

The Texas Commission on Environmental Quality (agency, commission, or TCEQ) adopts amendments to §§334.71, 334.201, and 334.503 *without changes* to the proposed text as published in the November 21, 2008, issue of the *Texas Register* (33 TexReg 9433) and will not be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

In a prior rulemaking proposal published May 2, 2008, and adopted on October 8, 2008, the commission sought input regarding the appropriateness of whether Leaking Petroleum Storage Tank (LPST) sites should be removed from the requirements of 30 TAC Chapter 350 to support statutory changes made to Texas Water Code (TWC), §26.351(a) and (i), by House Bill 3554, 80th Legislature, 2007, authored by Representative Carl Isett. The commission directed staff at the October 8, 2008 Agenda to initiate a rulemaking and address the LPST issue in a comprehensive rulemaking for both Chapter 334 and Chapter 350, Texas Risk Reduction Program.

SECTION BY SECTION DISCUSSION

Subchapter D - Release, Reporting, and Corrective Action

The commission adopts the amendment to §334.71(a) to remove language requiring the use of Chapter 350 for releases discovered and reported to the agency on or after September 1, 2003. Currently, LPST sites discovered and reported on or after September 1, 2003 are required to follow Chapter 334, with the exception that Chapter 350 be used in lieu of §§334.78 - 334.81. This rulemaking would effectively reinstate the use of §§334.78 - 334.81, and make corresponding rule changes to amend §350.2(g), by eliminating language requiring compliance with Chapter 350, for the assessment, response actions, and post-response action care for releases of regulated substances from underground storage tanks (USTs) or aboveground storage tanks (ASTs).

Subchapter G - Target Concentration Criteria

The commission adopts the amendment to §334.201(a) and (b), to remove the applicability of the Texas Risk Reduction Program (TRRP) to the criteria by which target concentrations are established for cleanup of LPST site releases. The commission also adopts a clarifying change to subsection (b) in order to remove an out-dated reference to agency guidance documents.

Subchapter K - Storage, Treatment, and Reuse Procedures for Petroleum-Substance Contaminated Soil

The commission adopts the amendment to §334.503(b) and (c), to remove the applicability of the TRRP to reuse of petroleum-substance waste.

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the rulemaking in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined the rulemaking is not subject to §2001.0225 because it does not meet the definition of a "major environmental rule" as defined in that statute. A major environmental rule means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

Concerning the economy, this rule package represents a return to a more streamlined and flexible process for owners or operators of USTs or ASTs (e.g. retail gasoline stations) to address contamination resulting from releases from tank systems. Because costs of gasoline and diesel are a major concern for the Texas

economy and the general public, it is sufficient to note that a streamlined and flexible process may result in a benefit to the economy. Concerning jobs, competition, and productivity, nothing in this package can be estimated to adversely affect these areas; to the extent that a benefit to the economy described above could also benefit jobs, competition, and productivity, then we expect to see a benefit in these areas as well.

Concerning "the environment, or the public health and safety of the state," the commission would first point out that the Chapter 334 assessment and corrective action rules and guidance are currently being used at a majority (approximately 63%) of open LPST sites. (These were LPST releases discovered and reported before September 1, 2003.) This rule affects only LPST releases discovered and reported on or after September 1, 2003, including future LPST sites.

Second, the commission notes that the particular Chapter 334 rules and guidance of concern here were originally proposed and adopted in 1995. House Bill 2587, 74th Legislature, 1995, effective September 1, 1995, significantly revised regulatory authority and responsibilities relative to USTs and ASTs. The rules proposed in July 1995 and adopted October 1995, officially incorporated "risk-based corrective action." This is the same risk-based corrective action program which this rule package uses for all current and future LPST sites. As stated in the 1995 rule proposal, the commission recognizes the level of remediation warranted at a high risk site will not be equivalent to the level necessary at a low risk site and that appropriate target concentrations and target cleanup levels should be used in determining risk actually posed to the environment and health or human safety. When risk pathways are not present or less risk is posed at a site, corrective action may generally be conducted more expeditiously. Thus, "risk" is the primary consideration in Chapter 334, as required by the TWC. Certain questions are approached using

risk analysis, such as how far does a groundwater contamination plume need to be delineated, or for how many years, or to what concentration levels does natural attenuation have to be monitored. Remediation itself may involve a number of different actions, from soil removal to removal of "free product" (also known as non-aqueous phase liquid or NAPL) from wells, to engineered groundwater systems, to monitored natural attenuation (since petroleum products naturally biodegrade to a large degree). In each of these actions, effectiveness and efficiency of removing actual risk pathways to human health and the environment must be considered, as required by the statute, regardless of whether Chapter 334 or Chapter 350 is being applied.

Thus, when actual risk is considered, the Chapter 334 rules, both in 1995 and in the current rule, are adequately protective of the environment. Although there may be discrete scenarios where Chapter 350 and Chapter 334 assessment and remediation require a different process and may have comparative positive or negative effects, taken as a whole this rule does not represent a major environmental rule which adversely affects the environment or the public health and safety.

Lastly, even if this rule were considered a "major environmental rule," it fails the second test under the Texas Government Code. It does not meet any of the four requirements listed in Texas Government Code, §2001.0225(a). That section states: "(a) This section applies only to a major environmental rule adopted by a state agency, the result of which is to: (1) exceed a standard set by federal law, unless the rule is specifically required by state law; (2) exceed an express requirement of state law, unless the rule is specifically required by federal law; (3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or (4) adopt a rule solely under the general powers of the agency instead of under a

specific state law." None of these four elements is applicable; the rule package does not exceed any federal or state requirements, nor exceed delegation agreements or contracts. The rule package is adopted under a specific state law, TWC, §26.351, and it is not adopted solely under the general powers of the agency.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. No comments were received on the draft regulatory impact analysis.

TAKINGS IMPACT ASSESSMENT

The commission evaluated this rulemaking action and performed an analysis of whether the rule is subject to Texas Government Code, Chapter 2007. The rulemaking returns LPST assessment and remediation to the same rules that were in effect before September 1, 2003. This may result in lower costs for assessment of releases from tanks, and may result in closure status being granted more quickly.

Promulgation and enforcement of the amendments would constitute neither a statutory nor a constitutional taking of private real property. Specifically, the rulemaking does not affect a landowner's rights in real property because the rulemaking does not burden (constitutionally) nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would exist in the absence of the amendments.

Although a contaminated LPST site or contaminated neighboring property may suffer from market devaluation due to contamination, this devaluation is due to the basic fact of the presence of contamination; it cannot be concluded that the choice of application of Chapter 334 risk-based corrective

action in lieu of TRRP would "cause" the devaluation. As a whole, this rulemaking is not anticipated to be a cause of a reduction in market value of private real property, does not create a burden on private real property, and will not constitute a takings under Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the rulemaking and found the rulemaking identified in the Coastal Coordination Act Implementation Rules (31 TAC §505.11(b)(2)) subject to the Texas Coastal Management Program (CMP) and will, therefore, require that goals and policies of the CMP be considered during the rulemaking process. The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Council and determined the rulemaking protects the environment by ensuring that the CMP goals and policies will not be adversely affected by the rule changes described in this preamble for the reason that although Chapter 334 cleanup requirements will now be used without Chapter 350 cleanup requirements, Chapter 334 risk-based corrective action requirements are adequately protective of human health and the environment.

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received concerning the CMP.

PUBLIC COMMENT

A public hearing on this rulemaking was held in Austin on December 16, 2008, 10:00 a. m. at the Texas Commission on Environmental Quality complex located at 12100 Park 35 Circle in Building E, Room 201S. The comment period closed on January 5, 2009. The commission received comments from: ATC

Associates, Inc. (ATC); Brookshire Brothers, Ltd. (Brookshire Brothers); Chambers Pump Service, Inc. (Chambers); Clear Fork Consulting Services (Clear Fork); GSI Environmental (GSI); Lowerre, Frederick, Perales, Allmon and Rockwell, Attorneys at Law on behalf of their own firm and on behalf of Clean Water Action, Texas Center for Policy Studies, Texas Conservation Alliance, Environment Texas, Public Citizen, Sierra Club (Lone Star Chapter), Sustainable Energy & Economic Development Coalition, Texas Campaign for the Environment, and Environmental Defense Fund (Lowerre); Texas Oil and Gas Association (TxOGA); Texas Petroleum Marketers and Convenience Store Association (TPCA); Valero Retail Holdings, Inc. (Valero); and an individual.

ATC, Brookshire Brothers, Chambers, Clear Fork, TxOGA, TPCA, and Valero were in favor of the proposed rule changes. Lowerre and one individual objected to any removal of LPST sites from TRRP, without suggesting alternate language. GSI was not clearly in favor or against, but did suggest delaying the effective date of implementation of this rule to ensure consistency with updated guidance documents.

RESPONSE TO COMMENTS

Comments Regarding General Protectiveness of Human Health, Safety, and the Environment

A number of commenters made general points concerning the protectiveness of the Chapter 334 and Chapter 350 rules for human health and the environment. Brookshire Brothers stated its agreement with the idea that Chapter 334 rules and guidance adequately protect the environment, while providing appropriate regulatory flexibility. Brookshire Brothers further pointed out that Chapter 334 was accepted by the United States Environmental Protection Agency (EPA) as being protective. Chambers commented that the Chapter 334 rules have served Texas very well for cleaning up the environment. TPCA stated that tens of thousands of LPST sites have been successfully closed under Chapter 334 and that subsequent

analysis demonstrated that closure under Chapter 334 was just as protective of the environment as closure under Chapter 350. TPCA further stated that both chapters are structured to provide similar assessment of sites and that they both require: a) survey of ecological receptors; b) delineation of contaminant plume; c) removal of NAPL to the extent practicable; d) achievement of similar human health points of exposure; and e) notification of off-site property owners. TxOGA communicated its view that Chapter 334 standards and procedures are actually more environmentally protective than those in Chapter 350. ATC stated the Chapter 334 rules provided a simple and concise risk-based site assessment program that protected human health and the environment, while it found the TRRP rules and guidance documents cumbersome for handling petroleum storage tank (PST) sites.

Lowerre asserted that the transfer of the LPST program to Chapter 334 would be less protective of public health and the environment and would represent a step backward from protections in TRRP. An individual who described himself as a senior environmental consultant stated that use of Chapter 334 would result in sites that get less cleaned up.

The commission responds that concerning the question of comparative protectiveness of Chapter 334 versus Chapter 350 assessment and remediation requirements, it would first point out that the Chapter 334 assessment and corrective action rules and guidance are currently being used at a majority (approximately 63%) of open LPST sites. These were LPST releases discovered and reported before September 1, 2003. This rulemaking affects only LPST releases discovered and reported on or after September 1, 2003, including future LPST sites.

The commission further responds to the general question of protectiveness by emphasizing that both Chapter 334 and Chapter 350 were designed to be protective of human health and the environment, in order to fulfill the agency's mission and in order to comply with both Texas and Federal law. Both chapters were written to be protective within the frame work of risk-based corrective action. According to TWC, §26.342(15), "risk-based corrective action" means site assessment or site remediation, the timing, type, and degree of which is determined according to case-by-case consideration of actual or potential risk to public health from environmental exposure to a regulated substance released from a leaking underground or aboveground storage tank. The commission agrees with commenters who note that both chapters are structured to be protective by providing parallel areas of assessment and action, such as: 1) plumes must be delineated; 2) pathways of risk to receptors must be evaluated; 3) human health-based target concentrations are set using science-based formulas and numbers; 4) member of the public affected by an LPST must be notified; 5) groundwater plumes may be managed, taking into consideration the natural attenuation and biodegradation of petroleum substances. Although there are differences in process, terminology, and in certain numbers and formulae, the fundamental structure and goal of the two chapters are designed to be protective within the framework of "case-by-case" consideration of actual or potential risk to public health. As explained in the March 26, 1999 preamble of a prior rulemaking (see 24 TexReg 2210), the agency shifted from Chapter 334 to Chapter 350 for LPST sites reported after September 1, 2003, not in an effort to change substantive requirements relating to protectiveness, but to consolidate the regulatory strategies and requirements for the benefit of the regulated community and the agency. Since that time, however, response from the regulated community has been that Chapter 350 is ill-suited to LPST sites and that it has created additional burdens and costs which have not achieved a corresponding

environmental benefit in terms of protectiveness. The commission has made no change to the rule in response to the comments received during this rulemaking.

Comments Regarding Off-Site Plume Delineation and Notification to Off-Site Landowners

Several commenters addressed the related issues of off-site plume delineation and notification to off-site landowners. TxOGA, TPCA, and Valero commented that delineation requirements under Chapter 334 are appropriate and effective because they consider actual and potential risk, and that delineation simply for the sake of delineation does not assist in meeting actual cleanup goals. TPCA further commented that under TRRP, a responsible party is still required to install monitoring wells on the property of adjacent landowners when it has already been shown the contamination has not left the LPST site.

Lowerre commented that Chapter 334 no longer requires full delineation of plumes because of a 1997 interoffice memorandum entitled "Guidance for Judging the Adequacy of Contaminant Delineation for Purposes of Determining if Further Corrective Action is Needed." Lowerre concedes that under TRRP, cleanup and closure at smaller sites in close vicinity to other properties may experience difficulties when neighboring property owners do not cooperate. However, Lowerre commented that this issue does not justify a shift back to Chapter 334. Additionally, Lowerre stated that 40 CFR §280.65 "Investigations for soil and ground-water cleanup" requires full characterization of soil and groundwater contamination in a number of instances.

The commission responds that although delineation of a plume is a basic component of assessing and addressing contamination, it is one aspect of an overall approach which must take into account actual and potential risk while taking actions to actually remediate. Delineation refers to

discovering information about the location and nature of groundwater contamination through drilling and sampling of monitoring wells. Under Chapter 334, responsible parties work with TCEQ project managers in determining the most useful locations of monitoring wells.

The commission further responds that Chapter 334 meets the standard set by 40 CFR §280.65 "Investigations for soil and ground-water cleanup" because §334.80 mirrors this section almost verbatim and points out that on the question of notification, Chapter 334 provides for public participation in §334.82: "For each confirmed release that requires corrective action, the owner or operator must provide notice to the public by means designated to reach those members of the public directly affected by the release and the planned corrective action." The commission has made no changes to the rule in response to these comments.

Comment Regarding Analytical Requirements

Lowerre commented that analytical data requirements are less strict under Chapter 334 than under Chapter 350.

The commission agrees that Chapter 334 does not specify in rule the analytical requirements. However, the commission points out that under Chapter 334, the analytical data must be of known and documented quality to meet the program and project objectives just as in Chapter 350, and that the requirements are clearly specified in guidance. No change to the rule was made in response to this comment.

Comments regarding the Length of Time for the Entire LPST Process

A number of commenters stated that TRRP causes each stage of the LPST process (assessment, remediation, and closure) to take a longer amount of time. Valero expressed concerns with post-response action care, which TRRP states has a default period of up to 30 years. TxOGA noted that the industry is seeing a significant decline in TRRP sites closing and that the TCEQ will see an alarming reduction of site closures due to the very nature of TRRP. TPCA stated that its membership's experience with TRRP cleanups is that they require more time to assess, monitor, and eventually close.

TxOGA stated that TRRP is more suited to assessing large plumes due to chemical properties of chlorinated solvents and other chemicals not present in LPST releases. While TRRP is well suited for large tracts sites where cleanup can take decades, PST sites are typically small tracts located adjacent to other PST sites and light commercial businesses. ATC stated that its experience has been that the TRRP is better suited for large scale projects and/or solvent plumes, not retail gasoline station LPST sites. As a result, the commenters point out that the TRRP process is taking longer to achieve the required assessment, and site closure is difficult to achieve even though concentrations do not present a risk to human health or the environment.

The commission responds that time periods associated with the life cycle of an open LPST case are indeed an important concern. The commission determined that Chapter 334 provides flexibility to allow sites to be closed both effectively and expeditiously. The commission has made no change to the rule in response to these comments.

Comments regarding Institutional Controls

Brookshire Brothers stated that institutional controls (ICs) required by TRRP at commercial/industrial sites are particularly restrictive. The Chapter 334 allowance to implement ICs voluntarily as part of the remedial plan when non-standard exposure assumptions are used is more appropriate. Valero commented that Chapter 334 evaluates LPST sites and neighboring properties based upon current and/or future usage as residential or commercial/industrial and allows for ICs on an as-needed basis; however, TRRP requires ICs which unnecessarily burden a site and adjacent properties when there is no real risk to human health and the environment. TPCA commented that although TRRP does permit responsible parties to select an appropriate cleanup level based upon the property's use, TRRP requires that an LPST site (as well as other properties impacted by the release) be deed recorded if a risk-based closure is selected; this requirement delays remediation, increases costs, and encourages litigation as property owners adjacent to the LPST site object to deed recordation and insist upon remediation to TRRP's residential standards.

The commission responds that it is a legitimate concern that IC rules be appropriately tailored to actual or potential risk. Chapter 334, Subchapter G contains criteria for when and how ICs may be used. It is important to note that in Chapter 334, ICs are not merely "optional." They are required whenever a tank owner or operator wishes to use non-standard exposure assumptions when calculating risk. No changes were made in response to this comment.

Comments regarding the Cost of LPST Assessment and Remediation

Brookshire Brothers commented that returning LPST sites to Chapter 334 will result in a cost savings of 25% or more over the life of a typical LPST site, and that Chapter 334 is purposely designed for LPST sites which results in its strategies being more efficient than the strategies of Chapter 350. Chambers commented that costs have escalated as a result of Chapter 350 and that has been particularly harsh on

small business owners, especially after the expiration of eligibility for reimbursement from the PST Remediation account. TxOGA, TPCA, and Valero also noted additional costs associated with Chapter 350, which they felt did not result in actual environmental benefit. TPCA, in addition, asserted that costlier cleanups will mean higher insurance premiums for tank owners or operators. ATC stated that it found the TRRP rules and guidance documents cumbersome for handling PST sites and that they required costly unnecessary site assessment.

An individual commented that the rule change is solely being made for the financial benefit of the gas station owners and not to create a cleaner environment, which should be the purpose of all environmental rulemaking.

The commission responds that both Chapter 334 and Chapter 350 are fundamentally protective of the environment. With that in mind, as part of our mission, it is both necessary and prudent to reassess regulatory requirements in terms of cost-benefit analysis. The commission has made no changes to the rule in response to these comments.

Comments Regarding Whether TRRP is Risk-Based

Clear Fork stated that Chapter 334 is a risk-based program and was recognized as such by EPA. Clear Fork also pointed out that TRRP does not utilize a case-by-case consideration of actual or reasonable exposure, and that all sites, including sites with no nearby wells and no beneficial use, are subject to the maximum concentration level requirement and delineation of soils to residential assessment levels.

TxOGA noted that cleanup standards under TRRP are not risk-based in practice because the difficulty of convincing neighboring landowners to sign deed restrictions means that the only option is to clean up to residential standards even if the neighboring property is commercial/industrial. TxOGA further commented that under TRRP, closure is not risk-based. Remedy Standard B is intended to be "risk-based" but in practice is not, for the reason that once a person gets a TRRP site to what would otherwise be a closure under Chapter 334, he is burdened with a requirement to monitor the site under Post Response Action Care.

Valero commented that Chapter 334 uses a risk-based approach and includes an evaluation of receptors, surface cover, groundwater use or likely future use, and geologic conditions. Valero further commented that TRRP requires delineation in all directions to basically non-detectable levels with virtually no regard to risk. TPCA also pointed out that delineation requirements are not risk-based under TRRP in many circumstances.

Lowerre commented that the TRRP rules provide a clearer process for identifying and addressing ecological risks.

The commission responds that risk-based corrective action was originally proposed in July 1995 and adopted into Chapter 334 of TCEQ rules in October 1995. As stated in the 1995 rule proposal, the commission recognizes the level of remediation warranted at a high risk site will not be equivalent to the level necessary at a low risk site and that appropriate target concentrations and target cleanup levels should be used in determining risk actually posed to the environment and health or human safety. When risk pathways are not present or less risk is posed at a site,

corrective action may generally be conducted more expeditiously. Thus, "risk" is the primary consideration in Chapter 334, as required by the TWC. Certain questions are approached using risk analysis, such as how far does a groundwater contamination plume need to be delineated, or for how many years, or to what concentration levels does natural attenuation have to be monitored. Remediation itself may involve a number of different actions, from soil removal to removal of "free product" (also known as non-aqueous phase liquid or NAPL) from wells, to engineered groundwater systems, to monitored natural attenuation (since petroleum products naturally biodegrade to a large degree). In each of these actions, effectiveness and efficiency of removing actual risk pathways to human health and the environment must be considered, as required by the statute, regardless of whether Chapter 334 or Chapter 350 is being applied.

Thus, when actual risk is considered, the Chapter 334 rules, both in 1995 and in the current rule, are adequately protective of the environment. Although there may be discrete scenarios where Chapter 350 and Chapter 334 assessment and remediation require a different process and may have comparative positive or negative effects, taken as a whole this rule does not represent a major environmental rule which adversely affects the environment or the public health and safety.

The commission has made no changes to the rule in response to these comments.

Comments Regarding the Need to Revise Chapter 334 Guidance Documents

GSI commented that transferring LPST sites from Chapter 350, which is supported by up-to-date guidance documents for risk-based corrective action, to Chapter 334, which does not have the support of up-to-date guidance documents for risk-based corrective action, will result in inconsistent assessment and cleanup standards for the PST program. GSI also expressed concern about ease of use of the interoffice

memoranda that were issued since 1994 to add to or modify regulatory guidance documents RG-36 "Risk-Based Corrective Action for Leaking Storage Tank Sites" (January 1994) and RG-411 "Investigating and Reporting Releases from the Petroleum Storage Tanks" (December 1994).

The commission acknowledges the concern for effective guidance documents; however, it also points out that roughly two-thirds of the sites currently in the PST Program were discovered and reported before September 1, 2003 and are therefore still effectively using Chapter 334 and its associated guidance documents and interoffice memoranda. Minor revisions to Chapter 334 guidance and interoffice memoranda are expected in the normal course of updating such types of documentation. Returning all sites to Chapter 334 assessment and cleanup requirements (rather than part in TRRP and part not) will actually achieve more consistency within the PST Program. No changes were made to the rule in response to this comment.

Comments Regarding the Intent of House Bill 3554

Several commenters addressed the legislative amendments to the Texas Water Code contained in House Bill 3554, 80th Legislature, 2007. TPCA stated that the House Bill 3554's requirement that the commission use "risk-based corrective action" was introduced and adopted in response to the TCEQ's rule change a few years prior, requiring that sites discovered and reported after September 1, 2003, must use TRRP instead of the "risk-based corrective action" developed in Chapter 334. TPCA noted both the language of the bill and the statement of intent by the bill's author.

An individual and Lowerre expressed the position that House Bill 3554 did not require the TCEQ to amend its rules to remove LPST sites from the TRRP. Lowerre commented that even if the sponsor of

the bill stated his intent orally in committee or on the floor, the legislative intent is not established unless explicitly stated in the language of the bill.

The commission responds that House Bill 3554 specifically directed the agency to use "risk-based corrective action." That term was defined in TWC, Chapter 26 before the TCEQ adopted the TRRP as a rule. Thus, the plain language of the bill refers to a phrase which has a specific definition in both the TWC and Chapter 334. Both during the legislative session and afterwards, the bill author communicated to members of the legislature and the TCEQ that the intent of the bill was to return the PST Program to the rules that had been used to clean up thousands of LPST sites. The particular Chapter 334 rules and guidance of concern here were originally proposed and adopted in 1995. House Bill 2587, 74th Legislature, 1995, effective September 1, 1995, significantly revised regulatory authority and responsibilities relative to USTs and ASTs. The rules proposed in July 1995 and adopted October 1995, officially incorporated "risk-based corrective action." This is the same risk-based corrective action program which this rule package uses for all current and future LPST sites. The commission has made no change to the rule in response to these comments.

Comments Regarding Regulatory Oversight Concerns

TxOGA stated that TRRP does not provide the TCEQ with timely information key to making risk-based decisions. If a responsible party chooses not to submit an Affected Property Assessment Report right away, TRRP allows him to submit a Self-Implementation Notice giving him no reporting requirements for three years. In contrast, Chapter 334 requires timely assessments and updates as plumes are delineated.

The commission responds that although the agency shares a general concern with ensuring that remediation projects are progressing around the state, the commission also values the private sector's ability to voluntarily comply with regulations. The agency takes note of TxOGA's point, and further notes that the requirements for reporting and oversight are reasonable in both Chapter 334 and Chapter 350. No changes to the rule was made in response to this comment.

SUBCHAPTER D: RELEASE REPORTING AND CORRECTIVE ACTION
§334.71

STATUTORY AUTHORITY

The amendment is adopted under Texas Water Code (TWC), §5.012, which provides that the commission is the agency responsible for implementing the constitution and laws of the state relating to the conservation of natural resources and protection of the environment; TWC, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties under this code and other laws of this state and to adopt rules repealing any statement of general applicability that interprets law or policy; TWC, §5.105, which directs the commission to establish and approve all general policy of the commission by rule; TWC, §26.345, which authorizes the commission to develop a regulatory program and to adopt rules regarding underground storage tanks (USTs); TWC, §26.351, which directs the commission to adopt rules establishing the requirements for taking corrective action in response to a release from a UST or aboveground storage tank (AST) and TWC, §26.011, which requires the commission to control the quality of water by rule.

The adopted amendment implements TWC, §26.351, which directs the commission to adopt rules establishing the requirements for taking corrective action in response to a release from a UST or AST.

§334.71. Applicability and Deadlines.

(a) The provisions of this subchapter are applicable to owners and operators of all underground storage tanks (USTs) and all petroleum product aboveground storage tanks (ASTs) unless otherwise specified in Subchapters A or F of this chapter (relating to General Provisions and Aboveground Storage

Tanks, respectively). For releases to which Chapter 350 of this title (relating to Texas Risk Reduction Program) was previously applicable under former rule (i.e. releases reported on or after September 1, 2003), this subchapter shall be used as of the effective date of this subsection.

(b) If the release was reported to the agency on or before December 22, 1998, the person performing the corrective action shall meet the following deadlines:

(1) a complete site assessment and risk assessment (including, but not limited to, risk-based criteria for establishing target concentrations), as determined by the executive director, must be received by the agency no later than September 1, 2002;

(2) a complete corrective action plan, as determined by the executive director and including, but not limited to, completion of pilot studies and recommendation of a cost-effective and technically appropriate remediation methodology, must be received by the agency no later than September 1, 2003. The person may, in lieu of this requirement, submit by this same deadline a demonstration that a corrective action plan is not required for the site in question under commission rules. Such demonstration must be to the executive director's satisfaction;

(3) for those sites found under paragraph (2) of this subsection to require a corrective action plan, that plan must be initiated and proceeding according to the requirements and deadlines in the approved plan no later than March 1, 2004;

(4) for sites which require either a corrective action plan or groundwater monitoring, a comprehensive and accurate annual status report concerning those activities must be submitted to the agency;

(5) for sites which require either a corrective action plan or groundwater monitoring, all deadlines set by the executive director concerning the corrective action plan or approved groundwater monitoring plan shall be met; and

(6) for sites that require either a corrective action plan or groundwater monitoring, have met all other deadlines under this subsection, and have submitted annual progress reports that demonstrate progress toward meeting closure requirements, a site closure request must be submitted to the executive director no later than September 1, 2011. The request must be complete, as judged by the executive director.

(c) Failure to meet the deadlines detailed in subsection (b) of this section will result in a loss of reimbursement eligibility as described in Subchapter H of this chapter (relating to Reimbursement Program).

SUBCHAPTER G: TARGET CONCENTRATION CRITERIA

§334.201

STATUTORY AUTHORITY

The amendment is adopted under Texas Water Code (TWC), §5.012, which provides that the commission is the agency responsible for implementing the constitution and laws of the state relating to the conservation of natural resources and protection of the environment; TWC, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties under this code and other laws of this state and to adopt rules repealing any statement of general applicability that interprets law or policy; TWC, §5.105, which directs the commission to establish and approve all general policy of the commission by rule; TWC, §26.345, which authorizes the commission to develop a regulatory program and to adopt rules regarding underground storage tanks (USTs); TWC, §26.351, which directs the commission to adopt rules establishing the requirements for taking corrective action in response to a release from a UST or aboveground storage tank (AST) and TWC, §26.011, which requires the commission to control the quality of water by rule.

The adopted amendment implements TWC, §26.351, which directs the commission to adopt rules establishing the requirements for taking corrective action in response to a release from a UST or AST.

§334.201. Purpose, Applicability, and Deadlines.

(a) Purpose. The purpose of this subchapter is to establish the criteria by which target concentrations are established for the cleanup of leaking storage tank site releases discovered and reported to the agency.

(b) Applicability. The provisions of this subchapter are applicable to owners and operators of all underground storage tanks (USTs) and petroleum product aboveground storage tanks (ASTs) unless otherwise specified in Subchapters A and F of this chapter (relating to General Provisions and Aboveground Storage Tanks, respectively).

(c) Deadlines. For sites where the release was reported to the agency on or before December 22, 1998, the deadlines detailed in §334.71(b) of this title (relating to Applicability and Deadlines) apply.

**SUBCHAPTER K: STORAGE, TREATMENT, AND REUSE PROCEDURES FOR
PETROLEUM-SUBSTANCE CONTAMINATED SOIL**

§334.503

STATUTORY AUTHORITY

The amendment is adopted under Texas Water Code (TWC), §5.012, which provides that the commission is the agency responsible for implementing the constitution and laws of the state relating to the conservation of natural resources and protection of the environment; TWC, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties under this code and other laws of this state and to adopt rules repealing any statement of general applicability that interprets law or policy; TWC, §5.105, which directs the commission to establish and approve all general policy of the commission by rule; TWC, §26.345, which authorizes the commission to develop a regulatory program and to adopt rules regarding underground storage tanks (USTs); TWC, §26.351, which directs the commission to adopt rules establishing the requirements for taking corrective action in response to a release from a UST or aboveground storage tank (AST) and TWC, §26.011, which requires the commission to control the quality of water by rule.

The adopted amendment implements TWC, §26.351, which directs the commission to adopt rules establishing the requirements for taking corrective action in response to a release from a UST or AST.

§334.503. Reuse of Petroleum-Substance Waste.

(a) Wastes that are intended for reuse are subject to all the applicable provisions of this subchapter, including, but not limited to, the following requirements. Sections 334.482, 334.496 - 334.500, and 334.502 of this title (relating to General Requirements; Shipping Procedures Applicable to Generators of Petroleum-Substance Waste; Recordkeeping and Reporting Procedures Applicable to Generators; Shipping Requirements Applicable to Transporters of Petroleum-Substance Waste; Shipping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities; Recordkeeping Requirements Applicable to Owners or Operators of Storage, Treatment, or Disposal Facilities; and Design and Operating Requirements of Stockpiles and Land Surface Treatment Units).

(b) The recordkeeping and reporting requirement for any person who intends to reuse petroleum-substance wastes must require that person to maintain records and provide to the agency when requested such information deemed necessary by the agency to ensure compliance with the requirements of this subsection. This information shall include, but is not limited to:

(1) identification, address, and name of the designated representative of the generating facility;

(2) identification, address, and name of the designated representative for the receiving facility or location;

(3) identification of the landowner of the receiving location or facility;

(4) the quantity, type, and contaminant levels of the reused wastes;

(5) documentation of the reuse methods and dates of reuse;

(6) documentation that asphalt mix or road base mix meets the specifications required by the final user; and

(7) documentation that the landowner of the receiving location has approved the use of the reused wastes on his property.

(c) Reuse requirements are as follows.

(1) Any person who intends to utilize petroleum-substance wastes for reuse must obtain written approval from the landowner of the land on which the wastes will be placed and from the agency as specified by this subsection. The landowner's approval shall be submitted to the agency upon request.

(2) Petroleum-substance wastes shall be reused only in manners which are in accordance with §334.482 of this title and at contaminant levels specified by the agency.

(3) Petroleum-substance wastes may be reused under the following conditions.

(A) Petroleum-substance wastes may be utilized in cold-mix-emulsion bituminous paving at a cold-mix asphalt-producing facility registered under the terms of this subchapter. The petroleum-substance waste shall be mixed with aggregate or other suitable materials at a rate which

will result in a mixture meeting or exceeding the specifications required by the final user. The petroleum-substance waste must contain less than 0.5 milligrams/kilograms (mg/kg) for each component of benzene, toluene, ethyl benzene, and total xylenes prior to mixing. Authorization for the facility must also be obtained from all other appropriate federal, state, or local governing agencies. Authorization from the owner of the road or other area where the asphalt is to be utilized must be obtained prior to laying the asphalt.

(B) Petroleum-substance wastes may be utilized in asphalt mix at hot-mix asphalt-producing facilities registered under this subchapter. The petroleum-substance waste must contain less than 0.5 mg/kg for each component of benzene, toluene, ethyl benzene, and total xylenes prior to mixing. The petroleum-substance waste must be mixed with aggregate at a rate which will result in a mixture meeting or exceeding the specifications required by the final user. Authorization for the facility must also be obtained from all other appropriate federal, state, or local governing agencies. Authorization from the owner of the road or other area where the asphalt is to be utilized must be obtained prior to laying the asphalt.

(C) Petroleum-substance wastes may be utilized in road base or parking lot stabilized base when the base will be covered with concrete or asphalt if the contaminant levels of the soil prior to mixing into the stabilized base are less than 0.5 mg/kg for each component of benzene, toluene, ethyl benzene, and total xylenes, and less than 500.0 mg/kg total petroleum hydrocarbons or at contaminant levels otherwise specified by the agency. The base must be mixed according to the specifications required by the final user. Soil which is not mixed into stabilized road base must meet the criteria for clean soil as specified by the agency to be spread on a road or parking lot. The generator must

obtain prior written consent for the placement of the soil from the owner of the road (if different from the landowner).

(D) Petroleum-substance wastes may be utilized, if appropriate, in road base or parking lot stabilized base when the base will not be covered with asphalt or concrete. To determine if the soil to be reused is appropriate for the application, analysis for contamination must be conducted as specified by this agency. The agency will give written approval for the particular reuse after ensuring that the implementation will, in the opinion of agency staff, adequately protect human health, safety, and the environment. The base must be mixed according to the specifications required by the final user. The base must be professionally mixed by a facility registered under the terms of this subchapter. Soil which is not mixed into stabilized road base must meet the criteria for clean soil to be spread on a road or parking lot. The generator must obtain prior written consent for the placement of the soil from the owner of the road (if different from the landowner).

(E) Petroleum-substance wastes may, if appropriate, be used as fill. To determine if the soil to be reused is appropriate for the application, analysis for contamination must be conducted as specified by this agency. The agency will give written approval for the particular reuse after ensuring that the implementation will, in the opinion of agency staff, adequately protect human health, safety, and the environment. The landowner at the receiving site (if different from the original owner of the petroleum substance contaminated soil) must give written consent for this activity. Fill for tank hold bedding and backfill for tank systems must meet the requirements of §334.46(a)(5) of this title (relating to Installation Standards for New Underground Storage Tank Systems).