency. (This would reduce the number

and frequency of inspections that the agency would have to conduct at these facilities.)

Effective use of such a program would require that the State have significant penalties for false certification. Clearly, the State would also need to conduct additional inspections at facilities that have not demonstrated a good compliance record. Although this method would not be sufficient for determining the compliance status of the entire regulated community, its use for a certain portion of the UST population may enable a State to reduce some of its resource needs for inspections.

Compliance Outreach. The effectiveness of reporting by the regulated community can be enhanced by developing a compliance outreach program. Given the large size of the regulated universe and the limited resources available for compliance monitoring and inspections, the State UST programs will have to rely heavily on voluntary compliance, and outreach is an effective tool for encouraging compliance. States have developed a number of methods to inform the regulated community of its obligations under the State UST program. A common means of reaching the regulated community is to identify certain industry groups as representative of the regulated community and then develop relationships with these groups. For example, Minnesota and Texas have established ongoing communication with the Independent Service Station Organization and the Texas Oil Marketer's Association, respectively.

To reach a wider audience, some State programs use standard communication techniques, such as press releases, public service announcements, and mass mailings. The Maryland Department of Environment has established an advisory committee comprising members from local government, industry, and community groups to aid in communicating UST issues and to encourage the exchange of ideas. The State of Oregon sends a newsletter

"Tankline" to all persons in the State who may be connected to the UST community. This newsletter discusses State regulations along with UST technology and practices.

3. Inspections.

Although the final State program approval regulations (§281.40(e)) require States to develop an inspection program, States should be aware that the requirements do not mandate a State to develop "traditional" programs that have specific inspection schedules and a required number of inspections and subsequent enforcement actions. EPA realizes that resource constraints in most States will make it difficult for them to develop the traditional "bean counting" inspection program. Currently, some States do not have sufficient resources to do much more than conduct inspections in response to potential or known violations or releases. Although these States are expected to develop the capability to conduct systematic inspections to detect non-compliance, EPA recognizes that alternative approaches to gathering inspection data may help meet the overall performance goal of ensuring compliance. Several alternative approaches to an inspection program are described below.

Targeted Inspections. One alternative to periodic, random inspections is to develop inspection priorities, taking into account factors such as: (1) the nature and magnitude of the threat; (2) the availability of resources for preventative action; and (3) the results of past leak incidents. For example, some States have targeted their inspections to groups of UST systems that potentially pose greater risk to human health and the environment. Examples of such UST populations include: aging UST systems, which have a greater chance of leaking; UST systems located near sources of drinking water or ground water; and UST systems whose owners or operators have a history of significant violations.

Alternatively, some States have targeted UST-related activities, such as installation or closure, for inspections. For example, in Rhode Island, an inspector must be present at every UST system closure to ensure that no releases have occurred. In San Diego County, California, the UST staff has inspected all new UST system installations and UST system removals since the program was established in 1984. In these types of targeted inspections, compliance is driven by the certainty that at least during one critical event, all UST systems will be examined.

Alternative Inspectors. States can also supplement their basic inspection programs by delegating certain compliance monitoring responsibilities to other governmental entities or to private parties through certification. A number of governmental programs, ranging from fire safety to consumer affairs, require the presence of governmental personnel at UST system sites. Some State and local agencies have incorporated their inspection needs into the inspection programs of these agencies. Specifically, many agencies rely on fire marshals or plumbing inspectors to conduct technical UST inspections when at a facility.

Several States delegate elements of their UST inspections to private parties. New York and Maine, for example, certify UST installers who then must verify that UST system installations meet State requirements. Florida has set up a licensing program for UST installers, testers, and removers. Rhode Island certifies the tank testing procedure developed by companies providing that service, and gives the testing company the responsibility for approving their testers. These approaches reduce the need for the presence of a State inspector at each UST system installation or testing event. Thus, these States can limit their direct involvement to follow-up inspections and possible enforcement actions if an UST system fails the test.

4. Public Reporting.

Under the Federal requirements for adequate enforcement (§281.40(f)), States must encourage the public to report violations and must provide the public with information about reporting procedures. In addition to the compliance outreach procedures for the regulated community described above, States are encouraged to develop basic outreach procedures designed to reach the general public. However, this requirement does not mandate States to develop comprehensive outreach programs. Instead, procedures for encouraging communication with the public may be as simple as providing a telephone "hot-line" service for citizens to report observations and suspected violations. Some States use mechanisms such as public notices, newspaper articles, press releases, and mass mailings to inform the public about the UST program. In particular, publicity that focuses on the State's enforcement response to a particular violation may draw public attention to the program. (Publicity of enforcement actions is described in Part C of this chapter).

5. Data Maintenance.

The final State program approval regulations for adequate enforcement (§281.40(g)) require States to develop procedures for maintaining the data collected through inspections and record reviews so that the implementing agency can monitor over time the compliance status of the regulated community. Any such compilation of compliance data must be made available to EPA upon request. This requirement is based on Section 9002 of Subtitle I, which mandates the establishment of State inventories, and emphasizes the necessity of such inventories for effective compliance monitoring.

The Agency intends to limit these requests as much as possible and will negotiate specific reporting requirements with the States as part of the annual State grant process.

C. Procedures for Enforcement Response

The final State program approval regulations require State agencies to have certain legal authorities for enforcement. The specific requirements and guidance for these enforcement authorities were addressed in Chapter 4 on the Attorney General's statement. However, in order to receive program approval, States must also demonstrate that they have enforcement response procedures for exercising these legal authorities. The purpose of enforcement response is to take action against violators, bring them into compliance, and deter other violators. Although the requirements for adequate enforcement do not provide specific details on the requirements for enforcement procedures, §§281.40(d) and (e) require that States have procedures for enforcing against noncompliance. EPA will evaluate the adequacy of a State's enforcement response procedures as a whole and not based on one type of procedure.

(§ 281.40)

(d)

State programs must have procedures for receipt, evaluation, retention, and investigation of records and reports required of owners or operators and must provide for enforcement of failure to submit these records and reports.

(e)(1)

State programs must have inspection procedures to determine, independent of information supplied by regulated persons, compliance with program requirements, and must provide for enforcement of failure to comply with the program requirements. States must maintain a program for systematic inspections of facilities subject to regulations in a manner designed to determine compliance or non-compliance, to verify accuracy of information submitted by owners or operators or regulated USTs, and to verify adequacy of methods used by owners or operators in developing that information.

(e)(2)

When inspections are conducted, samples taken, or other information gathered, these procedures must be conducted in a manner (for example, using proper "chain of custody" procedures) that will produce evidence admissible in an enforcement proceeding, or in court.

States seeking program approval are not restricted to "traditional" formal enforcement programs, but instead may prefer to use a combination of formal and informal enforcement techniques. Formal enforcement is considered to include any actions taken under the authority contained in a statute, such as issuing a formal notice of violation or compliance order. In general, two types of compliance orders can be levied: administrative orders and judicial orders, both of which may have accompanying civil penalties. In States that do not have administrative order authority, or where the order is not heeded by the owner or operator, judicial orders and civil penalties typically are sought. Informal enforcement programs include any other actions taken to achieve compliance, such as the issuance of warning letters or undertaking other means of encouraging voluntary compliance.

Although formal enforcement techniques are necessary for an effective enforcement program, EPA recognizes that it may not be reasonable or appropriate for State agencies to carry out formal enforcement responses in all situations. States may often encounter violations that are not significant enough to require formal orders and high penalties. In addition, States may lack the legal staff or funds necessary to carry out such responses in all situations. Thus, a broad range of enforcement tools may be necessary.

By having a variety of formal and informal enforcement procedures, a State can determine which type of response is most appropriate in a particular situation, depending upon the threat to human health or the environment, the willingness of the violator to cooperate, or a violator's history of noncompliance. A State may want to develop procedures for issuing some of the more formal orders (for example, notice of violation) as an informal response when violations are minor and compliance is expected. For example, in cases of minor violations, a State inspector may issue a simple warning notice or

on-site complaint, informing the owner or operator of the requirements and specifying actions necessary to bring the UST system(s) into compliance. Warning notices and on-site complaints may describe potential penalties, but States typically do not have administrative authority to assess a penalty through such notices. However, the threat of more stringent enforcement actions and penalties remains an important factor in the success of using informal notices.

Examples of some informal and formal enforcement techniques that may be appropriate for use in UST programs are discussed below.

1. Informal Means of Encouraging Voluntary Compliance.

The type of enforcement response used by a State generally will depend upon the cooperation of the violator and the severity of the violation. Unless a violation is significant or the violator is recalcitrant, States may prefer to negotiate informally with the violator as a first step in obtaining compliance. This is less resource-intensive than more formal actions and encourages a cooperative relationship on the part of the regulated community.

Some States have developed procedures for notifying violators and encouraging their cooperation in correcting a violation without having to obtain compliance orders. Such notices are typically used when the violation appears to have resulted from the violator's unfamiliarity with the regulations. Most of these informal notices, such as Maryland's "Warning Notice" and Rhode Island's "Letter of Noncompliance," require the violator to bring the UST system(s) into compliance. The notice may indicate the potential penalty if actions are not taken, but generally does not have the force of law for imposing penalties.

A State may also take advantage of a permit program to convince violators to remedy major violations. As mentioned previously, the

implementing agency in any California county can threaten to revoke permits or threaten to remove an UST system completely if major or repeated violations occur. Other States enforce their permit requirements through commercial vendors. In Iowa and Florida, for example, it is illegal for fuel vendors to fill an unregistered UST system. UST programs that encourage participation of local agencies such as fire departments may be able to employ the enforcement authorities of that agency to encourage compliance. For example, in Baltimore County, Maryland, the enforcement responses are tied to building permits. An UST system found to be leaking is considered to have violated the building permit, and the permit is subsequently revoked. Without a permit, the UST system cannot be operated, and its contents must be pumped out until a replacement permit is obtained (after corrective action).

For violations or releases that require cleanups, States may develop techniques that encourage the owner or operator to take responsibility for remedying releases. For example, Minnesota has a program that encourages voluntary cleanup from responsible parties without having to use traditional enforcement techniques. To provide an incentive, the State has a trust fund that reimburses costs to responsible parties who are in compliance when a release is discovered, as long as they cooperate with the State in achieving an agreed-upon level of cleanup. The "hammer" for encouraging voluntary compliance is an aggressive State cleanup and cost recovery program supplemented by penalties for unresponsive owners and operators. Florida has implemented a similar program that provides amnesty from cleanup costs as long as the owners have complied with certain requirements and have been cooperative. In addition to cost recovery programs that provide reimbursement or amnesty to cooperative owners or operators, some States provide no-cost oversight of corrective action if the responsible party cooperates.

2. Formal Enforcement Responses.

For an effective program, a State must have procedures for carrying out formal enforcement actions in certain situations. These enforcement actions may be needed to compel compliance with regulatory requirements, to compel corrective action, or to compel cost recovery. Formal enforcement responses generally include authority to issue civil administrative compliance orders or penalties. Although administrative authority is not required for program approval, EPA encourages States to obtain such authority (including penalty authority) as a cost-effective enforcement mechanism. In addition, judicial authorities, which are required for program approval, will be needed to address certain violations (e.g., a certain degree of environmental harm), and to back up other enforcement responses if compliance has not been achieved.

For UST programs, States can undertake to make "traditional" authorities an effective part of their UST program. For example, a State may want to develop streamlined administrative hearing procedures for minor violations, or to develop judicial case strategies or priorities with the Attorney General. However, since these traditional approaches may be resource-intensive, States may consider developing expedited formal enforcement procedures such as field citations and other alternative means of obtaining compliance. In general, field citations are modified administrative orders issued on site by inspectors when violations are discovered. Using the citations, inspectors typically assess a low to moderate penalty at the site and require that violators correct the violation within a short time period. For States that have the necessary statutory authority, cease-and-desist orders are also an effective and efficient alternative to administrative orders for compelling compliance. Such orders may require violators to cease operation of their UST systems, may revoke the operating permit, or may require that tanks be pumped

until empty, or closed, if necessary. These cease-and-desist orders do not necessarily include a penalty, but are effective in reducing the environmental threat caused by the violation. The advantage of these less formal procedures is that they allow for tailored on-site settlement of the violation without requiring extensive administrative resources.

3. Enforcement Outreach.

As a supplement to compliance outreach, enforcement outreach can be a useful tool for encouraging compliance in any enforcement program. States can encourage compliance by publicizing enforcement responses. For example, the implementing agency could publicize violations in local or national newspapers. Currently, some State programs use press releases of patterns of violations to encourage marketers to assess their compliance status. For example, Rhode Island has had considerable success in influencing compliance efforts through adverse publicity stimulated by press releases accompanying violations. Alabama required a violator to place a statement in the Alabama Oilmen's Newsletter in which he admitted that he had violated the regulations and was taking actions to return to compliance.

If a State finds a pattern of violations among a chain of outlets of one owner or operator, the State could require that violator to initiate a self-auditing program in lieu of a highly-publicized, intensive State inspection. This type of enforcement outreach has been used in numerous enforcement settlements under the Toxic Substances Control Act, the Clean Air Act, and the Resource Conservation and Recovery Act.

6. Memorandum of Agreement

CHAPTER 6. MEMORANDUM OF AGREEMENT**A. Explanation**

The MOA specifies the roles and responsibilities of EPA and the State after approval of the State's program to operate in lieu of the Federal program. The EPA Regional Office (the Region) will discuss the details of particular components with the individual State to tailor the Agreement to the specific needs and aspects of the State program. The MOA is a vehicle for communicating the respective roles of the State and EPA, and clearly spelling out the purpose and limitations of that role.

1. Who Signs.

Generally, the MOA is negotiated between the State Director and the Regional Administrator and is drafted either by the State or the Region. (Each Region may decide this question for itself.) In cases in which two or more State agencies share considerable responsibilities for the functions described in the MOA, the director of the lead agency should sign the MOA with EPA. The lead agency may execute a Memorandum of Understanding (MOU) with the other implementing agencies. The MOA describes the coordination and implementation of those provisions of the MOA that concern more than one State agency. Agreements with local units of government need not be included in the MOA.

2. Federal/State Partnership.

EPA will maintain communication and provide support in order to assist the State in achieving its program objectives. The Regional role in this partnership includes: providing information and guidance regarding the Federal UST regulations; communicating national and Regional priorities; providing information on other successful State programs; and collecting information to

assess the nation's progress in the implementation of the underground storage tank program. EPA must maintain reliable national data on underground storage tanks which will be used to advise the President, the Congress, and the public on the status of the Subtitle I UST program, and to support EPA's regulatory development efforts. EPA will first seek to obtain this data from the States when it decides what information is needed.

Perhaps the most important function described above is to provide technical guidance to the State, including information on alternative and effective UST technologies or corrective action approaches used in other States. The Regions will inform Headquarters of specific State needs as well. Headquarters will assemble this information for use in updating national program policies and priorities.

Approved States have primary responsibility for implementing and enforcing the UST program. They will work with the Regions in determining specific State priorities and goals on an annual basis under the grant negotiation process. The States are responsible for collecting and reporting information regarding the size of their UST population and compliance monitoring data. States also will provide input to the Regions with regard to further development of national program policy and future regulatory development.

3. State Program Appraisal Process.

OUST's program appraisal process has three objectives:

- Identify the levels of performance in key program areas;
- Assist and support States in improving their performance where needed; and
- Disseminate information on successful approaches to other States.

Regional offices, in particular the UST Program Managers, will have the primary responsibility for balancing the service and evaluation functions that are part of this process. They will use reporting information, on-site program reviews, service visits, self appraisals by States and other tools to determine the most pressing needs of the States for improvement and assistance. The Regional UST program staff work with other offices within the Region (for example, Grants, Financial Management, and Regional Counsel) to appraise performance in relevant program areas and to provide technical, legal and other assistance to the States. State visits and reviews by other Regional office staff should be coordinated with UST program reviews whenever possible in order to minimize the disruption of normal program activities in the States. At a minimum, UST Program Managers and the States should know of such visits far enough in advance to allow for adequate preparation by the States.

OUST's program appraisal process recognizes that State programs will be using a variety of approaches to meet the Federal program objectives. Therefore, expectations regarding State performance negotiated under grant workplans and cooperative agreements will be tailored as much as possible to reflect State-specific program implementation strategies. Reporting data on UST system ownership, releases, and clean-up action contributes to a comprehensive picture on the implementation of the UST program. In addition, such data may assist EPA in further rulemaking efforts. The appraisal process will rely on quantitative as well as qualitative assessments. The Regions will negotiate specific reporting requirements with each of their States and incorporate those requirements into the State grant workplans and cooperative agreements.

6. Variances.

State programs using variances may be approved under certain conditions. The objectives laid out in the State Program Approval Rule do not allow approval of State programs with standards less stringent than those at the Federal level. Ground-water area variances (for example, those that allow less stringent release detection in remote or low groundwater table areas) are prohibited, as well as any other variance that affords less stringent protection of human health and the environment. For example, the rule does not allow approval of State programs that allow less stringent requirements (such as less frequent release detection) in ground-water areas that are described or classified as less vulnerable, whether these variances are applied on a case-by-case or class basis.

A State program with a variance procedure may be approved if the State's eligibility criteria and procedures for reviewing site-specific or equivalent technology-type variances requests will result in no less stringent prevention, detection, and responses to releases. The State must not have any provisions in its program that allow less stringent variances to be granted. Furthermore, in the MOA, the State must agree to issue variances only in a manner that is no less stringent than the Federal program in protecting human health and the environment. More discussion of the general subject of variances and EPA's response to public comments on this aspect of the rule can be found in the preamble to the State Program Approval Rule (53 FR 37223).

Although no State program that includes a risk-based variance procedure can be approved (for example, a variance procedure that allows less stringent requirements in "less risky" situations), the Agency did approve the use of technology-based variances, and may approve State programs with such variances. Two examples of technology-based variances may be helpful. First,

a State that allows owners and operators to use an alternative technology (for example, different release detection methods) may be no less stringent if each particular method can be shown to achieve the same level of performance as the methods allowed under the Federal program. The State may identify the approved methods in regulation or the State may decide instead simply to make provisions (in the form of a variance) to allow for the use of alternatives as they are developed in the future and determined by the State to perform as well as the Federally-allowed methods. This variance could allow the use of any particular method in accordance with the conditions that are necessary to ensure that the requisite level of performance of that method is attained.

A second type of variance is the site-specific variance, where the State approves a variance from its regulations for a particular UST system based on site-specific circumstances. An instance in which a State could choose to allow such variances that would be no less stringent, for example, would be cases where the State has determined that the nature of the soil at a particular site or type of site is sufficiently non-corrosive, such that the bare steel tanks or piping at that site will not leak due to corrosion during its operating life. As stated above, the terms of agreement on how variances will be issued by the State must be specified in the MOA.

B. Sample Memorandum of Agreement:

MEMORANDUM OF AGREEMENT

BETWEEN

The State of New Columbia

and

The United States Environmental Protection Agency

Region III

I. GENERAL

This Memorandum of Agreement (hereinafter "Agreement") establishes policies, responsibilities, and procedures pursuant to 40 CFR 281 for the State of New Columbia's Underground Storage Tank Program (hereinafter "State Program") approved under Section 9004 of Subtitle I of the Resource Conservation and Recovery Act (hereinafter "RCRA" or "the Act") of 1976 (Public Law 98-616, USC §6901 et seq.), as amended, and the United States Environmental Protection Agency (hereinafter "EPA") Regional office for Region III. This Agreement further sets forth the manner in which the State and EPA will coordinate in the State's administration of the State program.

This Agreement is entered into by the Director [or other title as appropriate] of [State Agency] (hereinafter "Director" or "the State") and the Regional Administrator, EPA Region III (hereinafter "Regional Administrator" or "EPA"). [Where State program responsibility is shared among two or more agencies, each of the agencies is to be identified here as a party of the Agreement and the Agreement must identify which of the agencies is responsible for each provision of the Agreement.]

For administrative purposes, the [State Agency] will serve as lead agency to simplify coordination and communication between the State and EPA. [This provision need not be included in the MOA where there is only one responsible State agency.]

Nothing in this Agreement shall be construed to restrict in any way EPA's authority to fulfill its oversight and enforcement responsibilities under Subtitle I of RCRA. Nothing in this Agreement shall be construed to contravene any provision of 40 CFR Parts 280 and 281.

The parties will review the Agreement jointly at least once a year. This Agreement may be modified upon the initiative of either party in order to ensure consistency with State program modifications made or for other purposes mutually agreed upon. Any revisions or modifications must be in writing and must be signed by the State and the Regional Administrator.

This Agreement will remain in effect until such time as State program approval is withdrawn by or is voluntarily transferred to EPA according to the criteria and procedures established in 40 CFR Part 281.

This Agreement shall be executed by the State and the Regional Administrator and shall become effective at the time the State's approval takes effect, which shall be the effective date of the approval as specified in the Federal Register notice announcing EPA's final decision to grant approval to the State.

II. POLICY STATEMENT

Each of the parties to this Agreement is responsible for ensuring that its obligations under Subtitle I of RCRA are met. Upon award of [interim] final approval by EPA, the State assumes primary responsibility for implementing the Subtitle I Underground Storage Tank Program within its boundaries. [Insert discussion of deadlines for State to apply for final approval, if appropriate.] EPA retains its responsibility to ensure full and faithful execution of the requirements of Subtitle I of RCRA, including direct implementation in the event the State is unable to act. The State and the Regional Administrator agree to maintain a high level of cooperation and coordination between their respective staffs in a partnership to assure successful and effective administration of the State program.

[Insert discussion on Regional and State roles and responsibilities with regard to partial approved State programs. Provide details on how the petroleum or hazardous substance UST systems will be managed in the approved State.]

EPA assumes a management role upon granting [interim] final approval to the State. EPA will review the State program in order to assist the State in implementing its program, to allow EPA to report to the President, the Congress, and the public on the achievements of the underground storage tank program, and to encourage the State and EPA to agree on desirable technical support and targets for joint efforts to prevent and mitigate environmental problems associated with improper management of underground storage tanks. Management will be accomplished by EPA through written reporting requirements, compliance and enforcement overview, and annual review of the State's program.

III. STATE PROGRAM REVIEW

The Regional Administrator will assess the State administration and enforcement of the underground storage tank program on a continuing basis for stringency with Subtitle I requirements, with this Agreement, and with all applicable Federal requirements and policies and for adequacy of enforcement. This assessment will be accomplished by EPA review of information submitted by the State in accordance with this Agreement and annual review of State program activities. The Regional Administrator may also consider, as part of this regular assessment, written comments about the State's program administration and enforcement that are received from regulated persons, the public, and Federal, State, and local agencies. Copies of any such comments received by the Regional Administrator will be provided to the State.

To ensure effective program review, the State agrees to allow EPA access to all files and other information requested by the Regional Administrator and deemed necessary for reviewing State program administration and enforcement.

Review of [State agency] files may be scheduled at quarterly intervals. Program review meetings between the State and the Regional Administrator or their assignees will be scheduled at reasonable intervals not less than annually to review specific operating procedures and schedules, to resolve problems and to discuss mutual program concerns. These meetings will be scheduled at least 15 days in advance unless agreed to differently. A tentative agenda for the meeting will be prepared by EPA.

IV. INFORMATION SHARING

A. General

As the national underground storage tank program matures, the respective roles and responsibilities in this State/Federal partnership will become more clear. As the respective information needs of the State and EPA evolve, changes to this section of the Agreement may be appropriate. During the annual review of this agreement, the State and Regional Administrator will carefully examine the following information sharing provisions for necessary revisions.

B. EPA

1. EPA will keep the State informed of the content and meaning of Federal statutes, regulations, guidelines, standards, policy decisions, directives, and any other factors that affect the State program. EPA will also provide general technical guidance to the State. EPA will share with the States any national reports developed by EPA from the data submitted through State reporting requirements.
2. EPA will make available to the State other relevant information as requested that the State needs to implement its approved program.

C. State

1. The State agrees to inform the Regional Administrator of any proposed or adopted program changes that would affect the State's ability to implement the approved program. Program changes of concern include

modification of the State's legal authorities (for example, statutes, regulations, and judicial or legislative actions affecting those authorities), modifications of memoranda of agreement or understanding with other agencies, and modifications of resource levels (for example, available or budgeted personnel and funds). The State recognizes that program revisions must be made in accordance with the provisions of 40 CFR Part 281.

2. The State will provide compliance monitoring and enforcement information to the Regional Administrator, as specified in the annual grant guidance, on a quarterly basis. The State agrees to provide EPA with copies of reports on data resulting from any compliance inspection and subsequent enforcement actions, if EPA requests such copies.

D. National Data

EPA is responsible for maintaining reliable national data on underground storage tanks. This data is used to report to the President, the Congress, and the public on the achievements of the underground storage tank program and to support EPA's regulatory development efforts. Whenever EPA determines that it needs to obtain certain information, EPA will first seek to obtain this information from the States. The State agrees to supply the Regional Administrator with this information if readily available and as resources allow. If the State is unable to provide the information or if it is

necessary to supplement the State information, EPA may conduct a special survey or perform information collection site visits after notifying the State. EPA will share with the State any national reports developed by EPA as a result of such information collection.

E. Confidentiality

Any information obtained or used in the administration of the State program shall be available to EPA upon request without restriction. If the information has been submitted to the State under a claim of confidentiality, the State must submit that claim to EPA when providing the information. Any information obtained from a State and subject to a claim of confidentiality will be treated in accordance with the regulations in 40 CFR Part 2.

V. COMPLIANCE MONITORING AND ENFORCEMENT

A. EPA

Nothing in this agreement shall restrict EPA's right to inspect any underground storage tank facility or bring enforcement action against any person believed to be in violation of the approved State underground storage tank program. Before conducting an inspection of a facility, the Regional Administrator will normally give the State at least 7 days notice of the intent to inspect. [The Regional Administrator and State may agree on a longer period of time in order to allow the State the opportunity to conduct the inspection.] If the State performs a compliance inspection and submits a report and relevant data thereto within that time to EPA, no EPA inspection will be made, unless the Regional Administrator deems the State report and data to be inadequate. In case of an imminent hazard to human health or the

environment, the Regional Administrator may shorten or waive the notice period.

The Regional Administrator may take enforcement action against any person determined to be in violation of Subtitle I of RCRA in accordance with section 9006. EPA also retains its right to issue orders and bring actions under Section 9003(h) or 9006 of Subtitle I of RCRA and any other applicable Federal statute. With regard to Federal enforcement, it is EPA's policy not to take such action where a State has taken appropriate enforcement action. Before issuing a compliance order under Section 9006, EPA will give notice to the State.

B. State

The State agrees to carry out an effective program for monitoring the compliance by owners and operators of facilities with applicable program requirements. As part of this program, the State will conduct compliance inspections and use other mechanisms to assess compliance with underground storage tank standards, compliance schedules, and all other program requirements.

The State agrees to develop an appropriate enforcement response against all persons in violation of underground storage tank standards (including notification requirements), compliance schedules, and all other program requirements, including violations detected by State compliance inspections. The State will maintain procedures for receiving and ensuring proper consideration of information about violations submitted by the public.

The State agrees to retain all records for at least 3 years unless there is an enforcement action pending. In that case all records will be retained until such action is resolved.

STATE OF _____

U.S. ENVIRONMENTAL PROTECTION AGENCY

AGENCY _____

REGION _____

BY: _____

BY: _____

DATE: _____

DATE: _____

7. Program Description

CHAPTER 7. PROGRAM DESCRIPTION**A. Introduction**

This section of the application describes the scope and organization of the State UST program and the resources that are available to run it. This information is needed to enhance the Agency's and the public's understanding of the State program, and to ensure that a basic program exists. EPA expects that the information requested in these questions will rarely be used as grounds for program approval or disapproval.

The questions covered in the Program Description are grouped into five major categories: general information; program scope; program organization and structure; resource information; and State funds for financial responsibility. The first two sections request information regarding the range of the State's jurisdiction over USTs and whether the State program is a "partial" or "complete" program. For example, a State may regulate an UST universe that is broader in scope than the Federal program. (Program scope is also covered in Chapter 4 on the Attorney General's Statement.) These questions also inquire about the extent of the State's authority to regulate Indian lands.

The third category in the Program Description asks for information regarding the organization and structure of any State and local implementing agencies administering the UST program within a State. A State should identify the major jurisdictional responsibilities, program operation roles, and lines of communication and authority of these implementing agencies. It should also provide an organizational chart depicting the role and responsibility of each State agency that is involved in UST implementation.

The fourth and fifth sections of the Program Description ask the State to describe its staff and funding resources with any existing restrictions on the utilization of either. In addition, the State should provide estimates of various administrative and implementation costs involved in running a State UST program. Some of these questions also request information regarding a State fund that may be used to help owners and operators to implement the financial responsibility requirements.

The purpose of the Program Description is two-fold. First, the information provided by the State in these sections will enhance EPA's and the general public's understanding and knowledge of the content and structure of that particular program. The overall success of a nationwide UST program depends heavily on the sharing of such information among States in order that they may draw from one another's experiences in developing and improving their own programs.

Second, EPA can use this information as a yardstick by which to measure the nature and scope of future improvements made in State UST programs. The data that the States provide in their Program Descriptions will describe an initial "baseline" UST program that the Agency can compare with future programs.

B. Local Implementation

Although EPA gives States the primary responsibility to implement and enforce their UST programs, the Agency strongly encourages States to involve local agencies in this process. If a State chooses to involve local agencies in the implementation of its UST program, it may do so in one of two possible ways.

First, a State may request assistance from local agencies and allow them to conduct activities under State authorities and requirements. In such instances, States are not required to provide detailed discussion of local agency implementation assistance in their applications. If the State program has already been approved, the State can inform the EPA Regional Office of the nature of the local involvement in its implementation and enforcement programs. In summary, if local implementation activities supplement State activities but do not replace State authorities and requirements, no formal approval is required by EPA.

Second, a State develops an approvable program. Within the context of an approvable program, the State may also permit local governments to develop their own authorities and procedures as long as those requirements are no less stringent than the approved State program. In this case, the State agency retains the ultimate responsibility for ensuring that the UST program implemented in the State is no less stringent in all areas of the Federal program and provides for adequate enforcement. In this example, EPA interacts with the State agency regarding its approved program. It is the State's responsibility to interact with local governments.

Chapter 2 of this Handbook provides additional discussion of the program revision process, as does the preamble to the State Program Approval Rule (53 FR 37329).

C. Program Description Questions

1. General Questions.

a. Questions

1. Type of approval requested:

- a. Final _____ or Interim _____.

b. Explanation

By "UST universe", EPA means all of the categories or types of UST systems including those not currently regulated under Subtitle I. The USTs regulated under Subtitle I are a subset of the tanks in the UST universe. What tanks are included in this subset, or the "scope" of the Federal UST program, is defined by those tanks that are excluded from the program by statute or through EPA regulations. In other words, if the type of tank in question is not listed as one of those that is excluded, then it is within the jurisdiction of the Federal program. Although deferred tanks are within the jurisdiction of the Federal program, they are subject only to the requirements of Subparts A (interim prohibition) and F (corrective action) of the Federal Technical Standards. Exhibit 1 lists those UST systems that are outside the scope of the Federal UST program.

In the program description, the State must describe the scope of the State UST program and provide the information requested on the estimated size of the universe. This information does not duplicate the program scope section required in the Attorney General's Statement. The Attorney General certifies that the State has authority to regulate those tanks within the scope of the State program and that it includes all those tanks regulated under the Federal program. The program description provides a more useful description of what the scope of the State program is in terms of its size and categories of tanks.

In the program description, States must also identify those areas where their UST programs are broader in scope than the Federal program. For example, a State's statutes and laws may cover a larger regulated UST community (for example, heating oil tanks) than is addressed by the Federal program, and should be clearly identified in response to Question 4.

EXHIBIT 1

UST Systems Outside the Scope of the Federal UST Universe

Exclusions

Excluded by Congress through the definition of UST

farm USTs < 1100 gallons

heating oil USTs

septic tank systems

pipelines

impoundments, pits, ponds, and lagoons

stormwater and wastewater collection systems

flow-thru process tanks

oil and gas production facilities

USTs in underground areas

Excluded by EPA through applicability section 281.10(b)

hazardous waste USTs

wastewater treatment tanks under the Clean Water Act

equipment and machinery tanks

USTs < 110 gallons

de minimus concentration USTs

emergency overflow USTs

Deferrals

Only Interim Prohibition and Corrective Action Standards Apply

waste water treatment tanks not under the Clean Water Act

radioactive material USTs

emergency generator USTs at nuclear power plants

airport hydrant fuel systems

field-constructed USTs

Release Detection Standards are Deferred,

All Other Standards Apply

emergency generator USTs

3. Organization and Structure of Program.

a. Questions

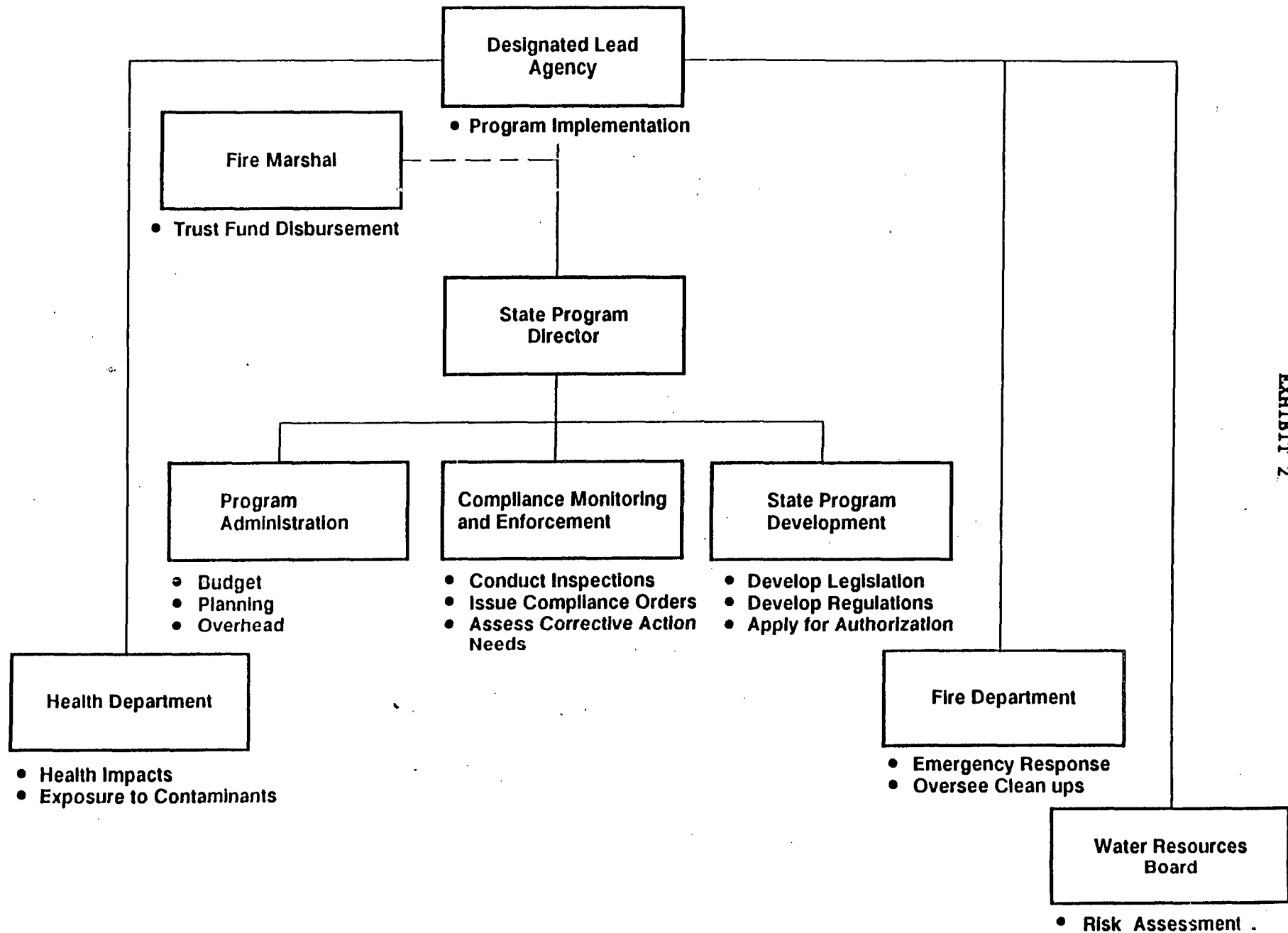
4. Indicate the lead agency for facilitating communications between EPA and the State. If there is a separate agency for coordinating Trust Fund activities, indicate that here also.
5. Include a simple chart that describes the organizational structure of the complete State underground storage tank program, including all implementing agencies.
6. Describe the procedures for coordinating the State implementing agencies.

b. Explanation

The program description should include an explanation of the organization and structure of the State agencies with responsibility for administering the program. The jurisdiction and responsibilities of State implementing agencies should be delineated, appropriate procedures for coordination set forth, and one State agency designated as a "lead agency" to facilitate communications between EPA and the State. The identification of the lead agency is intended to simplify coordination and communication between the State and EPA. The "lead agency" will be the agency that other State agencies and EPA contact when an issue concerns one or more State agencies or when it is unclear which State agency should be contacted concerning a particular issue.

The organizational structure chart (see sample in Exhibit 2) should include each agency involved in the implementation of the State UST program, and describe the relationship and overall responsibilities of each State and local agency that is involved in UST implementation. For example, if the State UST program relies heavily on local programs, the State should include a description of those organizations in questions 5 and 6.

Sample State UST Program Organization



All of the information requested in this section will be used to inform the public about the State underground storage tank program. In addition, this information will assist EPA in working with the States to implement their UST programs.

4. Resource Information.

a. Questions

7. For each State implementing agency with responsibilities for developing, regulating, enforcing, or administering the underground storage tank program, please estimate the total dollar budget and number of staff assigned to the underground storage tank program.
8. Please provide an estimate of the administrative and implementation costs of the State's underground storage tank program on an annual basis.
9. Indicate current Federal, State and local funding sources, with approximate amounts for each. Please explain any restrictions or limitations regarding these funding sources.

b. Explanation

If a State is formally delegating authority to local agencies, the State should include information on local resources, staffing, and budget in the program description. States should note that local resource estimates are not required as a condition of approval. However, if the State uses local agencies to help implement its program and feels that a description of those agencies is necessary for a complete understanding of the entire UST program organization, the State may include information regarding local government participation in response to Questions 7, 8, and 9. The resource estimates provided in response to the questions in this section will not be judged with any upper or lower bounds for approval or disapproval. EPA merely wants to ensure that some funding and staffing plans exist.

/

Implementation costs are the direct costs incurred in developing and implementing State programs. Some examples include the cost of conducting inspections, writing field citations, issuing permits, reviewing tank test results, working with the State legislature, preparing program approval applications, and similar activities. Administrative costs, on the other hand, include indirect program expenses such as the following examples: developing a budget, providing clerical support, negotiating State grants and cooperative agreements, testifying to State legislatures on program accomplishments, maintaining supplies, etc.

5. State Funds for Financial Responsibility.

a. Questions

10. What amount of capital does the fund currently have? What are the sources of money for the fund (for example, registration fees, general appropriations, petroleum taxes)?
11. Does the fund cover corrective action costs? If so, in what amounts? Does the fund cover third-party compensation costs? If so, in what amounts?
12. Does the fund pay for costs first and then seek reimbursement? If the fund guarantees to reimburse owners and operators, can the fund pay for costs if the necessary actions are not taken (for example, the owner or operator is unwilling or unable to pay)?
13. What class of UST systems does the fund cover (for example, all UST systems in the State, only those UST systems that have paid registration fees, only UST systems in a particular industry)?

b. Explanation

This section of the program description includes questions regarding a State fund that may be used to help owners and operators meet the financial responsibility requirements. State funds are not necessary elements of a State UST program. If a State does not have a State fund to fulfill the financial responsibility objective, then this section should be disregarded.

The above summary on the State fund is useful for both EPA and the public in understanding the State program. Funds will be reviewed as part of the State Program Approval Application to determine if the fund is no less stringent than the Federal financial responsibility objective.

8. Appendices

APPENDIX A

Sample Application
for Approval of State Underground Storage Tank Program

GOVERNOR'S LETTER AND ATTORNEY GENERAL'S STATEMENT

[Insert Governor's letter and the Attorney General's certification here in that order.]

NEW UST SYSTEMS AND NOTIFICATION

OBJECTIVE § 281.30

The State must have requirements that ensure that all new UST systems conform with the following:

Cite
Regulation Statute

- (a) Be designed, constructed, and installed in a manner that will prevent releases for their operating life due to manufacturing defects, structural failure, or corrosion. [Note: Codes of practice developed by nationally-recognized organizations may be used to demonstrate that the State program requirements are no less stringent in this area.]
- (b) Be provided with equipment to prevent spills and tank overfills when new tanks are installed or existing tanks are upgraded, unless the tank does not receive more than 25 gallons at one time.
- (c) All UST system owners and operators must notify the implementing State agency of the existence of any new UST system using a form designated by the State agency.

Please put explanations of how State requirements meet this objective on a separate page.

UPGRADING EXISTING UST SYSTEMS

OBJECTIVE § 281.31

<p>The State must have requirements that ensure existing UST systems will be replaced or upgraded before December 22, 1998, to prevent releases for their operating life due to corrosion, and spills or overfills.</p>	<table><thead><tr><th data-bbox="1092 383 1310 446">Cite Regulation</th><th data-bbox="1310 383 1481 446">Statute</th></tr></thead><tbody></tbody></table>	Cite Regulation	Statute
Cite Regulation	Statute		

Please put explanations of how State requirements meet this objective on a separate page.

GENERAL OPERATING REQUIREMENTS

OBJECTIVE § 281.32

The State must have requirements that ensure all new and existing UST systems conform to the following:	Cite Regulation Statute
(a) Prevent spills and overfills by ensuring that the space in the tank is sufficient to receive the volume to be transferred and that the transfer operation is monitored constantly;	
(b) Where equipped with cathodic protection, be operated and maintained by a person with sufficient training and experience in preventing corrosion, and in a manner that ensures that no releases occur during the operating life of the UST system [Note: Codes of practice developed by nationally-recognized organizations and national independent testing laboratories may be used to demonstrate the State program requirements are no less stringent.];	
(c) Be made of or lined with materials that are compatible with the substance stored;	
(d) At the time of upgrade or repair, be structurally sound and upgraded or repaired in a manner that will prevent releases due to structural failure or corrosion during their operating lives;	
(e) Have records of monitoring, testing, repairs, and closure maintained that are sufficient to demonstrate recent facility compliance status, except that records demonstrating compliance with repair and upgrading requirements must be maintained for the remaining operating life of the facility. These records must be made readily available when requested by the implementing agency.	

Please put explanations of how State requirements meet this objective on a separate page.

RELEASE DETECTION

OBJECTIVE § 281.33

- | | | Cite |
|-----|---|-----------------------|
| | | Regulation Statute |
| (a) | Release detection requirements for owners and operators must consist of a method, or combination of methods, that is: | |
| (1) | capable of detecting a release of the regulated substance from any portion of the UST system that routinely contains regulated substances -- as effectively as any of the methods allowed under the Federal Technical Standards -- for as long as the UST system is in operation. In comparing methods, the implementing agency shall consider the size of release that the method can detect and the speed and reliability with which the release can be detected. | |
| (2) | designed, installed, calibrated, operated and maintained so that releases will be detected in accordance with the capabilities of the method; | |
| (b) | Release detection requirements must, at a minimum, be scheduled to be applied at all UST systems: | |
| (1) | immediately when a new UST system is installed: | |
| (2) | on an orderly schedule that completes a phase-in of release detection at all existing UST systems (or their closure) before December 22, 1993, except that release detection for the piping attached to any existing UST that conveys a regulated substance under greater than atmospheric pressure must be phased-in before December 22, 1990. | |

RELEASE DETECTION (CONTINUED)

OBJECTIVE § 281.33

- | | Cite |
|---|--------------------|
| | Regulation Statute |
| (c) All petroleum tanks must be sampled, tested, or checked for releases at least monthly, except that: | |
| (1) new or upgraded tanks (that is, tanks and piping protected from releases due to corrosion and equipped with both spill and overfill prevention devices) may temporarily use monthly inventory control (or its equivalent) in combination with tightness testing (or its equivalent) conducted every 5 years for the first 10 years after the tank is installed or upgraded, or until December 22, 1998, whichever is later; and | |
| (2) existing tanks unprotected from releases due to corrosion or without spill and overfill prevention devices may use monthly inventory control (or its equivalent) in combination with annual tightness testing (or its equivalent) until December 22, 1998. | |
| (d) All underground piping attached to the tank that routinely conveys petroleum must conform to the following: | |
| (1) if the petroleum is conveyed under greater than atmospheric pressure: | |
| (i) the piping must be equipped with release detection that detects a release within an hour by restricting or shutting off flow or sounding an alarm; and | |
| (ii) the piping must have monthly monitoring applied or annual tightness tests conducted. | |
| (2) if suction lines are used: | |
| (i) tightness tests must be conducted at least once every 3 years, unless a monthly method of detection is applied to this piping; or | |

RELEASE DETECTION

(CONTINUED)

OBJECTIVE § 281.33

	Cite Regulation Statute
(ii) the piping is designed to allow the contents of the pipe to drain back into the storage tank if the suction is released and is also designed to allow an inspector to immediately determine the integrity of the piping system.	
(e) All UST systems storing hazardous substances must meet the following:	
(1) all existing hazardous substance UST systems must comply with all the requirements for petroleum UST systems in sections 281.33(c) and (d) above, and after December 22, 1998, they must comply with the following subsection (e)(2).	
(2) all new hazardous substance UST systems must use interstitial monitoring within secondary containment of the tanks and the attached underground piping that conveys the regulated substance stored in the tank, unless the owner and operator can demonstrate to the State (or the State otherwise determines) that another method will detect a release of the regulated substance as effectively as other methods allowed under the State program for petroleum UST systems and that effective corrective action technology is available for the hazardous substance being stored that can be used to protect human health and the environment.	

Please put explanations of how State requirements meet this objective on a separate page.

RELEASE REPORTING, INVESTIGATION, AND CONFIRMATION

OBJECTIVE § 281.34

All owners and operators must conform with
the following:

Cite
Regulation Statute

- (a) Promptly investigate all suspected releases,
including:
 - (1) when unusual operating conditions,
release detection signals and environ-
mental conditions at the site suggest
a release of regulated substances may
have occurred; and
 - (2) when required by the implementing agency
to determine the source of a release
having an impact in the surrounding
area; and
- (b) Promptly report all confirmed underground
releases and any spills and overfills
that are not contained and cleaned up.
- (c) Ensure that all owners and operators contain
and clean up unreported spills and overfills
in a manner that will protect human health
and the environment.

Please put explanations of how State requirements
meet this objective on a separate page.

RELEASE RESPONSE AND CORRECTIVE ACTION

OBJECTIVE § 281.35

The State must have requirements that ensure:	Cite	
	Regulation	Statute
(a) All releases from UST systems are promptly assessed and further releases are stopped;		
(b) Actions are taken to identify, contain and mitigate any immediate health and safety threats that are posed by a release (such activities include investigation and initiation of free product removal, if present);		
(c) All releases from UST systems are investigated to determine if there are impacts on soil and ground water, and any nearby surface waters. The extent of soil and ground-water contamination must be delineated when a potential threat to human health and the environment exists.		
(d) All releases from UST systems are cleaned up through soil and ground water remediation and any other steps, as necessary to protect human health and the environment;		
(e) Adequate information is made available to the State to demonstrate that corrective actions are taken in accordance with the requirements of (a) through (d) of this section. This information must be submitted in a timely manner that demonstrates its technical adequacy to protect human health and the environment; and		
(f) In accordance with section 280.67, the State must notify the affected public of all confirmed releases requiring a plan for soil and ground water remediation, and upon request provide or make available information to inform the interested public of the nature of the release and the corrective measures planned or taken.		

Please put explanations of how State requirements meet this objective on a separate page.

OUT-OF-SERVICE UST SYSTEMS AND CLOSURE

OBJECTIVE § 281.36

The State must have requirements that ensure UST systems conform with the following:

Cite
Regulation Statute

- (a) All new and existing UST systems temporarily closed must:
- (1) continue to comply with general operating requirements, release reporting and investigation, and release response and corrective action;
 - (2) continue to comply with release detection requirements if regulated substances are stored in the tank;
 - (3) be closed off to outside access; and
 - (4) be permanently closed if the UST system has not been protected from corrosion and has not been used in one year, unless the State approves an extension after the owner and operator conducts a site assessment.
- (b) All tanks and piping must be cleaned and permanently closed in a manner that eliminates the potential for safety hazards and future releases.

The owner or operator must notify the State of permanent UST system closures.

The site must also be assessed to determine if there are any present or were past releases, and if so, release response and corrective action requirements must be complied with.

- (c) All UST systems taken out of service before December 22, 1988, must permanently close, in accordance with paragraph (b) of this section when directed by the State.

Please put explanations of how State requirements meet this objective on a separate page.

FINANCIAL RESPONSIBILITY FOR USTs CONTAINING PETROLEUM

OBJECTIVE § 281.37

- | | Cite |
|--|-------------------------|
| | Regulation Statute |
| (a) State requirements for financial responsibility must ensure that: | |
| (1) owners and operators have \$1 million per occurrence for corrective action and third-party claims in a timely manner to protect human health and the environment; | |
| (2) owners and operators not engaged in petroleum production, refining, and marketing and who handle a throughput of 10,000 gallons of petroleum per month or less have \$500,000 per occurrence for corrective action and third-party claims in a timely manner to protect human health and the environment; | |
| (3) owners and operators of 1 to 100 petroleum USTs must have an annual aggregate of \$1 million; and | |
| (4) owners and operators of 101 or more petroleum USTs must have an annual aggregate of \$2 million. | |
| (b) Phase-in requirements. Financial responsibility requirements for petroleum UST systems must, at a minimum, be scheduled to be applied to all UST systems on an orderly schedule that completes a phase-in of the financial responsibility requirements within 18 months (see Note 2, page 72) after the effective date of the Federal regulations. | |

FINANCIAL RESPONSIBILITY FOR USTs CONTAINING PETROLEUM (CONTINUED)

OBJECTIVE § 281.37

	Cite Regulation	Statute
(c) States may allow the use of a wide variety of financial assurance mechanisms to meet this requirement. Each financial mechanism must meet the following criteria: be valid and enforceable; be issued by a provider that is qualified or licensed in the State; not permit cancellation without allowing the State to draw funds; ensure that funds will only and directly be used for corrective action and third-party liability costs; and require that the provider notify the owner or operator of any circumstance that would impair or suspend coverage.		
(d) States must require owners and operators to maintain records and demonstrate compliance with the State financial responsibility requirements, and these records must be made readily available when requested by the implementing agency.		

Please put explanations of how State requirements meet this objective on a separate page.

PROGRAM SCOPE

[Insert Program Scope discussion here.]

LEGAL AUTHORITIES FOR COMPLIANCE MONITORING

(§ 281.40)

The State must have the following specific compliance monitoring authorities:	Cite Regulation Statute
(a) Any authorized representative of the State engaged in compliance inspections, monitoring, and testing must have authority to obtain by request any information from an owner or operator with respect to the UST system(s) that is necessary to determine compliance with the regulations.	
(b) Any authorized representative of the State must have authority to require an owner or operator to conduct monitoring or testing.	
(c) Authorized representatives must have the authority to enter any site or premises subject to UST system regulations or in which records relevant to the operation of the UST system(s) are kept, and to copy these records, obtain samples of regulated substances, and inspect or conduct the monitoring or testing of UST system(s).	

Please put explanations of how State authorities meet these requirements on a separate sheet of paper.

LEGAL AUTHORITIES FOR ENFORCEMENT RESPONSE

(§ 281.41)

The State must have the following specific enforcement response authorities for State program approval:

Cite
Regulation Statute

- (a) Any State agency administering a program must have the authority to implement the following remedies for violations of State program requirements:
- (1) To restrain immediately and effectively any person by order or by suit in State court from engaging in any unauthorized activity that is endangering or causing damage to public health or the environment;
 - (2) To sue in courts of competent jurisdiction to enjoin any threatened or continuing violation of any program requirement;
 - (3) To assess or sue to recover in court civil penalties as follows:
 - (i) Civil penalties for failure to notify or for submitting false information pursuant to tank notification requirements must be capable of being assessed up to \$5,000 or more per violation.
 - (ii) Civil penalties for failure to comply with any State requirements or standards for existing or new tank systems must be capable of being assessed for each instance of violation, up to \$5,000 or more for each tank for each day of violation. If the violation is continuous, civil penalties shall be capable of being assessed up to \$5,000 or more for each day of violation.

Please put explanations of how State authorities meet these requirements on a separate sheet of paper.

PUBLIC PARTICIPATION IN ENFORCEMENT PROCEEDINGS

(§ 281.42)

Any State administering a program must provide for public participation in the State enforcement process by providing any one of the following three options:	Cite Regulation Statute
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- (a) Authority that allows intervention analogous to Federal Rule 24(a)(2), and assurance by the appropriate State enforcement agency that it will not oppose intervention under the State analogue to Rule 24(a)(2) on the ground that the applicant's interest is adequately represented by the State.
- (b) Authority that allows intervention as of right in any civil action to obtain the remedies specified in 281.41 by any citizen having an interest that is or may be adversely affected; or
- (c) Assurance by the appropriate State agency that:
 - (1) It will provide notice and opportunity for public comment on all proposed settlements of civil enforcement actions (except where immediate action is necessary to adequately protect human health and the environment);
 - (2) It will investigate and provide responses to citizen complaints about violations; and
 - (3) It will not oppose citizen intervention when permissive intervention is allowed by statute, rule, or regulation.

Please put explanations of how State authorities meet these requirements on a separate sheet of paper.

DEMONSTRATION OF PROCEDURES FOR ADEQUATE ENFORCEMENT**I. COMPLIANCE MONITORING****A. Purpose**

The implementing agency must have compliance monitoring procedures for collecting and maintaining data on violators and monitoring their and the rest of the regulated community's compliance status over time. Specifically, States must develop procedures in each of the following four areas: record review; inspections; public reporting; and data maintenance.

B. Explanation

II. ENFORCEMENT RESPONSE**A. Purpose**

The implementing agency must have procedures to exercise legal enforcement authorities against violators, bring them into compliance, and deter other potential violators.

B. Explanation

PROGRAM DESCRIPTION

General

1. Type of approval requested:

(check one)

Interim _____

Final _____

(check one)

Complete _____

Partial (Petroleum) _____

Partial (Hazardous Substances) _____

2. Does the State have any existing agreements with Indian tribes? If so, attach agreements and briefly describe.

Program Scope

3. Describe the UST universe covered by the State program. Include the estimated number of petroleum UST systems, hazardous substance UST systems, and any other information affecting the State's regulation of this universe..

Organization and Structure of State Program

4. Indicate the lead agency for facilitating communications between EPA and the State. If there is a separate agency for coordinating Trust Fund activities, indicate that here also.
5. Include a simple chart that describes the organizational structure of the complete State underground storage tank program, including all implementing agencies.

6. Describe the procedures for coordinating the State implementing agencies.

Resource Information

7. For each State implementing agency with responsibilities for developing, regulating, enforcing, or administering the underground storage tank program, please estimate the total dollar budget and number of staff assigned to the underground storage tank program.

8. Please provide an estimate of the administrative and implementation costs of the State's underground storage tank program on an annual basis.
9. Indicate current Federal, State, and local funding sources, with approximate amounts for each. Please explain any restrictions or limitations regarding these funding sources.

State Funds for Financial Responsibility

10. What amount of capital does the fund currently have? What are the sources of money for the fund (for example, registration fees, general appropriations, petroleum taxes)?
11. Does the fund cover corrective action costs? If so, in what amounts? Does the fund cover third-party compensation costs? If so, in what amounts?

12. Does the fund pay for costs first and then seek reimbursement? If the fund guarantees to reimburse owners and operators, can the fund pay for costs if the necessary actions are not taken (for example, the owner or operator is unwilling or unable to pay)?
13. What class of UST systems does the fund cover (for example, all UST systems in the State, only those UST systems that have paid registration fees, only UST systems in a particular industry)?

APPENDIX B

Federal Subtitle I Program

B-1

OSWER Directive 9650.8

RCRA Subtitle I

"Subtitle I—Regulation of Underground Storage Tanks

[Subtitle I, Sections 9001 through 9010 added by PL 98-616]

"DEFINITIONS AND EXEMPTIONS

"Sec. 9001. For the purposes of this subtitle—

"(1) The term 'underground storage tank' means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 per centum or more beneath the surface of the ground. Such term does not include any—

"(A) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.

"(B) tank used for storing heating oil for consumptive use on the premises where stored.

"(C) septic tank.

"(D) pipeline facility (including gathering lines) regulated under—

"(i) the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1571, et seq.),

"(ii) the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or

"(iii) which is an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in clause (i) or (ii) of this subparagraph.

"(E) surface impoundment, pit, pond, or lagoon.

"(F) storm water or waste water collection system.

"(G) flow-through process tank.

"(H) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations, or

"(I) storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term 'underground storage tank' shall not include any pipes connected to any tank which is described in subparagraphs (A) through (I).

"(2) The term 'regulated substance' means—

"(A) any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under subtitle C), and

"(B) petroleum.

[9001(2)(B) revised by PL 99-499]

"(3) The term 'owner' means—

"(A) in the case of an underground storage tank in use on the date of enactment of the Hazardous and Solid Waste Amendments of 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and

"(B) in the case of any underground storage tank in use before the date of enactment of the Hazardous and Solid Waste Amendments of 1984, but no longer in use on the date of enactment of such Amendments, any person who owned such tank immediately before the discontinuation of its use.

"(4) The term 'operator' means any person in control of, or having responsibility for, the daily operation of the underground storage tank.

"(5) The term 'release' means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into ground water, surface water or subsurface soils.

"(6) The term 'person' has the same meaning as provided in section 1004(15), except that such term includes a consortium, a

joint venture, and a commercial entity, and the United States Government.

"(7) The term 'nonoperational storage tank' means any underground storage tank in which regulated substances will not be deposited or from which regulated substances will not be dispensed after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984.

"(8) The term 'petroleum' means petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

[9001(8) added by PL 99-499]

"NOTIFICATION

"Sec. 9002. (a) UNDERGROUND STORAGE TANKS.—(1) Within 18 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, each owner of an underground storage tank shall notify the State or local agency or department designated pursuant to subsection (b)(1) of the existence of such tank, specifying the age, size, type, location, and uses of such tank.

"(2)(A) For each underground storage tank taken out of operation after January 1, 1974, the owner of such tank shall, within eighteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, notify the State or local agency, or department designated pursuant to subsection (b)(1) of the existence of such tanks (unless the owner knows the tank subsequently was removed from the ground). The owner of a tank taken out of operation on or before January 1, 1974, shall not be required to notify the State or local agency under this subsection.

"(B) Notice under subparagraph (A) shall specify, to the extent known to the owner—

"(i) the date the tank was taken out of operation.

"(ii) the age of the tank on the date taken out of operation.

"(iii) the size, type and location of the tank, and

"(iv) the type and quantity of substances left stored in such tank on the date taken out of operation.

"(3) Any owner which brings into use an underground storage tank after the initial notification period specified under paragraph (1), shall notify the designated State or local agency or department within thirty days of the existence of such tank, specifying the age, size, type, location and uses of such tank.

"(4) Paragraphs (1) through (3) of this subsection shall not apply to tanks for which notice was given pursuant to section 106(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

"(5) Beginning thirty days after the Administrator prescribes the form of notice pursuant to subsection (b)(2) and for eighteen months thereafter, any person who deposits regulated substances in an underground storage tank shall reasonably notify the owner or operator of such tank of the owner's notification requirements pursuant to this subsection.

"(6) Beginning thirty days after the Administrator issues new tank performance standards pursuant to section 9008e of this subtitle, any person who sells a tank intended to be used as an underground storage tank shall notify the purchaser of such tank of the owner's notification requirements pursuant to this subsection.

"(b) AGENCY DESIGNATION.—(1) Within one hundred and eighty days after the enactment of the Hazardous and Solid Waste Amendments of 1984, the Governors of each State shall designate the appropriate State agency or department or local agencies or departments to receive the notifications under subsection (a)(1), (2), or (3).

"(2) Within twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator, in consultation with State and local officials designated pursuant to subsection (b)(1), and after notice and opportunity for public comment, shall prescribe the form of the notice and the information to be included in the notifications under subsection (a)(1), (2), or (3). In prescribing the form of such notice, the Administrator shall take

into account the effect on small businesses and other owners and operators.

"(c) State Inventories. — Each State shall make 2 separate inventories of all underground storage tanks in such State containing regulated substances. One inventory shall be made with respect to petroleum and one with respect to other regulated substances. In making such inventories, the State shall utilize and aggregate the data in the notification forms submitted pursuant to subsections (a) and (b) of this section. Each State shall submit such aggregated data to the Administrator not later than 270 days after the enactment of the Superfund Amendments and Reauthorization Act of 1986.

[9002(c) added by PL 99-499]

"RELEASE DETECTION, PREVENTION, AND CORRECTION REGULATIONS

"SEC. 9003. (a) REGULATIONS.—The Administrator, after notice and opportunity for public comment, and at least three months before the effective dates specified in subsection (f), shall promulgate release detection, prevention, and correction regulations applicable to all owners and operators of underground storage tanks, as may be necessary to protect human health and the environment.

"(b) DISTINCTIONS IN REGULATIONS.—In promulgating regulations under this section, the Administrator may distinguish between types, classes, and ages of underground storage tanks. In making such distinctions, the Administrator may take into consideration factors, including, but not limited to: location of the tanks, soil and climate conditions, uses of the tanks, history of maintenance, age of the tanks, current industry recommended practices, national consensus codes, hydrogeology, water table, size of the tanks, quantity or regulated substances periodically deposited in or dispensed from the tank, the technical capability of the owners and operators, and the compatibility of the regulated substance and the materials of which the tank is fabricated.

"(c) REQUIREMENTS.—The regulations promulgated pursuant to this section shall include, but need not be limited to, the following requirements respecting all underground storage tanks—

"(1) requirements for maintaining a leak detection system, an inventory control system together with tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment;

"(2) requirements for maintaining records of any monitoring or leak detection system or inventory control system or tank testing or comparable system;

"(3) requirements for reporting of releases and corrective action taken in response to a release from an underground storage tank;

"(4) requirements for taking corrective action in response to a release from an underground storage tank;

[9003(c)(4) and (5) amended by PL 99-499]

"(5) requirements for the closure of tanks to prevent future releases of regulated substances into the environment; and

"(6) requirements for maintaining evidence of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank.

[9003(c)(6) added by PL 99-499]

"(d) FINANCIAL RESPONSIBILITY.—

"(1) Financial responsibility required by this subsection may be established in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, qualification as a self-insurer or any other method satisfactory to the Administrator. In promulgating requirements under this subsection, the Administrator is authorized to specify policy or other contractual terms, conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this subtitle.

[Former 9003(d)(2) amended and redesignated as (1) by PL 99-499]

"(2) In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where with reasonable diligence jurisdiction in any State court of the Federal Courts cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this subsection may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this paragraph such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

"(3) The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this section. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law.

"(4) For the purpose of this subsection, the term 'guarantor' means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this subsection.

"(5)(A) The Administrator, in promulgating financial responsibility regulations under this section, may estab-

lish an amount of coverage for particular classes or categories of underground storage tanks containing petroleum which shall satisfy such regulations and which shall not be less than \$1,000,000 for each occurrence with an appropriate aggregate requirement.

"(B) The Administrator may set amounts lower than the amounts required by subparagraph (A) of this paragraph for underground storage tanks containing petroleum which are at facilities not engaged in petroleum production, refining, or marketing and which are not used to handle substantial quantities of petroleum.

"(C) In establishing classes and categories for purposes of this paragraph, the Administrator may consider the following factors:

"(i) The size, type, location, storage, and handling capacity of underground storage tanks in the class or category and the volume of petroleum handled by such tanks.

"(ii) The likelihood of release and the potential extent of damage from any release from underground storage tanks in the class or category.

"(iii) The economic impact of the limits on the owners and operators of each such class or category, particularly relating to the small business segment of the petroleum marketing industry.

"(iv) The availability of methods of financial responsibility in amounts greater than the amount established by this paragraph.

"(v) Such other factors as the Administrator deems pertinent.

"(D) The Administrator may suspend enforcement of the financial responsibility requirements for a particular class or category of underground storage tanks or in a particular State, if the Administrator makes a determination that methods of financial responsibility satisfying the requirements of this subsection are not generally available for underground storage tanks in that class or category, and —

— "(i) steps are being taken to form a risk retention group for such class of tanks; or

"(ii) such State is taking steps to establish a fund pursuant to section 9004(c)(1) of this Act to be submitted as evidence of financial responsibility.

A suspension by the Administrator pursuant to this paragraph shall extend for a period not to exceed 180 days. A determination to suspend may be made with respect to the same class or category or for the same State at the end of such period, but only if substantial progress has been made in establishing a risk retention group, or the owners or operators in the class or category demonstrate, and the Administrator finds, that the formation of such a group is not possible and that the State is unable or unwilling to establish such a fund pursuant to clause (ii).

[9003(d)(5) added by PL 99-499]

"(e) **NEW TANK PERFORMANCE STANDARDS.**—The Administrator shall, not later than three months prior to the effective date specified in subsection (f), issue performance standards for underground storage tanks brought into use on or after the effective date of such standards. The performance standards for new underground storage tanks shall include, but need not be limited to, design, construction, installation, release detection, and compatibility standards.

"(f) **EFFECTIVE DATES.**—(1) Regulations issued pursuant to subsection (c) and (d) of this section, and standards issued pursuant to subsection (e) of this section, for underground storage tanks containing regulated substances defined in section 9001(2)(B) (petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure) shall be effective not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

"(2) Standards issued pursuant to subsection (e) of this section (entitled 'New Tank Performance Standards') for underground storage tanks containing regulated substances defined in section 9001(2)(A) shall be effective not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

"(3) Regulations issued pursuant to subsection (c) of this section (entitled 'Requirements') and standards issued pursuant to subsection (d) of this section (entitled 'Financial Responsibility') for underground storage tanks containing regulated substances defined in section 9001(2)(A) shall be effective not later than forty-eight months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

"(g) **INTERIM PROHIBITION.**—(1) Until the effective date of the standards promulgated by the Administrator under subsection (e) and after one hundred and eighty days after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, no person may install an underground storage tank for the purpose of storing regulated substances unless such tank (whether of single or double wall construction)—

"(A) will prevent releases due to corrosion or structural failure for the operational life of the tank;

"(B) is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance; and

"(C) the material used in the construction or lining of the tank is compatible with the substance to be stored.

"(2) Notwithstanding paragraph (1), if soil tests conducted in accordance with ASTM Standard G57-78, or another standard approved by the Administrator, show that soil resistivity in an installation location is 12,000 ohm/cm or more (unless a more stringent standard is prescribed by the Administrator by rule), a storage tank without corrosion protection may be installed in that location during the period referred to in paragraph (1).

"(h) EPA Response Program for Petroleum. —

[9003(h) added by PL 99-499]

"(1) Before regulations. — Before the effective date of regulations under subsection (c), the Administrator (or a State pursuant to paragraph (7)) is authorized to—

"(A) require the owner or operator of an underground storage tank to undertake corrective action with respect to any release of petroleum when the Administrator (or the State) determines that such corrective action will be done properly and promptly by the owner or operator of the underground storage tank from which the release occurs; or

"(B) undertake corrective action with respect to any

release of petroleum into the environment from an underground storage tank if such action is necessary, in the judgment of the Administrator (or the State), to protect human health and the environment.

The corrective action undertaken or required under this paragraph shall be such as may be necessary to protect human health and the environment. The Administrator shall use funds in the Leaking Underground Storage Tank Trust Fund for payment of costs incurred for corrective action under subparagraph (B), enforcement action under subparagraph (A), and cost recovery under paragraph (6) of this subsection. Subject to the priority requirements of paragraph (3), the Administrator (or the State) shall give priority in undertaking such actions under subparagraph (B) to cases where the Administrator (or the State) cannot identify a solvent owner or operator of the tank who will undertake action properly.

“(2) After regulations.—Following the effective date of regulations under subsection (c), all actions or orders of the Administrator (or a State pursuant to paragraph (7)) described in paragraph (1) of this subsection shall be in conformity with such regulations. Following such effective date, the Administrator (or the State) may undertake corrective action with respect to any release of petroleum into the environment from an underground storage tank only if such action is necessary, in the judgment of the Administrator (or the State), to protect human health and the environment and one or more of the following situations exists:

“(A) No person can be found, within 90 days or such shorter period as may be necessary to protect human health and the environment, who is—

- “(i) an owner or operator of the tank concerned,
- “(ii) subject to such corrective action regulations, and
- “(iii) capable of carrying out such corrective action properly.

“(B) A situation exists which requires prompt action by the Administrator (or the State) under this paragraph to protect human health and the environment.

“(C) Corrective action costs at a facility exceed the amount of coverage required by the Administrator pursuant to the provisions of subsections (c) and (d)(5) of this section and, considering the class or category of underground storage tank from which the release occurred, expenditures from the Leaking Underground Storage Tank Trust Fund are necessary to assure an effective corrective action.

“(D) The owner or operator of the tank has failed or refused to comply with an order of the Administrator under this subsection or section 9006 or with the order of a State under this subsection to comply with the corrective action regulations.

“(3) Priority of corrective actions.—The Administra-

tor (or a State pursuant to paragraph (7)) shall give priority in undertaking corrective actions under this subsection, and in issuing orders requiring owners or operators to undertake such actions, to releases of petroleum from underground storage tanks which pose the greatest threat to human health and the environment.

“(4) Corrective action orders.—The Administrator is authorized to issue orders to the owner or operator of an underground storage tank to carry out subparagraph (A) of paragraph (1) or to carry out regulations issued under subsection (c)(4). A State acting pursuant to paragraph (7) of this subsection is authorized to carry out subparagraph (A) of paragraph (1) only until the State's program is approved by the Administrator under section 9004 of this subtitle. Such orders shall be issued and enforced in the same manner and subject to the same requirements as orders under section 9006.

“(5) Allowable corrective actions.—The corrective actions undertaken by the Administrator (or a State pursuant to paragraph (7)) under paragraph (1) or (2) may include temporary or permanent relocation of residents and alternative household water supplies. In connection with the performance of any corrective action under paragraph (1) or (2), the Administrator may undertake an exposure assessment as defined in paragraph (10) of this subsection or provide for such an assessment in a cooperative agreement with a State pursuant to paragraph (7) of this subsection. The costs of any such assessment may be treated as corrective action for purposes of paragraph (6), relating to cost recovery.

“(6) Recovery of costs.—

“(A) In general. — Whenever costs have been incurred by the Administrator, or by a State pursuant to paragraph (7), for undertaking corrective action or enforcement action with respect to the release of petroleum from an underground storage tank, the owner or operator of such tank shall be liable to the Administrator or the State for such costs. The liability under this paragraph shall be construed to be the standard of liability which obtains under section 311 of the Federal Water Pollution Control Act.

“(B) Recovery. — In determining the equities for seeking the recovery of costs under subparagraph (A), the Administrator (or a State pursuant to paragraph (7) of this subsection) may consider the amount of financial responsibility required to be maintained under subsections (c) and (d)(5) of this section and the factors considered in establishing such amount under subsection (d)(5).

“(C) Effect on liability. —

“(i) No transfers of liability. — No indemnification, hold harmless, or similar agreement or conveyance shall be effective to transfer from the owner or operator of

any underground storage tank or from any person who may be liable for a release or threat of release under this subsection, to any other person the liability imposed under this subsection. Nothing in this subsection shall bar any agreement to insure, hold harmless, or indemnify a party to such agreement for any liability under this section.

“(ii) No bar to cause of action. — Nothing in this subsection, including the provisions of clause (i) of this subparagraph, shall bar a cause of action that an owner or operator or any other person subject to liability under this section, or a guarantor, has or would have, by reason of subrogation or otherwise against any person.

“(D) Facility. — For purposes of this paragraph, the term ‘facility’ means, with respect to any owner or operator, all underground storage tanks used for the storage of petroleum which are owned or operated by such owner or operator and located on a single parcel of property (or on any contiguous or adjacent property).

“(7) State authorities.—

“(A) General. — A State may exercise the authorities in paragraphs (1) and (2) of this subsection, subject to the terms and conditions of paragraphs (3), (5), (9), (10), and (11), and including the authorities of paragraphs (4), (6), and (8) of this subsection if—

“(i) the Administrator determines that the State has the capabilities to carry out effective corrective actions and enforcement activities; and

“(ii) the Administrator enters into a cooperative agreement with the State setting out the actions to be undertaken by the State.

The Administrator may provide funds from the Leaking Underground Storage Tank Trust Fund for the reasonable costs of the State's actions under the cooperative agreement.

“(B) Cost share. — Following the effective date of the regulations under subsection (c) of this section, the State shall pay 10 per centum of the cost of corrective actions undertaken either by the Administrator or by the State under a cooperative agreement, except that the Administrator may take corrective action at a facility where immediate action is necessary to respond to an imminent and substantial endangerment to human health or the environment if the State fails to pay the cost share.

“(8) Emergency procurement powers. — Notwithstanding any other provision of law, the Administrator may authorize the use of such emergency procurement powers as he deems necessary.

“(9) Definition of owner. — As used in this subsection, the term ‘owner’ does not include any person who, without participating in the management of an underground storage tank and otherwise not engaged in petroleum production, refining, and marketing, holds indicia

of ownership primarily to protect the owner's security interest in the tank.

“(10) Definition of exposure assessment. — As used in this subsection, the term ‘exposure assessment’ means an assessment to determine the extent of exposure of, or potential for exposure of, individuals to petroleum from a release from an underground storage tank based on such factors as the nature and extent of contamination and the existence of or potential for pathways of human exposure (including ground or surface water contamination, air emissions, and food chain contamination), the size of the community within the likely pathways of exposure, and the comparison of expected human exposure levels to the short-term and long-term health effects associated with identified contaminants and any available recommended exposure or tolerance limits for such contaminants. Such assessment shall not delay corrective action to abate immediate hazards or reduce exposure.

“(11) Facilities without financial responsibility. — At any facility where the owner or operator has failed to maintain evidence of financial responsibility in amounts at least equal to the amounts established by subsection (d)(5)(A) of this section (or a lesser amount if such amount is applicable to such facility as a result of subsection (d)(5)(B) of this section) for whatever reason the Administrator shall expend no monies from the Leaking Underground Storage Tank Trust Fund to clean up releases at such facility pursuant to the provisions of paragraph (1) or (2) of this subsection. At such facilities the Administrator shall use the authorities provided in subparagraph (A) of paragraph (1) and paragraph (4) of this subsection and section 9006 of this subtitle to order corrective action to clean up such releases. States acting pursuant to paragraph (7) of this subsection shall use the authorities provided in subparagraph (A) of paragraph (1) and paragraph (4) of this subsection to order corrective action to clean up such releases. Notwithstanding the provisions of this paragraph, the Administrator may use monies from the fund to take the corrective actions authorized by paragraph (5) of this subsection to protect human health at such facilities and shall seek full recovery of the costs of all such actions pursuant to the provisions of paragraph (6)(A) of this subsection and without consideration of the factors in paragraph (6)(B) of this subsection. Nothing in this paragraph shall prevent the Administrator (or a State pursuant to paragraph (7) of this subsection) from taking corrective action at a facility where there is no solvent owner or operator or where immediate action is necessary to respond to an imminent and substantial endangerment of human health or the environment.

[Editor's note: Section 205(h) of PL 99-499 provides:

“(h) Pollution Liability Insurance.—

(1) Study. — The Comptroller General shall conduct a study of the availability of pollution liability insurance, leak insurance, and contamination insurance for owners and operators of petroleum storage and distribution facilities. The study shall assess the current and projected extent to which private insurance can contribute to the financial responsibility of owners and operators of underground storage tanks and the ability of owners and operators of underground storage tanks to maintain financial responsibility through other methods. The study shall consider the experience of owners and operators of marine vessels in getting insurance for their liabilities under the Federal Water Pollution Control Act and the operation of the Water Quality Insurance Syndicate.

(2) Report. — The Comptroller General shall report the findings under this subsection to the Congress within 15 months after the enactment of this subsection. Such report shall include recommendations for legislative or administrative changes that will enable owners and operators of underground storage tanks to maintain financial responsibility sufficient to provide all clean-up costs and damages that may result from reasonably foreseeable releases and events."

"APPROVAL OF STATE PROGRAMS

"SEC. 9004. (a) ELEMENTS OF STATE PROGRAM.—Beginning 30 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, any State may, submit an underground storage tank release detection, prevention, and correction program for review and approval by the Administrator. The program may cover tanks used to store regulated substances referred to in 9001(2) (A) or (B) or both. A State program may be approved by the Administrator under this section only if the State demonstrates that the State program includes the following requirements and standards and provides for adequate enforcement of compliance with such requirements and standards—

"(1) requirements for maintaining a leak detection system, an inventory control system together with tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment;

"(2) requirements for maintaining records of any monitoring or leak detection system or inventory control system or tank testing system;

"(3) requirements for reporting of any releases and corrective action taken in response to a release from an underground storage tank;

"(4) requirements for taking corrective action in response to a release from an underground storage tank;

"(5) requirements for the closure of tanks to prevent future releases of regulated substances into the environment;

"(6) requirements for maintaining evidence of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank;

"(7) standards of performance for new underground storage tanks; and

"(8) requirements—

"(A) for notifying the appropriate State agency or department (or local agency or department) designated according to section 9002(b)(1) of the existence of any operational or non-operational underground storage tank; and

"(B) for providing the information required on the form issued pursuant to section 9002(b)(2).

"(b) FEDERAL STANDARDS.—(1) A State program submitted under this section may be approved only if the requirements under para-

graphs (1) through (7) of subsection (a) are no less stringent than the corresponding requirements standards promulgated by the Administrator pursuant to section 9003(a).

"(2)(A) A State program may be approved without regard to whether or not the requirements referred to in paragraphs (1), (2), (3), and (5) of subsection (a) are less stringent than the corresponding standards under section 9003(a) during the one-year period commencing on the date of promulgation of regulations under section 9003(a) if State regulatory action but no State legislative action is required in order to adopt a State program.

"(B) If such State legislative action is required, the State program may be approved without regard to whether or not the requirements referred to in paragraphs (1), (2), (3), and (5) of subsection (a) are less stringent than the corresponding standards under section 9003(a) during the two-year period commencing on the date of promulgation of regulations under section 9003(a) (and during an additional one-year period after such legislative action if regulations are required to be promulgated by the State pursuant to such legislative action).

"(c) Financial Responsibility.—(1) Corrective action and compensation programs administered by State or local agencies or departments may be submitted for approval under subsection (a)(6) as evidence of financial responsibility.

[9004(c)(1) amended by PL 99-499]

"(2) Financial responsibility required by this subsection may be established in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, qualification as a self-insurer or any other method satisfactory to the Administrator. In promulgating requirements under this subsection, the Administrator is authorized to specify policy or other contractual terms, including the amount of coverage required for various classes and categories of underground storage tanks pursuant to section 9003(d)(5) conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this subtitle.

[9004(c)(2) amended by PL 99-499]

"(3) In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where with reasonable diligence jurisdiction in any State court of the Federal courts cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this subsection may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this paragraph such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

"(4) The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this section. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law.

"(5) For the purpose of this subsection, the term 'guarantor' means any person, other than the owner or operator, who provides

evidence of financial responsibility for an owner or operator under this subsection.

"(d) EPA DETERMINATION.—(1) Within one hundred and eighty days of the date of receipt of a proposed State program, the Administrator shall, after notice and opportunity for public comment, make a determination whether the State's program complies with the provisions of this section and provides for adequate enforcement of compliance with the requirements and standards adopted pursuant to this section.

"(2) If the Administrator determines that a State program complies with the provisions of this section and provides for adequate enforcement of compliance with the requirements and standards adopted pursuant to this section, he shall approve the State program in lieu of the Federal program and the State shall have primary enforcement responsibility with respect to requirements of its program.

"(e) WITHDRAWAL OF AUTHORIZATION.—Whenever the Administrator determines after public hearing that a State is not administering and enforcing a program authorized under this subtitle in accordance with the provisions of this section, he shall so notify the State. If appropriate action is not taken within a reasonable time, not to exceed one hundred and twenty days after such notification, the Administrator shall withdraw approval of such program and reestablish the Federal program pursuant to this subtitle.

"Inspections, Monitoring, Testing and Corrective Action

[9005 head amended by PL 99-499]

"Sec. 9005. (a) Furnishing Information.—For the purposes of developing or assisting in the development of any regulation, conducting any study, taking any corrective action or enforcing the provisions of this subtitle, any owner or operator of an underground storage tank (or any tank subject to study under section 9009 that is used for storing regulated substances) shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee, or representative of a State acting pursuant to subsection (h)(7) of section 9003 or with an approved program, furnish information relating to such tanks, their associated equipment, their contents, conduct monitoring or testing, permit such officer at all reasonable times to have access to, and to copy all records relating to such tanks and permit such officer to have access for corrective action. For the purposes of developing or assisting in the development of any regulation, conducting any study, taking corrective action, or enforcing the provisions of this subtitle, such officers, employees, or representatives are authorized—

"(1) to enter at reasonable times any establishment or other place where an underground storage tank is located;

"(2) to inspect and obtain samples from any person of any regulated substances contained in such tank;

"(3) to conduct monitoring or testing of the tanks, associated equipment, contents, or surrounding soils, air, surface water or ground water; and
Each such inspection shall be commenced and completed with reasonable promptness.

(4) to take corrective action.

[9005(a) amended by PL 99-499]

"(b) CONFIDENTIALITY.—(1) Any records, reports, or information obtained from any persons under this section shall be available to the public, except that upon a showing satisfactory to the Administrator (or the State, as the case may be) by any person that records, reports, or information, or a particular part thereof, to which the Administrator (or the State, as the case may be) or any officer, employee, or representative thereof has access under this section if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code, such information or particular portion thereof shall be considered confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when relevant in any proceeding under this Act.

"(2) Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subsection shall, upon conviction, be subject to a fine of not more than \$5,000 or to imprisonment not to exceed one year, or both.

"(3) In submitting data under this subtitle, a person required to provide such data may—

"(A) designate the data which such person believes is entitled to protection under this subsection, and

"(B) submit such designated data separately from other data submitted under this subtitle.

A designation under this paragraph shall be made in writing and in such manner as the Administrator may prescribe.

"(4) Notwithstanding any limitation contained in this section or any other provision of law, all information reported to, or otherwise obtained, by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of the Congress, to such committee (including records, reports, or information obtained by representatives of the Environmental Protection Agency).

"FEDERAL ENFORCEMENT

"Sec. 9006. (a) COMPLIANCE ORDERS.—(1) Except as provided in paragraph (2), whenever on the basis of any information, the Administrator determines that any person is in violation of any requirement of this subtitle, the Administrator may issue an order requiring compliance within a reasonable specified time period or the Administrator may commence a civil action in the United States district court in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

"(2) In the case of a violation of any requirement of this subtitle where such violation occurs in a State with a program approved under section 9004, the Administrator shall give notice to the State in which such violation has occurred prior to issuing an order or commencing a civil action under this section.

"(3) If a violator fails to comply with an order under this subsection within the time specified in the order, he shall be liable for a civil penalty of not more than \$25,000 for each day of continued noncompliance.

"(b) PROCEDURE.—Any order issued under this section shall become final unless, no later than thirty days after the order is served, the person or persons named therein request a public hearing. Upon such request the Administrator shall promptly conduct a public hearing. In connection with any proceeding under this section the Administrator may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures.

"(c) CONTENTS OF ORDER.—Any order issued under this section shall state with reasonable specificity the nature of the violation, specify a reasonable time for compliance, and assess a penalty, if any, which the Administrator determines is reasonable taking into account the seriousness of the violation and any good faith efforts to comply with the applicable requirements.

"(d) CIVIL PENALTIES.—(1) Any owner who knowingly fails to notify or submits false information pursuant to section 9002(a) shall be subject to a civil penalty not to exceed \$10,000 for each tank for

which notification is not given or false information is submitted.
 "(2) Any owner or operator of an underground storage tank who fails to comply with—

"(A) any requirement or standard promulgated by the Administrator under section 9003;

"(B) any requirement or standard of a State program approved pursuant to section 9004; or

"(C) the provisions of section 9003(g) (entitled 'Interim Prohibition') shall be subject to a civil penalty not to exceed \$10,000 for each tank for each day of violation.

"FEDERAL FACILITIES

"Sec. 9007. (a) APPLICATION OF SUBTITLE.—Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the Federal Government having jurisdiction over any underground storage tank shall be subject to and comply with all Federal, State, interstate, and local requirements, applicable to such tank, both substantive and procedural, in the same manner, and to the same extent, as any other person is subject to such requirements, including payment of reasonable service charges. Neither the United States, nor any agent, employee, or officer thereof, shall be immune or exempt from any process or sanction of any State or Federal court with respect to the enforcement of any such injunctive relief.

"(b) PRESIDENTIAL EXEMPTION.—The President may exempt any underground storage tanks of any department, agency, or instrumentality in the executive branch from compliance with such a requirement if he determines it to be in the paramount interest of the United States to do so. No such exemption shall be granted due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriations. Any exemption shall be for a period not in excess of one year, but additional exemptions may be granted for periods not to exceed one year upon the President's making a new determination. The President shall report each January to the Congress all exemptions from the requirements of this section granted during the preceding calendar year, together with his reason for granting each such exemption.

"STATE AUTHORITY

"Sec. 9008. Nothing in this subtitle shall preclude or deny any right of any State or political subdivision thereof to adopt or enforce any regulation, requirement, or standard of performance respecting underground storage tanks that is more stringent than a regulation, requirement, or standard of performance in effect under this subtitle or to impose any additional liability with respect to the release of regulated substances within such State or political subdivision.

[9008 amended by PL 99-499]

"STUDY OF UNDERGROUND STORAGE TANKS

"Sec. 9009. (a) PETROLEUM TANKS.—Not later than twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall complete a study of underground storage tanks used for the storage of regulated substances defined in section 9001(2)(B).

"(b) OTHER TANKS.—Not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall complete a study of all other underground storage tanks.

"(c) ELEMENTS OF STUDIES.—The studies under subsections (a) and (b) shall include an assessment of the ages, types (including methods

of manufacture, coatings, protection systems, the compatibility of the construction materials and the installation methods) and locations (including the climate of the locations) of such tanks; soil conditions, water tables, and the hydrogeology of tank locations; the relationship between the foregoing factors and the likelihood of releases from underground storage tanks; the effectiveness and costs of inventory systems, tank testing, and leak detection systems; and such other factors as the Administrator deems appropriate.

"(d) FARM AND HEATING OIL TANKS.—Not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall conduct a study regarding the tanks referred to in section 9001(1) (A) and (B). Such study shall include estimates of the number and location of such tanks and an analysis of the extent to which there may be releases or threatened releases from such tanks into the environment.

"(e) REPORTS.—Upon completion of the studies authorized by this section, the Administrator shall submit reports to the President and to the Congress containing the results of the studies and recommendations respecting whether or not such tanks should be subject to the preceding provisions of this subtitle.

"(f) REIMBURSEMENT.—(1) If any owner or operator (excepting an agency, department, or instrumentality of the United States Government, a State or a political subdivision thereof) shall incur costs, including the loss of business opportunity, due to the closure or interruption of operation of an underground storage tank solely for the purpose of conducting studies authorized by this section, the Administrator shall provide such person fair and equitable reimbursement for such costs.

"(2) All claims for reimbursement shall be filed with the Administrator not later than ninety days after the closure or interruption which gives rise to the claim.

"(3) Reimbursements made under this section shall be from funds appropriated by the Congress pursuant to the authorization contained in section 2007(g).

"(4) For purposes of judicial review, a determination by the Administrator under this subsection shall be considered final agency action.

"AUTHORIZATION OF APPROPRIATIONS

"Sec. 9010. For authorization of appropriations to carry out this subtitle, see section 2007(g).

Solid Waste Cleanup on Federal Lands in Alaska

Sec. 3. [Repealed by PL 96-482]

Sec. 4. (a) In order to demonstrate effective means of dealing with contamination of public water supplies by leachate from abandoned or other landfills, the Administrator of the Environmental Protection Agency is authorized to provide technical and financial assistance for a research program to control leachate from the Llangollen Landfill in New Castle County, Delaware.

(b) The research program authorized by this section shall be designed by the New Castle County areawide waste treatment management program, in cooperation with the Environmental Protection Agency, to develop methods for controlling leachate contamination from abandoned and other landfills that may be applied at the Llangollen Landfill and at other landfills throughout the Nation. Such research program shall investigate all alternative solutions or corrective actions, including—

(1) hydrogeologic isolation of the landfill combined with the collection and treatment of leachate;

Final State Program Approval Rule

Texas (EPA Form), Underground Storage Tank Program, Texas Water Commission, P.O. Box 13087, Austin, Texas 78711

Utah (EPA Form), Division of Environmental Health, P.O. Box 45500, Salt Lake City, Utah 84145-0500

Vermont (State Form), Underground Storage Tank Program, Vermont AEC/Waste Management Division, State Office Building, Montpelier, Vermont 05602, 802/828-3395

Virginia (EPA Form), Virginia Water Control Board, P.O. Box 11143, Richmond, Virginia 23230-1143, 804/257-6685

Virgin Islands (EPA Form), 205[] Coordinator, Division of Natural Resources Management, 14 F Building 111, Watertut Homes, Christianstead, St. Croix, Virgin Islands 00820

Washington (State Form), Underground Storage Tank Notification, Solid and Hazardous Waste Program, Department of Ecology, M/S PV-11, Olympia, Washington 98504-8711, 206/459-6318

West Virginia (EPA Form), Attention: UST Notification, Solid and Hazardous Waste, Ground Water Branch, West Virginia Department of Natural Resources, 1201 Greenbrier Street, Charleston, West Virginia 25311

Wisconsin (State Form), Bureau of Petroleum Inspection, P.O. Box 7969, Madison, Wisconsin 53707, 608/266-7605

Wyoming (EPA Form), Water Quality Division, Department of Environmental Quality, Herschler Building, 4th Floor West, 122 West 25th Street, Cheyenne, Wyoming 82002, 307/777-7781.

Appendix III—Statement for Shipping Tickets and Invoices

Note.—A Federal law (the Resource Conservation and Recovery Act (RCRA), as amended (Pub. L. 96-510)) requires owners of certain underground storage tanks to notify designated State or local agencies by May 8, 1988, of the existence of their tanks. Notifications for tanks brought into use after May 8, 1986, must be made within 30 days. Consult EPA's regulations, issued on November 8, 1985 (40 CFR Part 280) to determine if you are affected by this law.

[FR Doc. 88-21153 Filed 9-22-88; 8:45 am]
BILLING CODE 6560-50-M

40 CFR Part 281

[FRL-3385-4]

Underground Storage Tanks; State Program Approval

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) today finalizes regulations for approval of states to run underground storage tank programs in

lieu of the federal program. These regulations were first proposed on April 17, 1987 (52 FR 22353) and were further developed in a subsequent Supplemental Notice published on December 23, 1987 (52 FR 48638).

Subtitle I of the Resource Conservation and Recovery Act (RCRA) establishes a federal program for the regulation of underground storage tanks (USTs). Subtitle I of RCRA also allows EPA to approve state programs to operate in place of the federal UST requirements if those state programs have standards that are no less stringent than the federal requirements and provide adequate enforcement of compliance with those standards. States with approved UST programs will have primary enforcement responsibility with respect to UST program requirements in their states. Today's rule establishes final requirements for approval of state UST programs and for streamlined procedures to be used in submitting and evaluating state applications.

DATES: These regulations will become effective on December 22, 1988.

ADDRESSES: The public docket for this rulemaking is available for public inspection from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays at: Office of Underground Storage Tanks (WH-562A), Docket No. UST 4, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. Call (202) 475-9720 to make an appointment with docket clerk.

FOR FURTHER INFORMATION CONTACT: RCRA/SUPERFUND Hotline, (800) 424-9346; or in Washington, DC, (202) 382-3000.

SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed in the following outline:

- I. Authority
- II. Background
 - A. Subtitle I of RCRA (Section 9004)
 - B. Summary of the April 17 Proposal
 - C. Summary of Supplemental Notice
 - D. Summary of Public Comments
 - E. Important Influences on Today's Rule
- III. Summary of Today's Rule
 - A. Summary of Today's Rule
 - B. Strategy for State Program Approval
- IV. Analysis of Today's Rule
 - A. Subpart A—Purpose, General Requirements and Scope (§§ 281.10–281.12)
 - B. Subpart B—Components of a Program Application (§§ 281.20–281.25)
 - C. Subpart C—Criteria for "No Less Stringent" (§§ 281.30–281.36)
 - D. Subpart D—Adequate Enforcement of Compliance (§§ 281.40–281.43)
 - E. Subpart E—Approval Procedures (§§ 281.50–281.52)
 - F. Subpart F—Withdrawal of Approval of State Programs (§§ 281.60–281.61)
 - V. Relationship to Other EPA Programs

- A. Leaking Underground Storage Tank Petroleum Response Fund
- B. RCRA Hazardous Waste Program
- VI. Economic and Regulatory Impacts
 - A. Regulatory Impact Analysis
 - B. Regulatory Flexibility Act
 - C. Paperwork Reduction Act

I. Authority

These regulations are promulgated under sections 9004, 9005, 9006 and 2002 of the Solid Waste Disposal Act, as amended.

II. Background

A. Subtitle I of RCRA (section 9004)

The Hazardous and Solid Waste Amendments of 1984 added Subtitle I to the Resource Conservation and Recovery Act (RCRA). Subtitle I establishes a federal program for the regulation of underground storage tanks and has the following components.

Section 9002 requires each owner of an underground storage tank (UST) in operation after 1973 to notify the designated state agency of the existence of the tank and the tank age, size, type, location, and use. This notification was due on May 8, 1986, or within 30 days after an owner brings a new UST into use.

Section 9003(a) requires EPA to promulgate standards and requirements for new and existing USTs covering detection, prevention, and correction of releases. These regulations are set forth in the final UST technical standards published elsewhere in today's Federal Register.

Section 9003(g) establishes a prohibition on the installation of certain USTs from May 8, 1985 until the effective date of EPA's new tank performance standards established under section 9003(e). Section 9003(h), added to Subtitle I under section 205 of the Superfund Amendments and Reauthorization Act of 1986, establishes a program for cleanup of petroleum from leaking USTs.

Section 9004 provides a procedure by which states may administer and enforce state UST programs in lieu of the federal program established under section 9003. Under section 9004, states may submit their programs to EPA and will be approved by EPA if the state program meets the requirements for notification found under section 9002, provides for adequate enforcement of compliance with all program requirements, and includes requirements that are no less stringent than the corresponding federal UST technical standards for leak detection and prevention, recordkeeping for leak detection, reporting of releases and

corrective action, corrective action, closure, financial responsibility, and new tank standards. Section 9004 specifies that a state program submitted to EPA for approval may cover petroleum substances, hazardous substances (not including hazardous wastes), or both.

Under Subtitle I, a state with an approved UST program has primary enforcement responsibility for the requirements of its program. EPA retains authority to take enforcement action in approved states as necessary and will notify the designated lead state agency of any such intended action in accordance with procedures contained in a memorandum of agreement executed with EPA and section 9006(a)(2) of RCRA. In this rulemaking, EPA establishes requirements that a state UST program must meet in order for EPA to approve the program under section 9004. These regulations are codified in Part 281 of the Code of Federal Regulations.

In section 9004, Congress clearly provided EPA the authority to authorize state UST programs to operate in lieu of the federal program. Congressional intent that Subtitle I be implemented at the state level is supported by its legislative history. In introducing the Subtitle I legislation in 1984, its sponsor stated: "The purpose of this amendment is to establish a constructive federal role to aid the states in establishing programs to safeguard their water supplies. Passage of this program will help to ensure consistency between state programs and tank standards and measured progress toward our goal of protecting ground water from this ubiquitous source of contamination." 130 Cong. Rec. 9164 (daily ed. July 25, 1984) (statement of Senator Durenberger). Accordingly, EPA believes that Congress intended EPA to play an important leadership role by establishing UST criteria, and that, consistent with statutory requirements, the state and local governments should carry out the program wherever possible. This Congressional intent has been influential in shaping today's final rule for state UST program approval.

B. Summary of the April 17 Proposal

The April 17, 1987 proposal (52 FR 12853) solicited public comments on several topics concerning requirements and procedures for approving state UST programs to operate in place of federal UST regulations. In the proposal, EPA discussed the two criteria for approval that are required under section 9004 of RCRA. EPA described requirements for ensuring "adequate enforcement of compliance", including the specific legal

authorities that must be available to the state enforcement agency. The proposal also presented three possible approaches that could be used to determine whether state technical and program requirements are "no less stringent" than the federal standards.

In addition, the proposal contained a number of procedural and administrative requirements. The proposal outlined the components of a standard application for approval. These components include: A program description; an Attorney General's statement; an implementation plan that includes a Memorandum of Agreement; and copies of all applicable state laws and regulations. Furthermore, the proposal suggested procedures that EPA will follow when evaluating state applications for approval or when withdrawing approval of state programs. The procedures for reviewing a state application for approval must be completed within 180 days, according to section 9004, and the proposal provided details on how the review should proceed: (1) Confirm that an application is complete; (2) review the application; (3) publish a tentative decision in the *Federal Register*; (4) consider public comments and hold public hearings if necessary; and (5) publish a final decision in the *Federal Register*.

Finally, the proposal reflected the provision in section 9004 that, in cases when a state program has requirements that are less stringent in certain areas than corresponding federal requirements, EPA could approve these programs on an interim basis. The proposal clarified the requirements and procedures concerning the content and review of a state application for such interim approvals.

C. Summary of Supplemental Notice

EPA published a Supplemental Notice on December 23, 1987 (52 FR 48638) that requested public comments on some aspects of state program approval that EPA believed needed further clarification. The two parts of this supplemental notice that dealt specifically with state program approval are summarized below.

One part of the supplemental notice addressed the "no less stringent" issue and provided further details for public review and comment on how the Agency intended to implement its proposed approach to state program approval: A comparison of each of the technical program elements of the state program to the federal objectives for the corresponding program elements. For example, a state's regulations for release detection as a whole would be compared to the federal objectives for

release detection. As long as the state program's overall requirements for release detection were "no less stringent" than the federal objectives for release detection, then EPA could approve that state program element. An essential part of this process was the identification in the supplemental notice of federal objectives for each of the eight program elements. These federal objectives were proposed to clarify what constitutes acceptable "no less stringent" requirements in state programs.

The other part of the supplemental notice concerning the issue of state program approval requested comment on providing additional flexibility to implementing agencies by changing the wording of several sections of the technical standards proposed on April 17. These proposed wording changes were intended to allow state implementing agencies to substitute their own procedural and administrative requirements for those detailed in the federal technical standards for USTs.

D. Summary of Public Comments

EPA received many comments regarding both the April 17 proposed rule for state program approval and the December 23 supplemental notice. Four major issues were identified by public comment: Implementation by states and localities; adequate enforcement; no-less-stringent criteria; and federal funding. These issues are briefly highlighted below and discussed in more detail in section IV of today's preamble.

- *Implementation by states and localities.* Many commenters expressed concern about the potential for a lack of national consistency, which they believed would be an inherent result of the proposed rule for state program approval. They recommended that EPA not approve state regulations that would be different and perhaps more stringent than the federal rule. In addition, several other commenters were concerned that implementation of the UST program by local governments, specifically those with different technical regulations, would cause confusion for the regulated community. EPA received other comments concerning implementation by local governments. Generally, these commenters requested that EPA's final approval rule require that states negotiate with localities and include them in plans for UST program implementation.

- *Adequate enforcement criteria.* In defining what constitutes "adequate enforcement", commenters particularly wanted clarification of EPA's policy

regarding enforcement. Some commenters requested that broad objectives be developed as a means of approval in the federal rule, and some suggested such objectives should be part of the regulations. Others thought that guidance alone would be appropriate. Commenters also objected to the requirements for inspections and surveys, and wanted clarification of EPA's expectations. Regarding legal authorities required for enforcement, many commenters felt that states must be allowed to evaluate their own penalties and devise their own approaches on a case-by-case basis, and that EPA could require, at a minimum, general categories of authorities without dictating their terms. Finally, many commenters expressed concern about EPA's public participation requirements for state program approvals. Some commenters suggested that states should be allowed to assess the degree of participation necessary for each individual case, while others questioned the statutory authority for requiring specific levels of participation as criteria for approval.

• *No less stringent criteria.* In the April 17 preamble, EPA had considered three options for determining whether state programs meet the no-less-stringent criteria. Some commenters supported EPA's proposed approach (option 3), which compares the state and federal programs element-by-element, as the most flexible and implementable. An "element", was one of the paragraphs (1) through (8) in section 9004(a). Each paragraph defined an element, for example, release detection. Others claimed that only the holistic approach of option 1 that evaluates the overall results of a program gave states sufficient flexibility. These commenters also stressed that effectiveness in meeting the environmental goals should be considered first in approving states rather than the ability to meet specific individual legal requirements. A few commenters supported the line-by-line approach of option 2, believing that the flexibility of the other options could lead to the approval of inadequate programs.

Many comments were received on EPA's proposed approach to implementing state program approval. Most commenters agreed with the use of objectives for determining the stringency of state programs and liked the objectives that EPA outlined in the December 23 supplemental notice. In general, they believed the objectives would facilitate state program approval by allowing state programs the necessary room to develop regulations appropriate to the individual state's

geographical characteristics and regulated communities. For the same reason, these commenters also liked EPA's proposal to provide states additional decisionmaking authority within the technical and financial responsibility regulations.

Some commenters, however, did express reservations about EPA's proposed approach to provide states with flexibility. Most of these commenters felt that while flexibility was an admirable goal, consistency was also important. These commenters argued that the proposed regulations, particularly the additional state decisionmaking authority in the technical standards, allowed too much flexibility to the states without providing assurances that such flexibility was necessary to protect human health and the environment. A few commenters disagreed completely with the objectives approach and stated that objectives were not a substitute for detailed technical requirements.

• *Federal funding.* Some commenters raised the issue of the high cost of developing state UST programs compared to the small amount of federal funding available to assist state program development. They protested that EPA wanted states to run a program without sharing sufficient funds to make it possible and they urged the Federal Government to provide more grant money.

E. Important Influences on Today's Rule

In developing today's final rule for state program approval, the Agency has taken into consideration several characteristics of the UST system universe that are associated with any attempt to regulate UST system management. The following sections identify and discuss the influence of specific features of the UST system universe on the approval of state programs.

1. Leaking USTs Present a Unique Regulatory Challenge

EPA's approach to the regulation of UST systems on a national scale must be different from that undertaken by most of its other regulatory programs because the UST problem is significantly different. This difference is mainly due to two factors: The large number of facilities to be regulated and the nature of the regulated community.

The most significant problem is the sheer size of the regulated community. Nationally, over 700,000 UST facilities account for about 2 million UST systems. Estimates indicate that roughly 75 percent of existing UST systems are unprotected from corrosion (and thus

present a serious environmental risk). A relatively high proportion of UST facilities (10 to 30 percent) already have had a leak, and soon others will leak unless measures are taken to upgrade them.

Another problem arises from the nature of the regulated community. A large proportion of USTs are owned by small businesses with \$500,000 or less in total assets. For example, 72 percent of all retail motor fuel outlets are owned by small businesses. These small entrepreneurs, who are used to operating their businesses under minimal regulation, will be significantly affected by environmental regulations for UST systems. In the promulgation of the technical standards elsewhere in today's Federal Register, EPA has attempted to minimize the regulatory impact on small businesses without compromising the statutory requirements to protect human health and the environment.

In addition, the problem of releases from USTs is multi-faceted. There are three major sources of release incidents: Product delivery piping failures; corrosion of unprotected tanks; and spills and overfills. Environmental regulations for UST systems must be aimed at preventing these different types of petroleum and hazardous substance releases as well as increasing the ability to quickly detect and minimize the contamination of soil and ground water by such releases, and ensuring adequate cleanup of contamination. To do this, UST regulatory requirements must address every phase of the life cycle of a storage tank system: Selection of the tank system; installation; operation and maintenance; financial responsibility; closure; and cleanup of the site where releases have occurred.

In summary, the size of this regulated community, the predominance of small business ownership of the UST systems, and the need for comprehensive management of an UST so that releases are minimized during its operating life present a unique regulatory challenge. This challenge calls for the consideration of new approaches from federal, state, and local regulators. Some existing state and local UST programs already provide effective UST management through a variety of different approaches. In developing a strategy for approval of state UST programs, EPA has been guided by a realization that there is often more than one way to ensure sound UST management using different regulatory approaches.

2. Challenges for Compliance and Enforcement

The experience of state and local agencies that are currently implementing UST programs demonstrates two realities. First, large businesses are generally willing and have already begun to comply with UST requirements. Second, small business owners, with limited resources and knowledge of federal regulations, often need more direct attention and technical assistance to ensure compliance. Given the unique nature of this regulated community, EPA believes the UST regulatory program will be most effectively carried out by those who are closest to the problem, who can respond quickly, and who can create a visible presence, that is, the state and local governments.

In addition, successful implementation of this program depends a great deal on the regulated community's voluntary compliance with the requirements because, ultimately, they are responsible for conducting the work under this new program. Also, the large number of facilities and the numerous types of activities that take place on-site preclude the implementing agency from being present to ensure that tank management activities are performed properly. Compliance is best prompted by owners and operators who are clearly informed of the regulations and in close contact with the regulators. Interaction between regulators and UST system owners during the development of a regulatory program and during program implementation can be used to gain acceptance within the regulated community, and may be most effective at the state and local level. Another incentive for voluntary compliance can be the type of regulations developed at the state level. For example, the federal technical requirements, where possible, rely on familiar industry codes and build on recognized trends developing in the field of UST management.

Because much of the environmental improvement from the UST program will come from the regulated community's voluntary compliance, the process of approving state programs should recognize that regulatory approaches developed in response to the specific needs of different local areas may be more appropriate and thus better understood by the regulated community.

3. State and Local UST Programs Are Already Underway

Many states and localities have already begun to address the ground-water contamination threat and cleanup problems posed by leaking USTs. At least 18 states have developed UST

programs that, at a minimum, regulate the basic elements of proper UST system management. Although all of these programs address petroleum UST systems, only a few currently include hazardous substance USTs within their scope. Other states have enacted legislation and are developing a regulatory program. Because many of these states plan to use EPA's rules to guide their own regulatory decisions, EPA expects state progress in developing regulations to proceed rapidly with the appearance of today's final rule on the technical standards.

This high level of state activity has taken many routes. Some state programs have established stringent release detection for existing USTs (California and Florida), and others emphasize state-of-the-art prevention technologies for new USTs (New York, California, and New Hampshire). Some are phasing in the upgrading or replacement of existing substandard systems (Florida, Connecticut, and Delaware). Others have attempted to tailor their standard-setting based on proximity to sensitive ground-water locations (Maine and South Carolina). EPA has closely studied these state regulatory program approaches and found that diversity on important technical issues is often the rule rather than the exception. EPA believes that its approach toward the approval of state programs must accommodate these differences where such initiatives are no less stringent than the federal program.

Many county and municipal governments also are already implementing UST programs. Over 100 major cities in the U.S. have developed local UST ordinances and programs. Some programs are operated independently of the state; others are part of a wider state regulatory program. The implementation role of local agencies in the UST regulatory effort is being encouraged in many states in hopes of making use of available local manpower (such as fire marshals and building code officials) and thus improving overall enforcement and administrative capabilities. Three of the leading state UST programs—New York, Florida, and California—have begun to work out solid working relationships with local UST programs within the state, a policy that is believed to be critical to the success of the state program. In several of the eastern urban counties of New York, the state has delegated authority to the county governments, allowing the state agency to focus its efforts on implementing the UST program in the less urban counties where local UST programs are less

developed. In Florida, Dade and Broward counties have been given authority to implement the UST program in their jurisdictions. Several other counties in the state are reported to be considering local UST programs. California has given responsibility for administering and enforcing the state UST program to over 100 local county and city agencies.

In order to protect vulnerable ground-water supplies or in response to a series of local incidents, some local governments have issued their own ordinances, regulations or by-laws, even in the absence of any state regulatory action. In some cases, these local controls predate the corresponding state regulations and may be more stringent than their state counterparts. Savannah, Georgia; New Orleans, Louisiana; and San Antonio and Austin, Texas are examples of localities that have created their own UST regulations. In Massachusetts, at least 78 communities have enacted some level of UST controls. EPA has noted over the past three years that these independent actions at the local level often are the precursors to the development of an UST program for the entire state (as occurred in California, Florida, and New York).

EPA believes the high level of local UST program activity nationwide will increase with today's promulgation of the federal technical standards and as numerous state programs begin to develop or revise their own regulatory standards in response. Also, as other states begin to wrestle with the reality of how to implement their UST programs and as the dangers posed by existing UST systems become more widely known, local UST programs and involvement should increase significantly over current levels.

4. EPA's National UST Program Strategy and State Program Approval

The factors discussed above led EPA to conclude that the approach taken in today's final rule is the most effective way to implement this approval program. First, the state program approval language of section 9004 of RCRA, as well as its legislative history indicates that Congress intended state and local UST programs to have a pivotal role in the national UST program. At the same time, however, it is clear that Congress intended EPA to lead in establishing and supporting standards necessary to protect human health and the environment nationwide. The "no less stringent" and "adequate enforcement" criteria must be met to ensure protection of the nation's ground

water. Second, the nature of the problem, the regulated community, and the work involved in implementing the regulatory program dictate that the actual day-to-day work take place at the state and local level. EPA has concluded that much of the environmental improvement to be gained under this program will be made through supporting and building the implementation efforts of state and local UST programs. Third, substantial activity is already occurring in states and localities, and EPA's approval process should work to build, rather than disrupt, this established network. The Agency's role in approval, therefore, must focus on encouraging the state and local governments to carry out their own unique programs. The approval of state programs, however, is just one step in a long-term strategy to develop a national UST program. EPA must look ahead to the actual implementation of the program after approval has been given.

In facing the implementation challenge that today confronts the national UST program, EPA has concluded that the approval approach established today is necessary to address the realities of the UST regulatory program. First, as more state and local governments become involved, the work of the UST program must be routinely repeated in thousands of jurisdictions nationwide. Several operating state and local UST programs already report that they are quite busy "running the store," and express surprise at the size of the regulated community and how fairly simple tasks must be routinely repeated numerous times for the implementing agency to be successful in bringing UST systems into, and maintaining, compliance.

Second, visits to several state and local UST program offices have shown that they have developed their own unique requirements and operate differently even though they are geared towards solving similar technical problems. They need the flexibility to continue to improve upon their own approaches. They have common implementation problems, however, and have expressed the need for better technical aids, such as data management tools.

Third, many state and local governments that already implement UST programs report a significant effort to provide visible on-site monitoring, which means a constant "regulatory presence" is needed to effectively ensure the regulated community's compliance with UST requirements. A significant environmental gain is achieved through the implementation at

the local level by these individual UST programs. Thus, improving their performance will produce maximum environmental benefits and ensure the success of the UST program nationwide. Accordingly, EPA believes its implementation efforts should be focused on serving the network of state and local programs through listening to their concerns and helping them solve implementation problems with tools that improve their programs' effectiveness.

Approval of state programs thus becomes a basic competence test to ensure that the work associated with the implementation of regulatory controls by the state program will, in fact, cause the needed level of improvement in UST system management by the regulated community. A requisite level of enforcement authority and technical standards must be ensured, and therefore must be the focus for approval by EPA. Other program performance and implementation capability concerns are less of a focus for state program approval and more of a question of improving implementation of the national UST program over time after states have received program approval. EPA recognizes that the nature of the problem and the work involved in effective direct implementation of the regulation by EPA will overwhelm the Agency's capabilities and resources. Accordingly, the strategy for state program approval must focus on ensuring that a bottom-line level of protection is maintained, but at the same time must avoid setting requirements that would prevent or discourage the development of sound state and local UST programs that should be approved to operate "in lieu of" the federal program. The aim of state program approval is to develop the state-federal partnership that will allow both parties to focus on preventing leaking USTs from causing further environmental contamination.

III. Today's Rule

A. Summary of Today's Rule

EPA is promulgating today a final regulation for approval of state underground storage tank programs under section 9004 of RCRA, to be codified at 40 CFR Part 281. This regulation establishes criteria for state programs in the areas of "no less stringent" and "adequate enforcement" of compliance. The major elements of today's rule are outlined below.

In defining "no less stringent," EPA is promulgating criteria in the form of objectives. These objectives are established for seven of the eight technical program elements: New UST

systems design, construction, and installation; release detection; general operating requirements; upgrading of existing USTs; release reporting, investigation and confirmation; out-of-service USTs and closure; and release response and corrective action. The objective for the element of financial responsibility will be provided by EPA when the final technical requirements in this area are provided at a later date. These objectives represent the minimum standard that the state program must achieve in order to be considered "no less stringent" than the federal requirements. Through these objectives, EPA intends to provide the states with the flexibility to develop an administrative approach that best suits the needs of the state while ensuring that an adequate level of performance is achieved in protecting human health and the environment in all states.

In determining "adequate enforcement", EPA has defined the minimum authorities and procedures a state must have. The state must have authority to inspect records, inspect sites, and require monitoring and testing by the owner. The state must also have procedures for inspecting sites and reviewing records. The state must have legal authority to obtain a temporary restraining order and a preliminary injunction, and to assess or sue to recover penalties. In addition, the state must allow opportunity for public participation in enforcement actions.

Finally, the components of a state application for program approval are described in the regulation. These components include: A Governor's transmittal letter; a description of the state program; a description of compliance monitoring and enforcement procedures; where interim approval is sought, a schedule for final approval; a Memorandum of Agreement, which defines the roles and responsibilities of EPA and the approved state; an Attorney General's statement, which certifies to the state's authorities for the eight technical program elements and for enforcement and compliance monitoring; and copies of the applicable state statutes and regulations. EPA believes that the above requirements ensure that approved state programs meet the requirements set out in RCRA section 9004.

B. Strategy for State Program Approval

In the April 17 preamble, EPA proposed three options for evaluating whether a state program is "no less stringent." As stated in the proposal, EPA's preferred approach was to compare the state and federal programs

element-by-element. (Section 9004(a) of RCRA establishes those elements that must be included in a state program in order to receive EPA approval; under today's rule an element is a discrete segment of a comprehensive UST management program that has an identifiable objective.) EPA believed this option gave the best combination of flexibility and ease of implementation. On December 23, 1987, EPA requested public comment on certain general objectives provided as the criteria for determining the stringency of each program element. Today, the Agency is promulgating these criteria substantially as presented in the December 23 notice (although the objective for financial responsibility will be promulgated at a later date with its associated technical rules), except that they do reflect the points of departure made to the proposed underlying technical standards (discussed elsewhere in today's Federal Register) and public comments on the supplemental notice.

As discussed in the December 23 notice, EPA does not believe that the specific federal requirements in the Part 280 regulations provide the only definitive and protective approach for UST regulation. In developing the federal technical standards, EPA recognized that other approaches would meet EPA's overall performance objectives. These federal technical standards are by necessity more detailed and specific than the objectives they are designed to meet because the federal regulations must be able to be implemented by the regulated community and must be enforceable in those states without approved state programs. As indicated in today's rule, EPA does not believe that the individual requirements set forth within the federal program elements should necessarily preclude states from developing other approaches that will achieve the overall objectives of performance identified for purposes of state program approval.

The objectives in Subpart C of today's final rule identify the performance standards for each element that the federal requirements are intended to meet and that a state program must meet in order to be as stringent as the federal program. They ensure that state programs meet the basic standards established by the federal program but, at the same time, do not dictate the methods the states can use in reaching these standards. EPA believes this approach to state program approval will provide the states with significant flexibility, permit alternative methods of implementation, and still ensure that state UST programs achieve the same

result in protecting human health and the environment as the federal program.

Under section 9004, EPA also must ensure that state programs demonstrate "adequate enforcement" of compliance with program requirements. EPA proposed that states demonstrate compliance monitoring and enforcement authorities and basic compliance monitoring procedures. In addition, EPA solicited comment on whether it should require a demonstration of enforcement response procedures. As a result of public comments, the Agency is promulgating regulations for adequate enforcement that require state programs to demonstrate compliance monitoring and enforcement authorities and procedures for implementing those authorities (except in the area of public participation, where EPA will allow the state to choose between specific authorities or procedures). As explained above, EPA seeks to approve a variety of state programs and to encourage states to use innovative approaches in all program areas, including monitoring compliance and undertaking enforcement actions. In the near future, EPA will be issuing additional guidance on "adequate enforcement" that will provide examples of acceptable compliance monitoring and enforcement programs currently being used by several states.

Today EPA is also clarifying the issue of program scope. In evaluating the state's program scope, EPA considered requiring states to include all the jurisdictional definitions listed in the federal technical standards rule. EPA concluded, however, that this would be both burdensome and unnecessary. Instead, the state must describe its jurisdiction and regulated population in the program description to show that its program includes the UST population that is covered by the federal program. Broad state authorities are sufficient if, under state law, they cover the same or a greater universe than the federal program. States may, of course, choose to adopt any of the terms that are included in the list of definitions in the federal regulations at 40 CFR 280.12.

IV. Analysis of Today's Rule

The following sections of this preamble include discussions of the major issues and address the public comments received in response to the April 17 proposed rule and December 23 supplemental notice.

EPA has reorganized the proposed rule for two reasons. First, the Agency is incorporating as Subpart C of today's rule the criteria for "no less stringent" as proposed on December 23, 1987 (52 FR 48638), except for the criterion for

financial responsibility which will be promulgated at a later date along with its supporting technical rules. Second, the Agency has clarified the requirements for adequate enforcement as a component of the state's application. Previously, the adequate enforcement demonstration was proposed to be part of the program description. Today, the Agency is promulgating the adequate enforcement requirements in a separate subpart of the rule. Further explanation of this change can be found later in this preamble (section IV.B.). For ease of reference, the following preamble discussion is organized to address each subpart of the rule separately.

A. Subpart A—Purpose, General Requirements, and Scope (§§ 281.10 through 281.12)

Section 9004 of RCRA sets forth a number of requirements for state UST program approval. Section 9004(a) establishes the elements that must be included in a state program in order to receive EPA approval. In order to correspond with the technical requirements promulgated elsewhere in today's Federal Register (or to be promulgated later, in the case of the financial responsibility standards), EPA refers to these program elements as new UST systems; upgrading of existing UST systems; general operating requirements; release detection; release reporting, investigation and confirmation; release response and corrective action; out-of-service UST systems and closure; and financial responsibility. Section 9004(b) requires that each of the state program elements be no less stringent than the corresponding federal program elements for final approval. (A discussion of the Agency's approach to determining "no less stringent" is provided in Subpart C of this section of the preamble.) Under section 9004(b) state programs may receive interim approval as long as certain (but not all) requirements are no less stringent than the corresponding federal standards. In the preamble to the April 17 proposal, EPA solicited comments on the requirement that a state seeking interim approval must have each program element present in some form before interim approval. No comments were received on this issue, however. The proposed regulatory language simply provided that a state must have requirements in all the program elements, including the less stringent ones, as a condition of receiving interim approval. The proposed rule did not specify the type of requirements the states must have for

these other less stringent elements. Therefore, the Agency is clarifying that a state must have at least general statutory authority for the less stringent elements.

EPA received many comments regarding the program elements necessary for interim approval. Many commenters expressed concern that some of the most difficult program elements to achieve were required to be "no less stringent" at the time of application in order for a state to qualify for interim approval. The commenters suggested that EPA change this in the final rule. The Agency agrees with these commenters that the program element requirements required to be no less stringent at the time of application, such as financial responsibility, may be the most difficult to develop. The Agency, however, has promulgated these no less stringent requirements substantially as proposed because they are set forth by statute and cannot be changed through rulemaking.

In the proposal, the elements of a state program that must be immediately no less stringent were listed as corrective action, financial responsibility, notification, and new tank performance standards. Those elements that could be less stringent were listed as leak detection and prevention, recordkeeping for leak detection, reporting of releases and corrective action, and closure. Since the April 17 proposal, the elements of a program have been reorganized to parallel the order in the technical standards, and the new tank performance standards have been divided into standards for upgrading existing UST systems and general operating requirements as well as standards for new tank design, construction, installation and notification.

In order to be no less stringent than the federal program, a state must have requirements for upgrading of existing UST systems and for general operating requirements. For purposes of interim approval of state programs, these elements are considered to be part of the new tank performance standards. Therefore, a state applying for interim approval must have requirements that meet the federal objectives for the following elements: New tank design, construction, installation, and notification; upgrading existing UST systems; general operating requirements; release response and corrective action; and financial responsibility.

If a state chooses to apply for interim approval, it is accepting the limitations associated with it. It must upgrade all

less stringent authorities within the federal law's established timeframes. EPA acknowledges that this limitation will make interim approval less attractive to states, and will discourage states from applying for interim approval. Today's rule, however, provides procedures for both final and interim approval, including the automatic expiration of interim approval when a state with interim approval does not submit a program revision within the prescribed time periods.

Under sections 9004 (a) and (d), the state UST program must also provide for adequate enforcement of compliance. The Agency proposed, and today is finalizing, requirements mandating certain state legal authorities and procedures for compliance monitoring and enforcement. These regulatory requirements are found in §§ 281.40 through 281.43 and are discussed in greater detail later in this preamble.

The following section of the preamble explains the parts of the state's application that must be provided to demonstrate coverage of all of these requirements.

B. Subpart B—Components of a Program Application (§§ 281.20 through 281.25)

Today's regulation identifies the components that must be included in the state program application package submitted to EPA. Many commenters requested that the Agency keep the application process as flexible and streamlined as possible. The Agency attempted to do this, and has simplified the process even further by designing a standard state application form that will be provided in a State Program Approval Handbook to be issued before the effective date of this rule. The use of this application form is optional and the state may submit whatever application form that it prefers as long as it meets the regulatory requirements. As outlined in § 281.20 (a) through (g), the state's application must at least contain the following basic parts: (1) A transmittal letter from the Governor of the state; (2) a description of the current state program; (3) a description of compliance monitoring and enforcement procedures; (4) a schedule for interim approval, where applicable; (5) a Memorandum of Agreement; (6) a statement from the state Attorney General; and (7) copies of all applicable state laws and regulations. Although for purposes of clarity today's rulemaking separately addresses the Attorney General's statement and the demonstration of adequate enforcement, the state may join the two into one document in the application package.

The Agency had originally proposed that states submit an implementation plan as part of the application for program approval. The proposed implementation plan included: a long term implementation strategy; a schedule for interim approval; and a Memorandum of Agreement (MOA).

One commenter expressed concern that the implementation plan (proposed § 281.22) was redundant and therefore burdensome to require both a program description and an implementation plan. This commenter questioned the purpose of a long term implementation strategy, interpreting it to suggest that EPA would conduct detailed oversight of approved state programs. The commenter asked whether the Agency would disapprove a state that did not achieve the goals laid out in the long-term implementation strategy.

The Agency's intention is to conduct oversight in a manner that allows for changing circumstances. The original intent of the long-term implementation strategy was to provide a starting point that the Agency could use to determine the amount of assistance the state needed to improve its UST program. EPA expects that a significant amount of this improvement will occur after state program approval. As a result, the information provided by the plan can and should be satisfied apart from the approval process, and thus the proposed long-term implementation strategy is unnecessary. Because EPA believes that the implementation plan is no longer necessary for approval, and to be consistent with its efforts to streamline the application package, EPA has deleted the proposed requirement for an implementation plan. The schedule for interim approval and the MOA are now separate application components.

A brief description of each of the reorganized components in the final rule is provided below.

1. Transmittal Letter (§ 281.20(a))

A transmittal letter signed by the Governor of the state must accompany the original state application. This letter serves to transmit the state's formal request for UST program approval, and indicates that the Governor has approved the designated lead state agency for implementation of the UST program.

2. Program Description (§ 281.21)

The program description is intended to provide EPA and the public with basic information on the extent of the state's effort to manage UST systems. During the formal 180-day application review period, EPA must issue a public

notice of the tentative decision to approve or disapprove a state program application. As part of that notice, EPA must note the availability for inspection by the public of the state program application. The information in the program description is necessary to ensure that the public is informed of (1) the state's scope and jurisdiction, and (2) the state's plans for implementing an UST regulatory program in lieu of the federal program. Many commenters asked how EPA would use the resource information in the program description. In particular, they were concerned that specific staffing and funding figures would be set by EPA in determining state approval or disapproval. EPA notes that states have been receiving federal grant funds for program development since 1988. These grants, which require matching state funds, have enabled states to develop notification systems, obtain necessary legislation, write regulations and policies, and hire and train staff. In addition, most states now have LUST Trust Fund cooperative agreements that provide funds for corrective action, staff hiring and training, and enforcement and cleanup activities. Through the grants and cooperative agreements, and matching state funds, most states have demonstrated sufficient staffing and management capability for purposes of state program approval.

The program description must address several subjects. First, the scope of the state's UST program is described, including the extent of the state's jurisdiction and whether the state program is a "partial" or "complete" program. Knowledge of program scope is important for approval because the approved state program is formally designated to operate in lieu of the federal program. Thus, the state program must regulate at least the same categories of UST systems and substances as the federal program to avoid non-regulation by states of categories of UST systems that Congress intended to be regulated under the national UST program. The program description also indicates whether the state's authority extends to Indian lands. For those states that do not have authority over their Indian lands, EPA will implement an UST program on those lands.

Although the Agency received no comments on program scope, EPA is providing further clarification of its requirements in this area with regard to partial and complete programs. To demonstrate that the state program covers the same universe as the federal program, the state definitions will be

compared to the following six basic terms, defined in Subtitle I, that EPA believes are essential in defining the scope of the federal UST universe. Those six terms, which are defined in Section 9001 of Subtitle I, are: operator, person, release, regulated substances, petroleum, underground storage tank. (Of course, the state may incorporate any of the other terms that are included in the list of definitions in the federal regulations at 40 CFR 280.12.) The Agency does not require the state to use the exact definitions of these terms promulgated in the federal regulations. Broadly written state authorities will be sufficient, although the Agency may ask for a clarification if it is not clear that a state definition includes the same jurisdiction as the federal program. For example, rather than defining "underground storage tank," a statute that could regulate any facility with potential for release into air, soil or ground water would be sufficient.

Section 281.12(a) allows the Administrator to approve either partial or complete state programs as specified in section 9004(a). The definition of a "partial" state program is one that regulates either petroleum tanks only or hazardous substance tanks only. To receive program approval, a partial state program must include within its jurisdiction all of the major categories of UST systems that are addressed within the scope of the federal program for either petroleum tanks or hazardous substance tanks. For instance, a state program only covering petroleum tanks will not be approved if it does not cover retail motor fuel UST systems. The state, however, does not have to have immediate jurisdiction over all categories of petroleum tanks. To be approved in such cases, the state must reach an agreement with EPA in the Memorandum of Agreement on how those tanks not in the state scope will be regulated, and the state also must provide a schedule showing its plan for expanding its jurisdiction so that these tanks will be regulated by the state.

A "complete" state program regulates both petroleum and hazardous substance tanks, and the state must have jurisdiction over at least the same categories of tanks as the federal program. As discussed above, the state may indicate in the MOA how any tank not in its jurisdiction will be covered as long as it provides a schedule for expanding its jurisdiction. Those categories of USTs that EPA had proposed to defer but now regulates in the final technical standards must be included within the scope of the state program. For example, used oil USTs

need to be regulated under state programs.

Today's final technical rules do not cover certain UST systems. Because the Agency currently has insufficient information to decide whether to regulate these deferred USTs, the question of what (if any) standards are appropriate will be considered in the future. Deferred UST systems, however, are subject to interim prohibition and the release response and corrective action requirements under the federal program. UST systems storing fuel for emergency generators are subject to all but the release detection requirements. Thus, EPA and the state must agree on how to oversee compliance of the regulatory requirements applicable to any deferred USTs in the MOA. States may want to consider including the list of deferred USTs within their statutory authority from the start to avoid the necessity for future changes to expand their jurisdiction when and if federal regulations for the deferred systems are eventually published.

EPA has exempted by regulation certain other categories of UST systems entirely, and states will not need to include these systems within their jurisdictions in order to have adequate program scope for approval. The categories of USTs that are deferred and exempted are described elsewhere in today's Federal Register.

Today's rulemaking does not hinder states from implementing a state program that is broader in scope than the federal program (§ 281.12(a)(3)). A state program, for example, may regulate all heating oil tanks, although tanks used for storing heating oil for consumptive use on the premises where stored are excluded from the federal UST program. In such cases, the additional scope of coverage is not reviewed by EPA as part of the state program approval process. In addition, if EPA were asked to provide enforcement assistance, EPA cannot enforce these additional state requirements. On the other hand, in approved states with requirements (such as release detection) that are more stringent than the corresponding federal requirements, the more stringent requirements are part of the approved program and are federally enforceable (§ 281.12(a)(3)).

Second, this program description will also describe the organizational structure of any state and local implementing agencies administering the UST program within a state. The program description must generally identify the major jurisdictional responsibilities, program operation roles, and lines of communication and

authority of these implementing agencies. Copies of any Memoranda of Understanding (MOUs) or written agreements for coordination of intra-state responsibilities should be provided.

In addition, the program description should identify the number of persons currently involved in UST program operations, their general functions, and the staff expected to be employed in the near future (if available). State applications should also explain any limitations on hiring or the utilization of existing staff. This information is requested so that the public will be informed of operating constraints when the approval application is made available to the public through the formal review process. This information would rarely be a determining factor in assessing the adequacy of the state's program for regulating the UST system universe. In their response to the proposal, many states commented on their current resource problems. The Agency will not dictate staffing levels for purposes of state program approval.

Third, the program description should explain any plans the state program has for meeting the estimated future costs of administering the program. There will be no minimum base number used by EPA in approving state programs. All states must have some source of funding independent of federal grant monies. The Subtitle I federal grants are provided by Congress as seed money for use by states to initiate program development, among other things. EPA received many comments about the high costs of implementing UST programs in the states. EPA will not expect states to have all necessary funds available at the time of application for approval. As with staffing, EPA will approve states that need to develop additional funding sources, and believes that funding is a longer-term issue that is largely separate and apart from the state program approval process.

In conclusion, EPA does not expect the resource information required in the program description to result in the disapproval of state programs. Only in the unlikely situation where a state clearly has insufficient staff or funds to implement its program will EPA disapprove the state because of inadequate resource levels. The program description, in general, will be used by EPA and the public as background information that will help to ensure that a viable state program does exist. Additional guidance on the program description and the other parts of the application is being made available to states in the form of a State Program

Approval Handbook, which EPA has developed to help states implement today's rule.

In the April 17 proposal, EPA required states to include a description of their compliance monitoring and enforcement procedures in the program description. In reorganizing the proposal, EPA is now including compliance monitoring and enforcement as separate parts of the application. The Attorney General's statement (§ 281.25) should include the state's authorities for compliance monitoring and enforcement. The state's demonstration of adequate enforcement (§ 281.22) will ensure that the state has appropriate procedures for implementing those authorities. EPA's criteria for evaluating the adequacy of the state's authorities and procedures are explained under Subpart D of this preamble.

3. Description of Compliance Monitoring and Enforcement Procedures (§ 281.22)

The description of compliance monitoring and enforcement procedures must include information on the state's procedures for UST population identification, general compliance monitoring, and general enforcement response. More specifically, the implementing agency must have systems for: Updating and maintaining an inventory of the UST population; collecting and maintaining data on violators and monitoring their subsequent compliance status over time; and exercising legal authorities to take enforcement actions against violators, bring them into compliance, and deter other potential violators.

4. Schedule for Interim Approval (§ 281.23)

States applying for interim approval must include a schedule to propose, finalize, and change the necessary regulations and legislation. The schedule should address major milestones in the program development process, for example, submission of draft legislation, proposal of regulation, and promulgation of final regulations.

5. Attorney General's Statement (§ 281.25)

A fifth component of the state UST program application is a statement from the state Attorney General certifying that state laws and regulations provide adequate authority to implement the required elements of an approved program. The Attorney General's statement is the foundation for ensuring that the state UST program is no less stringent than the federal program. The Attorney General, or an independent legal counsel for the state, must certify

that the state laws and regulations provide authority to implement the program described in the application and has legal authorities for compliance monitoring and enforcement that meet the requirements of §§ 281.40 through 281.43.

6. Memorandum of Agreement (§ 281.24)

The MOA explains EPA's and the lead state agency's respective responsibilities for UST program administration and enforcement. The state staff will develop the draft MOA in close consultation with EPA staff. The MOA will be particularly important if a state is applying for approval of only a partial UST program. In addition, if the state program does not cover the same universe of underground storage tanks as the federal program, the MOA should include an agreement between the state and EPA with regard to how those tank systems not covered by the state program will be regulated.

EPA received comments suggesting that local agencies be allowed to sign the MOA. The MOA, however, is signed only by EPA and the lead state agency because it is important to have all UST program issues within the state coordinated by one lead state agency. The need for coordination makes it impractical for other participating state agencies and all the local authorities to sign the MOA. In addition, EPA is only authorized to approve states.

7. Copies of All Applicable State Laws and Regulations (§ 281.20)

Copies of all applicable state laws and regulations are essential for EPA to evaluate the state program's scope and technical requirements. This information will also serve as the basis for establishing a record of the state laws and regulations regarding USTs in approved states. EPA will codify state programs by incorporating state laws and regulations by reference as part of its final approval of the state program. Codification will enable all interested parties to receive notice of which state laws and regulations comprise the Subtitle I program in approved states. Another reason the Agency codifies state laws and regulations is to clarify the requirements that are effective in that state for purposes of federal enforcement. Once the state program is approved, it operates in lieu of the federal UST program. Therefore, if EPA were to take an enforcement action in an approved state, it would do so using federal authorities but citing violations of state law or regulations.

C. Subpart C—Criteria for "No Less Stringent" (§§ 281.30 through 281.36)

1. Background

a. Summary of public comments. In the preamble to the April 17 proposal (52 FR 12858), EPA solicited comments on three options for determining whether technical requirements in states seeking approval are no less stringent than the corresponding federal standards. Several states commented on the importance of two goals: Establishing flexible criteria for approval of state programs, and clearly identifying the minimum state program requirements in the final state program approval regulation. EPA recognizes that these two goals may often be in tension, and today's final rule attempts to strike a balance between them through the establishment of clear baseline criteria that will accommodate effective existing state UST programs to the greatest extent possible consistent with the statute.

The Agency's preferred option consisted of comparing the overall requirements within each technical program element of the state program to the federal objective for that element. Whether the state program element was no less stringent would be determined by its performance in meeting the overall federal objectives for that element. The two rejected options included (1) a holistic evaluation that would compare the overall stringency of the total state program to the total federal program, which would allow trade-offs between program elements (for example, balancing less stringent financial responsibility with more stringent release detection requirements), and (2) a line-by-line comparison of specific state and federal requirements. In the second of these two options, all the federal requirements would be matched by identical or closely similar state requirements for purposes of state program approval.

Many comments were received on these options for defining "no less stringent." Some commenters felt that only the holistic approach would allow states sufficient flexibility. Some commenters believed that only a line-by-line review would result in no less stringent state programs. Other commenters agreed with the Agency's preference for the element-by-element approach as a balance between flexibility and certainty. EPA carefully reviewed these comments and still prefers the element-by-element approach. This decision was based on EPA's intention (1) to develop a state program approval process that will allow states to use alternative

approaches in program development and implementation, and (2) to ensure that state programs meet the baseline standards established in the federal program to protect human health and the environment.

In the preamble to the April 17 proposal, EPA requested comment on whether to include state approval criteria in regulation or guidance. Many commenters wrote, and the Agency agrees, that including the criteria in regulation would ensure needed consistency and clarity in approving state programs. Subpart C of today's final rule provides the criteria all states must meet before receiving approval, and that EPA will use in judging each state application.

In its supplemental Federal Register notice of December 23, 1987, EPA proposed criteria for state program approval in the form of objectives for each of the eight technical program elements: New UST system design, construction, installation and notification; upgrading existing UST systems; general operating requirements; release detection; release reporting and investigation; corrective action; out-of-service and closed UST systems; and financial responsibility. Through the process of identifying the underlying purpose of the federal technical requirements in each program element, EPA developed the proposed federal objectives. The Agency's own interpretation of administrative and procedural details that were in the technical rule were intentionally left out of the federal objectives.

These objectives represented the Agency's expectations of what constitutes a no-less-stringent state program. By requiring the state to achieve the objectives underlying the detailed federal requirements in each element rather than match each regulatory detail of the federal requirements, EPA provides a performance-based measure for evaluating programs and recognizes that the precise details in the federal program are not the only feasible approach to UST regulation. By establishing these objectives, EPA also provides a framework for approval that guarantees that each state UST program provides a minimum level of protection.

Many comments were received on EPA's proposal to use the objectives as criteria for state program approval. Many commenters agreed with the objectives approach and felt that objectives would allow development of regulations appropriate to the geographical characteristics and the profile of the regulated community of

each individual state. Some commenters agreed with the objectives approach, but they suggested that the objectives needed to be more specific in several areas. The Agency has reviewed each of the objectives and provided greater specificity for several of them. More details and guidance are included in today's preamble in the section-by-section discussion of the objectives for each program element. Other commenters expressed concern that the objectives not be confused with regulations and emphasized that the objectives should be viewed by the states as no less stringent review criteria, but not as the model to be copied into state regulations. EPA agrees with these commenters and, in the following section, has provided further guidance on how states should develop regulations that will meet the performance goals set out in the objectives. Furthermore, the Agency has developed a Handbook for State Program Approval that will give more guidance and clarification on meeting the objectives.

One commenter discussed the legality of the federal objectives approach. This commenter argued that the approach was illegal, saying that Congress did not authorize EPA to create a subset of the federal requirements that would be used to assess the adequacy of state programs. However, EPA does not agree with the commenter who argued that the federal objectives and element-by-element approach promulgated today are inconsistent with Congressional intent. First, under today's rule, EPA is not, contrary to the commenter's suggestion, picking and choosing a subset of federal requirements by which to judge the stringency of state UST programs. Instead, the federal objectives and the element-by-element approach are designed to identify, on a holistic basis, the environmental performance standards to be achieved by the technical requirements in each program area. State programs will be required to achieve the performance standard for each program area rather than match each detail in the federal rule. EPA does not believe that the environmental objectives approach set out in today's rule will result in the approval of state UST programs that are less stringent than the federal UST program.

Second, the language of section 9004 is consistent with the federal objectives and element-by-element approach promulgated in today's rule. Section 9004(b) requires EPA to judge the stringency of state programs by comparing the state requirements in seven program areas to the

corresponding federal standards. Nothing in the statutory language suggests that a line-by-line comparison must be made between individual state requirements and corresponding federal regulations. Rather, paragraphs (a) and (b) of section 9004, when read together, strongly suggest that the relevant comparison is to the standard set in each federal program area.

Consistency among state programs was an objection raised by many commenters who are concerned that UST programs that vary from state to state will create an excessive compliance burden on those members of the regulated community operating in more than one state. These commenters believe some flexibility for states is useful, but that uniformity and consistency are equally important. Some commenters pointed out that the federal technical rule is the result of extensive research and analysis, and they suggested that states should be encouraged to adopt the federal standards.

EPA does not believe, however, that the specific federal requirements in the technical rule provide the only definitive approach for protection of human health and the environment. Many of the specific details of the federal regulations are necessary to establish requirements that the regulated community can follow and that the Agency can enforce. State regulations must accomplish the same underlying goals that the federal requirements aim to achieve. If a state chooses to accomplish them using different methods or administrative procedures than the federal government, however, EPA does not believe that that choice should preclude program approval.

b. The technical standards rule and state program approval. The details provided in the technical rule had to be included so that the regulated community could understand specifically what had to be done to comply with federal requirements, and so that the regulations could be enforceable by EPA. Given the nature of the state program approval process, EPA is aware that state program reviews will inevitably entail some comparison of specific federal and state technical requirements because EPA's technical requirements provide a model against which the state program can be measured. The Agency is concerned that requiring such a line-by-line review of state programs would result in delays that would be due to issues having little to do with that actual stringency of the state program or its overall performance. Thus, in order to establish

the federal objectives for each program element, EPA distinguished between those requirements in its technical standards that are substantive baseline environmental standards from those procedural and administrative requirements that are necessary to protect human health and the environment, but are not the only approach for doing so. The former only are the basis for state program approval under the "no less stringent" standard. The latter may also be advised through a variety of approaches established by the implementing agency in states that have not yet received program approval.

In the Supplemental Notice, EPA requested comment on whether changes were needed in several provisions of the proposed UST technical standards to ensure the intended flexibility was available for the approval of states that are no less stringent. These changes would allow states to substitute their own procedural and administrative requirements for those set forth by EPA in the federal technical standards. Many commenters supported allowing states additional latitude in this exercise of administrative discretion, specifically as pertains to the development of administrative and procedural requirements. In considering this issue, EPA noted that several state and local programs are already implementing varying procedural and administrative requirements that appear to be effective. For the above reasons, EPA has decided to integrate this additional decision-making authority into the final technical rule. (See the preamble discussion in support of that rule elsewhere in today's Federal Register notice.)

c. Achieving the objective. In developing a state UST program, EPA believes all states will have the same problem the Agency had in defining sufficiently clear requirements so that the regulated community will understand their responsibilities under the rules and can be held to comply with them. UST system owners and operators, the interested public, and state inspectors will need to know and be able to understand the minimum state requirements that apply to the complete operation (from installation to closure) of all UST systems. However, the final objectives promulgated in today's state program approval regulations do not, and were not meant to, restrict states to all the specific details of the federal program. EPA intends to allow states to choose a number of methods that will establish UST programs with clear, understandable requirements. The three major methods are discussed below.

First, a state may adopt or incorporate by reference today's final technical regulations. EPA already has some indications that several states plan to do this. These technical requirements have been developed with the thought that state programs may use them as the model for their state UST regulations. This approach is the simplest and takes advantage of the effort made by EPA to develop implementable and environmentally protective regulations.

Second, a state may develop a different regulatory approach that is, however, analogous to the federal program because it satisfies the performance objectives for each program element. EPA's final technical requirements reflect administrative and technical decisions that do not always have to be duplicated for a state program to be no less stringent in performance. For example, the federal requirements for new UST system installations mandate the use of nationally accepted codes. The same performance objective (sound installations at all new USTs) may be achieved if the state simply requires owners and operators to use certified installers and the state has a system of licensing or certifying installers that includes adherence to these same codes. If a state uses another approach or requires a different method than that specified under the federal program, the state must demonstrate that it has achieved the federal objective within that program element to be accepted to operate "in lieu of" the federal program.

In adopting this second approach, the state may develop different regulations that provide as specific and clear directions for the owners and operators as do the federal requirements. One advantage of this method of rulemaking that the regulated communities will understand their responsibilities and can be held to comply with them.

Alternatively, a state may choose to promulgate regulations that are more general and then supplement these with detailed policies and guidelines to instruct the regulated community and the public of its requirements and procedures for implementing the regulations. These general requirements must at least provide the state with authority to hold all UST system owners and operators responsible for achieving the overall performance goals provided in the objectives, even if the state regulations do not specify exactly how to meet each performance goal. This method of rulemaking, however, has a significant disadvantage in that it may increase the state's implementation burden because, to be enforceable, any

such general requirements must be supplemented by other state actions that ensure adequate clarification of how, at a minimum, to achieve the performance goal. Supportive actions could consist of state administrative policies, technical interpretations, procedures, or guidelines that more clearly establish how the general requirements can be met. For example, if the state regulations require the use of only approved methods of release detection, then some system for review and approval of release detection methods must be developed by the state that will not result in approval of methods less stringent than those allowed under the federal program.

Several commenters on the December 23 supplemental notice expressed concerns about this type of state approach and whether state guidelines should be sufficient for program approval as opposed to detailed state regulatory requirements. Several other commenters felt that procedures and guidelines would be adequate to demonstrate the adequacy of a state program and that this could significantly expedite program approvals, thus allowing the state to concentrate its resources on cleanups and other necessary activities. Two commenters objected to allowing state guidelines or procedures to replace state regulations for given requirements. One of these commenters wrote that regulations and statutes should be required in order to eliminate the possibility of an informal change in policy or of enforcement problems. The other commenter felt that, in order to provide fair notice and clarity of state methods, such guidelines or procedures must be submitted for public notice and comment.

In response to those commenters who expressed concerns over whether state guidelines should be sufficient for purposes of program approval, EPA is clarifying that guidelines are not a substitute for regulations. Guidance documents and written policies are not generally enforceable, while regulations do have the force of law. However, because EPA's Subtitle I program approval process focuses on whether a state program meets federal performance objectives, an approvable program will not need to have the same level of detail and specificity in regulations that would be required if the approach to program approval involved a comparison of individual state requirements with the federal standards. State requirements that meet the underlying federal objectives are sufficient for approval in terms of meeting the no less stringent criteria,

irrespective of whether or not they are supplemented with additional guidance or procedures. However, if the state does not provide specific enough direction to the regulated community and public on how to implement the state regulations, the state may not receive approval for their UST program. General regulations are difficult to enforce because the vagueness and lack of specificity may confuse owners and operators who will then be less likely to try and comply with them. Without the ability to provide adequate enforcement through clear direction, the state program will not be approvable. One of the criteria for withdrawing approval of state programs (§ 281.60(1)) is the lack of ability to enforce state regulations; thus, it is also a criterion for approval. An instance of where clear direction might be needed occurs in the objective for release investigation, confirmation and reporting, which says that a state must have standards that require prompt reporting of confirmed releases. The state should define what "prompt" is using a number so that the owners and operators have a clear direction on when such reporting must be done and so that the state has the ability to determine and then to enforce a violation of this reporting requirement. Therefore, where specific state standards are not embodied in statute or regulations, the Agency will consider policies or guidance documents submitted with the state application for approval if they are used to support applicable general state regulations.

Third, a state can use, for example, a combination of the above approaches that copies some elements of the federal program in some elements, and uses a different regulatory approach in other program elements. The state program will have met the no less stringent criteria for state program approval if the regulations within each element achieve the performance objectives for those elements.

d. State approaches to ground-water classification. EPA recognizes that releases from UST systems located in certain sensitive areas could pose a greater risk to human health and the environment than other areas. In developing the technical regulations, the Agency considered and requested comments on a federal classification approach under which a class or classes of UST systems located in higher-risk areas would be subject to more stringent requirements than UST systems located in less sensitive areas. After careful consideration of this issue, EPA rejected the concept of a federal ground-water classification scheme in promulgating

the final technical regulations for underground storage tanks. (This is discussed in more detail in the technical standards rule, published elsewhere in today's Federal Register.) The Agency strongly believes that the classification of ground water must be based on highly localized hydrogeological circumstances and, therefore, that classification should be a state or locally initiated activity. The Agency has also concluded that criteria for a national scheme of classification (that is, one that could encompass all the conditions across the country) could not be developed and feasibly applied to the national UST program.

A classification approach to regulating UST systems at state or local levels, however, where local environmental conditions are better known, may be feasible and appropriate: such a classification approach could result in improved environmental management. For example, several states have karst or limestone areas where contamination, once released, is nearly impossible to contain. In such areas, the state is free to consider whether secondary containment with interstitial monitoring could provide enhanced leak detection and better prevent releases in these sensitive areas. Under today's approach to program approval, the Agency allows, but does not require, states to develop a classification approach for use in determining whether more stringent leak detection and containment standards should apply to UST systems being located in sensitive or high-risk areas. States that have already developed a classification system may decide to use it to regulate USTs. Under today's final rule for state program approval, the federal objectives must be the minimum requirements in all areas of the state for the program to be determined "no less stringent" than the federal program; however, states could use a classification scheme to establish standards for certain areas that are more stringent than those under the federal program.

e. The use of state variances in approved programs. The Agency solicited comment on the use of technology- and risk-based variances in the preamble to the proposed EPA technical standards rule (52 FR 12739 and 48641). Technology-based variances are included in the federal technical regulations (published elsewhere in today's Federal Register). For example, the release detection standards allow owners or operators to use non-specified methods of release detection if they can demonstrate to the implementing

agency, or if the implementing agency otherwise determines, that the alternative method will achieve performance that is as effective as the allowed methods. Risk-based variances would allow less frequent or alternative approaches to release detection of protected tanks in areas where the risk to human health and the environment is believed to be lower (for example, where ground water is deep and not vulnerable to contamination). The Agency has decided not to include risk-based variances in the federal technical standards rule because it is the Agency's experience that variances based on site characteristics are generally difficult to justify and implement. In a regulated community the size of the national UST community, such a provision would be practically impossible for EPA to implement throughout the nation. Instead, the Agency has developed national standards that set a baseline of protection in all areas.

This subject also arises in connection with state program approval. In the December 23, 1987 Supplemental Notice (52 FR 48645), the Agency solicited comments on whether state programs should be approved if they had a variance procedure for owners and operators of petroleum UST systems that allowed alternative and less stringent release monitoring methods in lower risk areas (for example, a state could prospectively classify such lower risk areas). The Agency received some comments in favor and some in opposition to this approach. In reviewing these comments, the Agency has decided not to allow approval of state programs that do not maintain the minimum federal objectives in all areas of the state. An important reason for not accepting the use of less stringent release detection in "lower risk areas" is the difficulty in clearly establishing what constitutes a lower risk. Several state officials commented that they would not be allowed by the public to "write-off" less vulnerable areas. Another commenter questioned the judgement of classifying lower risk areas based on ground water because a safety and health hazard (explosive or toxic gases) could be present at any site with a release. EPA agrees that the final technical standards for release detection have been developed to enable the early detection and minimization of all releases to ensure that present and future ground water uses are protected at all sites and that all health and safety threats are avoided. The state requirements can do no less if they are to be considered no less stringent. For

this reason, today's final state program approval objectives for no less stringent programs do not allow approval of states if these states permit less stringent release detection in areas that are described or classified as less vulnerable, whether on a case-by-case or class basis.

If a state program includes a variance procedure, it can still be approved if the state can demonstrate that its eligibility criteria and procedures for reviewing site-specific or more general technology-type variance requests will ensure no less stringent protection of human health and the environment. However, if a state allows variances, it must agree to issue them only in a manner that is no less stringent in protecting human health and the environment as the federal program. Terms of this agreement will be specified in the MOA included in the state program application.

Following is a more detailed explanation of the objectives associated with approval of no-less-stringent state program elements.

2. New UST Systems and Notification (§ 281.30)

EPA has concluded that an important objective of the national UST program is for all new UST systems to be designed, constructed, installed, and protected from corrosion in a manner that will prevent releases during their operating life. Also, certain notification requirements should be met when new USTs are installed. States can achieve this objective in several ways: Adopt the same new UST system requirements found in the federal technical standards; require new UST systems to be built and installed in accordance with nationally recognized industry designs and standards by incorporating the applicable national codes and practices directly into state requirements; or adopt such codes by reference into state regulation. The proposed federal objective for new UST systems has been revised somewhat to reflect changes made in the final technical standards and public comment received on the proposed objective. The objectives for design and construction have been merged with the installation objective to emphasize the common reliance on established codes in today's final technical standards rule.

Some commenters were concerned that a general dependence on current national consensus codes would not be protective of the human health and the environment. As discussed in the preamble to the technical standards rule, published elsewhere in today's Federal Register, EPA does not agree. The Agency's analysis of these industry

codes and practices, public comments on the proposal, and new information the causes of releases from UST systems has led to the conclusion that implementation of these nationally recognized codes will protect human health and the environment. EPA notes that several of these codes for new UST system design, construction, and installation have been revised and improved since the publication of EPA's proposed technical requirements on April 17, 1987.

Another commenter was concerned that state requirements adopting current industry codes will not reflect future improvements in technology when they occur. The Agency believes the current industry codes and standards are already protective of human health and the environment. If a state adopts current codes and those codes are later updated and improved in response to new knowledge and technological developments, the state may decide to adopt the revised code, but it will not generally be required to do so for purposes of program approval. They may need to submit program revisions in the future, however, if the federal technical standards are revised based on a new code.

One commenter suggested that EPA specify which industry standards were acceptable. The commenter believed that EPA should not assume that all standards developed by all national groups were adequate. For each element in which codes have been developed, the final federal technical standards list the appropriate codes that may be used for purposes of compliance.

The federal objective concerning spill and overfill equipment (§ 281.30(b)) requires that the state program ensure that all owners and operators of new UST systems install equipment to prevent spills and tank overfills. In addition, when tanks are upgraded, such equipment must be installed as part of the upgrade. The proposed objective (§ 281.32(b)) was modified to reflect changes in the final technical rule. The federal requirement for spill and overfill equipment was originally contained in Subpart C, General Operating Requirements. In today's final technical standards rule, this requirement for equipment has been moved to Subpart B, UST System Design, Construction, Installation and Notification. To remain consistent with this formatting change in the federal technical standards rule, the final objective for spill and overfill equipment has been included with the objectives for New UST Systems in the state program approval rule (§ 281.30(b)).

To be no less stringent in this area, the state must have requirements that all new tanks must have spill and overfill equipment (except as noted below). Equipment to provide such protection includes small catchment basins for spills, and alarms, automatic flow restrictors, or shutoff devices for overfill prevention. A provision has been added to clarify that states do not have to require spill and overfill equipment on tanks that are manually filled through the addition of less than 25 gallons of product at a time (for example, used oil storage collection tanks at service stations that are manually filled in small volumes). This change recognizes the limited equipment exemption that has been added to the final EPA technical standard concerning spill and overfill equipment.

The proposal allowed state substitution of requirements on transporters in lieu of spill and overfill equipment. Several commenters were concerned that this provision could interfere with current regulations set forth by the U.S. Department of Transportation, and that they would also not provide sufficient spill and overfill protection. EPA agrees that this problem cannot be adequately solved by procedures required on the transporters alone and that requiring UST preventive equipment is more protective. Therefore, the final objective has been revised to no longer allow for substitution of procedural requirements on transporters in lieu of spill and overfill equipment on the UST system.

The federal objective concerning the notification requirement (§ 281.30(c)) is that the state program ensures that all owners of new UST systems notify the implementing agency of the UST's existence. Under section 9002 of RCRA, this notification requirement already has been implemented nationally for existing UST systems. Owners of existing and new UST systems were required to notify the designated state agency of the existence, age, size, type, use and location of their USTs beginning May 1986. Therefore, states may be approved if they only require owners and operators of new UST systems to notify the state agency because notifications of existing USTs have already taken place under existing federal authorities.

Although it was not included as a requirement for state program approval, the April 17 proposal solicited comment on whether approved states must require updated notifications from owners and operators of existing USTs (52 FR 12857). Updates of existing notifications, however, are not

mandated by federal law and are not part of the final federal technical requirements. In general, commenters concurred with the decision not to include updating as a state program approval requirement, although several pointed out that such updated information may be useful to the state. A few commenters expressed their belief that states should be required to update existing tank notification precisely because this data is useful to the state for enforcement purposes. Although some states may choose to have notification updates as part of their program, EPA is not requiring collection of this information for purposes of state program approval because it is not required under the federal program.

Another commenter pointed out that the federal notification form was proposed (on April 17) to be revised to include a new compliance status section that must be filled out by new UST system owners and operators. The commenter questioned why this additional information was not included in the objective for new UST systems in approved state programs. While this information will be useful to the implementing agency, EPA is not convinced that such a requirement is necessary to achieve the federal objective for new UST systems. The new UST system compliance checklist is to assist in compliance monitoring, and will not act as a substantive performance standard. Because the additional information is an enforcement tool rather than a new UST system standard, it is not required as part of the objective for new UST systems. Thus, states will be left with the discretion as to whether or not they desire to use the notification form to collect this additional information on new UST installations for purposes of compliance monitoring.

3. Upgrading Existing UST Systems (§ 281.31)

An important national objective is to ensure that unprotected steel UST systems are either upgraded or replaced within 10 years. This phase-in of protected tank systems is expected to prevent numerous leaks that would otherwise occur in the future due to corrosion of unprotected steel. The upgrading of existing UST systems ensures that existing USTs meet essentially the same standards of protection as new UST systems. Thus, by 1998, all UST systems must prevent releases due to corrosion, and spills or overfills. This 10-year schedule, however, does not include installation of release detection devices, which must be completed within 5 years according

to the release detection objective at § 281.33(b).

This 10-year goal may be achieved in two general ways. First, the state may develop a phase-in schedule that will bring all the USTs into compliance incrementally during the 10-year period. The phase-in schedule could be based on the age of the tank, ground-water sensitivity, county, zip code or any other factor chosen by the state. Second, the state may establish the same baseline goal as the federal requirements (1998), without specifying a detailed phase-in schedule.

The proposed objective for upgrading existing UST systems included a provision that allowed states to demonstrate in the state program approval application how other state requirements will achieve this federal goal without an explicit 10-year deadline. In the Supplemental Notice, EPA described what such a demonstration might consist of and requested comments on this approach. While several commenters encouraged the use of this more flexible approach, other commenters objected that the 10-year deadline was not simply a goal to work toward but that it was a requirement that must be achieved. The language in the proposed objective created confusion on this point. The discussion of this objective in the Supplemental Notice further raised commenters' concerns because it said that states could establish other requirements that might reasonably achieve the same general objective by prompting most unprotected tanks to be upgraded. One commenter asked for a definition of "most tanks." Another commenter argued that if EPA's best judgment dictates that tanks should be upgraded within 10 years (as required in the federal technical standards), then a state program that does not accomplish this is not as stringent as the federal program.

The Agency has considered these arguments and has deleted the provision that allows a demonstration of how upgrading will be achieved without a 10-year deadline. An important goal in the federal technical standards rule is for all existing UST systems storing regulated substances to be required either to upgrade to new tank standards within 10 years through retrofit or replacement, or be permanently closed. Most commenters to the proposed technical standards rule supported this requirement (for further discussion, see the Preamble to the final federal technical standards rule elsewhere in today's Federal Register). The Agency was concerned that the provision in the

proposed objective would lead states to believe that a time period greater than 10 years for upgrading was allowable. In addition, it was unclear what information would provide an adequate demonstration. The Agency was concerned that the interpretations would vary widely on what was sufficient for the state program to be approved and guidance on the subject has proved difficult to provide. For all these reasons, the Agency has deleted the proposed provision that allowed the state to demonstrate how the goal of upgrading existing USTs within 10 years would be achieved without a deadline.

4. General Operating Requirements (§ 281.32)

An important objective of the final EPA technical standards is the prevention of releases through the proper operation and maintenance of the UST system. EPA has concluded that the improper operation of UST systems can result in significant releases into the environment. To achieve the objective of the corresponding federal requirements in this program element, a state program needs to demonstrate that the risk of operation-related releases is minimized. This objective consists of five different provisions: (1) The use of procedures to prevent overfills and spills during transfer; (2) the maintenance of corrosion protection mechanisms; (3) ensuring the continued compatibility of the regulated substance stored with the UST systems; (4) ensuring only sound upgrades and repairs, which are performed in accordance with nationally-recognized practices; and (5) maintenance of recordkeeping necessary to demonstrate recent facility compliance.

The final technical standards require that spills and overfills be prevented through the use of proper procedures during product transfer (§ 281.32(a)). In response to one commenter's concern that the proposed objective in this area was not specific enough regarding proper transfer procedures, the final rule now requires that steps be taken to ensure that the space in the tank is sufficient to receive the volume being transferred and that the transfer operation is monitored constantly. This change makes it clearer that the Agency's intent in this aspect of the objective is consistent with the final technical standards.

The objective concerning the operation and maintenance of corrosion protection has been modified in response to commenters' concerns (§ 281.32(b)). One commenter correctly pointed out that the proposed objective, which stated that UST systems must "be

operated and maintained to prevent releases due to corrosion for the operating life of the UST systems if they have been equipped with corrosion protection", was not specific enough to ensure that states achieved the same performance goals as the corresponding EPA technical standards. Thus, the revisions to the final wording of the provision clarify EPA's intent that procedures for operation and maintenance of corrosion protection be carried out by someone knowledgeable and trained in corrosion protection. The goal is to ensure that the necessary protection is in place and operating properly. A note has been added for further guidance to suggest that state requirements in this area build on several existing national codes (such as those established by the National Association of Corrosion Engineers).

State programs must hold owners and operators responsible for ensuring compatibility between tank systems and their stored substances (§ 281.32(c)). EPA has concluded that incompatibility can result in releases due to structural deterioration of tanks or piping. EPA recommends the use of certain industry codes for ensuring the compatibility of alcohol-blended fuels with fiberglass tanks. For purposes of program approval, a general state requirement in this area would be sufficient (as it is in EPA's final technical standard in § 280.32).

The general operating objective includes a provision that addresses UST system upgrading and repairs (§ 281.32(d)). An additional requirement that has been added to this objective is that the system be found structurally sound before upgrades or repairs can take place. EPA has concluded that such an assessment is an important performance objective because all repair and upgrade technologies depend on the structural soundness of the existing system. Today's final technical standards for upgrading and repairs emphasize this initial assessment of tank system soundness before a repair or upgrading. The change to the federal objective similarly reflects this clarification of the corresponding federal requirements. This change also is made to respond to concerns raised by some commenters on the December 23 Supplemental Notice that the proposed objective appeared to ignore the emphasis on an initial assessment that was included in the proposed (and now final) technical standard concerning repairs.

To clarify the proposed objective, EPA has revised the language for the final rule to ensure that states mandate that

such assessments are conducted. There are several approaches for determining the structural integrity of tanks, for example, internal inspections, vacuum tests, and tightness testing. To meet this objective, a state may allow several approaches, mandate a specific test technology, or simply require that a general performance level be achieved.

This objective also ensures that upgrades and repairs are conducted in a manner that will prevent future releases for the remaining operating life of the UST system. Under today's final technical rules, a steel tank that is structurally sound may be upgraded or repaired by use of an internal lining alone (without cathodic protection), by retrofitting with a cathodic protection system, or both. FRP tanks must be repaired by the tank manufacturer's authorized representative or in accordance with national codes EPA's final technical standards require the use of applicable national codes and standards to ensure sound repairs and upgrading practices. Thus, the stringency of the state requirement will be considered in light of these existing nationally recognized practices.

The final provision of the general operating objective establishes that state programs must require UST owners and operators to maintain records of monitoring, testings, repairs, and closure sufficient to demonstrate recent facility compliance status, except that repair and upgrading records must be kept for the operating life of the facility (§ 281.32(e)). As discussed in greater detail in the preamble to the final technical standards rule (elsewhere in today's Federal Register), the Agency has concluded that some recordkeeping requirements are necessary to establish the recent compliance status of this large regulated community because regular reporting and frequent and routine inspections at all sites are not feasible. One commenter requested that EPA specify extensive recordkeeping requirements for state programs, including site plans and tank tests. EPA encourages states to require that owners and operators keep site plans on file as they could be useful. However, EPA will leave this administrative requirement, as well as other specifics of recordkeeping, to the discretion of the state according to the needs of its particular UST program.

In evaluating whether a state program is no less stringent in this area, the Agency will consider four points pertaining to the state's recordkeeping requirements. First, the state must require records addressing the same areas of the program that are mandated

under the federal technical standards. These areas are listed in the objective and include release detection, monitoring, corrosion protection testing, testing and certifications for repairs and upgraded UST systems, and site assessments at closure. Second, the state program must require records to be retained long enough to demonstrate recent facility compliance. EPA has designed the final technical standards to represent a minimum paperwork burden that will still enable an inspector to assess current facility compliance during an on-site inspection. These requirements in the technical standards rule may provide a guide for states to follow in developing their own requirements.

Third, the state's requirements must ensure that documentation of compliance is sufficiently detailed to enable an inspector to evaluate compliance in the areas mentioned above. For example, site assessment test results that demonstrate the condition of the site at closure must be available. Finally, the state program must require that all on-site records be made immediately available when requested by representatives of the state agency, or provided promptly to the inspector when they are stored off-site. If a state requires routine reporting, or collects and maintains this information itself, then an owner and operator may not need to maintain records on-site in order for the state program to meet this objective.

5. Release Detection (§ 281.33)

The detection of releases from new and existing UST systems is an important objective in the federal program. In the preamble to the December 23 Supplemental Notice (52 FR 48645), EPA discussed five major provisions of the performance objective for release detection. These provisions included requirements for: (1) The phase-in of release detection requirements; (2) new petroleum tank systems; (3) the applicability of release detection to both tanks and piping, and the capability of detection methods used; (4) new hazardous substance UST systems; and (5) all existing UST systems.

EPA received numerous comments on these proposed objectives, as well as the April 17 proposed technical requirements for release detection. The comments related to the proposed objective are addressed below, while the comments on the federal technical standards for release detection are discussed in the preamble to the federal technical standards rule published elsewhere in today's Federal Register.

The final technical standards for release detection have been revised to reflect public comment as well as new information available to the Agency since proposal regarding the causes of releases from UST systems. These changes in the federal technical rule are summarized in Section IV.D. of the preamble to that final rule package.

First, more frequent tank tightness testing (annual) of unprotected tanks is required during the 10-year upgrading period. Second, less frequent monitoring of new and upgraded tanks is allowed for 10 years from installation or upgrade, or by 1998 if it is later, at which point release monitoring must become more frequent. Third, the schedule for phase-in of release detection over 1 to 5 years at existing tanks will be based on age; and fourth, release detection is phased-in sooner on pressurized piping systems (within 2 years).

EPA has modified the substance and organization of the proposed release detection objective in today's final rule as a result of these changes and the reformatting of the final technical standards. The changes in the format for the final release detection objective resulted in a section for: General methods, phase-in of the requirements, requirements for petroleum tanks and piping, and requirements for hazardous substance USTs. The following discussion addresses the changes to the federal objective for release detection in greater detail.

a. General methods (§ 281.33(a)). An important provision of the release detection objective is for state programs to ensure that only those methods are used that can detect releases from UST systems as effectively as methods allowed under the federal program. The technical standards for release detection specify general performance and design requirements for several different detection methods to ensure reliable detection of releases. Accordingly, the proposed objective for state programs generally required the use of methods that are as effective as the methods allowed under the federal standards, and that the method be designed, installed, operated and maintained so that releases are detected.

A few commenters expressed concern that this provision of the proposed objective was vague and should include some of the details from the proposed technical standards concerning allowable methods. For example, one commenter expressed concern that the wording of the proposed objective would allow states to use different types of interstitial monitoring, and that such flexibility would place an undue burden

of oversight and evaluation on the state implementing agency.

EPA does not agree that the objective must include the same details contained in the final federal technical standards. As stated earlier, state programs do not have to mandate exactly the same requirements as the corresponding federal standards in order to be no less stringent. The state program must have an approach, however, that will ensure at least an equivalent level of performance as the federally-allowed methods. EPA plans to issue guides soon concerning the performance and correct use of various generic methods of release detection that should assist states in developing their own guidelines and evaluations of release detection methods.

The provision of the proposed objective regarding general methods has been revised to reflect changes made in the final release detection technical standards. First, wording has been added to § 281.33(a)(1) clarifying that release detection methods must be able to detect releases from any portion of the UST system "that routinely contains the regulated substance." EPA interprets this phrase to include all underground delivery piping and the tank vessel itself (except for the very top of the tank, which is protected by overfill prevention requirements). This clarification ensures that several viable methods of release detection are not disallowed (for example, in-tank level gauges that cannot detect releases due to loose bung hole covers, or double-walled tanks that do not cover the full 360-degree circumference of the tank).

The proposed objective for release detection specified that, in general, the method of release detection chosen must be capable of detecting a release of regulated substances before it migrates beyond the excavation area. This phrase, "before it migrates beyond the excavation area," was intended to be the performance goal that the state requirements must meet. The Agency requested comments on this language in the Supplemental Notice, specifically on what types of state requirements would ensure a similar level of performance as the federally-allowed methods. The Supplemental Notice discussed the placement of ground-water monitoring wells as an example of possible flexibility in specific requirements. EPA noted that state regulations permitting ground-water monitoring wells to be located outside the excavation zone might be acceptable if another method was combined with the wells. One commenter pointed to a contradiction between this example and the

performance requirement, and asked for clarification.

The phrase "before it migrates beyond the excavation area" has been deleted in the final objective for release detection because it precludes the use of some acceptable out-of-tank methods of release detection that are sometimes installed just beyond the excavation zone, such as ground-water monitoring wells. The state should be able to allow the use of the same release detection methods that are allowed under the federal technical standards. EPA has deleted the original phrase and added a second sentence that specifies the factors that must be considered when comparing other release detection methods against the methods approved in the federal technical standards. This change alters the basic performance goal that the state requirements on release detection methods must achieve; the new performance goal consists of a comparison with the federally-allowed methods. The federal technical standards allow six methods of release detection and also allow any other methods that meet either of two more general release detection requirements. One of these requirements is a release detection rate of 0.2 gallons per hour (§ 280.43(h)(i)). The alternative is a comparison test of the effectiveness of the proposed method against the first six methods, which consists of a demonstration by the owner and operator for the implementing agency (§ 280.43(h)(ii)). Therefore, the language in the final release detection objective for state program approval is intended to allow the state to permit the use of any of the federally-approved methods as well as any methods that the state determines are as effective as the federally-approved methods.

Second, § 281.33(a)(2) has been revised to specify that all methods must be properly calibrated in addition to being designed, installed, operated, and maintained to detect releases. This minor change makes the objective consistent with the approach in the final technical standards. Third, wording has been added that makes it clear that all methods must be implemented in accordance with the capabilities of the method. This change reflects an amendment to the technical standards to clarify that a method not only has to be capable of detecting small releases but must also be operated in a manner that will make use of those capabilities.

b. Phase-in of requirements (§ 281.33(b)). As discussed in the preamble to the December 23 Supplemental Notice, EPA has also concluded that to be no less stringent, a

state program must ensure that release detection is applied at all UST systems as rapidly as required under the federal program. The Agency is convinced that numerous existing UST systems are now leaking and, therefore, an important performance objective for state programs is quick detection to enable initiation of release response and corrective action. The proposed objective allowed states the flexibility to complete this phase-in in different ways providing that it is completed as rapidly as under the federal technical standards rule. Several commenters supported this approach. Several others, however, expressed the belief that EPA should not permit any variation from the proposed federal technical standards with regard to phase-in dates for purposes of state program approval. These commenters were concerned that the proposed objective would allow any state phase-in method to be approved and did not clearly identify evaluation criteria for determining acceptable state phase-in approaches.

In today's final technical standards rule, EPA has decided to phase in release detection over 1 to 5 years at all UST systems following a specific schedule that is based on the age of the UST system. This approach was suggested by numerous commenters. Although EPA recommends that a similar approach be used by state programs, the Agency has decided to retain flexibility in the final objective to continue to allow states to use other phase-in approaches. EPA believes numerous other reasonable approaches are possible including the phase-in of release detection sooner at UST systems located near drinking water wells. The key to meeting this federal objective is to ensure that release detection is scheduled to be completed at all UST systems before the end of the 5-year phase-in period.

In response to some commenters' concern about the clarity of this objective, the final objective has been revised to mandate that states provide "an orderly schedule that completes" the phase-in within 5 years. Although states do not have to use the criterion of age to be no less stringent in performance, they must provide a phase-in schedule that results in significant segments of the regulated community using release detection methods well before the end of the 5-year time period. Approaches that allow a majority of the regulated community to wait until the end of the 5-year period would not be accepted as an "orderly schedule." Allowing the major portion of the regulated community to wait until the

end of the period will result in serious noncompliance because much of the regulated community will wait until the last minute to apply release detection. A scarcity of release detection services would then result when everybody begins to demand these services at the same time, and releases will continue to go undetected in the interim.

EPA has also clarified § 281.33(b)(2) to require that each state's phase-in approach mandate that either release detection be applied or the system be closed. The objective for release detection proposed on December 23 did not include a conditional requirement to close the UST system if the owner or operator chose not to apply release detection. One commenter argued that the requirement to close is a powerful incentive to ensure that release detection takes place, and therefore, is important to the achievement of the objective. This commenter pointed out that such a requirement was proposed in the federal technical standards and is important to ensure that facilities are not allowed to operate in noncompliance (without release detection) after the phase-in period is over. EPA agrees with this commenter and has revised this objective to include this requirement.

The final objective has been changed also by adding the requirement that release detection methods that can detect a release within an hour must be applied at all pressurized underground piping within 2 years of the effective date of the federal requirements. This change reflects the increased stringency of the final technical standards concerning release detection for pressurized piping. EPA believes that an important performance objective is that state programs ensure that automatic flow restrictors or shutoff equipment or other hourly monitoring methods (such as vapor monitoring) with alarms be applied to all pressurized piping as rapidly as is required under the corresponding federal requirements. The Agency has concluded that pressurized piping without such release detection equipment poses a serious threat to human health and the environment.

c. Requirements for petroleum tanks (§ 281.33(c)). Another important aspect of the proposed release detection objective was for all release detection methods to be applied at least monthly, except that for 10 years, infrequent tightness testing combined with monthly inventory control could be used. As discussed in the preamble to the proposed technical standards, EPA believes that repeated monitoring on a frequent to continuous basis is the first

step toward minimizing threats posed by releases from UST systems, particularly existing systems unprotected from corrosion. EPA did not receive any comments on this aspect of the release detection objective except that one commenter requested further clarification of the proposed frequency requirements. However, three important changes in today's final technical standards have resulted in a revision to this provision of the final objective in § 281.33(c), and they are discussed below.

First, the final technical standards for release detection have been revised to allow tightness testing every 5 years combined with monthly inventory control for the first 10 years after the tank is installed or upgraded, or until 10 years from the effective date of today's requirements, whichever is later. The final objective has been revised to reflect these changes in § 281.33(c)(1). After 10 years, monthly monitoring must be conducted, even at protected petroleum tanks equipped with spill and overfill prevention devices. Again, this change reflects the performance requirements in EPA's final technical standards.

Second, the final release detection standards have been changed to require either monthly monitoring or annual tightness testing in combination with monthly inventory control for all existing petroleum tanks unprotected from corrosion or not equipped with spill and overfill prevention devices. The final objective has been revised to reflect these changes in § 281.33(c)(2).

Third, all the final release detection technical standards have been reorganized and the release detection objective has been changed accordingly to reflect this. Thus, today's final objective highlights more clearly the requirements for petroleum tanks by featuring them in new § 281.33(c).

d. Requirements for petroleum piping (§ 281.33(d)). Another important aspect of the release detection objective is monitoring of the underground piping attached to the tank. In the proposed objective (as well as the proposed federal technical standards for release detection), all underground piping had to meet the same release detection requirements as the tanks except that new pressurized lines without continuous monitoring had to use automatic shutoff equipment. Today's final objective concerning release detection for the piping reflects several changes that are due to revisions made to the final technical standards.

First, to be consistent with the final technical standards, the provision in the objective pertaining to release detection

for petroleum piping has been separated from the one for the tanks. This change is intended to clarify the different performance objectives that must be achieved for the piping. In addition, monthly inventory control as a method of release detection is not sufficient to meet this requirement because it is not as effective as any of those methods allowed under the federal technical standards (see § 281.33(a)(1)).

Second, a phrase has been added to clarify that only underground piping that routinely contains petroleum must have release detection. State requirements do not have to address release detection for fill pipes and vent pipes to be considered no less stringent.

Third, the objectives for pressurized lines have been made clearer to indicate that all such lines must be equipped with release detection that is able to detect a release within an hour by restricting or shutting off flow or sounding an alarm. In addition to hourly release detection equipment, monthly monitoring must be applied to pressurized piping or annual tightness tests must be conducted. Reflecting clarifications of the final technical standards, these changes indicate the Agency's increased concern about the threats posed by pressurized piping.

Fourth, the objective for suction piping has been changed to make clear that these types of lines, as in the federal technical standards, must be tightness tested every three years. Two possible exceptions exist. Testing every three years is not necessary if a monthly method of release detection is in use, for example, release detection that already applies to the tank. The other possible exception to testing every three years is in the case where the suction piping system is designed so that product always drains back into the tank when the suction is released and the design of the piping is such that an inspector can immediately determine the integrity of the piping system. These types of piping systems generally have an easily accessible check valve near the dispenser that an inspector can test to identify if the system is working correctly. Further discussion on the technical aspects of the design of a suction piping system may be found in the preamble to the final technical standards rule (section IV.D.) and in the preamble to the proposed technical standards rule (52 FR 12745).

e. Requirements for hazardous substance UST systems (§ 281.33(e)). The final provision of the release detection objective is release detection for hazardous substance UST systems. The proposed objective specified that all existing systems must meet the same

requirements as existing petroleum UST systems, and that all new UST systems must use secondary containment and interstitial monitoring unless the state approves another method. EPA is today promulgating the final objective substantially as proposed. The objective has been reformatted, however, to add clarity and to reflect the organization of the final technical standards rule.

First, the release detection objective for hazardous substances for both new and existing UST systems has been consolidated into one two-part objective. The objective for existing hazardous substance UST systems (§ 281.33(e)(1)) is followed by the objective for new ones (§ 281.33(e)(2)). The wording in the objective for existing UST systems refers back to the objectives for petroleum UST systems for purposes of simplicity, but the meaning of the requirement is unchanged from the proposal.

Second, a couple of minor wording changes have been made to the proposed language concerning the objective for new UST systems in § 281.33(e)(2). The deletion of the "no less stringent" language and the substitution of wording that holds variance approvals only to methods that are "as effective as" methods already allowed under the state program is intended to clarify that the performance of the methods sought under a variance must be judged relative to other methods allowed by a state program.

In addition, an effective clean up technology must be identified for the hazardous substances being stored in the tank. This language has been added to simply make the objective consistent with the revisions to the variance allowed in the federal technical standards rule. This information on clean up technologies will allow the state to make a more informed decision when evaluating requests for a variance from the secondary containment requirement. In some cases this may lead the state to determine that existing corrective action methods are unsatisfactory even though release detection technology for the hazardous substance is available.

6. Release Reporting, Investigation, and Confirmation (§ 281.34)

The objective of this program element is to ensure that all suspected below ground releases are promptly investigated and all confirmed releases are immediately reported, including all spills and overfills that are not contained and cleaned up. EPA will consider the following points in determining whether a state program is

no less stringent than the corresponding federal program requirements.

First, the state must require the investigation of all suspected releases. The final federal technical standards allow the owner and operator to double-check data and retest and repair release detection equipment before determining that an unusual condition or signal at the site signifies a suspected release. The discovery of released regulated substances at the UST site or in the surrounding area must, at a minimum, be a trigger for investigating a suspected release. EPA notes that many different methods are being used already to investigate suspected releases and they can be tailored to site-specific conditions.

Another aspect of this objective is that the state requirements will need to establish how and when a suspected release is determined to be a confirmed release and corrective action must begin. It is important that state requirements for release investigation be clear on this point. Ambiguity on how a suspected release must be investigated and when it is confirmed may result in delays on the part of the owner and operator in initiating clean up actions. Because such delays could increase the threat to human health and the environment, vague state requirements would be less stringent than the federal technical standards rule, which establishes a failed tightness test or a finding of significant contamination in the bottom of the UST system excavation zone as two separate ways of confirming a release. A state program must ensure that unintended delays in reporting confirmed releases that may occur as a result of uncertainty are avoided.

Second, the state must require a prompt investigation of all suspected releases. The federal technical standards specify completion of the investigation within 7 days (or another time period specified by the implementing agency). In contrast, the federal objective for state program approval purposes simply requires "prompt" investigation because EPA believes the precise definition of what constitutes a prompt investigation should be left to the discretion of the states within reason. EPA selected 7 days as a time limit in the final technical standards because the Agency believes that the type of investigation (a tightness test or initial site investigation) that is being required at the federal level can be arranged and carried out within that time period. The ability to investigate a site, however, can depend on the site and on the availability of the

existing service community. Therefore, a state that allows some additional time for completing investigations may still be considered no less stringent. For example, a state that requires more intensive or complex investigations may need more than 7 days to complete. EPA intends to be flexible in interpreting the promptness of a required state investigation in consideration of these factors. However, EPA also notes that if a state program allows owners and operators to carry out the same or similar investigations as required by EPA significantly beyond the 7 days (for example, 30 days), that state program is not likely to meet the objective with regard to prompt investigation.

Third, EPA has concluded that spills and overfills are generally identifiable through visual observations and that remedial action should be taken as soon as possible after such a discovery. The federal technical standard mandates that all spills be contained and cleaned up, and reported when they are not cleaned up or when they are greater than certain volumes (for example, greater than 25 gallons for petroleum releases). To meet the federal objective in this area, the state must require that spills and overfills be cleaned up. Those spills and overfills that are not completely cleaned up must also be reported so that the state can ascertain whether further corrective action is necessary. The Agency is aware, however, of states that have varying levels for automatically reporting aboveground releases. Under today's rule, a state with higher reporting levels than those under the final EPA technical standards (for example, Florida's requirement for reporting of all spills or overfills of petroleum greater than 100 gallons) can be considered no less stringent if two conditions are satisfied: (1) The state mandates that the unreported spills be completely contained and cleaned up; and (2) the state has requirements that identify the specific steps an owner and operator must take to ensure unreported spills and overfills are contained and cleaned up in a manner that will protect human health and the environment. (For example, Florida has several requirements in its regulations that will result in complete containment and removal of all released product, including contaminated soils.)

EPA has chosen a reporting threshold of 25 gallons because it feels that its requirements are sufficient to guide owner and operator activities for spills under this amount, but that spills larger than 25 gallons must be reported so that further and more specific guidance can

be obtained by the owner and operator. However, if state regulations are more specific than the federal regulations and provide more extensive guidance for how to carry out a clean-up at the sites with larger spills or overfills, then EPA believes that the state could allow a larger reporting threshold and still be considered no less stringent. Under the above objective, for program approval purposes, a state may decide to specifically guide and direct spill responses through regulations or enforceable policies and procedures. EPA believes the selection of an approach in this area is a matter of administrative discretion and is best left to state decision-makers who must choose how to effectively implement the program in their states.

7. Release Response and Corrective Action (§ 281.35)

An important objective of the federal program is that release response and corrective action be taken as needed to protect human health and the environment at all sites with confirmed releases. For purposes of determining whether the state program will achieve this objective as effectively as the corresponding federal requirements, the Agency proposed to evaluate the stringency of a state release response and corrective action program by focusing on several key aspects. First, the state program must require that confirmed releases from the UST system are promptly stopped. Second, the state program must require immediate steps to stop migration of the release, and ensure that health and safety hazards are quickly mitigated. Third, the state program must require that adverse impacts to soil and ground water be investigated, identified, and cleaned up as necessary to protect human health and the environment. Fourth, the state program must require timely reporting of release responses and corrective actions taken, including information necessary to establish cleanup goals and to monitor cleanup progress at the site.

As discussed in the preamble to the April 17 proposal (52 FR 12751), the experiences of several state and local UST programs indicate that no matter what approach is taken in the regulations, the actual work associated with UST release response and corrective action in the field commonly translates into two general phases: (1) Immediate abatement actions that are typically required at many UST sites (for example, control of explosion threats and free product removal), and (2) long-term release response and corrective action associated with soil and ground-

water remediation. For purposes of state program approval, EPA proposed that state requirements could achieve the federal objectives for release response and corrective action without being identical to the federal technical standards. In fact, many of the operating state and local UST programs have requirements that are more general than the technical standards proposed by EPA. As discussed previously in today's preamble, when state requirements are more general in nature, they tend to place a greater burden on the state to supply site-specific directions and to oversee more closely corrective actions taken. Recognizing the need for clear technical direction at clean-up sites, some states have established release response and corrective action funds that provide the state agency with the capability to take over a significant part of the responsibility for remedial action after the owner or operator reports a release.

Today's final technical requirements for release response and corrective action mandate that the owner and operator conduct an initial site investigation and promptly abate health and safety threats. Free product must also be recovered to prevent further movement of the released product, within the soil or ground water. Once the initial abatement of hazards has been completed, certain conditions may require that a more detailed soil and ground-water investigation be undertaken. After each step in the corrective action process, the owner is required to report to the implementing agency. In some cases the implementing agency may require a corrective action plan that specifies how further cleanup will be conducted. At this point, further corrective action of soil or ground water proceeds on a site-specific basis.

Several commenters responded to the Agency's request for input concerning the proposed approach to the release response and corrective action objective. Most of them agreed with the flexibility provided by the proposed objective and stated that it not only provided for adequate protection of human health and the environment but was also feasible for state agencies to implement.

Another commenter expressed concern with the proposed objective, saying that it was too vague, and that almost all the details of the proposed federal corrective action standards had been left out. This commenter also pointed out that the objective omitted requirements for reporting and public participation, and requested that they be included in the final objective.

After considering all the comments, EPA agrees with the commenter who suggested that more detail had to be included in the objective for release response and corrective action, and has provided more specificity in the final rule. In particular, the Agency has clarified in the objective that when a potential threat to human health exists, such as the presence of free product in the soil or ground water, a more extensive investigation of contamination must be conducted. The Agency also agrees with this commenter that the objective should be expanded to ensure that state programs include requirements for corrective action reporting and public participation in the corrective action process, and the final objective includes such requirements.

In general, the Agency has concluded that the states should be left with the flexibility to choose whether to adopt the federal corrective action approach or to adopt an alternative approach that is more suitable to the pattern of work and procedures already used by the implementing agency. Therefore, EPA believes that the overall goal of the federal requirements in the area of release response and corrective action is to ensure that the basic release response and corrective action steps that may be necessary at the site to protect human health and the environment be carried out at the site. In order to be no less stringent than the federal release response and corrective action program, the state's approach must ensure that the same basic work will get done in as timely and effective a manner as is required by the corresponding federal technical requirements. This objective can be met in a state that does not have all of EPA's release response and corrective action technical requirements in state regulations. In the same manner as the other objectives, EPA will require state programs to meet the underlying performance goals of the federal program, rather than all the details contained in the federal technical regulations. The following discussion addresses this final objective in greater detail.

a. Assess and stop further releases (§ 281.35(a)). EPA's final technical standards require that all confirmed releases are promptly investigated and stopped (§ 280.61 in the final technical rule). To demonstrate the state program's stringency in comparison to this provision of the federal objective, the state must provide requirements that ensure that the owner and operator is obligated to promptly take action to assess and stop any ongoing releases at the site. The actions appropriate to stop

a release will vary depending on how the release was confirmed (for example, through a tightness test or presence of fuel in nearby utility lines) as well as the conditions at the site (such as a four-tank gasoline station with pressurized lines versus a one-tank operation with suction lines). If the confirmation of the release identifies the tank or piping component responsible for the release, then actions to prevent future releases could include emptying the problem tank or not using the suspect piping run until it is replaced or repaired. However, if the location of the source is unknown, then the entire UST system or systems will need to be considered suspect and addressed accordingly.

The use of the word "promptly" in the objective is intended to mean that the state must require that owners and operators take such steps quickly to minimize future releases. The less prompt such actions are, the more likely it is that future releases will not be minimized and, therefore, the state's requirement will not be considered no less stringent by EPA. To provide adequate enforcement of such a requirement, the state must clearly define, using a number, the time frame within which an owner or operator is expected to respond to this requirement. General state requirements that are further clarified by detailed technical guidance or policies will be sufficient to demonstrate that a state program is no less stringent in this area.

b. Initial abatement activities (§ 281.35(b)). EPA's final technical standards require each site with a confirmed release to be investigated and addressed to ensure that any immediate threats to health and safety are identified and brought under control (§ 280.62 in the final technical rule). Under the federal program, some of the concerns that must be identified and addressed at the site include: Explosive gas levels or vapor threats that are due to the exposure of contaminated soils; the off-site impacts of free product (or resulting vapors) on nearby water, sewer lines, or in building basements; and the location of any nearby ground-water users who could be exposed to or threatened by dissolved contaminants in their drinking water. The objective underlying these federal requirements is to ensure that owners and operators take action to identify, contain, and mitigate any immediate health and safety threats that are posed by a release (such as mitigation of explosive or other hazards posed by released gas or vapors). Accordingly, a state is no less stringent than the federal program if its program contains such requirements.

The actions taken to mitigate the effects of the release at a particular site will be tailored to the nature of the release and the sensitivity of the site and the surrounding area. (See the discussion on this subject provided in the preamble to the final technical standards rule published elsewhere in today's Federal Register.) The state may decide to have an inspector immediately conduct a review of the site, or it may instruct the owner and operator to do the review and submit the information to the state. The state program must clarify the general actions that the owner and operator are expected to perform to identify, contain, and mitigate any immediate health and safety hazards. In addition, the state must require that the site must be investigated for free product, and if present, begin free product removal.

c. Investigation of impacts on soil and ground water (§ 281.35(c)). Another important aspect of the release response and corrective action objective is the investigation and identification of the extent of adverse impacts on soil and ground water at all sites with confirmed releases. EPA's final technical standards rule includes the requirement to investigate all sites to characterize the presence of contamination in the area of this site most likely to have been impacted (e.g., below the excavation zone; see § 280.63 in the final technical standards rule). A more detailed investigation of the extent of soil and ground water contamination (including dissolved product) is required if free product is present on or within the aquifer, or if contaminated soil is in contact with ground water (§ 280.65 in the final technical rule). Even if these conditions are not present, the implementing agency can require the more detailed site investigation if a potential threat to nearby surface or ground water is believed to exist.

To be no less stringent than these federal technical standards, a state must provide requirements that mandate an initial investigation of every site with a release to identify possible adverse impacts on soil, ground water, and nearby surface waters. The state requirements could establish the need to characterize the extent of ground-water contamination at all sites (which would be more stringent than the federal approach) or alternatively the state could require that a more extensive investigation be performed based on site conditions identified during an initial investigation. If the second approach is used, the state must develop a method or policy for determining when further site investigation is required, and this

policy must include the existence of a potential threat to human health and the environment. Potential threats may include evidence that drinking water wells have been affected, that free product is present on or within the aquifer, or that contaminated soil is in contact with the ground water. As with the other aspects of the release response and corrective action objective, more detailed requirements concerning what constitutes an initial versus a full site investigation, and when a detailed investigation must be conducted, can be established by the state through the use of guidelines, written policies, and implementation protocols and procedures as long as the owner and operator will be required to undertake the investigation when requested by the implementing agency.

In response to a concern raised by one commenter, this aspect of the overall objective has been modified to require investigation for nearby surface water impacts. This amendment is consistent with a change made to the final technical standards in § 280.65(a)(4).

d. Soil and ground-water remediation (§ 281.35(d)). Another objective for release response and corrective action is the cleanup of contaminated soil and ground water identified at the site as necessary to protect human health and the environment. For example, the extent of remediation may be based on a site-specific risk analysis that includes potential human exposure. Alternatively, a state may use statewide numerical standards to establish cleanup levels at a site. In evaluating this aspect of the objective, the Agency does not intend to distinguish between the two approaches when determining whether a program is no less stringent. In either case, the state requirements must ensure that remediation provides adequate protection of human health and the environment.

To be approved as no less stringent, EPA will consider the following points in evaluating whether the state program provides for release response and corrective action as necessary to protect human health and the environment. The state must have authority to require an owner and operator to develop and submit for approval information concerning how remediation of contaminated soil, ground water, and nearby surface water at the site will be conducted (§ 281.35(e)). In addition, the state must be able to require the implementation of steps for release response and corrective action after they have been identified. The release response and corrective action steps must consider the risk posed to human

health and the environment by contamination at the site and address potential routes of human exposure.

e. Reporting on corrective actions taken (§ 281.35(e)). Another objective of federal release response and corrective action requirements is to require the owner and operator to report to the implementing agency on corrective actions taken in response to confirmed releases. In today's final technical standards rule, EPA requires the owner or operator to submit status reports and to report plans for future corrective action activities, such as free product removal or soil and ground-water remediation (§§ 280.61 through 280.65 in the final technical standards rule). The proposed release response and corrective action objective for determining no less stringent state programs inadvertently did not include provisions for corrective action reporting. EPA agrees with the commenter who argued that this is an important aspect of state corrective action programs and that reporting must be included in the final rule as a no-less-stringent criterion. A certain amount of reporting and recordkeeping on the part of owners and operators is necessary for adequate oversight by the implementing agency and to ensure that owners and operators properly carry out their corrective action responsibilities. Thus, today's final rule includes an added objective that makes clear that states must require timely and complete reporting on corrective action steps planned and taken (§ 281.35(e)). This change makes the final objective fully consistent with the corresponding federal technical standards in the final rule, and responds to the concern raised by public comment.

In determining whether a state program meets the objective in the area of corrective action reporting, EPA does not require that states copy the same details as are required in the federal standards. General reporting requirements that obligate the owner and operator to report on corrective actions taken and planned should be sufficient for a state to meet this objective. EPA will examine the following factors in determining whether a state is no less stringent than this aspect of the release response and corrective action objective. The reporting on corrective action plans must result in the information being made available to the state quickly to ensure that steps are being taken to prevent further contamination, and so that technical direction can be provided by the state. In addition, the level of detail reported to the state should be

sufficient to oversee the process of corrective action and ensure technical adequacy. The state should be able to require reporting on all phases of corrective action to ensure that corrective action in fact is taking place and is sufficient to protect human health and the environment. In addition, information on the site and the surrounding area should be reported so that the corrective action can be tailored to the specific conditions of the site and the nature of the release. Initial corrective action steps, results of investigations of soils and ground water, and plans and status reports on long-term remediation of contamination at the site are among the types of specific information that the state might require

f. Public participation in release response and corrective action (§ 281.35(f)). To achieve this aspect of the objective, the state must provide opportunity for public participation when a confirmed release requires a corrective action plan. This provision was not included in the objective proposed in the December 23 Supplemental Notice. In order to respond to concerns raised by public comment on the proposal, and to remain fully consistent with the final federal technical standard (§ 280.67), a public participation provision has been added to the final release response and corrective action objective.

Section 7004(b) of RCRA and long-standing Agency policy indicate a need to be open to the involvement of any interested member of the public in site-specific cleanup decisions. EPA does not intend to prescribe the nature and extent of the public involvement procedures to be followed by the state. Rather, EPA's intention is that a forum be provided that is in keeping with the state's administrative procedures for the interested public to express its views on the proposed corrective actions for serious UST releases. To achieve this aspect of the federal objective, the state must ensure open access to information pertaining to specific corrective actions for those members of the public that are potentially affected by the release or any planned corrective action. EPA does not expect this to be a significant additional burden because many states already have been involving the public in the decisionmaking process for UST cleanups for many years. For example, many states already allow for public access to their site files and those most affected by the release are usually kept well informed through personal contacts with the state response staff.

8. Out-of-Service UST Systems and Closure (§ 281.36)

EPA has concluded that UST systems temporarily or permanently closed can pose a significant threat to human health and the environment if they are not managed properly. To be no less stringent in this program element, the state must demonstrate that it can satisfy two objectives: (1) Releases from temporarily closed UST systems must be minimized, and (2) future releases must be prevented, and existing conditions needing corrective action identified and corrected at permanent closure. EPA believes these goals can be met in different ways.

To ensure that releases are minimized from temporarily closed UST systems, the state must mandate that the general operating requirements continue to be practiced (§ 281.36(a)(1)). For those tanks where product remains in the UST system, the release detection, corrosion protection, reporting, and release response and corrective action requirements must be followed to achieve these general operating requirements. A state may allow release detection requirements to cease if all product is removed from temporarily closed UST systems (§ 281.36(a)(2)).

Another aspect of the closure objective states that each UST system must be closed-off to outside access if it is temporarily closed (§ 281.36(a)(3)). Although this was not addressed in the proposed objective, it is included in today's final rule in order to follow more closely the intent of the corresponding technical standards in this area. The objective reflects the underlying concern in the final technical standards that a tank temporarily closed for extended periods of time could (unknown to the owner and operator) be tampered with or misused as a waste sump or storage pit, or otherwise become the source of accidents during the period of temporary closure. To be able to satisfy this aspect of the objective, the state program must specify when a tank system is considered to be temporarily closed due to the fact that it has been removed from service.

EPA's final technical standard specifies that the tank must be closed-off from outside access if the UST system is temporarily closed for greater than 3 months. The objective has been written to allow some state administrative discretion as to what defines an "extended period of time" for temporary closure. Thus, while this means that states will not be held strictly to the 90-day time period specified in the final technical standards for closing off outside access to the tank,

the state still must establish clearly when temporary closure begins in order to meet this objective. Also, the longer a state allows for a definition of "temporary", the less likely they will be able to demonstrate that they are no less stringent in this area.

EPA's final technical standards set a maximum limit of 1 year for allowing unprotected tanks to be closed temporarily, unless the implementing agency allows a longer time period on a site-by-site basis. This time period limitation is primarily to make sure that permanent closure takes place, and the casual temporary abandonment of numerous unprotected USTs for extended periods of time is thereby avoided. Although this subject also was not addressed in the proposed objective, it is included in the final objective to more closely reflect the intention of the final technical standards. To meet this objective, the state must ensure that unprotected UST systems do not remain out of service for more than one year. A state may choose to allow extensions to this one year limit, in which case the state must require that a site assessment be conducted to make sure that a release has not already occurred from the UST system. The time limit for the temporary closure of USTs has been set at one year to ensure that owners and operators of unprotected USTs that are unused are held responsible for protecting the UST system from corrosion or permanently closing it. If the unprotected UST system is new or has been protected from corrosion, then the tank may remain temporarily out of service for an indefinite period of time (although the other requirements for temporary closure still apply).

Adverse environmental and public health impacts at all permanently closed UST systems may be caused by future releases as well as past releases. To avoid these impacts, the state must mandate that regulated substances and accumulated sludge be removed prior to closure and that the site condition around the UST system be assessed. To determine if there are any present or past releases at closure, the state should ensure that the condition of the site below the UST system is evaluated by the owner and operator. This evaluation can be done by any of the methods allowed at the federal level or approved by the state as protective of human health and the environment. The state may choose to hold owners and operators responsible for using appropriate national codes of practice or specify the particular steps needed to ensure a tank is completely emptied and cleaned.

EPA's technical standard for closure also mandates notification before permanent closure so that a state or local inspector may choose to be present. For purposes of program approval the state is only required to have owners and operators report at the time of closure. EPA has concluded prior notification is not essential to achieving the underlying objective in this area, particularly if a state has established a different method of compliance monitoring and has decided that notice before closure is unnecessary under that approach. If the site assessment confirms the existence of a release requiring some corrective action, then release response and corrective action requirements must be followed.

9. Financial Responsibility (§ 281.37—Reserved)

An important objective of the federal program is that owners and operators of UST systems containing petroleum have adequate financial responsibility to undertake corrective action and meet third-party liability claims. An objective for financial responsibility was proposed in the December 23, 1987 Supplemental Notice. The federal law mandates \$1 million per occurrence with appropriate aggregate amounts as the minimum level of assurance needed by most owners and operators of petroleum UST systems to meet cleanup and liability costs for a one-time release. The final objective in this area will be provided at a later date when the final technical requirements for financial responsibility are promulgated by EPA. States will need to be no less stringent in this area to be able to receive program approval from EPA.

10. Financial Responsibility for UST Systems Containing Hazardous Substances (§ 281.38—Reserved)

EPA is also developing financial responsibility requirements for USTs containing hazardous substances. These regulations will require owners and operators to maintain evidence that funds are readily available in the event of a release from their USTs to pay for the costs of corrective action and third-party liability for property damage and bodily injury. On February 9, 1988, EPA issued an Advance Notice of Proposed Rulemaking for financial responsibility requirements for USTs containing hazardous substances (53 FR 3818). In this advance notice of proposed rulemaking, EPA solicited comments and information about the approaches under consideration. The Agency intends to propose financial responsibility requirements for USTs containing hazardous substances in the

near future, and at that time, a federal objective for such requirements will also be proposed for purposes of state program approval.

Until these requirements are finalized, EPA is reserving this section of today's state program approval rule for this federal objective. For a state to receive program approval, a state does not currently need to have the authority to write financial responsibility requirements for USTs containing hazardous substances. However, if a state plans to regulate UST systems containing hazardous substances in the state program, then the state should consider obtaining the necessary authority in the near future. When EPA promulgates final requirements for financial responsibility for UST systems containing hazardous substances, each state with an approved program will have to submit a revision that incorporates corresponding changes into its state program.

D. Subpart D—Adequate Enforcement of Compliance (§§ 281.40 through 281.43)

In the April 17, 1987 proposed rule, the Agency set minimum requirements for states seeking to demonstrate adequate enforcement of compliance for program approval. In the proposed §§ 281.30 through 281.32, the Agency set forth three categories of requirements: (1) Legal authorities and procedures for collecting and maintaining data on the regulated community; (2) legal authorities for enforcement that must be available to the implementing agency; and (3) options for either procedural requirements or legal authorities for public participation. Section 281.33 of the proposed rule set requirements for sharing of information. The Agency received several comments on this subpart of the proposal and is today clarifying in the final rule its expectations of what constitutes adequate enforcement of compliance for purposes of state program approval. The final requirements are discussed in detail in this section of the preamble.

In summary, under today's final rules (§§ 281.40 through 281.43), states must have adequate compliance monitoring authority so that tank owners or operators can be required by the state to furnish information related to their tanks and conduct monitoring or testing. States must also have authority to enter and inspect any site subject to regulation. In addition, a state must have procedures for: inspections; evaluation of records; recordkeeping; enforcement against violators; and encouraging citizen reports of suspected violations. A state must also have enforcement authority sufficient to:

immediately restrain violators or potential violators by order or by suit; sue in a court of competent jurisdiction; and assess or sue to recover civil penalties and procedures to implement these authorities. Finally, a state must provide for public participation in enforcement proceedings by using one of three public participation options: Providing one of two types of authority to allow citizen intervention in civil actions; or more general public involvement procedures in compliance monitoring and enforcement actions.

In the preamble to the proposed rule (52 FR 12856), the Agency requested comments on how it should evaluate compliance monitoring and enforcement procedural requirements in state programs, for example, in the form of broad objectives or specific requirements. Many commenters expressed concern regarding the amount of flexibility to be allowed in developing state enforcement programs. Several commenters requested that states only be required to meet broad objectives in the regulations or in guidance. One commenter asked that enforcement procedural requirements be clearly outlined and defined.

In response to the comments, the Agency is clarifying its expectations for the requirements for adequate enforcement of compliance. In developing the requirements for adequate enforcement, the Agency seeks to maintain flexibility in approving a variety of state programs, and encourages states to use innovative approaches in monitoring compliance and carrying out enforcement actions. Consistent with that intent, today's regulations do not mandate the details of compliance monitoring and enforcement procedures for purposes of program approval. Instead, the regulations set forth certain authorities and programs or procedural areas that should enable a state program to demonstrate adequate enforcement of compliance with its technical requirements.

(Note that the insertion of the no-less-stringent criteria (in Subpart C § 281.30 of the final rule) has caused the adequate enforcement requirements to be reorganized into Subpart D, §§ 281.40 to 281.43 of the final rule.)

1. Requirements for a Compliance Monitoring Program (§ 281.40)

a. *Legal authorities for compliance* (§ 281.40 (a)-(c)). Proposed § 281.30 (a) and (b) required that state employees have the authority to obtain from an owner or operator any information on their USTs necessary to determine

compliance. State employees must also have the authority to require the owner or operator to conduct monitoring or testing, and the authority to enter the site to conduct such testing themselves.

One commenter suggested that these authorities, particularly the authority to require the owner or operator to conduct testing, will place unnecessary burdens on the owner and operator. The Agency believes that these authorities, which are analogous to federal authorities under Subtitle I, are necessary to ensure that states have the means of monitoring compliance, gathering necessary information, and assessing the potential risk to human health and the environment. The Agency is promulgating the language of these sections substantially as proposed.

The Agency is clarifying today the intent of this section by making two changes. First, the term "employee of the state" as it appeared in proposed § 281.30(a) has been replaced by the language of Subtitle I, Section 9005, which provides for such inspection authority for "any officer, employee, or representative of the Environmental Protection Agency duly designated by the Administrator . . . or any officer, employee, or representative of a state with an approved program." Since the proposal, the Agency has become concerned that the term in the statute may be construed to be broader in scope than "employee"; thus, for purposes of the final rule, the Agency has substituted the law's more inclusive language. Because of the nature of the regulated universe, many states are likely to depend on personnel other than state employees to inspect, monitor, and test UST systems. For example, the implementing agency may delegate such responsibility to the local building inspector or fire marshal. Because the Agency did not intend to restrict the original authority provided by the statute to only employees of the state, the term "employee" is being replaced by "representative" in the final rule's § 281.40(a). The term "employees" is being replaced by "representative" in the final rule's § 281.40(b) for the same reasons.

Second, in order to be consistent with the terms and definitions found in 40 CFR 280.12, and the wording used in the rest of the technical standards finalized elsewhere today, the Agency is replacing the phrases "his/her tanks, tank contents, and associated equipment" in proposed § 281.30 (a) and (b) with the more concise term, "the UST system", in the final rule's § 281.40 (a) and (b). This change does not alter the substantive meaning of the

requirement. The phrases "underground storage tank" and "underground storage tank program" in § 281.30(b) of the proposed rule were replaced with "UST system" in the final rule's § 281.40(c) for the same reason.

b. Procedures for compliance monitoring (§§ 281.40 (d) through (g)). Proposed § 281.30 (c) through (g) set requirements for compliance monitoring programs, including inspections and record reviews. Several commenters requested that the Agency clarify its expectations regarding a compliance monitoring program. These commenters were primarily concerned that the Agency may be restricting flexibility in developing compliance monitoring programs by requiring certain types and numbers of inspections under these programs. Furthermore, these commenters were concerned that the proposed regulatory language could be interpreted as requiring resource-intensive activities, such as a minimum number of scheduled inspections and comprehensive surveys of all UST systems.

Although the proposed regulations set general requirements for a compliance monitoring program, the Agency did not intend that states must develop a "traditional" inspection and record collection program for purposes of state program approval. In particular, the Agency has no intention of requiring states to undertake a specific number of inspections, record reviews, or enforcement actions. As discussed above, the Agency's intention was and still is to provide the states with maximum flexibility consistent with statutory requirements. Thus, the Agency intends to approve programs with innovative approaches to gathering compliance data as long as they adequately ensure compliance. Such compliance monitoring and inspection programs may range from programs that target portions of the tank population, to programs that use permitting. The Agency is clarifying this intent in the final rule by making several changes to proposed §§ 281.30 (d)–(g). These requirements and associated comments are addressed in greater detail below.

• *Requirements for record collection (§ 281.40(d)).* Proposed § 281.30(c) required states to have procedures for receiving, evaluating, and investigating all records and reports and for investigating failure to submit these reports. The Agency is promulgating the language of this section—now numbered § 281.40(d)—substantially as proposed.

Comments on this section expressed a general concern that the requirements may be resource-intensive. One

commenter requested clarification on how the proposed requirements would be interpreted. Specifically, the commenter asked how it might determine if an owner or operator failed to submit records, and what proportions of those identified must be investigated. The Agency believes that it is neither desirable nor necessary to promulgate additional requirements that specify procedures for receipt and investigation of required records and reports. The general wording in the final rule was retained in order to provide maximum flexibility for states in developing these programs. In response to the commenters' concerns, it is the Agency's intent to encourage states to develop a potentially wide range of procedures that allow the implementing agency to identify owners and operators who have not submitted required records and reports.

Consistent with this approach, the Agency has not specified procedures for identifying noncompliance. Therefore, in promulgating § 281.40(d), the Agency is clarifying its intent by deleting the word "all" from the language in the proposal. Section 281.40(d), as promulgated, requires states to develop procedures for evaluating records and reports but does not specify the number or percentage of reports to be evaluated.

For further clarification, the Agency is also deleting the word "possible" from the phrase "possible enforcement." "Possible" was removed because it was only needed where "all" records had to be evaluated, but this final action does not change the meaning. The Agency believes that the discretion to undertake an enforcement action is inherent in the state's authority to run the program.

The proposal established that state programs "must provide for investigation for enforcement of failure to submit these records and reports", and today the Agency is removing the phrase "for investigation" from the final wording in § 281.40(d) to clarify its intent not to limit specific means of enforcement. Under the final rule, the implementing agency must have a program for investigating owners' or operators' failure to submit records or reports for purposes of determining whether enforcement is warranted. The Agency thus clarifies that the states have discretion to determine whether, when, and by what means such failure warrants further investigation and enforcement actions.

• *Requirements for inspection procedures (§ 281.40 (e)(1) and (e)(2)).* The proposed § 281.30(d) required states to have inspection and surveillance procedures, including periodic

inspections, to ensure compliance with program requirements. For clarification, the proposed § 281.30 (d) and (e) have been renumbered, respectively, as § 281.40(e)(1) and § 281.40(e)(2).

The Agency received a number of comments on these proposed requirements, particularly the definition of "shall maintain a program for periodic inspections." Many commenters were concerned about the resources that would be necessary to implement a traditional inspection program with respect to the UST universe. One commenter requested that the Agency specify the number of inspections to be accomplished within a given time period and the frequency of inspections. The Agency agrees with the commenters that the requirements for inspection and surveillance, as proposed, could suggest that a traditional inspection program is required for program approval, which would be impossibly resource-intensive given the large UST universe. This was not the Agency's intent. Therefore, the final rule's requirements have changed the wording of the proposed § 281.30(d) to clarify that greater flexibility is available in this area for purpose of approving state programs.

In promulgating § 281.40(e)(1) today, the Agency has retained the general requirement that the state has inspection procedures, but has replaced the description of "periodic" inspections with "systematic" inspections. The Agency has promulgated a requirement for "systematic" inspections to clarify its expectations with regard to state inspection programs. The Agency expects states to conduct inspections but has chosen not to mandate a particular number of inspections within a specified time period. Instead, the Agency encourages states to develop a method for determining when to conduct inspections and encourages other, more innovative methods of determining compliance. Examples of systematic inspection programs include targeting inspections to certain tank groups or tank activities (for example, at closure) and developing permitting programs.

In the preamble to the proposed rule, the Agency requested comment on the need for requiring enforcement procedures. One commenter noted that states' legal, procedural, and institutional processes and structures are relevant to assessing adequate enforcement. The Agency agrees that an adequate enforcement program must not only have the legal authorities to carry out enforcement actions, but also the procedures for exercising these authorities. To clarify that intent, the

Agency has added to § 281.40(e)(1), the requirement that states provide for enforcement of failure to comply with program requirements. This requirement is consistent with final § 281.40(d), which requires that states not only have procedures for receipt of records and reports but also provide for enforcement of failure to submit such documents. In addition, this requirement will ensure that the regulated community and the public are provided with an opportunity to learn what procedures will be in effect in the state.

The proposed § 281.30(e) set requirements for the manner in which compliance monitoring information will be gathered. The purpose of these requirements was to ensure that all types of state inspection procedures were conducted in a manner that will produce evidence admissible in court. States are expected to be well aware of the need to conduct inspections properly for these reasons, and should be easily able to demonstrate compliance with this requirement. No comments were received on this requirement, and the Agency is making adjustments only to remain consistent with the changes to the inspection program requirement, as described above, and renumbering the subsection to emphasize its purpose as an addendum to the previous requirement.

• *Requirements for public reporting (§ 281.40(f)).* Section 281.30(f) of the proposed rule required states to develop a program for encouraging and processing public reports of violations. The purpose of the proposed requirement was to ensure that state applicants' efforts to monitor compliance were open to this important additional source of information regarding compliance. Several commenters, however, did not understand the purpose and scope of this requirement. One commenter requested clarification on what type of citizen complaints had to be addressed by the program. For example, would speculation concerning a possible violation be considered a complaint that must be investigated?

The final requirements have been revised to ensure that states develop programs that respond to public reports of both speculated or confirmed violations. The purpose of this requirement is to encourage citizens to provide information to implementing agencies—for example, report a suspected release—that may be crucial to early response, investigation, and compliance efforts by the implementing agency. Such a program is particularly crucial in light of the large UST universe

and the impracticality of large-scale enforcement efforts. This clarification of the scope of this requirement, however, is not intended by the Agency to require states to develop a substantial public outreach program. On the contrary, providing a telephone line for citizens to call if they suspect a leak or other violations would be the basic kind of program that will meet this requirement. Accordingly, the Agency has reworded § 281.40(f) of the final rule to clarify that state investigation procedures must allow for follow-up on tips and other reports and complaints to determine their validity. The Agency, however, is not promulgating specific requirements concerning such a program, and states are encouraged to adopt follow-up procedures that are tailored to their specific UST programs.

• *Requirements for monitoring compliance over time (§ 281.40(g)).* Section 281.30(g) of the proposed rule required states to maintain a "program which is capable of making comprehensive surveys of all facilities and activities subject to regulations," and that any resulting compilation, index, or inventory of such facilities be made available to EPA upon request.

Many commenters objected to this requirement because of the significant resource demands it would impose on the states. In particular, one commenter was concerned about having to maintain the capabilities to conduct "comprehensive surveys of all facilities and activities," and because this would be extremely resource-intensive, the commenter asked for more guidelines in implementing this requirement. Another commenter questioned the requirement for approvable states to provide EPA, upon request, an inventory or list of facilities in violation of UST requirements, because it would be burdensome and unnecessary.

The primary purpose of this requirement, as proposed, was to ensure that states are able to assemble information on the regulated community that can be used to measure their compliance status. This requirement is based on section 9002 of Subtitle I, which mandates the establishment of state inventories, and the necessity of such inventories for effective compliance monitoring. The Agency intended to allow states flexibility in determining how extensive the survey undertaking must be, provided that they achieve the purpose of measuring compliance. In response to concerns of the commenters, and to clarify its intent, the Agency has substantially altered proposed § 281.30(g) by deleting the first sentence pertaining to a program for

making "comprehensive surveys." The final rule simply requires that a state program must maintain the data collected through inspections and evaluation of records in a manner that allows the implementing agency to monitor over time the compliance status of the regulated community.

Section 281.40(g) also requires that states make any compilation, index, or inventory of such facilities and activities available to EPA upon request. With respect to the commenter who questioned the necessity of using such inventories to oversee state actions, the Agency wishes to clarify that this requirement was not intended to be used as an oversight tool. Although the Agency is promulgating this part of the requirement as proposed, the Agency does not intend to request submission of this information on a regular basis and will negotiate specific reporting requirements with the states as part of the MOA and the annual state grant process. The Agency prefers that reporting of information on state enforcement programs be managed through the MOA between the state and the EPA Regional Administrator. The Regions will negotiate specific reporting requirements with each of their states and will incorporate those requirements into the State Grant Workplan.

• *Requirements for updating of notification.* The preamble to the proposed rule (52 FR 12857) described how the Agency considered and rejected requiring states to include a requirement for updating UST notification information by owners and operators as a condition of state program approval. This issue was raised in the proposal in the context of adequate enforcement of compliance; however, the Agency considers it to be primarily a no less stringent issue. This issue is discussed earlier in today's preamble in section C.2.

2. Requirements for Enforcement Authority (§ 281.41)

The proposed § 281.31 established requirements for legal authorities for enforcement. The Agency proposed that states demonstrate some specific enforcement authorities as a condition of program approval. This was to ensure that states have sufficient authorities to carry out an enforcement program in lieu of the federal program. The final rule includes only a few changes to the proposed requirements.

The proposed § 281.31(a) specified the authorities necessary to implement remedies for violations of state program requirements. Section 281.31(a)(1) required that states have the authority to issue a temporary restraining order

that would prevent violators or potential violators by order or by suit from engaging in unauthorized activity that is endangering or causing damage to public health or the environment. One commenter requested that the Agency define "unauthorized activity". This term is intended to include any activities that result in noncompliance with the regulations. The Agency is promulgating this requirement—now numbered § 281.41(a)—substantially as proposed.

Section 281.31(a)(2) in the proposed rule required that states have authority to sue in a court of competent jurisdiction for a preliminary or permanent injunction. The Agency received no comments on this section and is promulgating the requirement as proposed. Both this section and § 281.31(a)(1) in the proposed rule—now numbered § 281.41(a)(1) and (a)(2)—are standard legal authorities and are often located in a general enforcement statute. The Agency expects that most states should be able to easily satisfy these requirements.

Section 281.31(a)(3) of the proposed rule set the authorities that states were required to have to recover civil penalties. In this section, the Agency required states to be able to recover civil penalties for failure to notify or for submitting false notification information "up to at least \$10,000 per tank." For failure to comply with state requirements or standards, the penalties were required to be assessable "up to at least \$10,000" for each tank for each day of violation.

The Agency received a number of comments concerning the penalty authorities, particularly regarding the phrase "up to at least \$10,000" for each day of violation of state requirements. Several commenters interpreted the rule to mean that EPA was dictating a *minimum* civil penalty of \$10,000. These commenters argued that the determination of whether civil penalties are necessary for effective implementation should be made at the state level.

The Agency agrees with the commenters that the proposed language in this section was unclear as written, and is clarifying that the intent is to require states to have authority to assess a wide range of penalties either for each violation or for each tank system for each day of violation. Therefore, the Agency is promulgating this revised section as § 281.41(a)(3) of the final rule to require that states "be capable of assessing civil penalties up to" the requisite amount per violation or for each tank for each day of violation. One commenter requested that EPA lower the limit for the penalty authority

from \$10,000 to \$5,000 for each tank for each day of violation and suggested that a \$5,000 penalty level was sufficient to promote compliance. The Agency agrees with this commenter and has changed the requirement for civil penalties accordingly. The penalty level was originally set at \$10,000 for each tank for each day of violation to reflect the penalty authority that Congress provided to EPA for enforcement of the federal program. States, however, do not necessarily have to have the same penalty level authority to run an adequate UST program. A high penalty level is often used as an incentive for compliance, and generally states do not actually ever exercise this authority to the full amount. In addition, much of the regulated community consists of small businesses, therefore a \$5,000 penalty level is more than adequate to promote compliance. EPA notes that most states already have the authority to assess \$5,000 for each violation. The language change in this section is also consistent with the Agency's intent to allow states flexibility in carrying out enforcement actions. Under the promulgated § 281.41(a)(3), states may determine during specific enforcement actions that a lower penalty may be sufficient to ensure compliance, and similarly are not restricted to \$5,000 for each tank for each day of violation as a *maximum* penalty if additional authority is obtained. Thus, EPA expects that a state will evaluate violations on a case-by-case basis, and enforce fines according to the severity of environmental hazard, the intentions of the owner and operator, a history of past violations, or other extenuating circumstances.

The proposed § 281.31 (b) and (c)—now § 281.41 (b) and (c) in the final rule—required standard enforcement authorities regarding burden of proof and appropriateness of penalties sought to violations detected. The Agency received no comment on these requirements and no changes have been made since proposal.

3. Requirements for Public Participation (§ 281.42)

The proposed § 281.32 set forth three options that states may choose from to ensure that the opportunity for public participation in enforcement proceedings is provided. The purpose of providing public participation in the decisionmaking process is to promote public involvement in implementation of the UST program in the state. The first option set in the proposed § 281.32 was authority that allows intervention as of right in any civil action to enforce UST requirements. The second option was

assurance that the implementing agency will provide at least 30 days for public comment on all proposed settlements; will investigate and provide written responses to all citizen complaints; and will not oppose citizen intervention. The third option was authority to allow intervention analogous to Federal Rule 24(a)(2). To fulfill this requirement, states must comply with only one of the three options.

The Agency received a number of comments on the requirements for public participation. It appears that many commenters did not understand that only one of the three options must be met. Several commenters expressed the opinion that the Agency's requirements were inappropriate for a rule that emphasized flexibility in state program development. For example, several commenters objected to EPA's dictating the level of public participation in enforcement proceedings. The commenters argued that states and localities have more expertise than the federal government in identifying circumstances in which public participation is appropriate. Another concern expressed by commenters is that certain public participation procedures may strain available resources. In particular, commenters objected to the requirement in the proposed § 281.32(b)(2) that states investigate *all* citizen complaints. Commenters also objected to the requirement that states provide 30 days for public comment on all proposed settlements of civil enforcement actions. One commenter indicated that this requirement would be a tremendous burden on implementing agencies. Conversely, one commenter objected to the option approach, and stressed the need for very specific public participation requirements.

The Agency has retained the option approach in the final rule because each of the options separately provides an adequate opportunity for public participation, and requiring all three options would be unnecessary. To emphasize that the Agency is providing options for this requirement, the Agency has added the phrase "any one of the following three options" to the first sentence in § 281.42 of the final rule. The Agency has also changed the order of the requirements for clarification. The option for the authority presented in the proposed § 281.32(c) is promulgated as the first option in § 281.42(a) of the final rule. The Agency has presented this authority first because it recognizes that most states will already have an authority analogous to Federal Rule 24(a)(2). Several commenters from state

agencies noted that they have this authority. The other options for legal authority proposed in § 281.32 are renumbered accordingly: Proposed § 281.32(a) is now § 281.42(b); proposed § 281.32(b) is now § 281.42(c).

Because the Agency received a number of comments regarding the specific requirements for the third option—proposed as § 281.32(b)—the Agency has made several changes in this requirement as § 281.42(c) of the final rule. The Agency has revised the requirement that states ensure "public notice of and provide at least 30 days for" public comment. In the final rule, the Agency has simply required that states must "provide notice and opportunity for" public comment. These changes will allow the state to develop procedures for notification in methods other than publishing (which implied that states may have to publish all notices in a newspaper). The Agency has also deleted the requirement that responses to *all* citizen complaints must be written. The Agency does not believe that the specifics in the requirement are necessary to ensure public participation; given the nature of the universe, responding in writing to all citizen complaints would be an overwhelming burden on state and local resources. Many citizen complaints can be handled effectively by telephone. In the final requirement, the method of response is not specified, and the word "all" is deleted. The new language reflects the need for flexibility in UST enforcement due to the nature of the regulated universe.

4. Sharing of information (§ 281.43)

The proposed § 281.33(a) set forth procedures for states to share with the Agency information obtained or used in the state program. Section 281.33(b) of the proposed rule indicated that the Agency will furnish approved states with any information necessary for administering the state program. Information submitted to the Agency under a claim of confidentiality subject to the conditions in 40 CFR Part 2 will not necessarily be treated as confidential by the state unless the owner and operator reapplies for confidentiality. The Agency received no comment on this section and is promulgating it in the final rule in § 281.43.

E. Subpart E—Approval Procedures (§§ 281.50 through 281.52)

1. Approval Procedures for State Programs (§ 281.50)

States may submit an application for approval on the date of promulgation of

the federal technical requirements. Though states may apply to operate all aspects of the UST program for both petroleum and hazardous substance tanks, approval of state UST programs may also occur in phases. Section 9004 of RCRA authorizes interim approval of state programs for a brief time-period and also authorizes approval of certain types of partial programs (this is discussed under the analysis of the program description earlier in this preamble). EPA regional offices will review state applications to determine if the application is complete. Section 281.40(c) of the proposed rule allowed EPA 180 days for review and approval of complete state applications. Commenters suggested that this time period be shortened and that an additional time period be established for determination of the completeness of an application. EPA has decided, however, to promulgate this section substantially as proposed because section 9004 of RCRA establishes 180 days as the time period for accepting and reviewing state applications, and EPA does not believe that it is possible to accommodate all the required procedures in a shorter period. For example, 30 of these 180 days are necessary for a public comment period. EPA staff will be available to states to work with them in developing both their applications and programs. Additionally, EPA encourages states to participate in pre-application reviews with the Agency's regional offices in order to facilitate final approval and ensure that applications will be complete upon submittal.

Comments on other aspects of the approval procedures were not received. The Agency includes a brief description of the process here for informational purposes. As part of the application review process, under § 281.50(e) of the final rule, the EPA Regional Administrator will make a tentative recommendation on approval or disapproval. EPA then will publish a tentative determination in the Federal Register and allow 30 days for public notice and comment. EPA will hold a public hearing if there is sufficient public interest shown during the comment period. Next, under § 281.50(f) of the final rule, the EPA Regional Administrator will evaluate the public comments and make a final decision on approval or disapproval within the statutorily mandated 180 days. EPA will publish this decision in the Federal Register.

2. Interim Approval (§ 281.51)

Section 281.51 of the final rule establishes the procedures for approval

of state revisions to interim programs. Initially, state programs may be approved for a period of 1 to 3 years from the date of promulgation of the federal technical standards, even if their requirements are less stringent than federal standards for: Release detection; release reporting and investigation; and out-of-service or closed UST systems. States seeking interim approval are required to submit a schedule (discussed in section IV.B. of this preamble) that outlines the major steps and milestones for obtaining the additional statutory and/or regulatory authorities necessary for final program approval.

States applying for interim approval must submit to EPA an amended application with their completed program revisions by the end of the applicable time period. The amended application need only cover changes in the state program since the award of interim approval. EPA must review this amended application using the same procedures applied to the original application. The Regional Administrator will publish the tentative determination on the amended application in the Federal Register, and will make a final determination within 180 days. In the April 17 proposal, the Agency proposed in § 281.41(e) that the approved status of the state's interim program would expire automatically if EPA disapproves its amended application. One commenter expressed concern that this provision does not allow for instances where a program amendment is submitted and disapproved early in the specified time frame, when opportunity still exists to correct the deficiencies and reapply. EPA did not intend this situation to occur and has added language to clarify the situation. A state may re-submit an application any time until the last day of its allowed interim period. The state program will revert to EPA only if the state submission is disapproved and a revised application is not submitted before expiration of the interim period. If a state application for final approval is received at the end of the interim period, EPA will evaluate the submission after termination of the interim period and will either determine the state's program to be complete and approvable, or will determine the application to be unapprovable, in which case the state program will automatically revert to EPA.

EPA interprets the interim period as that period of time the state has to submit an amended application. States seeking interim and then final approval are required to submit two separate approval applications for interim and final approval and undergo the 180-day

EPA review twice. States receiving interim approval must submit a complete application for final approval by the end of the interim period or automatic expiration of approval will occur. The expiration of interim approval under Subtitle I does not require EPA to terminate or withdraw the program, because the approval terminates automatically under the statute. State programs with expired interim approval may, through a Memorandum of Understanding with EPA, continue to implement parts of the federal UST program until they apply for and receive final approval.

3. Revision of Approved State Programs (§ 281.52)

At some point in the future it may be necessary for states to submit revisions to approved programs for approval by EPA. This need for revision may occur, for example, when federal or state authorities are changed by new legislation or rulemaking. EPA will treat revised applications in the same way as amended applications in that only those program areas affected by the change will be subject to review by EPA; however, the review process will be streamlined. Instead of publishing a tentative determination in the Federal Register, EPA will publish a proposed determination that may become final immediately after 60 days. This "immediate-final" rulemaking procedure has been used in state program approval under Subtitle C of RCRA, and for approval of revisions to State Implementation Plans under the Clean Air Act.

One commenter asked whether the meaning of "adverse comments" in proposed § 281.42(c) referred to public comments opposing EPA's decision or to public comments supporting program disapproval. In today's rulemaking the Agency has clarified the meaning of that section by explicitly referring to "significant negative comment opposing the proposed revision". If EPA receives public comments that strongly oppose the proposed revision and provide good reasons for EPA to reconsider its decision, the Agency may choose one of two options. The Agency may publish a notice in the Federal Register withdrawing the immediate-final decision and return to the procedures for initial and amended applications (found in § 281.50). Alternatively, the Agency may publish a notice in the Federal Register that responds to the significant negative comments and describes the Agency's final decision. In addition, if EPA has reason to believe that a particular revision will receive significant negative comment, EPA may

choose to follow the usual review procedures for program applications, rather than begin with the immediate-final rulemaking process.

One commenter misunderstood EPA's intent in this last case. EPA will not reject a revision simply because negative public comment is anticipated or received. Rather, the procedures for publishing EPA's determination regarding the state's application will follow those procedures normally used rather than the streamlined immediate-final rulemaking procedures. This course of action allows more time for the consideration of public comment.

F. Subpart F—Withdrawal of Approval of State Programs (§§ 281.60 through 281.61)

No comments were received on this part of the proposed regulations. EPA is promulgating these sections substantially as proposed. EPA has designed two withdrawal procedures for circumstances (1) when an approved state voluntarily transfers program responsibilities back to EPA, or (2) when EPA initiates proceedings to determine if approval of a state program should be withdrawn. If EPA initiates withdrawal, the proceedings are to be conducted in accordance with adjudicatory hearing proceedings as outlined in 40 CFR 271.23 (b) and (c) of the RCRA Subtitle C state program approval regulation. EPA considered, but has rejected at this time, an alternative to the Subtitle C approach calling for withdrawal procedures by regulation rather than an adjudicatory hearing process. An example of this alternative approach is found in 40 CFR 145.34, under the Underground Injection Control (UIC) program. Subtitle I of RCRA, covering the regulation of underground storage tank systems, lacks the explicit statutory direction provided to the UIC program under the Safe Drinking Water Act, and a precedent for adjudicatory hearings in withdrawal proceedings has been established for RCRA under Subtitle C. (The Agency is, however, re-evaluating the withdrawal procedures found in 40 CFR 271.23 of the Subtitle C state program approval regulations. Since this rule incorporates those procedures by reference, any final Agency changes will automatically take effect in §§ 281.60 through 281.61 of today's rule.) No public comments were received on this issue, so EPA has chosen to incorporate the adjudicatory hearing procedures.

In § 281.60(a) of today's final rule, the Agency has clarified the criteria for withdrawal of state program approval. The criteria proposed on April 17, 1987 required the Agency to consider whether

a state is taking timely and appropriate enforcement action and to evaluate the quality and number of state compliance inspections. The Agency is promulgating final criteria that are more consistent with the requirements for adequate enforcement as promulgated today, by emphasizing its expectations for quality enforcement actions rather than quantitative successes. The final withdrawal criteria require the Agency to consider whether the state agency is implementing an adequate enforcement program by evaluating the quality of state enforcement actions.

The criteria for withdrawal also include failure to have adequate statutory or regulatory authority. This would include failure to submit an application for program revision when requested by EPA as a result of changes to Subtitle I statutory authorities or regulatory provisions. However, the final rule contains no provisions setting a timeframe for states to submit such applications. The appropriate timeframe for such revisions has been a difficult issue in other state approval programs. The Agency intends to provide a timeframe for revisions of Subtitle I state programs each time a change in federal statutory or regulatory provisions is published in a notice in the Federal Register.

Finally, the Agency is making one change to § 281.60(a) to change "the Administrator must" to "the Administrator may" withdraw program approval. This change now makes § 281.60(a) consistent with § 271.22(a) of the RCRA Subtitle C regulations. It was the Agency's intention to use the same approach for withdrawing program approval as the Subtitle C program, and this correction has been made to reflect that intention.

V. Relationship to Other EPA Programs

A. Leaking Underground Storage Tank Petroleum Response Fund

The Superfund Amendments and Reauthorization Act of 1986 amended Subtitle I to establish a Leaking Underground Storage Tank (LUST) Trust Fund to provide funds for corrective action and enforcement for releases from USTs storing petroleum. The long-term goals of the Trust Fund cleanup program and UST prevention program are to protect human health and the environment, primarily from releases to ground water caused by leaking USTs. Cleaning up releases using the Trust Fund is an immediate need, but by itself is a short-term and temporary solution. The long-term solution is for states to develop prevention programs, which over time will result in fewer leaking

tanks needing cleanup responses. States must also develop financial assurance mechanisms that will provide funds for future cleanups.

EPA, therefore, has made a link between the LUST Trust Fund and UST regulatory program to ensure that future contamination is minimized. After the effective date of today's final rule, a state's success in making reasonable progress toward submitting a completed application for state program approval may be grounds for increasing state access to the Trust Fund in FY 90 and thereafter. EPA realizes that "reasonable progress" toward submitting a complete application will vary depending upon the status of the individual state program. EPA intends to develop criteria for measuring state progress, and will evaluate progress for each individual state during FY 89.

B. RCRA Hazardous Waste Program

State UST program requirements and approval procedures will be treated independently of state authorization under other related EPA programs. Federal UST legislation, under Subtitle I of RCRA, was developed to address an environmental problem not adequately covered by existing EPA programs. Regulations governing tanks storing hazardous wastes have been promulgated under Subtitle C (40 CFR Parts 264 and 265, July 14, 1986). These regulations are only applicable to hazardous wastes, the storage of which is exempted from today's technical standards under § 280.10. Approval of a state UST program under Subtitle I of RCRA does not entitle a state to implement hazardous waste tank requirements under Subtitle C of RCRA. For additional information, see "Relationship to Other EPA Programs" discussed under the promulgation of federal UST technical standards, published elsewhere in today's Federal Register.

VI. Economic and Regulatory Impacts

A. Regulatory Impact Analysis

Under Executive Order 12291, EPA must determine whether a new regulation is a "major" rule and prepare a Regulatory Impact Analysis (RIA) in connection with a major rule. A "major" rule is defined as one that is likely to result in: (1) An annual effect on the economy of \$100 million or more; (2) a major increase in costs or prices for consumers, individual industries, federal, state, and local government agencies or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the

ability of U.S.-based enterprises in domestic or export markets. In the April 17 proposal, the Agency stated its belief that an RIA was not needed for the Part 281 rulemaking.

One commenter requested that a regulatory impact analysis be performed for the Part 281 regulations, but EPA still believes that this regulation will have none of the above effects. The requirements for state UST programs as outlined in this proposal will not add substantial costs beyond those imposed under the federal UST regulations proposed elsewhere in today's Federal Register. Because this rulemaking does not meet the definition of a major regulation, the Agency has not conducted a Regulatory Impact Analysis. A Regulatory Impact Analysis, however, has been prepared for the federal technical requirements and the results are described in the preamble to that regulation, published elsewhere in today's Federal Register. Today's rulemaking was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires an agency to prepare and make available for public comment a regulatory flexibility analysis that describes the impact of a proposed or final rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). No regulatory flexibility analysis is required if the head of an agency certifies the rule will not have significant economic impact on a substantial number of small entities.

This rule, in itself, will not have a significant impact on a substantial number of small entities, because federal UST requirements will already be in effect in all states seeking program approval subsequent to promulgation of federal UST requirements under Subtitle I. Therefore, no regulatory flexibility analysis has been prepared. EPA has determined that the final rule for UST technical standards under Subtitle I, published elsewhere in today's Federal Register, will have a significant economic impact on a substantial number of small entities based on the analysis prepared for the final rule.

C. Paperwork Reduction Act

The information collection requirements in this rule have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, and have been assigned OMB Control

Number 2050-0067. The one-time reporting and recordkeeping burden on the public for this collection is estimated at 15,272 total hours, or 1,632 hours for the 6 respondents per year over nine years (with an average of 272 hours per response). These burden estimates include all aspects of the collection effort and may include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information, etc.

If you wish to submit comments regarding any aspect of this collection of information, including suggestions for reducing the burden, or if you would like a copy of the information collection request (please reference ICF #1355), contact Rick Westlund, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460 (202-382-2745); and Marcus Peacock, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

List of Subjects in 40 CFR Part 281

Administrative practice and procedure, Hazardous materials, Petroleum, State program approval, Underground storage tanks.

Date: September 8, 1988.

Lee M. Thomas,
Administrator.

For reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended by adding a new Part 281 as follows:

PART 281—APPROVAL OF STATE UNDERGROUND STORAGE TANK PROGRAMS

Subpart A—Purpose, General Requirements and Scope

Sec.

- 281.10 Purpose.
- 281.11 General requirements.
- 281.12 Scope and definitions.

Subpart B—Components of a Program Application

- 281.20 Program application.
- 281.21 Description of state program.
- 281.22 Procedures for adequate enforcement.
- 281.23 Schedule for interim approval.
- 281.24 Memorandum of agreement.
- 281.25 Attorney General's statement.

Subpart C—Criteria for No Less Stringent

- 281.30 New UST system design, construction, installation, and notification.

- 281.31 Upgrading existing UST systems.
- 281.32 General operating requirements.
- 281.33 Release detection.
- 281.34 Release reporting, investigation, and confirmation.
- 281.35 Release response and corrective action.
- 281.36 Out-of-service UST systems and closure.
- 281.37 Financial responsibility for USTs containing petroleum. [Reserved]
- 281.38 Financial responsibility for USTs containing hazardous substances. [Reserved]

Subpart D—Adequate Enforcement of Compliance

- 281.40 Requirements for compliance monitoring program and authority.
- 281.41 Requirements for enforcement authority.
- 281.42 Requirements for public participation.
- 281.43 Sharing of information.

Subpart E—Approval Procedures

- 281.50 Approval procedures for state programs.
- 281.51 Amendment required at end of interim period.
- 281.52 Revision of approved state programs.

Subpart F—Withdrawal of Approval of State Programs

- 281.60 Criteria for withdrawal of approval of state programs.
- 281.61 Procedures for withdrawal of approval of state programs.

Authority: Sections 2002, 9004, 9005, 9006 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6912, 6991 (c), (d), (e)).

Subpart A—Purpose, General Requirements and Scope

§ 281.10 Purpose.

(a) This subpart specifies the requirements that state programs must meet for approval by the Administrator under section 9004 of RCRA, and the procedures EPA will follow in approving, revising and withdrawing approval of state programs.

(b) State submissions for program approval must be in accordance with the procedures set out in this part.

(c) A state may apply for approval under this subpart at any time after the promulgation of release detection, prevention, and correction regulations under section 9003 of RCRA.

(d) Any state program approved by the Administrator under this part shall at all times be conducted in accordance with the requirements of this part.

§ 281.11 General requirements.

(a) *State program elements.* The following substantive elements of a state program must be addressed in a state application for approval:

(1) Requirements for all existing and new underground storage tanks:

(i) New UST systems (design, construction, installation, and notification);

(ii) Upgrading of existing UST systems;

(iii) General operating requirements;

(iv) Release detection;

(v) Release reporting, investigation, and confirmation;

(vi) Out-of-service USTs and closure;

(vii) Release response and corrective action; and

(viii) Financial responsibility for UST systems containing petroleum.

(2) Provisions for adequate enforcement of compliance with the above program elements.

(b) *Final approval.* The state must demonstrate that its requirements under each state program element for existing and new UST systems are no less stringent than the corresponding federal requirements as set forth in Subpart C of this part, except as provided in paragraph (c) of this section. The state must also demonstrate that it has a program that provides adequate enforcement of compliance with these requirements.

(c) *Interim approval.* (1) The Administrator may approve state programs with requirements less stringent than the federal requirements for a period of 1 to 3 years from September 23, 1988. Such interim approval may be granted only if state regulatory and/or legislative change is required in order for the state program to be no less stringent than the federal requirements and standards under Part 280 for one or more of the following program elements: Release detection at existing UST systems; release reporting and investigation; and out-of-service or closed UST systems.

(2) A state program may receive interim approval if it:

(i) Has requirements for three elements:

(A) Release Detection;

(B) Release Reporting, Investigation, and Confirmation; and

(C) Out-of-Service UST Systems and Closure; and

(ii) Has requirements that are no less stringent than the corresponding federal requirements for five elements:

(A) New UST System Design, Construction, Installation and Notification;

(B) Upgrading Existing UST Systems;

(C) General Operating Requirements;

(D) Release Response and Corrective Action; and

(E) Financial Responsibility for UST systems containing petroleum; and

(iii) Provides for adequate enforcement of compliance with these requirements.

(3) A state with a program that has received interim approval must receive final approval of an amended program containing program elements that are no less stringent than the corresponding federal program elements under Subpart C in accordance with the following schedule:

(i) If only state regulatory action is required, the state must submit an amended program to EPA for approval before September 23, 1989.

(ii) If only state legislative action is required, the state must submit an amended program to EPA for approval before September 23, 1990.

(iii) If both state legislative and regulatory action are required, the state must submit an amended program to EPA for approval before September 23, 1991.

(d) States with programs approved under this part are authorized to administer the state program in lieu of the federal program and will have primary enforcement responsibility with respect to the requirements of the approved program. EPA retains authority to take enforcement action in approved states as necessary and will notify the designated lead state agency of any such intended action.

§ 281.12 Scope and definitions.

(a) *Scope.* (1) The Administrator may approve either partial or complete state programs. A "partial" state program regulates either solely UST systems containing petroleum or solely UST systems containing hazardous substances. If a "partial" state program is approved, EPA will administer the remaining part of the program. A "complete" state program regulates both petroleum and hazardous substance tanks.

(2) EPA will administer the UST program on Indian lands, except where Congress has clearly expressed an intention to grant a state authority to regulate petroleum and hazardous substance USTs on Indian lands. In either case, this decision will not impair a state's ability to obtain program approval for petroleum and/or hazardous substances on non-Indian lands in accordance with this part.

(3) Nothing in this subpart precludes a state from:

(i) Adopting or enforcing requirements that are more stringent or more extensive than those required under this part; or

(ii) Operating a program with a greater scope of coverage than that required under this part. Where an

approved state program has a greater scope of coverage than required by federal law, the additional coverage is not part of the federally-approved program.

(b) *Definitions.* (1) The definitions in Part 280 apply to all subparts of this part.

(2) For the purpose of this part, the term "interim approval" means the approval received by a state program that meets the requirements in § 281.11(c) (1) and (2) for the time period defined in § 281.11(c)(3).

(3) For the purposes of this part the term "final approval" means the approval received by a state program that meets the requirements in § 281.11(b).

Subpart B—Components of a Program Application

§ 281.20 Program application.

Any state that seeks to administer a program under this part must submit an application containing the following parts:

(a) A transmittal letter from the Governor of the state requesting program approval;

(b) A description in accordance with § 281.21 of the state program and operating procedures;

(c) A demonstration of the state's procedures to ensure adequate enforcement;

(d) A schedule for obtaining needed authorities under interim approval, where applicable;

(e) A Memorandum of Agreement outlining roles and responsibilities of EPA and the implementing agency;

(f) An Attorney General's statement in accordance with § 281.25 certifying to applicable state authorities; and

(g) Copies of all applicable state statutes and regulations.

Note: EPA has designed an optional application form that is available for use by state applicants.

§ 281.21 Description of state program.

A state seeking to administer a program under this part must submit a description of the program it proposes to administer under state law in lieu of the federal program. The description of a state's existing or planned program must include:

(a) The scope of the state program:

(1) Whether the state program regulates UST systems containing petroleum or hazardous substances, or both;

(2) Whether the state is applying for interim or final approval;

(3) Whether the state program is more stringent or broader in scope than the federal program, and in what ways; and

(4) Whether the state has any existing authority over Indian lands or has existing agreements with Indian tribes relevant to the regulation of underground storage tanks.

(b) The organization and structure of the state and local agencies with responsibility for administering the program. The jurisdiction and responsibilities of all state and local implementing agencies must be delineated, appropriate procedures for coordination set forth, and one state agency designated as a "lead agency" to facilitate communications between EPA and the state.

(c) Staff resources to carry out and enforce the required state program elements, both existing and planned, including the number of employees, agency where employees are located, general duties of the employees, and current limits or restrictions on hiring or utilization of staff.

(d) An existing state funding mechanism to meet the estimated costs of administering and enforcing the required state program elements, and any restrictions or limitations upon this funding.

§ 281.22 Procedures for adequate enforcement.

A state must submit a description of its compliance monitoring and enforcement procedures, including related state administrative or judicial review procedures.

§ 281.23 Schedule for interim approval.

For a state program that must modify its statutory or regulatory requirements for release detection, release reporting and investigation, and out-of-service or closed UST systems in order to be no less stringent than the federal requirements, the plan must include a schedule for making such changes and for submitting an amendment to the state application in accordance with § 281.51.

§ 281.24 Memorandum of agreement.

EPA and the approved state will negotiate a Memorandum of Agreement (MOA) containing proposed areas of coordination and shared responsibilities between the state and EPA and separate EPA and state roles and responsibilities in areas including, but not limited to: Implementation of partial state programs; enforcement; compliance monitoring; EPA oversight; and sharing and reporting of information. At the time of approval, the MOA must be signed by

the Regional Administrator and the appropriate official of the state lead agency.

§ 281.25 Attorney General's statement.

(a) A state must submit a written demonstration from the Attorney General that the laws and regulations of the state provide adequate authority to carry out the program described under § 281.21 and to meet other requirements of this part. This statement may be signed by independent legal counsel for the state rather than the Attorney General, provided that such counsel has full authority to independently represent the state Agency in court on all matters pertaining to the state program. This statement must include citations to the specific statutes, administrative regulations, and where appropriate, judicial decisions that demonstrate adequate authority to regulate and enforce requirements for UST systems. State statutes and regulations cited by the state Attorney General must be fully effective when the program is approved.

(b) If a state currently has authority over underground storage tank activities on Indian Lands, the statement must contain an appropriate analysis of the state's authority.

Note: The reporting requirements under this section have been approved by the Office of Management and Budget (OMB) and have been assigned OMB Control Number 2050-0067.

Subpart C—Criteria for No-Less-Stringent

§ 281.30 New UST system design, construction, installation, and notification.

In order to be considered no less stringent than the corresponding federal requirements for new UST system design, construction, installation, and notification, the state must have requirements that ensure all new underground storage tanks, and the attached piping in contact with the ground and used to convey the regulated substance stored in the tank, conform to the following:

(a) Be designed, constructed, and installed in a manner that will prevent releases for their operating life due to manufacturing defects, structural failure, or corrosion.

Note: Codes of practice developed by nationally-recognized organizations and national independent testing laboratories may be used to demonstrate that the state program requirements are no less stringent in this area.

(b) Be provided with equipment to prevent spills and tank overfills when new tanks are installed or existing tanks

are upgraded, unless the tank does not receive more than 25 gallons at one time.

(c) All UST system owners and operators must notify the implementing state agency of the existence of any new UST system using a form designated by the state agency.

§ 281.31 Upgrading existing UST systems.

In order to be considered no less stringent than the corresponding federal upgrading requirements, the state must have requirements that ensure existing UST systems will be replaced or upgraded before December 22, 1998, to prevent releases for their operating life due to corrosion, and spills or overfills.

§ 281.32 General operating requirements.

In order to be considered no less stringent than the corresponding federal general operating requirements, the state must have requirements that ensure all new and existing UST systems conform to the following:

(a) Prevent spills and overfills by ensuring that the space in the tank is sufficient to receive the volume to be transferred and that the transfer operation is monitored constantly;

(b) Where equipped with cathodic protection, be operated and maintained by a person with sufficient training and experience in preventing corrosion, and in a manner that ensures that no releases occur during the operating life of the UST system;

Note: Codes of practice developed by nationally-recognized organizations and national independent testing laboratories may be used to demonstrate the state program requirements are no less stringent.

(c) Be made of or lined with materials that are compatible with the substance stored;

(d) At the time of upgrade or repair, be structurally sound and upgraded or repaired in a manner that will prevent releases due to structural failure or corrosion during their operating lives;

(e) Have records of monitoring, testing, repairs, and closure maintained that are sufficient to demonstrate recent facility compliance status, except that records demonstrating compliance with repair and upgrading requirements must be maintained for the remaining operating life of the facility. These records must be made readily available when requested by the implementing agency.

§ 281.33 Release detection.

In order to be considered no less stringent than the corresponding federal requirements for release detection, the state must have requirements that at a minimum ensure all UST systems are

provided with release detection that conforms to the following:

(a) *General methods.* Release detection requirements for owners and operators must consist of a method, or combination of methods, that is:

(1) Capable of detecting a release of the regulated substance from any portion of the UST system that routinely contains regulated substances—as effectively as any of the methods allowed under the federal technical standards—for as long as the UST system is in operation. In comparing methods, the implementing agency shall consider the size of release that the method can detect and the speed and reliability with which the release can be detected.

(2) Designed, installed, calibrated, operated and maintained so that releases will be detected in accordance with the capabilities of the method.

(b) *Phase-in of requirements.* Release detection requirements must, at a minimum, be scheduled to be applied at all UST systems:

(1) Immediately when a new UST system is installed;

(2) On an orderly schedule that completes a phase-in of release detection at all existing UST systems (or their closure) before December 21, 1993, except that release detection for the piping attached to any existing UST that conveys a regulated substance under greater than atmospheric pressure must be phased-in before December 22, 1990.

(c) *Requirements for petroleum tanks.* All petroleum tanks must be sampled, tested, or checked for releases at least monthly, except that:

(1) New or upgraded tanks (that is, tanks and piping protected from releases due to corrosion and equipped with both spill and overfill prevention devices) may temporarily use monthly inventory control (or its equivalent) in combination with tightness testing (or its equivalent) conducted every 5 years for the first 10 years after the tank is installed or upgraded or until December 22, 1998, whichever is later; and

(2) Existing tanks unprotected from releases due to corrosion or without spill and overfill prevention devices may use monthly inventory control (or its equivalent) in combination with annual tightness testing (or its equivalent) until December 22, 1998.

(d) *Requirements for petroleum piping.* All underground piping attached to the tank that routinely conveys petroleum must conform to the following:

(1) If the petroleum is conveyed under greater than atmospheric pressure:

(i) The piping must be equipped with release detection that detects a release within an hour by restricting or shutting off flow or sounding an alarm; and

(ii) The piping must have monthly monitoring applied or annual tightness tests conducted.

(2) If suction lines are used:

(i) Tightness tests must be conducted at least once every 3 years, unless a monthly method of detection is applied to this piping; or

(ii) The piping is designed to allow the contents of the pipe to drain back into the storage tank if the suction is released and is also designed to allow an inspector to immediately determine the integrity of the piping system.

(e) *Requirements for hazardous substance UST systems.* All UST systems storing hazardous substances must meet the following:

(1) All existing hazardous substance UST systems must comply with all the requirements for petroleum UST systems in paragraphs (c) and (d) of this section and after December 22, 1998, they must comply with the following paragraph (e)(2) of this section.

(2) All new hazardous substance UST systems must use interstitial monitoring within secondary containment of the tanks and the attached underground piping that conveys the regulated substance stored in the tank, unless the owner and operator can demonstrate to the state (or the state otherwise determines) that another method will detect a release of the regulated substance as effectively as other methods allowed under the state program for petroleum UST systems and that effective corrective action technology is available for the hazardous substance being stored that can be used to protect human health and the environment.

§ 281.34 Release reporting, investigation, and confirmation.

In order to be considered no less stringent than the corresponding federal requirements for release reporting, investigation, and confirmation, the state must have requirements that ensure all owners and operators conform with the following:

(a) Promptly investigate all suspected releases, including:

(1) When unusual operating conditions, release detection signals and environmental conditions at the site suggest a release of regulated substances may have occurred; and

(2) When required by the implementing agency to determine the source of a release having an impact in the surrounding area; and

(b) Promptly report all confirmed underground releases and any spills and overfills that are not contained and cleaned up.

(c) Ensure that all owners and operators contain and clean up unreported spills and overfills in a manner that will protect human health and the environment.

§ 281.35 Release response and corrective action.

In order to be considered no less stringent than the corresponding federal requirements for release response and corrective action, the state must have requirements that ensure:

(a) All releases from UST systems are promptly assessed and further releases are stopped;

(b) Actions are taken to identify, contain and mitigate any immediate health and safety threats that are posed by a release (such activities include investigation and initiation of free product removal, if present);

(c) All releases from UST systems are investigated to determine if there are impacts on soil and ground water, and any nearby surface waters. The extent of soil and ground water contamination must be delineated when a potential threat to human health and the environment exists.

(d) All releases from UST systems are cleaned up through soil and ground water remediation and any other steps, as necessary to protect human health and the environment;

(e) Adequate information is made available to the state to demonstrate that corrective actions are taken in accordance with the requirements of paragraphs (a) through (d) of this section. This information must be submitted in a timely manner that demonstrates its technical adequacy to protect human health and the environment; and

(f) In accordance with § 280.67, the state must notify the affected public of all confirmed releases requiring a plan for soil and ground water remediation, and upon request provide or make available information to inform the interested public of the nature of the release and the corrective measures planned or taken.

§ 281.36 Out-of-service UST systems and closure.

In order to be considered no less stringent than the corresponding federal requirements for temporarily closed UST systems and permanent closure, the state must have requirements that ensure UST systems conform with the following:

(a) Removal from service. All new and existing UST systems temporarily closed must:

(1) Continue to comply with general operating requirements, release reporting and investigation, and release response and corrective action;

(2) Continue to comply with release detection requirements if regulated substances are stored in the tank;

(3) Be closed off to outside access; and

(4) Be permanently closed if the UST system has not been protected from corrosion and has not been used in one year, unless the state approves an extension after the owner and operator conducts a site assessment.

(b) Permanent closure of UST systems. All tanks and piping must be cleaned and permanently closed in a manner that eliminates the potential for safety hazards and any future releases. The owner or operator must notify the state of permanent UST system closures. The site must also be assessed to determine if there are any present or were past releases, and if so, release response and corrective action requirements must be complied with.

(c) All UST systems taken out of service before the effective date of the federal regulations must permanently close in accordance with paragraph (b) of this section when directed by the implementing agency.

§ 281.37 Financial responsibility for USTs containing petroleum. EM (Reserved)

§ 281.38 Financial responsibility for USTs containing hazardous substances. (Reserved)

Subpart D—Adequate Enforcement of Compliance

§ 281.40 Requirements for compliance monitoring program and authority.

(a) Any authorized representative of the state engaged in compliance inspections, monitoring, and testing must have authority to obtain by request any information from an owner or operator with respect to the UST system(s) that is necessary to determine compliance with the regulations.

(b) Any authorized representative of the state must have authority to require an owner or operator to conduct monitoring or testing.

(c) Authorized representatives must have the authority to enter any site or premises subject to UST system regulations or in which records relevant to the operation of the UST system(s) are kept, and to copy these records, obtain samples of regulated substances, and inspect or conduct the monitoring or testing of UST system(s).

(d) State programs must have procedures for receipt, evaluation, retention, and investigation of records and reports required of owners or operators and must provide for enforcement of failure to submit these records and reports.

(e)(1) State programs must have inspection procedures to determine, independent of information supplied by regulated persons, compliance with program requirements, and must provide for enforcement of failure to comply with the program requirements. States must maintain a program for systematic inspections of facilities subject to regulations in a manner designed to determine compliance or non-compliance, to verify accuracy of information submitted by owners or operators of regulated USTs, and to verify adequacy of methods used by owners or operators in developing that information.

(2) When inspections are conducted, samples taken, or other information gathered, these procedures must be conducted in a manner (for example, using proper "chain of custody" procedures) that will produce evidence admissible in an enforcement proceeding, or in court.

(f) Public effort in reporting violations must be encouraged and the state enforcement agency(ies) must make available information on reporting procedures. State programs must maintain a program for investigating information obtained from the public about suspected violations of UST program requirements.

(g) The state program must maintain the data collected through inspections and evaluation of records in such a manner that the implementing agency can monitor over time the compliance status of the regulated community. Any compilation, index, or inventory of such facilities and activities shall be made available to EPA upon request.

§ 281.41 Requirements for enforcement authority.

(a) Any state agency administering a program must have the authority to implement the following remedies for violations of state program requirements:

(1) To restrain immediately and effectively any person by order or by suit in state court from engaging in any unauthorized activity that is endangering or causing damage to public health or the environment;

(2) To sue in courts of competent jurisdiction to enjoin any threatened or continuing violation of any program requirement;

(3) To assess or sue to recover in court civil penalties as follows:

(i) Civil penalties for failure to notify or for submitting false information pursuant to tank notification requirements must be capable of being assessed up to \$5,000 or more per violation.

(ii) Civil penalties for failure to comply with any state requirements or standards for existing or new tank systems must be capable of being assessed for each instance of violation, up to \$5,000 or more for each tank for each day of violation. If the violation is continuous, civil penalties shall be capable of being assessed up to \$5,000 or more for each day of violation.

(b) The burden of proof and degree of knowledge or intent required under state law for establishing violations under paragraph (a)(3) of this section, must be no greater than the burden of proof or degree of knowledge or intent that EPA must provide when it brings an action under Subtitle I of the Resource Conservation and Recovery Act.

(c) A civil penalty assessed, sought, or agreed upon by the state enforcement agency(ies) under paragraph (a)(3) of this section must be appropriate to the violation.

§ 281.42 Requirements for public participation.

Any state administering a program must provide for public participation in the state enforcement process by providing any one of the following three options:

(a) Authority that allows intervention analogous to Federal Rule 24(a)(2), and assurance by the appropriate state enforcement agency that it will not oppose intervention under the state analogue to Rule 24(a)(2) on the ground that the applicant's interest is adequately represented by the State.

(b) Authority that allows intervention as of right in any civil action to obtain the remedies specified in § 281.41 by any citizen having an interest that is or may be adversely affected; or

(c) Assurance by the appropriate state agency that:

(1) It will provide notice and opportunity for public comment on all proposed settlements of civil enforcement actions (except where immediate action is necessary to adequately protect human health and the environment);

(2) It will investigate and provide responses to citizen complaints about violations; and

(3) It will not oppose citizen intervention when permissive intervention is allowed by statute, rule, or regulation

§ 281.43 Sharing of information.

(a) States with approved programs must furnish EPA, upon request, any information in state files obtained or used in the administration of the state program. This information includes:

(1) Any information submitted to the state under a claim of confidentiality. The state must submit that claim to EPA when providing such information. Any information obtained from a state and subject to a claim of confidentiality will be treated in accordance with federal regulations in 40 CFR Part 2; and

(2) Any information that is submitted to the state without a claim of confidentiality. EPA may make this information available to the public without further notice.

(b) EPA must furnish to states with approved programs, upon request, any information in EPA files that the state needs to administer its approved state program. Such information includes:

(1) Any information that is submitted to EPA without a claim of confidentiality; and

(2) Any information submitted to EPA under a claim of confidentiality, subject to the conditions in 40 CFR Part 2.

Subpart E—Approval Procedures

§ 281.50 Approval procedures for state programs.

(a) The following procedures are required for all applications, regardless of whether the application is for a partial or complete program, as defined in § 281.12, or for interim or final approval in accordance with § 281.11.

(b) Before submitting an application to EPA for approval of a state program, the state must provide an opportunity for public notice and comment in the development of its underground storage tank program.

(c) When EPA receives a state program application, EPA will examine the application and notify the state whether its application is complete, in accordance with the application components required in § 281.20. The 180-day statutory review period begins only after EPA has determined that a complete application has been received.

(d) The state and EPA may by mutual agreement extend the review period.

(e) After receipt of a complete program application, the Administrator will tentatively determine approval or disapproval of the state program. EPA shall issue public notice of the tentative determination in the Federal Register, in enough of the largest newspapers in the state to attract statewide attention; and to persons on the state agency mailing list and any other persons who the

agency has reason to believe are interested. Notice of the tentative determination must also:

(1) Afford the public 30 days after the notice to comment on the state's application and the Administrator's tentative determination; and

(2) Include a general statement of the areas of concern, if the Administrator indicates the state program may not be approved; and

(3) Note the availability for inspection by the public of the state program application; and

(4) Indicate that a public hearing will be held by EPA no earlier than 30 days after notice of the tentative determination unless insufficient public interest is expressed, at which time the Regional Administrator may cancel the public hearing.

(f) Within 180 days of receipt of a complete state program application, the Administrator must make a final determination whether to approve the state program after review of all public comments. EPA will give notice of its determination in the Federal Register and codify the approved state program. The notice must include a statement of the reasons for this determination and a response to significant comments received.

§ 281.51 Amendment required at end of interim period.

(a) State programs that meet the requirements of section 281.11(c) (1) and (2) may be approved for 1 to 3 years from September 23, 1988. States that receive such interim approval must adopt requirements that are no less stringent than the corresponding federal requirements and standards within the timeframes specified under § 281.11(c)(3).

(b) By the end of the specified time period, a state with interim approval must submit to EPA an amendment to its application that includes all modified and new requirements for any of the elements containing less stringent requirements. Such amended applications must also include a modified program description, an Attorney General's statement and a Memorandum of Agreement that incorporate the amended program requirements, and copies of all applicable state statutes and regulations.

(c) Upon receipt of the application amendment, the Administrator shall follow the same review and approval procedures as required in § 281.50.

(d) If a state fails to submit an amendment within the specified timeframe, the interim approval of the state program expires upon the

applicable date established under § 281.11(c), and the Subtitle I program automatically reverts to EPA.

(e) If a state submits an amendment to the program application within the timeframe specified under § 281.11(c)(3) and the amendment is disapproved after the end of the time period, the interim approval of the state program expires immediately upon disapproval and the Subtitle I program automatically reverts to EPA.

(f) If interim approval of the state program expires, EPA must notify the regulated community and the public of the re-establishment of the federal program through a notice in the Federal Register.

§ 281.52 Revision of approved state programs.

(a) Either EPA or the approved state may initiate program revision. Program revision may be necessary when the controlling federal or state statutory or regulatory authority is changed or when responsibility for the state program is shifted to a new agency or agencies. The state must inform EPA of any proposed modifications to its basic statutory or regulatory authority or change in division of responsibility among state agencies. EPA will determine in each case whether a revision of the approved program is required.

(b) Whenever the Administrator has reason to believe that circumstances have changed with respect to an approved state program or the federal program, the Administrator may request, and the state must provide, a revised application as prescribed by EPA.

(c) The Administrator will approve or disapprove program revisions based on the requirements of this Part and of Subtitle I pursuant to the procedures under this section, or under section 281.50 if EPA has reason to believe the proposed revision will receive significant negative comment from the public.

(1) The Administrator must issue public notice of planned approval or disapproval of a state program revision in the Federal Register; in enough of the largest newspapers in the state to attract statewide attention; and by mailing to persons on the state agency mailing list and to any other persons who the agency has reason to believe are interested. The public notice must summarize the state program revision, indicate whether EPA intends to approve or disapprove the revision, and provide for an opportunity to comment for a period of 30 days.

(2) The Administrator's decision on the proposed revision becomes effective 60 days after the date of publication in

the Federal Register in accordance with paragraph (c)(1) of this section, unless significant negative comment opposing the proposed revision is received during the comment period. If significant negative comment is received, EPA must notify the state and within 60 days after the date of publication, publish in the Federal Register either:

(i) A withdrawal of the immediate final decision, which will then be treated as a tentative decision in accordance with the applicable procedures of § 281.50 (e) and (f); or

(ii) A notice that contains a response to significant negative comments and affirms either that the immediate final decision takes effect or reverses the decision.

(d) Revised state programs that receive approval must be codified in the Federal Register.

Subpart F—Withdrawal of Approval of State Programs

§ 281.60 Criteria for withdrawal of approval of state programs.

(a) The Administrator may withdraw program approval when the Agency determines that a state no longer has adequate regulatory or statutory authority or is not administering and enforcing an approved program in accordance with this part. The state must have adequate capability to administer and enforce the state program. In evaluating whether such capability exists, the Agency will consider whether the state is implementing an adequate enforcement program by evaluating the quality of compliance monitoring and enforcement actions.

(b) Such withdrawal of approval will occur only after the state fails to take appropriate action within a reasonable time, not to exceed 120 days after notice from the Administrator that the state is not administering and enforcing its program in accordance with the requirements of this part.

§ 281.61 Procedures for withdrawal of approval of state programs.

(a) The following procedures apply when a state with an approved program voluntarily transfers to EPA those program responsibilities required by federal law.

(1) The state must give EPA notice of the proposed transfer, and submit, at least 90 days before the transfer, a plan for the orderly transfer of all relevant program information necessary for EPA to administer the program.

(2) Within 30 days of receiving the state's transfer plan, EPA must evaluate the plan and identify any additional

information needed by the federal government for program administration.

(3) At least 30 days before the transfer is to occur, EPA must publish notice of the transfer in the Federal Register; in enough of the largest newspapers in the state to attract statewide attention; and to persons on appropriate state mailing lists.

(b) When EPA begins proceedings to determine whether to withdraw approval of a state program (either on its own initiative or in response to a petition from an interested person), withdrawal proceedings must be conducted in accordance with procedures set out in 40 CFR 271.23 (b) and (c), except for § 271.23(b)(8)(iii) to the extent that it deviates from requirements under § 281.60.

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Preamble to Financial Responsibility Objective
(53 FR 43365)

In response to the comment that Trust Fund money should not be given to states that do not have approved UST regulatory programs, the Agency wants to emphasize that the negotiation of state cooperative agreements for use of the LUST Trust Fund is proceeding on a path separate from the approval of state programs. However, EPA has decided to make a link between the LUST Trust Fund and UST regulatory program to ensure that future contamination is minimized. After the effective date of today's final rule, a state's success in making reasonable progress toward submitting a completed application for state program approval may be grounds for increasing state access to the Trust Fund in fiscal year 1990 and thereafter.

In response to the commenters urging that the Trust Fund be made directly available to local governments, EPA's cooperative agreement process involves states negotiating arrangements for proper use, recovery, and accounting of Trust Fund money with EPA. The municipalities are not parties to these negotiations and will need to rely on the state to implement a sound and effective program for the use of the Trust Fund for corrective action. The statute does not provide for any direct EPA/municipality arrangement.

Finally, as discussed in Section III.W of this preamble, the Agency has decided to defer promulgation of final procedures for suspension of enforcement. Until such procedures are promulgated, the Agency does not intend to exercise its discretionary suspension of enforcement authority. At that time, the Agency will address the use of LUST Trust Fund monies to respond to releases from tanks whose owner or operator is a member of a class which has been granted a suspension of enforcement.

V. State Program Approval

A. Background

Section 9004 of RCRA allows any state to submit an underground storage tank regulatory program for review and approval by EPA. An EPA-approved state UST regulatory program will operate "in lieu of" the Federal program. The Agency may approve the state program if the state demonstrates that its program (1) imposes requirements that are "no less stringent" than the Federal release detection, prevention, correction, and financial responsibility requirements, and (2) provides for adequate enforcement of compliance with such requirements.

B. Financial Responsibility Objective (§ 281.37)

In its final State Program Approval rule (53 FR 37212, September 23, 1988), EPA promulgated criteria for state program approval in the form of objectives for seven of the technical program elements in the final technical standards rule (53 FR 37082, September 23, 1988): New UST system design, construction, installation and notification; upgrading existing UST systems; general operating requirements; release detection; release reporting and investigation; corrective action; and out-of-service and closed UST systems. The eighth objective for financial responsibility of owners and operators of petroleum UST systems is promulgated in today's rule.

These objectives represent the Agency's expectations of what constitutes a no-less-stringent state program. By requiring the state to achieve the objectives underlying the detailed Federal requirements in each element rather than match each regulatory detail of the Federal requirements, EPA provides a performance-based measure for evaluating programs and recognizes that the precise details in the Federal program are not the only feasible approach to UST regulation. By establishing these objectives, EPA also provides a framework for approval that guarantees that each state UST program provides a minimum level of protection.

An important objective of the Federal program is that owners and operators of UST systems containing petroleum have adequate financial responsibility to undertake corrective action and meet third-party liability claims. The Federal law mandates \$1 million per occurrence with appropriate aggregate amounts as the minimum level of assurance needed by most owners and operators of petroleum UST systems to meet cleanup and liability costs. Today's Federal financial responsibility rule allows an exception for certain classes of owners and operators who store small quantities of petroleum for purposes other than selling it as a product. More specifically, owners and operators not engaged in petroleum production, refining, or marketing and who have a throughput of 10,000 gallons or less per month are required to have only \$500,000 per occurrence for corrective action and third-party liability claims. In addition, the financial responsibility rule sets the aggregate amounts at \$2 million for owners and operators with more than 100 UST systems, and \$1 million for those who have 100 or fewer UST systems. Finally, the financial

responsibility requirements will be phased-in over a 24-month period from the date of promulgation for different groups of owners and operators. In order to be no less stringent than the Federal requirements for financial responsibility for USTs containing petroleum, the state must have requirements for owners and operators to have financial assurance and for the types of mechanisms used to provide that financial assurance.

The Agency received comments in support of the holistic approach to determining no less stringent state programs, particularly because such an approach would enable a state to trade-off more stringent technical requirements with less stringent financial requirements, for example, lower amounts of financial responsibility. While the Agency understands that states may experience difficulty in obtaining statutory or regulatory authority to require \$1 million in coverage, that amount was established by Congress in Subtitle I and EPA believes it does not have the flexibility to lower that level of coverage as part of the Federal program or as part of state program approval.

The first aspect of this objective (§ 281.37(a)) concerns the amount of financial assurance, both per occurrence and in aggregate, that an owner or operator must have. First, the state must have a statute or regulations that require an owner or operator to have at least \$1 million or \$500,000 per occurrence and \$1 million or \$2 million in aggregate, depending on the size and type of the operation. This requirement follows directly from the Federal financial responsibility regulations for petroleum-containing UST systems.

The Supplemental Notice published on December 23, 1987 (52 FR 48644) included an objective for financial responsibility; however, aggregate levels were not included in the proposed objective. To remain consistent with the Federal requirements for financial responsibility, the Agency today is promulgating the final objective with a requirement that the owner or operator have financial assurance in appropriate aggregate levels. Addition of the aggregate is necessary to ensure that approved states require an adequate level of coverage. The aggregate level varies depending on the number of tanks owned or operated. Owners and operators with 1 to 100 tanks must have an aggregate level of coverage of \$1 million and those with more than 100 tanks must have an aggregate level of coverage of \$2 million. The final objective establishes the same levels of coverage. Further discussion on pre-

occurrence and aggregate levels of coverage can be found in today's preamble at Section III.D.

The second aspect of this objective (§ 281.37(b)) concerns the phase-in compliance schedule for owners and operators. The objective proposed on December 23, 1987 (52 FR 48644) did not include a provision for a phase-in schedule. This provision is being added to be consistent with decisions made following the Supplemental Notice to the proposed rule for financial responsibility for petroleum USTs that was published in the Federal Register on March 31, 1988 (53 FR 10401). In today's final financial responsibility rule, EPA has decided to phase-in compliance over 24 months from the date of promulgation at all UST systems following a schedule based on net worth and the number of tanks owned. Although EPA recommends that a similar approach be used by state programs, the Agency has decided to allow flexibility in the objective for states to use other phase-in approaches provided that the schedule is completed in 24 months. Approaches that allow all of the regulated community to wait until the end of the 24-month period would not be accepted as an orderly schedule.

The third aspect of this objective (§ 281.37(c)) concerns the variety of financial mechanisms that may be used by owners and operators to demonstrate adequate financial responsibility. The Federal financial responsibility rule allows a wide variety of mechanisms and combinations of mechanisms to be used. The state may also allow a variety of financial mechanisms to be used. To determine whether state-allowed or required mechanisms are no less stringent than the Federal requirement, general criteria have been established that are applicable to all financial mechanisms. By establishing these criteria in the Federal objective, the Agency believes that it is unnecessary for the state to have detailed requirements for each mechanism affected by these criteria for purposes of state program approval. However, EPA encourages states to adopt the financial responsibility regulation, especially the language of each mechanism, since they have been developed and tested to ensure that adequate financial responsibility will be available when necessary. For example, the state will not be expected to demonstrate that its regulations require a surety company to state in a bond that the bond cannot be cancelled during a 120-day period following notice of cancellation of the bond to the owner or operator. The state must, however, be able to draw on the

funds assured by the bond before cancellation occurs. The state regulations must ensure that the time period before the effective cancellation of the bond provides ample opportunity for the state to assess the facility, determine if a release has occurred, and, if needed, draw funds from the instrument. In this way, the Federal objectives for financial responsibility for UST systems containing petroleum are met.

Section 9004(c)(1) of Subtitle I allows states to set up a fund that may be used to meet the no less stringent requirement for financial responsibility. The state may choose to establish a state fund to provide financial assurance for certain classes of owners and operators or for all owners and operators. The general criteria for state funds are represented in the objective (§ 281.37(a) and (c)); these criteria are essentially the same as the requirements for state funds set out in the Federal financial responsibility rule in § 280.100. Further discussion on state funds and their use in providing financial assurance will be available in guidance due to be issued this fall by EPA. A briefer discussion can also be found in EPA's *State Program Approval Handbook*.

Some commenters expressed concern that the requirement that states have a financial responsibility program that is no less stringent than the Federal program in order to receive state program approval will delay approval of state programs. The commenters stated that complex financial responsibility requirements could discourage states from submitting UST programs for approval. They urged that EPA promulgate a simple financial responsibility framework and provide guidance to the states.

As explained above, the requirement that an approved state program contain financial responsibility requirements that are no less stringent than those under the Federal program is required by RCRA Section 9004. However, EPA has developed an approach to state program approval that provides states as much latitude as possible consistent with the statute in adopting approaches to fulfill the requirement. The Agency recognizes the difficulties for states in developing financial responsibility programs and is preparing detailed guidance and outreach assistance to states to help them develop their programs.

A more complete analysis of issues regarding state program approval is presented in the preamble to that rule (53 FR 37212, September 23, 1988).

VI. Compliance Monitoring and Enforcement

Although not raised as an issue in the proposal, implications of the proposed rules for compliance monitoring and enforcement activities received considerable comment. Many of the comments were submitted by states.

In general, the comments note that performing compliance monitoring and enforcement for financial responsibility rules will place a heavy resource burden on the states. Moreover, some states are currently understaffed while others apparently have little experience with the options for demonstrating financial responsibility and would have difficulty evaluating them. Also, the proposed requirement for maintaining financial responsibility for one year after tank closure would be difficult to enforce, especially if the business is sold, closes, or goes bankrupt.

Some states noted that, if the states will be responsible for implementation of the financial responsibility program and will not be provided funding, then EPA should not have a strong oversight role or stringent requirements for state program approval. Another state commenter reads the proposed section on reporting, which requires owners or operators to send evidence of financial responsibility to the Regional Administrator, to mean that EPA will administer the entire financial responsibility program.

A number of non-governmental commenters also noted the enormous burden that ensuring compliance for such a large universe would entail, with some offering approaches to enhance compliance and enforcement. One approach suggested by several commenters is that EPA collect evidence of financial responsibility from all owners or operators through periodic reporting; for example, using the Tank Notification Program to provide the basis for annual notification of compliance with financial responsibility requirements. Other commenters suggested that proof of financial responsibility be made a condition to obtain an annual operating permit. Another suggested that enforcement would be enhanced if the scope of these complicated rules could be clarified using the following techniques: (1) Workshops, (2) fact sheets, (3) more detailed summaries, and (4) condensed versions of the regulations.

Virtually all of the comments evidence both justifiable concern that performing compliance monitoring and enforcement for such an enormous regulated community presents a formidable

APPENDIX C

Tools for Implementing State Regulations

Tools for Implementing State Regulations

The following section describes various approaches that States have used to implement their regulations and monitor compliance. These examples are provided here to assist States in developing their UST program or making it work more effectively. The use of such approaches are merely suggestions for interested States and are not necessary to receive State program approval.

New UST System Design, Construction, Installation and Notification. To make sure that installations of new UST systems are completed properly, Maine certifies installers. The certification involves a written test based on nationally-recognized codes and a review of applicant's qualifications (including apprenticeship and work experience) as an installer by the Board of Underground Oil Storage Tank Installers.

Permitting is another way to ensure that new UST systems are soundly designed, constructed, and installed. In one State, the permitting process requires the owners to describe: (1) the UST characteristics, such as tank capacity, contents, and material of construction, cathodic protection and release detection methods, and (2) facility characteristics, including property boundaries, the location of buildings at the site and in the surrounding area, the location of the proposed tank system, and the approximate location of public or private water wells and any surface water bodies within 500 feet of the proposed UST. The permitting process in Nebraska includes a review of shop drawings by the State Fire Marshal's Office and an on-site inspection of the tank and piping systems during installation.

Upon notification, Florida provides each owner or operator with a registration sticker or a certificate that lists all of the registered USTs at the facility. State regulations require that this proof of registration be

posted in plain view near the UST system so that fuel distributors can verify the registration status of the UST before they make a delivery. If no proof of registration is displayed, the distributor is prohibited from making a delivery. Distributors are also required to make notification forms available to any customers who may own USTs that need to be registered.

In addition to the Federally-required notification by owners and operators of new and existing USTs, Connecticut requires notification in the event of change in ownership or control of a new or existing UST system within 15 days of the change in status. Also, owners and operators must report any changes in the information provided to the State for purposes of notification within 30 days of the change(s) (for example, type of substance stored).

Upgrading Existing UST Systems. Vermont has an innovative approach that helps to implement upgrading requirements. Vermont recently passed legislation that sets forth an incentive program to encourage UST upgrading. This program provides financial assistance to owners of retail gas stations that sell less than 20,000 gallons of gasoline per month and that want to replace their USTs in accordance with Vermont's regulations. Owners must fill out an application providing the Vermont Agency of Environmental Conservation with essential facility information. Grants up to \$5,000 or the cost of bringing the system into compliance (whichever is less) may be awarded to the applicants. Priority is given to applicants from areas with a low density of retail gasoline stations and for whom the expense of tank replacement is likely to cause "termination of retail gasoline services." California is considering the establishment of a similar program with financial assistance in the form of a loan provided for UST system upgrades and repairs at small businesses.

General Operating Requirements. Maryland has developed an innovative approach to prevent operational problems that can cause overfills and spills. In Maryland, drivers of tank trucks and transports must pass an examination to demonstrate knowledge of the procedures used in the safe handling of oil, oil spill control measures, and oil spill reporting requirements. Upon successful completion of the exam, drivers receive an "Oil Vehicle Operator's Certificate", which they must carry at all times while involved in the transfer or transport of oil. Temporary (30 day) certificates are issued to new drivers provided that the distributor instructs the driver regarding basic procedures involved in safe handling of oil and oil spill reporting requirements. Interstate drivers that transport petroleum products through Maryland are not required to have an operator's certificate; however, all drivers must follow a detailed set of product transfer requirements to make sure that petroleum transfers are handled properly. These requirements supplement the typical procedural requirements that appear in Maryland's regulations and serve as a useful program implementation tool.

To ensure that substances are delivered to USTs with which they are compatible, some States require labeling of UST systems. Five States (Delaware, Florida, New Hampshire, New York, and Vermont) have issued requirements for labeling of tanks and fill ports to identify tank material and regulated substance compatibility. Both Delaware and Florida have provisions specifically for USTs made of fiberglass-reinforced plastic. In these States, both the tank and the fill cap must be equipped with a label that says: "Non-metallic Underground Tank for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures" or "Non-Metallic Underground Tank for Petroleum Products Only".

To aid delivery personnel, some States require fill ports to be labeled with the tank volume and substance stored (for example, color coding for substance type in accordance with API 1637). In this way, delivery personnel are provided with the essential information they need to gauge an UST system accurately and to make the appropriate delivery of regulated substance. The use of such labeling helps prevent overfills and spills.

The Delaware Department of Natural Resources and Environmental Control (DNREC) is drafting standardized methods for recordkeeping. Such standardization will help UST owners and operators to determine what types of information must be documented and in what form they must be recorded. The resulting records should contain useful information that is consistent in quality and presentation. These characteristics are helpful to the implementing agency when trying to determine facility compliance. Maintenance of clear and comprehensive records enhances DNREC's compliance monitoring capabilities.

Release Reporting, Investigation, and Confirmation. Most States require immediate reporting of all suspected or confirmed releases. Hotlines have been established in many States in order to provide a fast, effective way of contacting the emergency response unit. Typically, once a release is reported, State officials advise UST owners as to what actions they must take. In TANKLINE (September 1987), Oregon's newsletter for UST owners and interested parties, a checklist was presented to guide the actions of UST owners in the event of a release. The checklist contains 10 major items, three of which relate to release reporting and investigation, and seven of which pertain to corrective action. The recommended actions relating to release reporting and investigation are: (1) notify the DEQ through the

Oregon Accident Response Hotline; (2) determine if there is a fire danger (if so, contact the fire department immediately); and (3) determine the source of the release.

Florida has an innovative approach toward release reporting. The State has instituted an "Early Detection Incentive" program in which the UST owners are required to report any UST releases, but have amnesty from clean-up costs because the remedial actions are financed through a special State trust fund. Petroleum UST owners are eligible provided that (1) they have complied with the notification requirement by October 1, 1988; (2) the UST facility is not owned by the Federal government; (3) State access to the facility for inspection has not been or is not denied; and (4) the State determines that the facility was not operated in a grossly negligent manner. (This last provision gives UST owners an incentive to comply with release detection monitoring requirements.) Once eligible, the owner or operator may choose to have the State perform the cleanup, or perform it himself and receive reimbursement from the State. The number of reports and cleanups this program has motivated is impressive. The newsletter LUSTLINE (published by the New England Interstate Water Pollution Control Commission), reports that as of March 2, 1987, 477 sites had requested State cleanup and an additional 298 sites were being cleaned up by the responsible party and receiving reimbursement from the State.

A different type of incentive for release reporting, abatement, and hazard mitigation has been put forth in Missouri House Bill No. 528. This legislation requires "any person having control over a hazardous substance" who detects a release to notify the State and initiate cleanup. Should this person fail to comply with these requirements, he is not only liable for the

associated cleanup cost, he is also liable for punitive damages up to three times the cleanup cost amount. The "any person" language can refer to a transporter making a product delivery as well as the owner or operator of an UST system.

One State requires that any facility where one confirmed UST release has occurred must have all other tanks at that facility inspected within 180 days to determine whether other releases may exist.

Release Response and Corrective Action. Oregon's newsletter, TANKLINE (September 1987), presents a checklist to provide guidance to UST owners and operators in the event of a release. Seven items on this checklist direct owners on how to clean up the release: (1) determine the extent of contamination; (2) if product has moved off your property, notify affected owners; (3) meet with DEQ to set up a cleanup standard and a schedule for the cleanup; (4) write a remedial action plan to achieve the cleanup goals; (5) submit your plan to DEQ for approval; (6) implement your plan and monitor progress; and (7) report to DEQ on your success at meeting cleanup goals. By posting the State requirements in a newsletter that is circulated to the UST community, Oregon is using an innovative approach for informing UST owners and operators of their responsibilities.

In addition to its basic corrective action requirements, Nebraska has developed a detailed set of protocols for determining the need for and the nature of ground water remedial action. A systematic flow chart provides guidance in determining the type and extent of treatment needed. For releases that have or may potentially impact ground water, a detailed site assessment is required that must address the characteristics of the soil, hydrogeology, contaminant, and site (for example, proximity to water supplies and land use)

as well as the background water and soil quality or use. A ground-water classification scheme is used to determine the degree of hazard presented and make decisions concerning remedial actions. Based on this assessment, preliminary cleanup levels are defined and remedial actions proposed.

Florida's Department of Environmental Regulation (DER) has developed a set of site cleanup criteria for petroleum contamination. The State has provided criteria for evaluating: (1) the initial remedial action, (2) a Quality Assurance Project Plan for collecting and analyzing samples, (3) a contamination assessment and report, (4) a remedial action plan, (5) the remedial action, and (6) the completion of site rehabilitation. Site Rehabilitation Levels (SRLs) are allowable contaminant concentration limits that must be met before the site cleanup can be deemed complete. The SRLs are based on water quality standards. Alternative or less stringent SRLs may be created if it can be demonstrated that site-specific factors (for example, background contaminant levels) can justify their use.

In order to protect human health and the environment when an immediate threat is perceived, some State agencies swiftly perform corrective action for UST releases even before they are able to identify all the potentially responsible parties (PRPs). States like Maine and New York are able to do this because they have created cleanup trust funds that allow them to incur the cost of cleanup and seek PRP reimbursement later. This type of State trust fund can be an effective tool in mitigating immediate hazards and ensuring environmental restoration.

Out-of-Service UST Systems and Closure. UST owners or operators in South Carolina who have temporarily removed their UST system(s) from service within the past calendar year must submit a report, during January of each

year, to the Department of Health and Environmental Control that describes the system's location, capacity, permit number, dates temporarily taken out of operation, and method used to place the system temporarily out of operation. This report helps South Carolina monitor the compliance of these temporarily out-of-service USTs.

For permanent UST closure, some States (FL, MA, and OR) require that the person dismantling and removing the UST system be certified to ensure that permanent UST closures are performed properly and safely by trained professionals. In Maine, the UST owner or operator must notify appropriate State and local agencies and receive written permission from the Maine Department of Environmental Protection (DEP). By requiring notification and written permission, the DEP is aware of planned tank closures and is able to give UST owners guidance, when necessary, to ensure that appropriate procedures are used to close the UST system. In Rhode Island, owners and operators are required to obtain a certificate of closure. In this way, the State can ensure that site assessments for past and present releases are performed, and any necessary corrective actions implemented. The potential dangers associated with UST closure should not be underestimated. To prevent mishaps, the use of good closure practices is absolutely necessary. The approaches described above also help States ensure that the UST closure is performed safely and properly.

New Jersey's proposed regulations suggest another method of ensuring that closures are performed safely and properly. Owners or operators in New Jersey who plan to close their UST systems must submit a closure plan to the Department of Environmental Protection (DEP) 60 days before the anticipated closure date. This plan consists of a site assessment that incorporates the

following information: (1) three consecutive months of monitoring data from a DEP-approved external monitoring system; or (2) a work plan for conducting soil sampling and analysis. This work plan must provide: (1) the number and location of soil samples; (2) soil sampling procedures (for which the DEP provides some guidance) and analysis protocols that must be in accordance with DEP-approved methods; (3) a plot plan clearly indicating all major structures, including the tank itself (in use and closed), piping, dispensers and other equipment; (4) a health and safety plan (may be required); (5) an implementation schedule; and (6) a plan showing the installation of monitoring wells (may be required). Based on the substance stored, the DEP provides guidance as to what constituents must be looked for in the soil samples. The owner or operator is required to implement the closure plan within 30 days after obtaining all necessary Federal, State, and/or local approvals.

An essential part of permanent UST closure by removal is disposal of tanks and any end products derived from tank cleaning. Massachusetts has an innovative approach to address these matters. It requires USTs that are undergoing removal to be emptied of stored product, purged of vapors, and taken to a licensed or permitted tank dismantling yard. At the tank yard, the UST must be logged in, cleaned of residue, and dismantled. The cleaning end product must be treated as hazardous waste and removed by a hazardous waste or waste oil transporter licensed by the Department of Environmental Quality Engineering.

Maine makes provisions in the regulations for the proper disposal of sludge and scale, as well as for recycling and disposal of USTs. Furthermore, Maine mandates that the tank owner have a notice regarding permanent UST abandonment attached to the property deed. Although such a requirement is not

needed for State program approval, this mechanism ensures that future property owners will be informed about the tank's presence on their property. In California, UST owners or operators choosing to close their USTs in place are also required to place a notice on the property deed, describing the location in detail of the closed UST, the regulated substance it contained and the closure method.

APPENDIX D

Table of National Industry Codes and Standards

TABLE 1. SELECTED NATIONAL CONSENSUS CODES AND RECOMMENDED PRACTICES FOR UST MANAGEMENT

DOCUMENT NUMBER	MAJOR TECHNICAL TOPICS OF THE FINAL EPA UST RULE							
	DESIGN AND CONSTRUCTION	CORROSION PROTECTION	INSTALLATION	UST SYSTEM REPAIR AND RETROFIT	OPERATING REQUIREMENT	RELEASE DETECTION	RELEASE REPORTING AND CORRECTIVE ACTION	CLOSURE
American National Standards Institute (ANSI)								
ANSI B31.4	x	x	x	x	x	x	x	x
American Petroleum Institute (API)								
* API 5L	x							
* API 12F	x							
API 650	x							
API 1604								x
* API 1615		x	x		x	x		
API 1628						x	x	
* API 1631		x		x	x	x		
API 1632	x	x		x	x			
API 2202								x
American Society for Testing and Materials (ASTM)								
ASTM (Steel Piping, Tubing, and Fittings)	x							
* ASTM A 53-87b	x							
* ASTM A182/A182M-87	x			x				
* ASTM D 4021-86	x							

TABLE 1. SELECTED NATIONAL CONSENSUS CODES AND RECOMMENDED PRACTICES FOR UST MANAGEMENT (CONTINUED)

MAJOR TECHNICAL TOPICS OF THE FINAL EPA UST RULE

DOCUMENT NUMBER	DESIGN AND CONSTRUCTION	CORROSION PROTECTION	INSTALLATION	UST SYSTEM REPAIR AND RETROFIT	OPERATING REQUIREMENT	RELEASE DETECTION	RELEASE REPORTING AND CORRECTIVE ACTION	CLOSURE
Association of Composite Tanks (ACT)								
■ ACT 100	x	x	x		x			
Factory Mutual (FM)								
FM 1920	x		x					
National Association of Corrosion Engineers (NACE)								
NACE RP-0169-83	x	x	x	x	x			
NACE RP-0172-72	x	x		x				
NACE RP-0184-84		x		x				
NACE RP-0275-75	x	x						
NACE RP-0285-85	x	x	x	x	x			
NACE RP-0572-85	x	x	x	x		x		
National Fire Protection Association (NFPA)								
■ NFPA 30	x	x	x		x	x		x
■ NFPA 321	x						x	x
■ NFPA 327					x			
■ NFPA 328							x	x
■ NFPA 329					x	x	x	x
■ NFPA 385					x			
National Leak Prevention Association (NLPA)								
■ NLPA 631	x	x	x	x				

TABLE 1. SELECTED NATIONAL CONSENSUS CODES AND RECOMMENDED PRACTICES FOR UST MANAGEMENT (CONTINUED)

MAJOR TECHNICAL TOPICS OF THE FINAL EPA UST RULE								
DOCUMENT NUMBER	DESIGN AND CONSTRUCTION	CORROSION PROTECTION	INSTALLATION	UST SYSTEM REPAIR AND RETROFIT	OPERATING REQUIREMENT	RELEASE DETECTION	RELEASE REPORTING AND CORRECTIVE ACTION	CLOSURE
Owens Corning (OC)								
OC 3-PE-9632-A	x		x					
Petroleum Equipment Institute (PEI)								
* PEI/RP100	x	x	x	x		x	x	x
Steel Tank Institute (STI)								
STI (Installation of Stl-P3)		x	x					
STI (Interior Corrosion Control)	x	x	x	x				
STI (Exterior Corrosion Protection)	x	x	x					
STI (Dual Wall USTs)	x	x	x					
Underwriters Laboratories (UL)								
UL 58	x							
UL 567	x	x						
* UL 1316	x		x					

TABLE 1. SELECTED NATIONAL CONSENSUS CODES AND RECOMMENDED PRACTICES FOR UST MANAGEMENT (CONCLUDED)

DOCUMENT NUMBER	MAJOR TECHNICAL TOPICS OF THE FINAL EPA UST RULE							
	DESIGN AND CONSTRUCTION	CORROSION PROTECTION	INSTALLATION	UST SYSTEM REPAIR AND RETROFIT	OPERATING REQUIREMENT	RELEASE DETECTION	RELEASE REPORTING AND CORRECTIVE ACTION	CLOSURE

Western Fire Chiefs Association

* UFC 1985	x	x	x	x	x	x	x	x
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* Revised in 1987

** Drafted in 1987

x - There is a code or recommended practice.