United States
Environmental Protection
Agency

Preamble to 40 CFR Part 281

(37212-37241)

Compiled by the US EPA Office of Underground Storage Tanks

ENVIRONMENTAL PROTECTION AGENCY
40 CFR PART 281
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 12853) 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, S.W., Washington, D.C. 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, D.C., (202)382-3000.

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

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

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.

o 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.

o 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.

o 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.

o 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 -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 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 - 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 (§§ 281.20-25)

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) - (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 1986. 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 (section 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 (section 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 §§ 281.40-281.43.

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 - 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 (section 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 judgment 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 on 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 that 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 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 section 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 - 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 (Section 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 - 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 - 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 section 281.30 of the final rule) has caused the adequate enforcement requirements to be reorganized into Subpart D, sections 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 or 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) - (g)]. Proposed §§ 281.30(c) - (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.

o 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.

o 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.

o 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.

o 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.

o 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 -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 section 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 - 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 §§ 281.60-61 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 section 281.60(a) to change "the Administrator must" to "the Administrator may" withdraw program approval. This change now makes section 281.60(a) consistent with section 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 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 1632 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 St., S.W., Washington, D.C. 20460 (202-382-2745); and

Marcus Peacock, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

VIII. LIST OF SUBJECTS IN 40 CFR PART 281

Administrative practice and procedure, Hazardous materials, Petroleum, State program approval and Underground storage tanks.

Date: September 8, 1988

Lee M. Thomas Administrator.