STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Office of Waste Management

Responses to Public Comments Submitted for the Proposed Amendments to the
Rules and Regulations for Underground Storage Facilities
Used For Petroleum Products and Hazardous Materials

The Office of Waste Management has proposed amendments to the **Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials**, dated December 30, 1993. A public notice to that effect was listed in the Providence Journal on May 15, 2002, and a public hearing was held on June 4, 2002.

As a result of public comments the Office of Waste Management extended the comment period for all proposed amendments, except for the increase to registration and late fees, to July 5, 2002. The comment period for the registration and late fee increases ended on June 5, 2002 at 11:00 am. This decision was recorded at the public hearing for the record. All other proposed changes were finalized at the close of the extended comment period, July 5, 2002.

This document includes all comments made at the public hearing, as well as all written comments received prior to the close of the comment period on July 5, 2002. The Department has fully considered all written comments received, and has prepared the following responses upon review of these comments.

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WARREN EQUITIES, INC.

Comment made by Karen O'Connor at the Public Hearing on June 4, 2002

COMMENT: My name is Karen O'Connor. I represent Warren Equities, Inc. My first comment is on Rule 8.03 regarding the installation of groundwater monitoring wells at sites that have single-walled tanks. We don't believe that the installation of groundwater monitoring wells at these sites is necessary in that these sites are required to have automatic tank gauging systems, which provide continuous leak detection for the tank. They are required to have monthly tank leak tests and annual line leak detector tests for pressurized piping. They're also to have annual tightness testing for pressure tightening and tank tightness testing required every two to five years. We don't see the additional benefit to gauging for product on an annual basis. My second comment is in regard to the Rule 8.14(E) and (F) with respect to operation of leak monitoring equipment. The automatic tank gauging systems have been upgraded and have become much more sophisticated since these regulations went into effect a number of years ago. I think the regulations need to account for that. I've asked VETA, who provides ATGs to probably eighty percent of the market, to provide us with a position statement to the regulatory authorities regarding self-inspections of these systems. These systems do self-diagnostics, and they have given me a position paper that I'll give to you to enter into the record regarding that. The third comment is regarding Rule 8.15(E), spill containment and overfill protection. In the annual testing of spill containment basins and sumps, we believe the Department should consider alternative methods for testing these. The twenty-four-hour period for the test jeopardizes the spill containment capability of the equipment. Basically, if you fill the sump up for twenty-four hours, you're not going to have spill containment for that twenty-four-hour period. So I think we need to evaluate alternatives to that method of testing. In Rule 9.17, monitoring wells, the Department does not define what an environmentally sensitive area is in the regulations. Additionally, in Rule 9.17(B)-8, again with respect to monitoring wells, it indicates that you have to develop the wells no sooner than forty-eight hours after installation. "Initial water quality samples," I'm not quite sure what those initial water quality samples are, whether they're just gauging for free product or if the Department is looking for a dissolve phase analysis and if so, what constituents is the Department looking for. Under Rule 10.04, approval of modification or repairs, is a new requirement about having an environmental consultant on-site during a modification or repair as defined by the regulations. It indicates that when screening occurs, notification to the Department is required if a release is detected. We feel that the Department needs to be more specific on what triggers a release. For example, in Massachusetts they designate a certain concentration, one hundred PPM within ten feet of the tank. That's not clear in the regulations. On Rule 11.03(G), inventory record keeping and leak reporting, there's no provision for situations that are out of tolerance out of the one percent, one thirty; for example, if it's explainable by inaccurate record keeping or temperature variations or any other factors that are not related to leakage. There's no provision in the regulation to account for that. So, basically, you would have to report to the Department on anything out of tolerance even if it's explainable by something other than a leak. In Rule 12.11, under no further action, the Department refers to applicable standards. Those are not defined in the regulation; and 12.04, leak and release reporting, discusses if you fail a tank test, you have to notify the Department within two hours. It also indicates that a release characterization report is required. There should be clarification on whether or not a release characterization report is required if no release actually occurred and the failure occurred because of something like a seal was not tight but didn't result in the release. That's all I have.

> **RESPONSE**: The above language was recorded by stenographer during the public hearing held June 4, 2002 and was later submitted in writing to the Department of Environmental Management by Warren Equities. The Department has responded to each comment on the Warren Equities response pages.

LINCOLN ENVIRONMENTAL, INC.

Comment made by Gary Ezovski at the Public Hearing on June 4, 2002

COMMENT: Thank you. My name is Gary Ezovski. My company is Lincoln Environmental. I have three general comments. First, on the fees. In view of the Department and the state's budget issues, my anticipation is the fee increase will be perceived reasonably. It's modest. The target to close single-walled tanks by December 15, 2015, certainly is a good objective, and I like the opportunity with the thirty-year from installation criteria. It gives more of phased approached for folks so that they don't have one date and the Department doesn't have one date to work to. My last comment, on the other hand, is a little more negative in that I think it's unfortunate that these changes, and maybe it's only me, I maybe missed a page. I wouldn't be here if I hadn't learned this from the business roundtable meeting a week and a half ago, and I find this inconsistent with some of the Department's activities over the past few years. There's stakeholder groups involved in this process, and there may be reasons that I haven't come to understand as yet and I'm interested to learn, that that process didn't occur, but I wish it had and I hope there is still an opportunity for that to happen. As you heard from the prior speaker, I think that there are people in the industry that have ideas about how to manage tanks that can make more sensible regulations on the part of everyone involved. One of the things that I would like to hear that isn't in here is some dialogue on the opportunity on how to protect particularly sensitive areas. We've got a requirement -- or your change right now is that there be monitoring wells in single-walled tanks. I'm not sure that there aren't some locations that we together, consultant, regulator and industry might not want to see a single-level playing field to see monitoring wells in other locations even where there are double-walled tanks. That's something I would like to hear a dialogue on and be part of a dialogue on to see what everyone thinks of the benefits or detriments. I encourage in the future -- if there is a possibility before this does become final that there be some opportunity for an open dialogue. Thank you.

> **RESPONSE**: The above language was recorded by stenographer during the public hearing held June 4, 2002. Your comments regarding fees and the target to close single walled tanks have been noted. As for your third comment the Department had sent out a copy of the public notice which references the public hearing to all tank owners, 92 environmental groups, 39 building officials & Fire Marshal’s Office, 30 contractors & tank testers, and 90 consultants & attorneys. Lincoln Environmental was on this list and we have no record of this mail not being delivered. As for the second part, the Department is going to start a stakeholder process to amend the UST Regulations sometime in the fall.

AMERICAN PETROLEUM INSTITUTE

Comment made by Stephen Dodge at the Public Hearing on June 4, 2002

COMMENT: For the record, I'm the Associate Director of the Massachusetts Petroleum Council, which is a division of the American Petroleum Institute, which represents over four hundred companies that do business in all facets of the petroleum industry. The Massachusetts Petroleum Institutes oversees regulatory and legislative affairs in both Rhode Island and Vermont as well as Massachusetts, and that's why I'm here today. I'm sure many of you know Lenette Boisselle. She sits on the UST board. She would normally be here, but the legislature is wrapping up tonight. So we've kind of split duties. I also wanted to say I represent the Independent Oil Marketers Association of New England here this evening.

I know you've received some correspondence from them. They are, as we in the business call them, the jobbers. They own the majority of the stations. The people I represent, the major refiners, sell about half or so of the gasoline. They own about twenty or thirty percent of the stations. The jobbers own a significantly more and operate a significantly larger amount of stations, and I represent them as well. I don't believe they have a representative here tonight. I'm not the technical person, and I don't want to pass myself off as one. I want to offer a couple of quick comments. I'm sorry I was late. I do appreciate the fact that the Department is extending the comment period. I would hope that they reconsider their decision not to have another public hearing. As the previous speaker mentioned, this is typically not the case, not only in Rhode Island but in other states. Usually when there are regulations of this magnitude proposed, stakeholders are called in. There's a chance of input and discussion. That was not the case with these proposed regulations. They're fairly significant. They're fairly costly. No representative of the petroleum industry that I know of knew about these regulations until a couple of weeks ago. Again, we are appreciative of the fact that the public comment period has been extended, but we would also like to have an opportunity to weigh in verbally as well, and we hope the Department would reconsider their decision not to hold another public hearing. Two points I want to make, which I think illustrate the fact that there is significant disagreement with some of the major provisions of this proposal; one, is the issue of monitoring wells for single-walled tank fields. We believe that monitoring wells alone are an obsolete method of leak detection, that other leak detection systems that are already mandated are more accurate. In addition, monitor wells can sometimes act as a conduit for a contaminant to leak into the watertable and in some cases they're ill-advised. The second example and also a significant part of this proposal is the requirement that all single-walled tanks be removed by 2015, in thirty years. The thirty years is driven by the manufacturer's warranties. Probably the best example warrantied for twelve months, a hundred thousand miles. The auto manufacturers don't expect the car to fall apart when the warranty ends, and that's the case with warranties with the tanks as well. The warranty for thirty years does not necessarily mean that the life expectancy is thirty years. My understanding is that the only other state that has this provision is Connecticut. I'm told that Connecticut will give extensions to the thirty-year rule when there's an internal inspection. I'm not aware of any case when there's been an internal inspection when there's been a request for a waiver that the tank has failed. Again, without going into detail, I just wanted to flag those two issues. Those are issue that I think are significant and issues that may require further discussion publicly as well. I've given you written comments as well and those reflect my oral comments as well.

> **RESPONSE**: The above language was recorded by stenographer during the public hearing held June 4, 2002. Rule 8.03 *Installation of Groundwater Monitoring Wells* has been deleted from the revised regulations and will be discussed later with the regulated community through the stakeholder meeting process. As for your second comment, installation of single walled tanks has been prohibited by the Department since 1992. Even 10 years ago, the Department believed that double walled tanks provided an extra layer of protection to the environment and that prevention of releases, not just detection of releases was vital to protection of the environment. It has been the experience of the UST programs in RI and across the country, highlighted during the rush of closures for the 1998 deadline, that most USTs found to be leakers at closure had never failed tightness tests. Testing unfortunately does not always identify leaking tank systems. The single walled tanks will all be at least 30 years old at the time of mandatory closure, many will be much older than 30 years. They will have had a long operational life and have outlived manufacturer warranty. The Department does not agree that these tanks would pose no additional risk to the environment than double walled tanks and does not agree that testing and inspection would provide equivalent protection to the environment. Also, it is New Hampshire, not Connecticut, who has a deadline of 2015 for the removal of single walled USTs.

VANASSE, HANGEN & BRUSTLIN

Comment made by Tim O'Connor at the Public Hearing on June 4, 2002

COMMENT: Tim O'Connor from the consulting firm Vanasse, Hangen & Brustlin here in Providence. Two comments, both on the same rule. 12.04 reads, "All persons shall immediately report all confirmed and suspected leaks or releases from USTs to the Director," amongst a host of other potential people that would be interested in such things. I would like the Department to consider "all persons." It basically goes back to the consulting firm to report on our clients without really, you know -- "All persons shall immediately" implies I'm talking to you about that before I'm talking to my clients about that. I also think your putting a reporting obligation on a consulting firm is certainly inconsistent with the mediation regulations. It's probably inconsistent with other regulations as well. So that's the first comment. The second comment is on the same rule in that I would counsel the Department to think about putting something in there that advises what is a suspected leak or release. If you want to just reference the GB groundwater policy or the headspace criteria or just something, half the MCLs, so there is something to backup. It could be a very burdensome reporting obligation to have. To have it vague like that makes matters worse. That's my only comment.

> **RESPONSE**: The above language was recorded by stenographer during the public hearing held June 4, 2002. Regarding your first comment, at this time the Department is not going to make a change to Rule 12.04. There may be instances where owners are not satisfied with what is discovered during an investigation, fire the contractor/consultant, and never report the release. We can, however discuss this proposal along with other changes during the stakeholder process. As for your second comment, one of the reasons the department requires an environmental consultant to be present is to enable a qualified professional to evaluate all conditions, including soil screening and allow an informed opinion to be made as to whether or not a significant release has occurred. DEM feels that there is little scientific basis to set any threshold of field screening results, which of and by themselves would be indicative that no release has occurred. Imposing some artificial standard would also be inconsistent with the RIDEM *Oil Pollution Control Regulations*, which do not contain a minimum reportable quantity.

DB COMPANIES, INC.
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Comment Letter from Charles H. DeBlois, Jr. received on July 5, 2002

COMMENT: RULE 5.62 – The definition of owner has been amended to include "…or facility component". This is overly broad. I believe this wording needs to be clarified so as not to allow conflicts as to who could be classified an owner (i.e. the lessor of equipment who maintains title to it).

> **RESPONSE**: The Departments proposal for Rule 5.62 has been deleted, and will remain as it is written in the current regulations. We do however plan to discuss this topic during the stakeholder process.

COMMENT: RULE 8.03 – This section deals with the requirement of installing ground water monitoring wells at facilities with singled-walled tanks. I do not believe this should be necessary if the operator is utilizing any other proper leak detection method. It may also be a detriment to the facility as you are creating a pathway for surface spills to impact the ground water. Further discussion is needed on this issue.

> **RESPONSE**: Rule 8.03, *Installation of Groundwater Monitoring Wells,* has been deleted from the revised regulations and will be discussed later with the regulated community through the stakeholder meeting process.

COMMENT: RULES 8.12 – In the normal course of business, crash valves are manually closed when changing filters or conducting line tests. Normally this is at least once per year. What documentation are you requiring of this inspection?

> **RESPONSE**: The owner/operator or trained personnel could perform the annual test of the shear valve by manually tripping the hold-open linkage and logging the results (along with the name of the person performing the test and test date) in a table. Records of testing shall be maintained in accordance with Rule 11.02(B), *Routine Record-keeping*.

COMMENT: RULE 8.15 – I am not aware of hydrostatic testing of spill containment basins and sumps being a requirement in any other state. This requirement would not be feasible in many instances and would also create water and gasoline mixture, which would then have to be properly transported and disposed. This needs much more research and discussion before being included in he regulations as final.

> **RESPONSE**: In response to comments received, the Department has removed Rule 8.15(E), *Annual Testing of Spill Containment Basins and Sumps*, from the revised regulations and will further discuss this subject at the upcoming stakeholder meetings.

COMMENT: RULE 8.18 – The department seems to be grouping groundwater monitoring wells and UST Pad Observation wells into the same classification. Observation wells are primarily used to determine groundwater elevation when performing tightness testing. There are presently no requirements for sampling these wells. Is the department doing so with these changes?

> **RESPONSE**: Tank pad wells, or observation wells, are required only to meet certain construction and maintenance standards. The proposal states that groundwater monitoring wells shall be bailed and evaluated, not observation wells. Testing, record-keeping, and closure requirements are limited to groundwater monitoring wells (and are specified in Rule 8.18(D) of the proposed amendments).

COMMENT: RULE 9.03 – This section, as written, also applies to modifications of UST systems. Some of these requirements should not be necessary in the case of minor modifications, such as a new set of plans. The department has eliminated the phrase "substantial modifications" in the regulation, and as such are classifying minor and major modifications as the same. Leaving the distinction between minor and substantial would be clearer as to when submissions of the detail required in this section would be necessary. As such, the wording "or modifications to an existing UST system" should be removed.

RESPONSE: In response to the above comment the definition of modification has been changed to better reflect the Department's intent. It now reads: "MODIFICATION" means any addition, replacement, restoration, refurbishment or renovation to an existing UST system or repair of any UST system component which regularly contains product that is inconsistent with the information provided to the Director in the Registration Application.

COMMENT: Rule 10.04 (C) – There should be no requirement to have an environmental consultant present for <u>any</u> modification or repair unless a release is suspected. This requirement is overly burdensome, expensive and could lead to delays in scheduling repairs when necessary. As such, this should be deleted.

RESPONSE: Only repairs/modifications which require the excavation of soil are subject to this rule. Screening of the soil during excavation by an environmental consultant using the appropriate instruments is necessary to determine if a release has occurred.

COMMENT: RULE 12.04 (C) – What is the purpose of requiring the tester to notify the department on an inconclusive test? There may be a reason that can be easily remedied and is not the threat of a release. Additionally, by requiring the pump out of the tank system within 24 hours you are precluding a quick retest without filling the tank again. In the case of a failed test this works, but not on an inconclusive test. This requirement should be deleted from the regulations.

RESPONSE: Notification and submission of an inconclusive tightness test is being required so that the Department can review the test to confirm that it actually was inconclusive and not, for example, a test that was failing and stopped before completion and so that the Department can then discover whether repairs were done between the inconclusive test and the retest, such as tightening piping connections that may have been leaking, and that may not have been reported or investigated if the subsequent test resulted in a pass.

Please note that Rule 12.04 (C) (2) allows three days for a retest to be done after an inconclusive test result. If the retest is a pass, the tank does not have to be emptied. If the retest is an inconclusive or fail, or if the retest is not conducted within 3 days, the tank must be emptied.

COMMENT: RULE 13.11 (C) (2) – What is the purpose of having the facility owner/operator sign the closure report when the department requires that the report be completed by an environmental consultant? This should not be a requirement.

RESPONSE: To a large degree, environmental reports include site specific information which is obtained from the owner/operator and therefore this information on which the report is based on needs to be certified as accurate by the owner/operator.

COMMENT: RULE 13.11 (F) – What is the purpose and meaning of this section? Is the reference to 1988 correct?

RESPONSE: This rule is unchanged from the UST Regulations effective 1993. The 1988 reference is correct. The rule allows the Department to require an assessment of a historic tank grave if releases from the former UST pose a potential threat to human health or the environment.

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Comment Letter from Suzanne C. Courtemanche received on July 8, 2002

COMMENT: The regulations regulate underground storage tanks and underground holding tanks. As such, we recommend the word "storage" be removed from all locations except where only storage tanks are intended to be discussed. For example, the title of the regulations would be more accurate as "Rules and Regulations for Underground Tank Facilities…" The terms "UST" and "underground storage tank" appear to be used throughout the text when "underground tank" may be more appropriate.

> **RESPONSE**: A holding tank is a subcategory for an underground storage tank. The department does not draw a distinction between underground storage tank and underground tank for the purpose of these regulations.

COMMENT: In Rule 3.01, we recommend adding ", accumulated, or otherwise contained" following "…or have been stored,…"

> **RESPONSE**: For the purposes of these regulations, the Department does not draw any distinction between the above terms.

COMMENT: We recommend changing Rule 3.02 to read as follows: "Leak and Spill Responses, shall apply to all facilities and the owners/operators thereof, and any person having actual knowledge of a confirmed leak, spill, and other release from a tank or tank system governed by these regulations. There are no exemptions to the responsibility to report a suspected or confirmed leak or spill from a regulated tank or tank system."

RESPONSE: For the purposes of the UST Regulations, the Department feels that Rule 3.02 is adequate. We are willing to discuss this Rule during the upcoming stakeholder meetings.

COMMENT: "Storage Tank" is used in the regulation, but undefined. We recommend defining the term.

> **RESPONSE**: Please refer to the definition of "underground storage tank".

COMMENT: Rule 3.04 discusses underground tanks and tank systems used to contain discharges, both intermittent and continuous, of non-sanitary wastewaters. Please explain how contain is different from "storage," or perhaps define "contain."

> **RESPONSE**: For the purposes of these regulations, the Department does not draw any distinction between the above terms.

COMMENT: We recommend changing "product" to "liquid" in Rule 5.03.

> **RESPONSE**: The first sentence does say " liquid contents". The "automatic product level monitor test" and "portion of the tank routinely containing product" are EPA terminology - CFR 40 - 280.43.

COMMENT: Rule 5.11 defines "contaminant." How is this different from 'Pollutant" already defined in the regulations?

> **RESPONSE**: The definitions of both "pollutant" and "contaminant" are in the existing regulations and are terminology used by the Department and EPA. Both definitions were revised to include "soil, water, air or other environmental media" in addition to "water", which was the only media in the existing regulations. These other media are impacted by releases and this change is to provide more complete definitions.

COMMENT: Rule 5.11 and 5.68 use the term "environmental media" which is undefined in the regulation. We recommend defining this term.

> **RESPONSE**: The Department uses the term "environmental media" to mean any other surrounding environmental matter other than air, water and soil. It may include rock, vegetative matter, etc.

COMMENT: Rule 5.22 uses the terms "temporary" and "expeditiously." We recommend better defining these terms by associating time frames with the words.

> **RESPONSE**: As circumstances that may require the use of such an emergency tank can vary widely, the Department would prefer to not set specific time frames, but to allow case specific consideration.

COMMENT: Rule 5.25 uses the term "fixed containers." We recommend defining this term.

> **RESPONSE**: The Department doesn't agree that defining "fixed containers" in the UST regulations is beneficial or necessary. "Fixed" is merely used as an adjective to describe a container which is stationary and is not a technical term.

COMMENT: Rule 5.25 defines "facility component." How is this different from "tank system?"

> **RESPONSE**: A facility component is a part of the tank system such as a pump, dispenser, etc.

COMMENT: In Rule 5.27, we recommend adding the word "exclusively" between "used" and "on-site."

> **RESPONSE**: Your comment has been noted. However, the Department does not feel the term needs to be added to the definition and feels that its addition may be problematic as some equipment is used offsite.

COMMENT: We recommend re-writing the first sentence in Rule 5.22 as follows: "Flow Through Process Tank" means any underground tank that is an integral part of a process through which there is a steady, variable, recurring, or intermittent flow of petroleum products, hazardous materials, or non-sanitary wastewaters during the operation of the process."

RESPONSE: Rule 5.22 is a definition for "EMERGENCY SPILL PROTECTION TANK", we believe you were referring to Rule 5.28. For the purposes of the UST Regulations, the Department feels the definition for the term "FLOW THROUGH PROCESS TANK" is adequate.

COMMENT: In Rule 5.32, we recommend considering the following:

- Use the definitions of "Hazardous Material" and " Hazardous Substance" from the Remediation Regulations for cross-program consistency.
- Include non-sanitary wastewater.
- How is the jurisdiction of non-sanitary wastewater in holding tanks addressed?

RESPONSE: For the purposes of the UST Regulations, the Department feels that the definition of "Hazardous Material" is adequate. We are willing to discuss all of these definitions during the upcoming stakeholder meetings.

COMMENT: Rule 5.34 uses the term "collect and contain." How is this different from "storage"? Is the difference based on time or management of the material?

RESPONSE: For the purposes of these regulations, the Department does not draw any distinction between the above terms.

COMMENT: In Rule 5.42, we recommend referring to the RIDEM existing monitoring well construction standards.

RESPONSE: For the purposes of the UST Regulations, the Department feels the definition for the term "MONITORING WELL" is adequate.

COMMENT: In Rule 5.56, we recommend removing "typically for storm water run-off application and intended…..:

RESPONSE: For the purposes of the UST Regulations, the Department feels the definition for the term "OIL-WATER SEPARATER" is adequate.

COMMENT: In Rule 5.60, the terms "temporary," "substance," and "expeditiously" are used. Please define these terms.

RESPONSE: As circumstances that may require the use of such an overflow tank can vary widely, the Department would prefer to not set specific time frames, but to allow case specific consideration. The Department believes it is clear enough that substances referred to are those leaked or spilled.

COMMENT: We recommend rephrasing the beginning of Rule 5.66 as follows: "Pollutant" means any hazardous or nonhazardous material, petroleum product or non-sanitary wastewater which….."

RESPONSE: For the purposes of the UST Regulations, the Department feels the definition for the term "POLLUTANT" is adequate.

COMMENT: In Rule 5.68, we recommend the following: "Release" means any spilling, leaking, pumping, pouring, injecting, emitting, escaping, leaching, or disposing of any hazardous material or petroleum product or other material regulated herein from an underground tank or underground tank system into groundwater, surface water, soil, air, or other environmental media.

> **RESPONSE**: The definition of the term "RELEASE" has been amended to read as follows: "RELEASE" means any spilling, leaking, pumping, pouring, injecting, emitting, escaping, leaching, or disposing of any material stored in an underground storage tank system *subject to these regulations* into groundwater, surface water, soil, air or any other environmental media.

COMMENT: In Rule 5.73, we recommend referring to the RIDEM ISDS regulations.

> **RESPONSE**: For the purposes of the UST Regulations, the Department feels the definition for the term "SEPTIC TANK" is adequate.

COMMENT: In Rule 5.74, we recommend adding "or other substance from an underground tank or underground tank system subject to these regulations" after "material" in the first line.

> **RESPONSE**: For the purposes of the UST Regulations, the Department feels the definition for the term "SPILL" is adequate.

COMMENT: Rule 5.75 does not currently include non-sanitary wastewaters and, therefore, releases from holding tanks are not addressed here. We recommended adding "non-sanitary wastewater" to the definition of hazardous material.

> **RESPONSE**: For the purposes of the UST Regulations, the Department feels the definition for the term "SPILL CONTAINMENT BASIN" is adequate.

COMMENT: We recommend re-phrasing Rule 5.80 as follows: "Tank" means a stationary device designed to contain, store, or accumulate (either permanently to temporarily) petroleum products, hazardous materials, and non-sanitary wastewaters and which is constructed of non-earthen materials, and that provide structural support and which is underground as defined by these regulations.

> **RESPONSE**: For the purposes of the UST Regulations, the Department feels the definition for the term "TANK" is adequate.

COMMENT: Rule 5.84 does not address tanks sitting on the ground surface. A clarification or exemption for addressing "on-ground" portions of tanks should be considered.

> **RESPONSE**: Tanks sitting on the ground are above ground tanks regulated under the RIDEM *Oil Pollution Control Regulations*. The Department has used the 10% (total volume of tank and piping) rule in the past for the determination between an above ground storage tank and an underground storage tank. If an "on ground" tank as stated in the comment has 10% or more of its storage volume (tank and piping) located beneath the surface, it is by definition an underground storage tank. The Department recognizes the possible confusion and for clarification offers further discussion of this matter at the upcoming stakeholder meetings.

COMMENT: In Rule 5.85, we recommend removing the phrase "contain and accumulation."

> **RESPONSE**: For the purposes of the UST Regulations, the Department feels the definition for the term "UST" is adequate.

COMMENT: There is significant confusion regarding the use of "storage," "temporary storage," "contain," "contain an accumulation," "hold" (as in holding tank), and "spill containment for emergency." These should be clarified throughout the regulations.

> **RESPONSE**: The above comment has been addressed through previous Department responses.

COMMENT: Please clarify that Rule 7.01 does not apply to underground tanks storing hazardous materials.

> **RESPONSE**: At this time the Department is not going to make any changes to this Rule. We will however discuss this topic during the upcoming stakeholder meetings.

COMMENT: Rule 8.18 should refer to Observation Well Construction Standards and should reference the RIDEM Investigation Derived Waste Policy for the handling of purge water.

> **RESPONSE**: This section of the proposed regulations speaks to the <u>maintenance</u> and construction standards of groundwater monitoring wells and UST pad observations wells. RIDEM Investigative Derived Waste Policy applies to newly installed wells during site investigations and is therefore not applicable to this section of the UST Regulations.

COMMENT: Is Rule 9.02(D) intended only to apply to storage tanks and not any other types of tanks?

> **RESPONSE**: Rule 9.02(D) <u>Prohibitions</u> is intended to apply to all tanks subject to these regulations, as well as residential tanks and farm tanks referenced in Rule 3.03(B).

COMMENT: We recommend that Rule 9.12 use the phrase "petroleum product or hazardous material" in place of "regulated substance."

> **RESPONSE**: For the purposes of the UST Regulations, the Department feels the terms used in Rule 9.12 are adequate.

COMMENT: We recommend that Rule 9.12 apply to transfers to and from tanks.

> **RESPONSE**: The intent of this section is to provide spill containment and overfill prevention for deliveries/transfers on the <u>fill pipe</u> of UST's. Usually when the tanks are emptied they do not use the fill pipe. At this time we are not proposing a change to put spill containment and overfill protection on all tank openings.

COMMENT: We recommend that Rule 9.14 use the phrase "petroleum product or hazardous material" in place of "regulated substance."

> **RESPONSE**: For the purposes of the UST Regulations, the Department feels that the term "regulated substance" is appropriately used in Rule 9.14, <u>Leak Detection for New and Replacement Underground Storage Tanks</u>.

COMMENT: Rule 9.17 discusses groundwater monitoring wells. We recommend that all references to monitoring wells be consistent and reference existing RIDEM construction standards. In addition, the IDW Policy should be referenced.

> **RESPONSE**: Rule 9.17(B) references existing RIDEM construction standards detailed in Appendix I of the RIDEM *Rules and Regulations for Groundwater Quality*. While the RIDEM *Investigative Derived Waste Policy* is applicable during the installation of new groundwater monitoring wells, the Department does not feel it needs to be specifically referenced through Rule 9.17 of the revised UST Regulations.

EXXONMOBIL
Refining and Supply Company
3225 Gallows Road
Fairfax, Virginia 22037

Comment Letter from F. M. Anderson received on July 5, 2002

COMMENT: 5.41 –Definition of Modification: adding the word *repair* to this definition may present problems in dealing with minor/routine repair work.

> **RESPONSE**: Rule 5.41 "MODIFICATION" has been amended to better reflect the intent of the Department. It will read as follows: "MODIFICATION" means any addition, replacement, restoration, refurbishment or renovation to an existing UST System or any UST System component which regularly contains product that is inconsistent with the information provided to the Director in the Registration Application.

COMMENT: 8.03 – Installation of monitor wells: we have significant concerns with the requirement. It does not recognize the existing release detection technologies, procedures, inspections and testing requirements and other alternatives that could be implemented.

> **RESPONSE**: Rule 8.03 *Installation of Groundwater Monitoring Wells* has been deleted from the revised regulations and will be discussed later with the regulated community through the stakeholder meeting process.

COMMENT: 8.04 – Mandatory deadline for permanent closure of single wall USTs: this is a significant concern. There is no justification for this requirement. UST systems > 30 yrs. old have been and continue to remain in service all over the U.S. with no problems. Alternatives such as internal inspections and/or testing are available.

> **RESPONSE**: Installation of single walled tanks has been prohibited by the Department since 1992. Even 10 years ago, the Department believed that double walled tanks provided an extra layer of protection to the environment and that prevention of releases, not just detection of releases was vital to protection of the environment. It has been the experience of the UST programs in RI and across the country, highlighted during the rush of closures for the 1998 deadline, that most USTs found to be leakers at closure had never failed tightness tests. Testing unfortunately does not always identify leaking tank systems. The single walled tanks will all be

at least 30 years old at the time of mandatory closure, many will be much older than 30 years. They will have had a long operational life and have outlived manufacturer warranty. The Department does not agree that these tanks would pose no additional risk to the environment than double walled tanks and does not agree that testing and inspection would provide equivalent protection to the environment.

COMMENT: Rule 8.06 – Interior lining: we believe this technology should be allowed under certain conditions.

RESPONSE: Rule 8.06 states that Interior lining is no longer accepted as a method of corrosion protection. All existing tanks were required to be corrosion protected by December 22, 1998. One way for tanks to comply with that requirement was to add interior lining by 12-22-98. Since that deadline has passed, interior lining is no longer an option for corrosion protection of those tanks.

COMMENT: 8.09 (B) – Single-wall piping: adding the word *leak* is inconsistent with the definitions and will create confusion of what is required.

RESPONSE: The proposed regulations have been amended to reflect the above comment.

COMMENT: 8.15(E) – Annual testing of spill containment and sumps: there are alternatives to hydrostatic testing, including visual inspection and other measures required by parts of the rule.

RESPONSE: In response to comments received, the Department has removed Rule 8.15(E) *Annual Testing of Spill Containment Basins and Sumps* from the revised regulations and will discuss this subject at the upcoming stakeholder meetings.

COMMENT: 9.02 (A) – Prohibition of UST replacement: we believe it is unfair and may be detrimental to add the words of equivalent size.

RESPONSE: The installation of new USTs in wellhead protection areas is prohibited by the existing regulations. The exception is and has been allowed strictly for tanks of the same size or smaller.

COMMENT: 9.17 – Monitor wells: environmentally sensitive areas needs to be defined and some criteria needs to be defined for when the Director can require monitor wells in any other areas.

RESPONSE: The Department agrees that all areas are environmentally sensitive, to a varying degree. However, for the purposes of these regulations, the following definition has been added: "ENVIRONMENTALLY SENSITIVE AREA" means any area, including but not limited to, those wherein the groundwater is classified as GA or GAA in accordance with Rule 9 Groundwater Classification of the RIDEM *Rules and Regulations for Groundwater Quality* and any other area which includes sensitive receptors. Additionally, the Department has removed the sentence where the Director may require the installation of groundwater monitoring wells in all other areas.

COMMENT: 10.04 – Approval of modifications: We question why *modifications* have to be approved, and why approval is allowed only *one time*. In addition, we do not believe an environmental consultant needs to be onsite during modifications or repairs.

RESPONSE: The requirement that modifications have to be approved is not a new change to the UST regulations. It ensures that all work is done in accordance with the RI DEM requirements/standards and allows the Department the discretion to decide on a case-by-case basis if a minor modification needs approval.

The Department is considering omitting the clause that USTs and/or their associated piping can be modified or repaired only once, and it will be discussed at the upcoming stakeholder meetings stating this fall.

Only repairs/modifications which require the excavation of soil are subject to Rule 10.04(C). Screening of the soil during excavation by an environmental consultant using the appropriate instruments is necessary to determine if a release has occurred.

COMMENT: 12.07 – Release Characterization report: Confirmation of a *leak or failed or inconclusive tank or line test* should not trigger a release characterization report.

RESPONSE: Because the Department has received many comments objecting to the requirement that an RCR be submitted following an inconclusive tightness test, this requirement will be removed from this revision of the regulations and the issue will be discussed in upcoming stakeholder meetings. An RCR will be required after confirmation of a leak or a failed tightness test.

COMMENT: 13.03 – Temporary Closure: The words *for more than 90 days but less than 180 days* should be left in the rule

RESPONSE: The existing regulations say that USTs removed from service for more than 90 days but less than 180 days are subject to the temporary closure requirements. But "REMOVE FROM SERVICE" is defined as to cease to operate a facility component, and storing product in a UST falls under the definition "OPERATE A FACILITY". As long as there is product stored in the tank, it is considered in operation and all the daily and monthly operational requirements such as leak detection, inventory, maintenance, record keeping, etc. apply. When an owner/operator wants to cease conducting the operational requirements, the tank must be emptied, secured, etc. and the tank is then considered in temporary closure. There is no longer a 90 day period when the operational requirements in the regulation do not have to be followed.

GEOLOGIC SERVICES CORPORATION
15 Bonazzoli Avenue
Hudson, MA 01749

Comment Letter from John Harvey emailed on July 5, 2002

COMMENT: Response to changes to Rule 8.00 of the revised regulation: Rule 8.03 (revised reg.) Installation of Groundwater Monitoring Wells: Clarification is sought based on the definition of monitoring wells. Under the current definition, tank field monitoring wells (if in compliance with Rule 9.17 A&B) are currently viewed to meet the requirement for the installation of monitoring wells(s) downgradient of the tank(s). In addition, in the event shallow bedrock is present

(i.e. <30 feet below grade) would bedrock monitoring wells be required at sites with little or no overburden aquifer?

RESPONSE: Rule 8.03 *Installation of Groundwater Monitoring Wells* has been deleted from the revised regulations and will be discussed later with the regulated community during the upcoming stakeholder meetings.

COMMENT: Response to changes to Rule 12.00 of the revised regulation: Rule 12.11 and 12.18 (revised reg.) No Further Action (NFA): Sections 12.11 and 12.18 state that a letter of NFA my be issued by the director upon review of the site investigation report or upon completion of the remedial action respectively where "...the contaminant concentrations are found to be below applicable standards" and "...the threat to human health and the environment has been eliminated or reduced to the satisfaction of the Director". The addition of a reference to "applicable standards" AND the addition of a regulation allowing for the use of site specific risk assessments in accordance with the "Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases" as promulgated by the Division of Site Remediation, would significantly simplify the process of meeting the requirement for NFA subsequent to site investigation and/or active remediation.

RESPONSE: No further action letters pertaining to underground storage tanks are based on established regulations (*Rules and Regulations for Groundwater Quality*) and published policies and documents (*Guidelines on the Management and Restoration of Groundwater in Urban Areas*, *Closure in Place (CIP) Policy*, *UST Closure Assessment Guidelines*, *LUST Program Guidance Document*).

Risk assessments consider total risk at a site, which is done in the Site Remediation programs. The UST Program focuses on one exposure pathway – leachability to groundwater and the remedial goals/applicable standards are the groundwater standards in accordance with the Groundwater Regulations. Development of alternative groundwater standards is not allowed in the UST Program.

INDEPENDENT OIL MARKETERS ASSOCIATION OF NEW ENGLAND
183 Eustis Avenue, PO Box 3059
Newport, RI 02840

Comment Letter from Joseph M. Tomaino received on July 5, 2002

COMMENT: *Rule Section 5.41*: Including repair in the definition of “MODIFICATION” could be misinterpreted to include minor system repairs.

RESPONSE: Rule 5.41 “MODIFICATION” has been amended to better reflect the intent of the Department. It will read as follows: “MODIFICATION” means any addition, replacement, restoration, refurbishment or renovation to an existing UST system or repair of any UST system component which regularly contains product that is inconsistent with the information provided to the Director in the Registration Application.

COMMENT: *Rule Section 5.62*: Including the term "facility component" in the definition of "OWNER" is confusing. If, for example, a facility owner owns only the submersible pumps does he become the joint owner of the whole facility?

> **RESPONSE**: The Department's proposal for Rule 5.62 has been deleted, and will remain as is. We do however plan to discuss this topic during the stakeholder process.

COMMENT: *Rule Section 8.03*: We have real concerns with the required installation of groundwater monitoring wells. As you know there are much more sophisticated, timely, methods for leak detection that are, or could be, implemented. These wells, at best, only provide after the fact indication of a release.

> **RESPONSE**: Rule 8.03 *Installation of Groundwater Monitoring Wells* has been deleted from the revised regulations and will be discussed later with the regulated community through the upcoming stakeholder meetings.

COMMENT: *Rule Section 8.04*: The mandatory deadline for single wall tank closure is much too inclusive. An alternative could be some combination of inspection, testing and/or 24/7 monitoring.

> **RESPONSE**: Installation of single walled tanks has been prohibited by the Department since 1992. Even 10 years ago, the Department believed that double walled tanks provided an extra layer of protection to the environment and that prevention of releases, not just detection of releases was vital to protection of the environment. It has been the experience of the UST programs in RI and across the country, highlighted during the rush of closures for the 1998 deadline, that most USTs found to be leakers at closure had never failed tightness tests. Testing unfortunately does not always identify leaking tank systems. The single walled tanks will all be at least 30 years old at the time of mandatory closure, many will be much older than 30 years. They will have had a long operational life and have outlived manufacturer warranty. The Department does not agree that these tanks would pose no additional risk to the environment than double walled tanks and does not agree that testing and inspection would provide equivalent protection to the environment.

COMMENT: *Rule Section 8.12*: How would the annual inspection of shear valves be uniformly documented?

> **RESPONSE**: The owner/operator or trained personnel could perform the annual test of the shear valve by manually tripping the hold-open linkage and logging the results (along with the name of the person performing the test and test date) in a table. Records of testing shall be maintained in accordance with Rule 11.02(B), Routine Record-keeping.

COMMENT: *Rule Section 8.15 (E)*: It would appear that there are more practicable alternative to a hydrostatic test of spill containment basins and sumps. Would the water used in such a proposed test be disposed of in the manner prescribed for contaminated material?

> **RESPONSE**: In response to comments received, the Department has removed Rule 8.15(E) *Annual Testing of Spill Containment Basins and Sumps* from the revised regulations and will discuss this subject at the upcoming stakeholder meetings.

COMMENT: *Rule Section 8.18*: Monitoring wells used to determine ground water elevation for future tank testing should not be subject to the testing, record keeping or closure requirements of this section.

> **RESPONSE**: Tank pad wells, or observation wells, are required only to meet certain construction and maintenance standards. Testing, record-keeping, and closure requirements are limited to groundwater monitoring wells (and are specified in Rule 8.18(D) of the proposed amendments).

COMMENT: *Rule Section 9.03*: The phrase "modification to an existing UST system" requires a limiting definition of the word modification or the phrase should be changed to "substantial modification to an existing UST system".

> **RESPONSE**: In response to the above comment the definition of modification has been changed to better reflect the Department's intent. It now reads: "MODIFICATION" means any addition, replacement, restoration, refurbishment or renovation to an existing UST system or repair of any UST system component which regularly contains product that is inconsistent with the information provided to the Director in the Registration Application.

COMMENT: *Rule Section 9.17*: See previous comments to Rule Section 8.03. How is an environmentally sensitive area defined? One could consider all areas to be environmentally sensitive.

> **RESPONSE**: The Department agrees that all areas are environmentally sensitive, to a varying degree. However, for the purposes of these regulations, the following definition has been added: "ENVIRONMENTALLY SENSITIVE AREA" means any area, including but not limited to, those wherein the groundwater is classified as GA or GAA in accordance with Rule 9 Groundwater Classification of the RIDEM *Rules and Regulations for Groundwater Quality* and any other area which includes sensitive receptors.

COMMENT: *Rule Section 10.04*: Why should minor system modifications be subject to this section? The presence of an environmental consultant during a system modification or repair should not be necessary unless evidence of a release is discovered.

> **RESPONSE**: The definition of modification has been modified. (See previous response) Only repairs/modifications which require the excavation of soil are subject to this rule. Screening of the soil during excavation by an environmental consultant using the appropriate instruments is necessary to determine if a release has occurred.

COMMENT: *Rule Section 12.04 (C)*: A single inconclusive test should not require a Release Characterization Report. Neither should a single inconclusive test require emptying the UST system. These requirements should only be imposed if a timely retest has an inconclusive or failed result.

> **RESPONSE**: Because the Department has received many comments objecting to the requirement that an RCR be submitted following an inconclusive tightness test, this requirement will be removed from this revision of the regulations and the issue will be discussed in upcoming stakeholder meetings.
>
> Please note that Rule 12.04 (C) (2) allows three days for a retest to be done after an inconclusive test result. If the retest is a pass, the tank does not have to be emptied. If the retest is an inconclusive or fail, or if the retest is not conducted within 3 days, the tank must be emptied.

COMMENT: *Rule Section 12.07*: See previous comments to *Rule Section 12.04 (C)* concerning a Release Characterization Report.

RESPONSE: See response above for 12.04(C)

COMMENT: *Rule Section 13.03 (A)*: Some reasonable time parameters should be included in this section.

RESPONSE: The existing regulations say that USTs removed from service for more than 90 days but less than 180 days are subject to the temporary closure requirements. But "Remove from service" is defined as to cease to operate a facility component, and storing product in a UST falls under the definition "Operate a facility". As long as there is product stored in the tank, it is considered in operation and all the daily and monthly operational requirements such as leak detection, inventory, maintenance, record keeping, etc. apply. When an owner/operator wants to cease conducting the operational requirements, the tank must be emptied, secured, etc. and the tank is then considered in temporary closure. There is no longer a 90-day period when the operational requirements in the regulation do not have to be followed.

COMMENT: *Rule Section 13.11(C)(2*): If a closure assessment report is signed by an appropriate registered or certified professional certifying the accuracy of the report why should the owner/operator also be required to certify the reports accuracy?

RESPONSE: To a large degree, environmental reports include site specific information which is obtained from the owner/operator and therefore this information on which the report is based needs to be certified as accurate by the owner/operator.

COMMENT: *Rule Section 13.11(F):* An assessment of the excavation zone of a UST system permanently closed before December 22, 1988 should only be required if there is evidence that releases from the UST pose a potential threat.

RESPONSE: This rule is unchanged from the UST Regulations effective 1993. The rule is not in conflict with the above comment. It clearly says that an assessment is needed if releases from the UST pose a potential threat to human health or the environment.

MOTIVA ENTERPRISES, LLC
520 Allens Avenue, Bldg. 2
Providence, RI 02905

Comment Letter from Shiron K. Olson faxed on July 5, 2002

COMMENT: Section 8.15 (E) of the draft document requires annual hydrostatic sump and spill containment testing with a 24 hour testing period. There are other testing technologies available in the industry for containment testing instead of hydrostatic testing. Vacuum testing is a current testing practice and should be allowed as an alternative testing method. If hydrostatic testing is to remain as the only approved testing method, then the testing duration should be reconsidered to a shorter timeframe.

RESPONSE: In response to comments received, the Department has removed Rule 8.15(E) *Annual Testing of Spill Containment Basins and Sumps* from the revised regulations and will further discuss this subject at the upcoming stakeholder meetings.

SUNOCO, INC.
1801 Market Street
Philadelphia, PA 19103

Comment Letter from Yvonne Monti faxed on July 5, 2002

COMMENT: Rule 8.02 (A) - Need a definition of "trained personnel". A section might be added on "training requirements" instead.

RESPONSE: What the Department means by trained personnel is someone who can conduct proper inventory, leak reporting procedures, record-keeping requirements, and properly operate leak monitoring and other ancillary equipment. At this time the Department is not going to add a definition but we will discuss this topic during the stakeholder process.

COMMENT: Rule 8.03 (A) - This rule requires the installation of 1 or more monitoring wells downgradient of the USTs with single-wall construction within 6 months of promulgation of the revised regulations. The monitoring wells must be installed and maintained in accordance with Rule 9.17.

One can guess with some accuracy the direction of groundwater flow based on surface topography, but an accurate flow direction needs a minimum of 3 wells in a triangular arrangement. It appears we could achieve compliance with 1 well per site, but the questions then are: If we install only 1 well, how would we be sure its hydraulically down-gradient of the USTs? And, what would the mechanism be for RIDEM to question a flow direction? And what are the consequences if the groundwater flow was incorrect? Although it appears we could achieve compliance with only 1 monitoring well per site, 3 monitoring wells per site would be preferable.

RESPONSE: Rule 8.03 *Installation of Groundwater Monitoring Wells* has been deleted from the revised regulations and will be discussed later with the regulated community through the stakeholder meeting process.

COMMENT: Rule 8.03 (B) - This rule gives the Director of RIDEM the authority to require the installation of monitoring wells downgradient of USTs (of any construction) at sites in wellhead protection areas or other environmentally sensitive areas. The monitoring wells must be installed and maintained in accordance with Rule 9.17.

Again, the number of monitoring wells is not specified, and the determination of groundwater flow direction is left to interpretation. Additionally, the phrase "wellhead protection area" is defined in Section 5 (Definitions), but the phrase "other environmentally sensitive area" is not. Who will determine what is "environmentally sensitive?" And what are the consequences of an incorrect determination?

Most importantly, the requirement for the installation of the wells and subsequent checking once per year (section 8.18) serves no purpose due to the fact that this would be too late and contamination will have already entered the environment. Sunoco would propose the current regulations for leak detection remain in effect for the most efficient means of leak detection.

> **RESPONSE**: Rule 8.03 *Installation of Groundwater Monitoring Wells* has been deleted from the revised regulations and will be discussed later with the regulated community through the stakeholder meeting process.

COMMENT: Rule 8.04 - Permanent closure of single wall UST's by 12/22/2015 or 30 years after the date of installation. It is Sunoco's opinion that the proper operating and monitoring devices on single wall tanks, there is no additional risk of a release than a double wall tank. Therefore, this requirement seems excessive. An alternative would be to require 24 hour/7 day continuous monitoring of the tank system.

> **RESPONSE**: Installation of single walled tanks has been prohibited by the Department since 1992. Even 10 years ago, the Department believed that double walled tanks provided an extra layer of protection to the environment and that prevention of releases, not just detection of releases was vital to protection of the environment. It has been the experience of the UST programs in RI and across the country, highlighted during the rush of closures for the 1998 deadline, that most USTs found to be leakers at closure had never failed tightness tests. Testing unfortunately does not always identify leaking tank systems. The single walled tanks will all be at least 30 years old at the time of mandatory closure, many will be much older than 30 years. They will have had a long operational life and have outlived manufacturer warranty. The Department does not agree that these tanks would pose no additional risk to the environment than double walled tanks and does not agree that testing and inspection would provide equivalent protection to the environment.

COMMENT: Rule 8.08 (C) - 4 Single wall upgrade with interior lining or cathodic protection testing requirements at 5 year intervals for a period of 20 years and every 2 years thereafter. It does not appear to have a need because the CSLD is a continuous test 24 hours a day at a minimum of once per month which is greater form of leak detection

> **RESPONSE**: Continuous monitoring of single-walled USTs upgraded with cathodic protection/interior lining is not a requirement until ten (10) years after the date of the upgrade. These tanks are required to be tightness tested annually. Following the installation of continuous monitoring, however, a tank is required to be tightness tested as referenced in your comment (at 5-year intervals until such time as the tank has been installed for a period of twenty years; thereafter tightness tests shall be conducted once every two years). This requirement is identical for other continuously monitored corrosion-resistant (i.e., fiberglass reinforced plastic, sti-P_3, or coated) single-walled USTs and does not reflect a change in Department policy.

COMMENT: Rule 8.09 (A) - The double wall piping interstitial or annular space monitoring should be further defined in section 9.15 (C) to define if sensors in the submersible area will satisfy the continuous monitoring of the interstitial space. A further clarification on this issues would make it easier to understand.

> **RESPONSE**: Rule 9.15(C) shall be clarified to indicate that sensors in the submersible area will satisfy the continuous monitoring of the interstitial space.

COMMENT: Rule 8.14 (B) - The deactivation of a monitoring device shall be immediately reported to the Director by the owner/operator seems excessive. An alternative would be to report the deactivation only if the repair can not be made within the 15 day requirement.

> **RESPONSE**: This rule has not changed from the existing UST Regulations, effective in 1993. It has not been problematic in the past and the Department does not consider it excessive.

COMMENT: 8.17 - Fill pipe labeling requirements is very hard if not impossible to comply with because the are no permanent devices currently on the market to fulfill this requirement 100% of the time. The requirement to ensure the appropriate API color coding on the fill pipes would be more effective and practical a solution as most other states have adapted.

> **RESPONSE**: Both the current and proposed regulations allow API 1637 ("Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Service Stations and Distribution Terminals") to be used as a means of product identification. The proposed regulations will be clarified, however, to indicate that labeling or marking of the *fill box covers* (and not exclusively the *fill pipes*) will also satisfy this requirement.

COMMENT: Rule 8.18 (A through D): This rule provides new guidelines for the construction of groundwater monitoring wells and tank pad observation wells. The 4 requirements of this rule are:

A. Wells must have tamper-resistant covers and be labeled as monitoring or observation wells
B. Wells must have locking gripper plugs
C. Wells cannot be screened to the top
D. Wells must be inspected for visual and olfactory evidence of free product at least once per year, and the records must be maintained in accordance with Rule 8.19.

The apparent subtle difference between RIDEM's definitions of "observation well" and "monitoring well" should be noted. An "observation well" is a monitoring well in a tank excavation or in a sump of a secondary containment system. In essence, the regulations seem to use "tank pad well" interchangeably with observation well." A "monitoring well" is a cased well with a screened interval that intercepts the water table and can be used to detect groundwater contamination. This term seems to be reserved for true drilled monitoring wells.

An interesting point to consider with respect to Subpart D is that the only monitoring required is a visual and olfactory inspection for evidence of product. An actual groundwater sample for laboratory analyses is not required.

> **RESPONSE**: This rule is to provide guidelines for the operation and maintenance of existing groundwater monitoring wells and existing UST pad/observation wells. Both types of well have the same general maintenance requirements (A-C). Part D explains that groundwater monitoring wells (not pad/observation wells) require well checks at least once a year.

COMMENT: Rule 9.13(C) - Requires all flexible underground piping runs to be continuous in accessible sumps. In some current engineering circumstances, this may not be the case and construction would be necessary to meet the requirement. This rule should be for new or replacement piping only.

> **RESPONSE**: Department policy has been to require all underground flexible piping runs to be continuous whereby all connections for both the primary and secondary piping are made in accessible sumps that are continuously monitored. Manufacturers of underground flexible piping

systems also require all connecting joints to be contained in accessible sumps. Therefore, all existing underground flexible piping systems currently should meet this requirement.

COMMENT: Rule 9.17: This rule states that as a condition of approval of new or replacement UST systems in environmentally sensitive areas, the owner/operator must install 1 or more groundwater monitoring wells. Additionally, this rule states that the Director may require the installation of monitoring wells in all other areas. This rule also provides specifications for groundwater monitoring well construction. Similar to the language of Rule 8.18(D), Subpart C of the rule requires the annual inspection of the wells for free product.

Again, the definition of " environmentally sensitive area" in the first half of the rule is called into question. We would need a sensitive receptor survey to identify the affected sites. However, the second half of the rule appears to go even a step further and state that the Director may require installation of monitoring wells "in all other areas." Theoretically, we could be required to install at least one monitoring well at all sites where we install or replace USTs. Additionally, the same discussion regarding the determination of groundwater flow and location of the consistent with currently accepted industry practices.

RESPONSE: For the purposes of these regulations, the following definition has been added: "ENVIRONMENTALLY SENSITIVE AREA" means any area, including but not limited to, those wherein the groundwater is classified as GA or GAA in accordance with Rule 9 Groundwater Classification of the RIDEM *Rules and Regulations for Groundwater Quality* and any other area which includes sensitive receptors. As for the second part of your comment, we have deleted the sentence where the director may require wells in all other areas, and will discuss it later in the stakeholder process.

COMMENT: Rule 12.07: This rule outlines the reporting requirements for a Release Characterization Report (RCR). The current regulations state that an RP must submit an RCR within 7 days of confirmation of a release. The proposed new rule will state "leak or release or a failed or inconclusive tank and/ore line tightness test" instead of "release." However, under the proposed regs, the entire scenario will be compressed into 7 days.

The elements of the RCR are essentially the same with a few minor additions. The significant change is scope of applicability and in the compression of the time to report. Under the old regs, we had the ability confirm if an actual release to the environment occurred or not after a failed or inconclusive test. Often, through re-testing, we were able to determine that a release had not actually occurred. In cases where we determined that a release did occur, we had 7 days from that determination to notify RIDEM. During that time, we could research the sensitivity of the area, and be better prepared to report the severity (or lack thereof) of the release to RIDEM if eventual notification was required.

Sunoco's position would be to keep the same regulatory reporting requirements the same.

RESPONSE: Because the Department has received many comments objecting to the requirement that an RCR be submitted following an inconclusive tightness test, this requirement will be removed from this revision of the regulations and the issue will be discussed in upcoming stakeholder meetings.

The time frame for submittal of an RCR will remain at seven (7) days, until it can be discussed during the stakeholder process.

WARREN EQUITIES, INC.
PO Box 72743
Providence, RI 02907-0743

Comment Letter from Karen O'Connor received on July 12, 2002

COMMENT: Rule 8.03 Page 18 of 70 Installation of Groundwater Monitoring Wells

- WEI strongly urges the Department to consider removing this section from the proposed regulations to allow for collaboration between the Department, the regulated community and UST system and component manufacturers to develop alternative approaches that would be as effective and less burdensome while minimizing the potential for negative impact to human health and the environment.
- Single-walled tank sites already are required to have an automatic tank gauge (ATG) that provides continuous leak detection for the tanks, conduct monthly tank leak tests, and conduct annual line leak detector and line tightness tests. Additionally, tank tightness tests are required every two/five years. WEI does not believe that installation and annual gauging monitoring wells (MW) provides any benefit to preventing releases at these sites. In fact, WEI believes that MWs increase that risk of negatively impacting the environment. Due to high traffic at these sites, MWs increase environmental risk at these sites because they provide a direct pathway to the groundwater table in the event fuel is spilled during delivery or dispensing.

RESPONSE: Rule 8.03 *Installation of Groundwater Monitoring Wells* has been deleted from the revised regulations and will be discussed later with the regulated community through the stakeholder meeting process.

COMMENT: Rule 8.14 (E) and (F) Page 24 of 70 Operation of Leak Monitoring Equipment

- The Department should change this section to account for the technological advances of leak monitoring equipment. The new ATGs have self-diagnostic capabilities. See attached "Veeder-Root Maintenance, Inspection, and Testing Position Statement to State and Local Agents."
- Additionally, many larger petroleum companies contract with a fuel management service. The fuel management service has the capability to provide real time inventory data, compliance reporting (i.e. release detection) as well as alarm management. As such, the fuel management service provider would immediately detect any operating problems associated with the ATG and immediately report them to their client.

RESPONSE: The Department has not proposed any changes to these Rules, therefore we cannot make additional changes at this time. We do however plan to discuss additional changes during the upcoming stakeholder meetings.

COMMENT: Rule 8.15 (E) Page 25 of 70 Spill Containment and Overfill Protection

- WEI strongly urges the Department to consider removing this section from the proposed regulations to allow for collaboration between the Department, the regulated community and UST system and components manufacturers to develop alternative approaches that would be as effective and less burdensome while minimizing the potential for negative impact to human health and the environment.

- The Department should consider that annual 24-hour hydrostatic test jeopardizes spill containment capability of equipment.
- The Department should also consider the cost associated with managing the test water (permitting and disposal). A three-tank site would result in the generation of at lease 1,000 gallons of wastewater.

RESPONSE: In response to comments received, the Department has removed Rule 8.15(E) *Annual Testing of Spill Containment Basins and Sumps* from the revised regulations and will further discuss this subject at the upcoming stakeholder meetings.

COMMENT: Rule 8.18 (D) Page 26 of 70 Groundwater Monitoring Wells and UST Pad Observation Wells

- The Department should clarify if it is their intent to require observation wells to be gauged.

RESPONSE: No. Rule 8.18 explains how both types of wells are to be constructed and maintained. It states that groundwater monitoring wells shall be bailed and evaluated, not observation wells.

COMMENT: Rule 9.14 (B) Page 31 of 70 Leak Detection for New and Replacement Underground Storage Tanks

- The Department should clarify if it is their intent to require discriminating sensors within the interstitial space of a double-walled UST.

RESPONSE: The Department does not intend to require discriminating sensors within the interstitial space of double-walled USTs. A clarification shall be made to the regulations.

COMMENT: Rule 9.17 Page 33 of 70 Monitoring Wells

- The Department should define "environmentally sensitive area."

RESPONSE: The following definition has been added to the proposed regulations: "ENVIRONMENTALLY SENSITIVE AREA" means any area, including but not limited to, those wherein the groundwater is classified as GA or GAA in accordance with Rule 9 Groundwater Classification of the RIDEM *Rules and Regulations for Groundwater Quality* and any other area which includes sensitive receptors.

COMMENT: Rule 9.17 (B)(8) Page 33 of 70 Monitoring Wells

- The Department should clarify what "initial water quality samples" have to be evaluated for.
- The Department should also clarify if soil samples are required to be collected when monitoring wells are installed.

RESPONSE: For clarification, soil samples will not be required for new installations at sites which have not previously contained USTs. The specific analyses of the water samples will depend on what material will be stored in the tanks. The Department will discuss these topics during the upcoming stakeholder meetings and may later revise the regulations for clarification.

COMMENT: Rule 10.04 Page 34 of 70 Approval of Modification or Repairs

- The Department should clarify what screening concentrations triggers a release (i.e. In MA, during tank closure, reporting is required if soil exhibits concentrations greater than 100 ppm within 10' of a tank component).

  RESPONSE: One of the reasons for the requirement of a consultant during repairs/modifications involving excavation is to enable a qualified professional to evaluate all conditions, including soil screening and allow an informed opinion to be made as to whether or not a significant release has occurred. DEM feels that there is little scientific basis to set any threshold of field screening results which of and by themselves would be indicative that no release has occurred. Imposing some artificial standard would also be inconsistent with the RIDEM *Oil Pollution Control Regulations*, which do not contain a minimum reportable quantity.

COMMENT: Rule 11.03 (G) Page 36 of 70 Inventory Recording-keeping and Leak Reporting

- The Department should add language to account for variances explainable by inaccurate record keeping, temperature variations or other factors not related to leakage.

  RESPONSE: The requirement to record any unusual discrepancies in inventory record-keeping has been inadvertently omitted from the proposed amendments to the UST regulations but will be included in the final version.

COMMENT: Rule 12.04 (C) Page 37 of 70 Leak and Release Reporting

- The Department should insert language to eliminate the requirement of preparing and submitting a Release Characterization Report when explainable variances happen and no release has occurred.

  RESPONSE: Because the Department has received many comments objecting to the requirement that an RCR be submitted following an inconclusive tightness test, this requirement will be removed from this revision of the regulations and the issue will be discussed at the upcoming stakeholder meetings.

COMMENT: Rule 12.11 (A) Page 42 of 70 No Further Action

- The Department should define "applicable standards."

  RESPONSE: No further action letters pertaining to underground storage tanks are based on established regulations (*Rules and Regulations for Groundwater Quality*) and published policies and documents (*Guidelines on the Management and Restoration of Groundwater in Urban Areas*, *Closure in Place (CIP) Policy*, *UST Closure Assessment Guidelines*, *LUST Program Guidance Document*). The Department will discuss this topic during the upcoming stakeholder meetings for clarification if necessary.

COMMENT: Rule 12.04 (A) Page 45 of 70 Leak and Release Reporting Requirements

- The Department should remove "all persons" and change this to "owner or operator."

RESPONSE: At this time the Department is not going to make this change. There may be instances where owners might not be satisfied with what is discovered in an investigation and for some reason fire the contractor/consultant, and the release never gets reported. We can however plan to discuss this proposal along with other changes during the stakeholder process.

COMMENT: Rule 13.12 (B) Page 52 of 70 Certificate of Closure

- The Department should clarify the applicability of this section.

RESPONSE: The Department has not proposed any changes to these Rules, therefore we cannot make additional changes at this time. We do however plan to discuss this comment and additional changes during the stakeholder process