

**INNOVATIVE/ALTERNATIVE SEWAGE DISPOSAL TECHNOLOGIES
TECHNICAL REVIEW COMMITTEE (TRC)**

January 27, 2006 Meeting Minutes

APPROVED

Attendees:

TRC members present: Noel Berg, Russ Chateauf, Dave Burnham, Susan Licardi, Tim Stasiunas, Ken Anderson, Joe Frisella, and Dennis Vinhateiro

TRC members absent: George Loomis

Others present: Deb Knauss RIDEM

Russ called the meeting to order about 8:20 AM

Materials distributed:

- Draft Agenda for today's meeting - 1/27/06
- Draft Minutes of 12/16/05
- Summary of TRC review of White Knight
- Copy of Advantex AX Denite Certification
- Information on ADS Pipe
- E-mail from Chuck Schwabe to George Loomis regarding solid handling in effluent pumps (Suggestion to revise RI policy)

Minutes

Information recorded regarding the use of BSFs in Critical Resource/drinking water supply areas prompted discussion of whether the decision to require PSNDs when possible in inland areas where phosphorous is the nutrient of concern, may require designers to submit applications for variances in order to accommodate use of the PSND. A guidance clarifying this will be prepared by DEM.

Page 2: second bullet beneath additions to the AX denite certification should read: "... (design flow of 2,000 gpd and over) being monitored"

Page 2: beneath "Use of BSFs in Inland Critical Resource Areas" in 1st paragraph, last sentence should read: "... a conventional leachfield with an advanced treatment system, in inland..."

Page 2: 5th paragraph beneath "Use of BSFs in Inland Critical Resource Areas", in the first sentence, should read "... must use a PSND with an advanced treatment system, other wise a BSF will be required."

Page 3: In the last paragraph beneath floating AX pods, delete "with four bags of sac-crete on each side".

Motion: Noel made a motion to accept the minutes with the necessary corrections.

Second: Dennis seconded the motion.

Vote: All present who were present at the December 16, 2005 meeting voted in favor (Noel Berg, Russ Chateauf, Susan Licardi, Tim Stasiunas, and Dennis Vinhateiro)

White Knight

Decisions made and issues discussed at the last three meetings were presented in summary form to facilitate incorporation of these in the terms of the approval of the technology.

A member had been told that in some cases the WK does not begin to work for up to 5 months. Russ decided that, based on the information presented to us it seems unlikely and that we would deal with the isolated incidents if they should occur, rather than pursue at this time by requiring KTS to develop a procedure for doing so.

Whether to limit use of the WK to systems with a previously approved design prompted the following discussion:

Sometimes there was no address at the time the application was approved, plat and lot numbers sometimes change after the approval is issued, in cases such as these it may be impossible to find a permit for a system which was approved in the 70s or 80s.

It seems to be unfair and unreasonable to make this a requirement with consideration of the issues noted. Additionally, in the case of some of the old permits, the WK site investigation may provide more information. TRC decided that systems either have a permit or a site investigation.

Terms of the WK approval:

Application **must be submitted as a repair application**, even where the system is proposed to be used where there is no current failure.

Use of the WK must be limited to systems which: either have received state approval or are determined by the site investigation process, to substantially comply with prior standards (based on plan drawn-up by designer showing the results of site investigation work, including tank type and size, estimated SHWT, and leachfield location, type, size and capacity, and locations of all wells within 100 feet of leachfield, public wells within 500 feet of the leachfield, and public water lines).

A copy of the site qualification form used by the company, and a copy of the original design plan for the system, (which may be a copy of the originally approved plan or drawn up based on the site investigation work which we would require to identify location and size of tank and d-box – if used and the type and size of leaching area in use) must be submitted with the ISDS **repair application**.

Department will reserve the right to reject the use of the technology in any instance in which, after application review, the Department determines that replacement, reconstruction or other rehabilitation of the system is required.

The WK may not be installed in cesspools, or block or steel tanks, or in substandard tanks, (11/18/05)

In no case may a tank of less volume than 1,000 gallons. (11/18/05)

Although KTS requires that effluent filters be used with the WK, DEM will require their use in each application. (11/18/05)

There would be no design flow restrictions (11/18/05)

The Department will require a **detailed training manual, notification of training to be conducted and who has been trained.** (11/18/05)

The designer and installer must be DEM licensed, and trained and approved by KTS (incorporate the same language in the AX cert....)

Two-year maintenance contracts required (11/18/05)

When a WK is installed in a new system, no leachfield reduction will be approved. (11/18/05)

Reporting Requirements

Reporting requirements would be effluent data for three systems and documentation that the symptoms which had indicated hydraulic failure are no longer observed. (11/18/05)

Must report annually, all installations, sites which were rejected and systems which were removed with any necessary explanation. (11/18/05)

List of approved, trained dealers/designers/installers submitted annually and a means to check the status at any time.

Training

- a) The vendor shall submit to the Department a detailed agenda and a list of presenters and their credentials prior to offering a training event.
- b) Following the training event, the vendor is required to provide each attendee who successfully completes the training with documentation of having done so.
- c) Following each training seminar, a list of those who have satisfactorily completed the training shall be submitted to the Department.

The Vendor shall provide to the Department within six months of the issuance of this approval, a list of trained Maintenance providers. The names of at least two qualified service providers shall be maintained on the list at all times. Properly trained homeowners may perform operation and maintenance on their own systems.

The Vendor shall have an inventory of System replacement parts available locally.

If a failure is egregious, such as sewage on the surface, we can't have this condition persisting for 5 months. DEM, call KTS and ask how they deal with such situations.

Motion: A motion was made by Noel to approve the White Knight with the approval to incorporate the conditions specified above.

Second: The motion was seconded by Joe.

Vote: All present voted in favor of the motion (Noel Berg, Russ Chateauneuf, Dave Burnham, Susan Licardi, Tim Stasiunas, Ken Anderson, Joe Frisella, and Dennis Vinhateiro).

ADS Pipe

Brian Moore has been receiving requests to use this in place of PVC for construction of PSNDs. Strength issue: Some discussion that ADS must be shown to be as strong as PVC. Issue of ½ pipe – not manufactured as such, the pipe is manufactured as a pipe, the structure which is assigned the strength ratings. Upon bisecting the pipe, the strength ratings no longer apply, as the material is no longer a pipe. As pipe, ADS is stronger than PVC, and although once it is cut, the standards no longer apply, though the corrugations would lend strength.

It was noted that approval of ADS for use in construction of PSNDs would require a minor edit to the SFGD which specifies PVC.

Motion: Tim made a motion to allow use of ADS pipe for construction of PSNDs as follows:

- Must be N-12 or equivalent (corrugated exterior, smooth interior)
- Smooth interior wall
- Soil tight joint
- Joints must be covered by filter fabric
- Support pipes placed every 4 feet
- Inspection ports every 20 feet
- The distal end and ports must be wrapped with filter fabric.

Second: The motion was seconded by Dave.

Vote: All present voted in favor of the motion (Noel Berg, Russ Chateauneuf, Dave Burnham, Susan Licardi, Tim Stasiunas, Ken Anderson, Joe Frisella, and Dennis Vinhateiro).

Effluent Pumps - Specifications

After brief discussion during which all present acknowledged the necessity to modify RI policy on the referenced topic, a motion was made to approve the change.

Motion: Joe made a motion to modify the solids handling requirements for effluent pumps from capacity to pass two-inch diameter solids to capacity to pass ½” to ¾” solids.

Second: Dave seconded the motion

Vote: All present voted in favor (Noel Berg, Russ Chateauneuf, Dave Burnham, Susan Licardi, Tim Stasiunas, Ken Anderson, Joe Frisella, and Dennis Vinhateiro).

Other

Denite Performance Standard

Joe proposed considering eliminating the denite performance standard of 19 mg/L TN concentration, as treatment performance is based on effluent data compared to a grab influent sample. Ideally, sewage flow to the system would be considered, since sewage flow may approach design flow and the system yields treated effluent and with lower TN concentration than a system receiving less sewage, yielding a higher TN concentration, but contributing a lower TN load to the receiving environment.

Russ reported that the 19 mg/L came from MA requirements. They were considering dilution with recharge to achieve some TN concentration at the property line and looking for a 50% reduction of TN based on an assumed TN influent concentration of 38 mg/L. He also reported that he found online that there is no standard in MA requiring denitrification to protect the ponds and embayments.

Joe wanted to know if we could consider a sliding scale applied for performance objectives based on use, rather than the current TRC policy of 19 mg/L and 50 % reduction.

Another potential consideration: two different nitrogen reduction approval levels or types.

Nitrogen credits and purchasing of nitrogen treatment easements is an alternative.

The group considered how to determine when a single family home is not in compliance. If the monitoring of the three AX single-family homes is reporting a 50% reduction, we may consider the systems to be in compliance, but if they were not achieving a 50% reduction, we would require that the systems continue to be adjusted.

Tim suggested that a checklist be developed incorporating all the application requirements.

Motion: Joe made a motion to adjourn the meeting.

Second: Ken seconded the motion.

Vote: All present voted in favor.

The meeting adjourned about 12:10 PM.

Next Meeting

Next meeting was scheduled for February 17, 2006 from **8:00** to **Noon** at the South Kingstown Town Hall at 180 High Street in Wakefield.