and experience in preventing corrosion, and in a manner that ensures that no releases occur during the operating life of the UST system;

NOTE: Codes of practice developed by nationally-recognized organizations and national independent testing laboratories may be used to demonstrate the state program requirements are no less stringent.

(c) Be made of or lined with materials that are compatible with the substance stored;

(d) At the time of upgrade or repair, be structurally sound and upgraded or repaired in a manner that will prevent releases due to structural failure or corrosion during their operating lives;

(e) Have records of monitoring, testing, repairs, and closure maintained that are sufficient to demonstrate recent facility compliance status, except that records demonstrating compliance with repair and upgrading requirements must be maintained for the remaining operating life of the facility. These records must be made readily available when requested by the implementing agency.

§ 281.33 Release detection.

In order to be considered no less stringent than the corresponding federal requirements for release detection, the state must have requirements that at a minimum ensure all UST systems are provided with release detection that conforms to the following:

(a) General methods. Release detection requirements for owners and operators must consist of a method, or combination of methods, that is:

(1) Capable of detecting a release of the regulated substance from any portion of the UST system that routinely contains regulated substances—as effectively as any of the methods allowed under the federal technical standards—for as long as the UST system is in operation. In comparing methods, the implementing agency shall consider the size of release that the method can detect and the speed and reliability with which the release can be detected.

(2) Designed, installed, calibrated, operated and maintained so that releases will be detected in accordance with the capabilities of the method.

(b) Phase-in of requirements. Release detection requirements must, at a minimum, be scheduled to be applied at all UST systems:

(1) Immediately when a new UST system is installed:

(2) On an orderly schedule that completes a phase-in of release detection at all existing UST systems (or their closure) before December 21, 1993, except that release detection for the piping attached to any existing UST that conveys a regulated substance under greater than atmospheric pressure must be phased-in before December 22, 1990.

(c) Requirements for petroleum tanks. All petroleum tanks must be sampled, tested, or checked for releases at least monthly, except that:

(1) New or upgraded tanks (that is, tanks and piping protected from releases due to corrosion and equipped with both spill and overfill prevention devices) may temporarily use monthly inventory control (or its equivalent) in combination with tightness testing (or its equivalent) conducted every 5 years for the first 10 years after the tank is installed or upgraded or until December 22, 1998, whichever is later; and

(2) Existing tanks unprotected from releases due to corrosion or without spill and overfill prevention devices may use monthly inventory control (or its equivalent) in combination with annual tightness testing (or its equivalent) until December 22, 1998.

(d) Requirements for petroleum piping. All underground piping attached to the tank that routinely conveys petroleum must conform to the following:

(1) If the petroleum is conveyed under greater than atmospheric pressure:

(i) The piping must be equipped with release detection that detects a release within an hour by restricting or shutting off flow or sounding an alarm; and

(ii) The piping must have monthly monitoring applied or annual tightness tests conducted.

(2) If suction lines are used:

(i) Tightness tests must be conducted at least once every 3 years, unless a monthly method of detection is applied to this piping; or

(ii) The piping is designed to allow the contents of the pipe to drain back into the storage tank if the suction is released and is also designed to allow
an inspector to immediately determine
the integrity of the piping system.

(e) Requirements for hazardous sub-
stance UST systems. All UST systems
storing hazardous substances must
meet the following:

(1) All existing hazardous substance
UST systems must comply with all the
requirements for petroleum UST sys-
tems in paragraphs (c) and (d) of this
section and after December 22, 1998,
they must comply with the following
paragraph (e)(2) of this section.

(2) All new hazardous substance UST
systems must use interstitial moni-
toring within secondary containment
of the tanks and the attached under-
ground piping that conveys the regu-
lated substance stored in the tank, un-
less the owner and operator can dem-
onstrate to the state (or the state oth-
erwise determines) that another meth-
olod will detect a release of the regulated
substance as effectively as other meth-
ods allowed under the state program
for petroleum UST systems and that
effective corrective action technology
is available for the hazardous sub-
stance being stored that can be used to
protect human health and the environ-
ment.

§ 281.34 Release reporting, investi-
gation, and confirmation.

In order to be considered no less
stringent than the corresponding fed-
eral requirements for release reporting,
investigation, and confirmation, the
state must have requirements that en-
sure all owners and operators conform
with the following:

(a) Promptly investigate all sus-
pected releases, including:

(1) When unusual operating condi-
tions, release detection signals and en-
vironmental conditions at the site sug-
gest a release of regulated substances
may have occurred; and

(2) When required by the imple-
menting agency to determine the
source of a release having an impact in
the surrounding area; and

(b) Promptly report all confirmed
underground releases and any spills and
overfills that are not contained and
cleaned up.

(c) Ensure that all owners and opera-
tors contain and clean up unreported
spills and overfills in a manner that
will protect human health and the en-
vironment.

§ 281.35 Release response and correc-
tive action.

In order to be considered no less
stringent than the corresponding fed-
eral requirements for release response
and corrective action, the state must
have requirements that ensure:

(a) All releases from UST systems are
promptly assessed and further releases
are stopped;

(b) Actions are taken to identify,
contain and mitigate any immediate
health and safety threats that are
posed by a release (such activities in-
clude investigation and initiation of
free product removal, if present);

(c) All releases from UST systems are
investigated to determine if there are
impacts on soil and ground water, and
any nearby surface waters. The extent
of soil and ground water contamination
must be delineated when a potential
threat to human health and the environ-
ment exists.

(d) All releases from UST systems are
cleaned up through soil and ground
water remediation and any other steps,
as necessary to protect human health
and the environment;

(e) Adequate information is made
available to the state to demonstrate
that corrective actions are taken in ac-
cordance with the requirements of
paragraphs (a) through (d) of this sec-
tion. This information must be sub-
mitted in a timely manner that dem-
onstrates its technical adequacy to
protect human health and the environ-
ment; and

(f) In accordance with § 280.67, the
state must notify the affected public of
all confirmed releases requiring a plan
for soil and ground water remediation,
and upon request provide or make
available information to inform the in-
terested public of the nature of the re-
lease and the corrective measures
planned or taken.

§ 281.36 Out-of-service UST systems
and closure.

In order to be considered no less
stringent than the corresponding fed-
eral requirements for temporarily
closed UST systems and permanent