

ALTERNATIVE/EXPERIMENTAL WASTEWATER TREATMENT TECHNOLOGIES
TECHNICAL REVIEW COMMITTEE (TRC)

The meeting was held at the South Kingstown Town Hall

November 7, 2008

Draft

Present: Russ Chateauneuf, Noel Berg, Joe Frisella, George Loomis, Susan Licardi and Tim Stasiunas

Absent: Ken Anderson, Dave Burnham and Dennis Vinhateiro

Others Present: Deb Knauss (DEM); John McDonough (Scituate Surveys); Marc Nyberg (Marc N. Nyberg and Associates); Mike Raimondi (Scituate Surveys); Harry Miller (Alpha Associates) and Dick Pastore (RP Engineering)

Call to Order: 9:00 AM

Materials Distributed:

- Draft Agenda for this meeting
- Draft Minutes of 10/1/08 meeting
- List of draft criteria for Class I design of A/E technologies for repairs

Minutes of October 1, 2008

Necessary edits noted below:

- Add Harry Miller of Alpha Associates to the list of others present.
- On Page 2, at item 2, beneath “Objections” add a third bullet, “Direct accountability of contractor to the homeowner”.
- On Page 3, item 4, at bullet 1, fourth line, edit last phrase as follows: “...given this issue by the TRC and ~~asked DEM for~~ a is interested in a TRC advisory opinion.”

Motion: George made a motion to accept the minutes with the noted corrections.

Second: Susan seconded the motion.

Discussion: There was no discussion.

Vote: All who were present at the October 1 meeting voted in favor of the motion.

Additional items for the Draft Agenda

Russ asked if anyone desired for and additions to the Draft Agenda. Joe asked if we could add discussion of addition of members to the committee.

Proposed Expansion of Design Authority for Class I Designers Demonstrating Satisfaction of Specific Criteria

Russ distributed:

- A two-sided sheet titled “Additional Requirements and Demonstration of Proficiency for Class I Designers to prepare and Submit Repair Apps for Specific AE Systems”, noting that at the bottom of the sheet, the footer should be edited to include “Revised 11/7/08”.
- A stapled bundle of material including:
 1. “OWTS Repair Submission Requirements” (explaining that this lists the critical elements DEM needs to see to review a Repair submission).
 2. Photocopy of pages 38, 39, 40, 41 and 42 of the January 2002 ISDS Regulations
 3. Photocopy of minutes of TRC meeting of September 11, 1997
 4. Letter dated September 20, 2008 from Board of Registration for PLSs to DEM Director
 5. Letter dated October 21, 2008 from Board of Registration for PEs to DEM Director

TRC original charge, requested by Joe, at the October 1, 2008 meeting to be provided by DEM: Russ directed attention to section SD 14.06(c) on page 38 of the 2002 ISDS Regulations, in which this is stated.

With regard to **committee membership**, the text identified with the numeral 3 on page 42 of the January 2002 ISDS Regulations copy distributed, lists organizations from which committee membership is to be composed, not all of which are currently represented. Audubon used to have representation; at this time there is no representative of an environmental stewardship organization.

Joe asked who represented a utility, and was informed that Susan, representing of a drinking water supplier is fulfilling that role. He noted that there is no sewage system product manufacturer on the TRC. It was suggested that O&M companies might be a suitable sector from which to seek representation on the TRC. Joe expressed his desire for another engineer or for two land surveyors.

Bullet 2 on page 41 of the 2002 ISDS Regs: "Director may establish..." provides **DEM authority to establish qualifications for designers regarding design of AE systems**. Joe countered that this does not provide DEM the authority act in conflict with statute.

The **Minutes of the September 11, 1997** TRC meeting in **paragraph 3**, deals with the question of **design authority**, describing the "Guidance to Designers" on which DEM sought the TRCs comments. At that time DEM suggested and the TRC agreed that the IA (vernacular at the time) system element of the design plan had to be stamped by a PE, but that a PLS could prepare the rest of the design plan and application to the ISDS Program. This has changed significantly since that time, with CI-II designers (minimum eligibility of PLS) having the authority to design AE (IA) systems up to 2,000 gpd, and although there are restrictions CI-II design authority these are not related to AE design and include restrictions on the variances for which a CI-II may apply. Russ emphasized that since 1997, there has been additional design authority provided for CI-II designers.

Joe questioned the authority of the TRC to consider the issue of design authority, stating it should be being considered by the Review Panel for Designer Licensing.

Joe stated that this body is public, open to public membership and that **members with a conflict of interest should recuse themselves**. When asked, Joe acknowledged that he included himself among the membership with a conflict of interest. George noted that few would remain to vote on the issue and was told by Joe that he also had a conflict, explaining that if the proposal is implemented, George will be offering the required classes. George stated that he would recuse himself, leaving four voting members.

There was additional lengthy discussion of the TRC role of providing a technical advisory opinion and also of the issue of whether they should be considering legal issues or technical issues only, with the legal professionals being called upon to consider the legal aspects of the technical opinions rendered by the TRC. No agreement was reached.

Letters form Boards of Professional Registration to DEM Director

Russ distributed these in the interest of full disclosure, since he has referred to them and wanted the committee to read them for themselves. The letter from the PLS Board states the Board's intention to pursue legal action against any CI-I designer engaged in the practice of Land Surveying. The letter does not specify that this is associated exclusively with the preparation of plans incorporating AE systems. Russ noted however, that CI-Is have been submitting repair plans for nearly ten years, with approximately 10,000 repair application submissions having been filed by this license class. The letter also states that a dialogue has been initiated with DEM legal counsel.

The letter from the PE Board identifies two issues: 1) advertising for engineering services: a case of a CI-I is cited where the individual in question stated that he prepares buoyancy calculations and pump calculations as part of OWTS submissions to DEM prepared under his CI-I designer license authority. The Board interprets this as DEM authorizing illegal practice of engineering, which is exclusively within the purview of the PE Board. Additionally, the letter cites objection to implementation of the proposal being considered by the TRC which would authorize CI-Is to design repair applications incorporating AE systems, as their position is that this would be a violation of RI State law 5.8.

Russ emphasized that the proposed measure cannot be implemented without being proposed through official Rule making procedure and that this has not been initiated. He also reminded the group that the legislature demonstrated interest in the measure by proposing related legislation in both the House and Senate last session. Joe stated that these actions were initiated on the basis of erroneous cost information, which he made an effort to clear up. Russ stated that DEM is obligated to be responsive to legislative proposals and if legislation were to be proposed in a future session, DEM will resume work with the Assembly, but he added that legislation might not be re-introduced.

Russ re-stated for the record and sought Committee comment on why this issue is being discussed:

We are considering removing any barriers to homeowners effecting repairs. DEM, as the regulatory body is charged with ensuring appropriate protective measures are in place, and to establish who has the right to prepare and submit design plans. DEM should continually evaluate whether Rules in place are appropriate. CI-Is have had the authority to design repairs for ten years. The issues are: 1) Is it appropriate to change the scope of this authority with consideration of the denitrification requirement (which applies to some repairs) set forth in the January 1, 2008 Rules? 2) Might there be some financial relief for affected homeowners, associated with this measure?

“Additional Requirements and Demonstration of Proficiency for Class I Designers to Prepare and Submit Repair Apps for Specific AE Systems”, (Revised 11/7/08)

Russ directed attention to this draft document listing proficiency elements for eligibility for expanded CI-I design authority, emphasizing that it not regulatory language and that it has not received but will require legal review. He cited for example that Rule would specify that DEM would annually prepare list of training requirements, rather than listing required classes.

Experience: George asked if we are stating that performing installations helps an installer to create a better design and that if so, in the interest of fairness, installation should be required of the other two classes of design license. Russ asked if George disagreed with what is written on this topic; George replied he does not, but he thinks it is important that CI-II & IIIs have experience with installation, thus providing insight for preparation of better design plans, resulting in systems that are more easily maintained and serviced.

Training: There was discussion of the appropriateness of the classes listed. Russ asked George if we should add a class and if so what should it be. George stated OWT 150, Autocalcs, as this would improve the quality of designs prepared by those who attend. He added that we are working on developing requirements for CI-Is to become eligible to design AE systems, but there is no such requirement for CI-II and IIIs (PLSs and PEs) have no such requirements. It was suggested that hopefully they are receiving support from a more experienced person with whom they work. But another perspective is that the more experienced person might be old school and not have the experience with these systems. It was stated that college curricula completed by PLSs and PEs include high level classes and the by-laws of the boards of registration for the professions require that additional training be obtained, as necessary to perform work. The DEM licensing requirements accept that individuals registered in these professional disciplines have met that burden. Rule and Statue require continuing education and this is ensuring that these designers get the training they need.

Plan Submission: The proposal is for three repair plans that were approved by DEM during the previous three years; note that these are not AE systems, as this is part of the eligibility for the expansion of design authority to include design repairs incorporating AE systems. Russ noted that although every repair submission does not include all of the elements listed on the “OWTS Repair Submission Requirements” document, DEM staff works with the designers to complete the applications where necessary.

Limitations: The requirement that the site must meet all regulatory setbacks was deleted, as this relates exclusively to repair sites many of which can be expected to not satisfy this requirement.

Item 6: The requirement for renewal or reauthorization has been eliminated, and re-crafted to require only that the CI-I license remain in good standing, with performance issues being dealt with in Item 8.

Item 7: Requiring Vendors to make available standard drawings was agreed to be an issue between DEM and vendors and it was agreed that this can be deleted from this list.

Item 8: Regarding performance was substantially rewritten. It presents two reasons for a finding of “unsatisfactory performance”: 1) failure of an AE system due to faulty design or installation (“of the I/A system” was deleted at George’s request) and 2) Failure to correct any design, submittal or installation defect identified by the Department.

There was a suggestion to involve the Review Panel, but at this time DEM does not want to develop this in such a way, although in a case of an egregious issue, the Panel could be asked to consider the issue.

Public Comment

Dick Pastore (RP Engineering): 1) He sees this issue as crossing over from technology to policy and that TRC consideration of this issue is leading to a recommendation for policy change, which is beyond the charge of the body. 2) Equalizing the playing field is acceptable in theory, but he objects to the proposed measure. There is a vast difference in the basic knowledge that PEs and CI-Is possess. In the code of engineering and surveying, there is a professional obligation to take it upon oneself to learn what is necessary to do the job. There is no such code of obligation for CI-Is; the courses proposed are not nearly equivalent to the training that PEs and PLSs obtain while pursuing eligibility to test for admission to these professional registrations; they will not turn someone into an engineer. Although there are tools which are available that facilitate a plug and chug process of OWTS design, an understanding of the principles and formulas is necessary to understand if the values provided by these tools are correct; without such an understanding, the user would not be able to tell if the data provided are correct. Although it may be only a small percentage of the time that such errors would occur, the user needs to have the knowledge to identify when they do.

Mike Raimondi (Scituate Surveys): Mike stated that although there is no proposal on the table in the form of a proposed Rule, it is moving in that direction and there is going to be an issue with the PLS and PE Boards. He stated that there are issues with MEs and EEs moonlighting doing OWTS designs and that this is a violation of the law. He stated that there is an inherent conflict with the TRC for all the reasons Joe Frisella stated earlier and that although George Loomis is not self-promoting, he is financially attached to the courses and that is a conflict. George stated that by federal mandate course registration fees must be used to run the program, which includes David Kalen's salary, but expressly, not George's. Mike further stated that the TRC is being myopic in considering criteria for eligibility for expanded design authority, without considering all things associated with this.

Dick asked if the legislative initiatives were initiated by DEM or if they were developed by the General Assembly independently as a result of complaints about the denitrification requirement in Charlestown. He stated that the Assembly was misinformed of the costs of these systems.

Harry Miller (Alpha Associates): Harry commented that this has nothing to do with fairness to CI-Is, that DEM holds the CI-II and IIIs to a higher standard than the CI-Is, specifying that the plan quality standard proposed is for CI-Is to submit a neat and clean plan, while if he submitted a plan of this quality standard, it would be returned as unacceptable. One of the reasons there are design classes available is because there are different types of expertise among designers. He cites that the Autocalcs spreadsheets have been revised, as errors have been identified. He cited as examples of errors he has seen made by CI-Is as including: a system in the groundwater and a system in the street, filling with water and flowing back into the home. 6 bedroom systems are a bit much for a CI-I; from 4 or 5 to 6 is a big step and suggested limiting them to 4 bedrooms, if this proposal advances. He expressed agreement with the other objections that have been articulated.

Dick added that CI-Is lack knowledge of wastewater chemistry and analysis.

Russ commented on failures stating that RI has a very low failure rate, but that there have been cases of failures and poor installation, for example, installation on the wrong parcel, but these errors have not been made exclusively by Class Is. Over 1,000 repairs are performed each year and DEM does have to work with CI-Is to make sure the design is protective, due to conditions imposed by working on a property with an existing home, but if there were many failures, the procedure would have to be changed.

Mike Raimondi stated that if a CI-I wants to continue to do design, they should hire professionals to do property lines and perform other critical measurements. Joe stated that they could do that now. Dick stated that the person who would do this would be disadvantaged in the marketplace, because the cost for their work would be higher than those who are not doing so. Homeowners would be comparing apples and oranges and would select the designer on the basis of the lower cost.

Susan, seeking to clarify the cost saving of a CI-I design, stated that CI-II and IIIs have reported that they do a survey for repairs, which would add cost and wonders if it is necessary to perform this survey work for a repair application. Dick stated that to assume that a survey is not required for repairs, is a mistake.

There was discussion regarding CI-Is lack of the **professional liability insurance** that PEs and PLSs carry, which includes errors and omissions coverage. It was suggested that this could be made a requirement for all design license classes. Russ noted that well drillers are required to carry comprehensive liability insurance and he is not sure there is much difference between the activities of the CI-I relative to the well driller, who decides where on a property to install a well. There was disagreement with this, stating that there is greater potential for error in work performed by a CI-I. It was also stated that one of the reasons PEs and PLSs costs are higher than CI-Is, is the high cost of E&O insurance. Russ said that DEM will investigate the insurance issue.

There was discussion of **PEs and PLSs being held to a higher standard by DEM staff**. Russ reported that Brian Moore had been asked if this is a practice in the office and was told that all that is expected of any repair application is the items on the Repair Checklist, but that since CI-II and IIIs are in the habit of providing greater detail on plans, there is more opportunity to identify errors. Dick stated that he thought that if he submitted a plan where the topo did not run out 25-feet, that it would be returned. Russ said he would talk to Program staff about this.

Mike Raimondi asked if he could pursue a CI-I license and was informed that he may not. When an individual who holds a CI-II passes the CI-III exam and applies for a CI-III license, Dem requires that the CI-II license certificate be returned to DEM in exchange for the CI-III certificate: one person may not hold more than one license authorizing the design of OWTS.

Joe asked for the following to be recorded in the minutes: Because he is a PE and submits detailed plans to DEM, he is held to a higher standard and on his RI Mental Health repair plans he has experienced a longer turn-around time.

Russ asked if anyone would support a motion to move ahead as proposed with the list of Additional Requirements and Demonstration of Proficiency for Class I Designers to Prepare and Submit Repair Apps for Specific AE Systems”, (Revised 11/7/08), incorporating the comments made at the meeting this morning.

Motion: Susan made a motion to move forward with development of the list of Additional Requirements and Demonstration of Proficiency for Class I Designers to Prepare and Submit Repair Apps for Specific AE Systems”, (Revised 11/7/08), incorporating the comments made at the meeting this morning.

Second: George seconded the motion.

Discussion: Joe stated that PEs and PLSs are required to have specified education and additional training obtained over an 8 – 12-year interval prior to professional licensure. They are also required to have education and stamps prior to taking the CI-II and III exams. Because of the denitrification requirement in the Critical resource Areas, including repairs, he believes cost of these systems, is the reason for this CI-I issue being brought in to the TRC. CI-Is have the highest profit. They will have to do engineering and surveying to do plans and that will be costly unless we waive all this. It is mind boggling that this is being considered in Critical Resource Areas, which are sensitive. CI-II & IIIs are required as observers of construction to keep records for ten years and if not they will be in violation of their license. It is ironic that in sensitive areas a CI-I observes his or her own construction and there is no requirement to document what is brought to the site. Deb tried to clarify that the requirement for maintaining records of materials delivered applies to CI-I designers as well. Russ read from Rule 43.8.1 substantiating that this is the case. Joe noted that he is certain to comply with this requirement and welcomes DEM to audit his records. CI-Is are certifying to their own work and CI-II and IIIs certify to the installation work of an installer. He stated that wetlands, ponds, rivers, streams and watertable elevation is recorded to the nearest 100th in elevations. CI-Is are not trained to do this. He has found errors by CI-I designers. Recently he did a survey and located leachfields at or within one-foot of a property line, but the sketches show a ten-foot setback. Systems could be closer to wells, or not installed where they are supposed to be and it would not be known unless the location of each one was field verified. Joe said that he is representing a case where a CI-I misplaced the system and a lawsuit resulted. At the time that CI-I repair design authority was first considered he did not go against it but fought the authority for I/A systems. DEM can state that there is a good track record with the current system of repair by CI-Is, but this is because we don’t have information on how they were installed, we have taken their word for it. In the future we may want to say there is a good track record with CI-I design of repairs with A/E, so let’s allow them to design NBC. The costs for CI-I designer denite systems will not be less. At the town review stage, they will have to go to Planning and Zoning if the site is within that town’s threshold setback from a wetland. Applications may have to go to DEM Freshwater Wetlands, and CRMC, sometimes CRMC will give insignificant alteration finding, but not always. A PE or PLS would be aware of all these things a CI-I would not.

Tim suggested that DEM tried to address this with site visits and also that if the system is proposed for the edge of a pond, for example, they have the authority to require that the system be designed by a CI-II or III. Joe stated that the DEM staff has dwindled and we can’t rely on a dwindling staff to site verify every one of these installations. He asked if CI-I is required to show a wetland within 200 feet of the system. Russ stated that there is an exemption in Rule regarding wetland for repair work at an existing home with wetland present. Susan noted that PEs do not have the expertise to identify wetlands, but that a biologist will come to the site to make necessary assessments.

Russ stated that with regard to the issue of future CI-I authority for NBC, staff struggles to ensure that everything is shown on the plans, he does not see it happening. A PLS is needed to mark a property line for new construction situation where the parcel may be in the woods, and there are no exiting features from which to measure distance to proposed system. Susan agrees with Russ’s statement about NBC, and stated that considering the sensitivity of the critical resource areas and that at this time people are opting to not do repairs, if we can ensure qualified people are available to do the work, at a reduced cost we can enhance the likelihood of people doing repairs. Joe countered that it may not result in lower costs.

Joe further stated that these AE systems should be designed by qualified people with the proper education and that the TRC is acting in the face of the law. This proposal is not legal. The TRC is knowingly violating the law. Noel objected that the TRC is knowingly doing what Joe is accusing them of. Russ stated that the TRC has no authority to direct DEM to do this and that DEM legal is already looking at it. Noel added that the TRC is charged with providing technical opinion regarding CI-I ability to do repair with AE and all they are doing is this, and considering if there are eligibility and submission standards that can be developed.

Tim noted that the things that Joe is objecting to are already being done by CI-Is, based on repair submissions being required today.

Vote:

Approve: Noel, Tim, Susan and George

Oppose:

Recused: Joe recused himself because the issue is in the face of two laws and he has a conflict.

Russ asked Joe why he would recuse himself rather than oppose the motion, since he is opposed to it. Joe explained that he does not want a potential conflict of interest. Tim clarified that the motion is regarding moving forward with development of the list of proficiency document, not to recommend the additional design authority.

Motion: clarification and restatement

Susan clarified the motion: Move forward with outline presented summarizing proposal to have certain CI-Is design IA as repairs. Russ restated the motion made by Susan: To support the proposed outline on the additional requirements and demonstration of proficiency for repair submission of specific AE systems with the specific modifications discussed today.

Motion: Susan restated her motion as stated above by Russ.

Second: George seconded the motion

Vote:

Approve: Noel, Tim, Susan and George

Oppose:

Recuse: Joe

Joe changed his vote to "Oppose", following discussion of the requirements for recusal including not participating in discussion of the subject in question.

Vote:

Approve: Noel, Tim, Susan and George

Oppose: Joe

Russ sought support to hold the remaining agenda items until the next meeting at which time we will also discuss Aquaworx Remediator. There was no objection to do so.

The group agreed on January 16, 2009 at 8:30 in the SKTH Council Chambers, for the next meeting, pending availability of the room.

The meeting adjourned at 12:10 PM.