

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

**June 8, 2005 Meeting Minutes**

**DRAFT**

**Attendees:**

**TRC Members: Noel Berg, Joe Frisella, Sue Licardi, George Loomis, Tim Stasiunas, Russ Chateaufneuf and Ken Anderson**

**Others: Jim Dunlap and Alex Grosso of J & R Engineering, Brian Moore and Deb Knauss RIDEM**

**Russ called the meeting to order about 8:15.**

**Minutes: Tim made a motion to accept the minutes of April 2004 as presented. The motion was seconded by Joe. There was no discussion. All members present voted to accept the minutes as presented.**

**Biomicrobics**

**Request upgrade of nitrogen approval for the FAST system from Class Two to Class One**

**Application was made to the Department on June 24, 2003 for a Class One Approval for the FAST system for nitrogen reduction. With**

consideration of the issue date of the initial certification, this application satisfies the rule requirement for Class 1 certification that the System be approved in RI or three other jurisdictions for at least five years.

There was a set up and an O & M issue with a system owner in Foster: The blower was set 1 hour on / 1 hour off, it should have been set to run continuously. This owner, an HVAC engineer, wanted to perform the O & M on his system. Although he was willing to receive any necessary training, training was not available. J & R reported that they do now have training available and have trained three service providers. Also that this system owner has not provided any service documents to them.

J & R states that they must conduct O & M for the first two year period; they will not sell a unit if a two year maintenance contract is not purchased with the unit, thus assuring that the system is receiving proper O & M during the initial 2 years of use, as required in their certification. There have been complaints regarding this exclusivity. URI has received calls from system owners concerning odor problems and delays in service response by J & R. Additionally there is confusion on the part of homeowners concerning who does what, because J & R the contract does not include O & M on the RSF, BSF or PSND to which the FAST system often discharges.

**J & R is concerned that if a contract with another service provider is broken, they would not know and if the state has no enforcement mechanism in place, homeowners will get away with canceling their contracts. It was suggested that DEM should require a service contract for the whole treatment train**

### **Suggested Possible Solution**

**About 500 FAST units in use – can J & R service this many systems and be responsive to system owners?**

**Service providers trained by Bio-microbics, would be authorized to conduct the necessary O & M. The list of company trained service providers will be given to homeowner. Cancellation or non renewal of contract must be reported by the service provider to the vendor who informs DEM.**

### **TRC Requests**

- Clarification of the complaint made by the Foster system owner (available from DEM file records)**
- The application must indicate that there are at least two additional service providers.**
- Vendor must offer for sale the two-year service contract, but not couple this with sale of the unit**
- TRC require that there be training for anyone who wishes to be trained**
- Clarification from Bio-Microbics regarding whether they provide training**

- If so, what does the training cover, how often are sessions conducted and how many have been trained**
- Provide a list of the trained/certified service providers**
- What must be done during service visit (O & M required by manufacturer should be incorporated in the nationally sanctioned O & M service provider training)**
- Troubleshooting list, which would be the learning objectives for service providers / OWT offered nationally sanctioned class on O & M of I & A systems, with stipulation that parent companies be contacted for additional training and required O & M activities.**
- What problems have been observed with the FAST system installations in RI / other jurisdictions as well???**
- Data provided – most/ all? were residential, which would not support the approval for denite over 900 gpd.**
- Flow equalization process needs to be clarified. Submit schematics of the treatment train .**
- Seasonally used homes and start-up. Parent company did not recommend microFast where designer knew that use would be seasonal. Is this still the case, and if not what caused the policy change?**
- Provide true costs of O & M, incorporating BSF or PSND in addition to the FAST unit**
- Submit the data required by the 10/99 certification three reports (4/yr one in each season) for two years so that it is incorporated in the June 24, 2003 application currently under consideration.**
- Are the requirements of the other states which have approved the**

**system for nitrogen reduction similar to ours?**

**Letter to be sent to Bio Microbics requesting the information specified above.**

**Advantex**

**Application for nitrogen reduction**

**Orenco (OSI) will not sell units with out telemetry panel, which costs \$300 – 400.**

**George noted that he had sent data to OSI before the date of the application submission which is not included in the application package.**

**Since some of the systems in use are serving residences with very low flows, the TN concentrations are high, there was some discussion regarding the potential for considering total load of TN, as an 18 mg/l home may be discharging 600 gpd in contrast to the higher TN from an ultra low flow home.**

**The AX20 commercial application is approved for uses other than residential and for sewage flows greater than 600 gpd, but there is no consideration of wastewater characteristics.**

**Request of OSI:**

- Submit URI Demo Project data which was submitted to OSI before the date of the application and is not included in the application dated January 4, 2005.**
- Submit all the other data which was submitted with the initial application in support of nitrogen removal**
- AX performance compared with RX**
- About 7 of 10 of the AXs installed do not meet the TN reduction criterion, this should be addressed in the application; the RXs are meeting the TN reduction criterion.**

### **NEIWPC Data Evaluation System**

**NEIWPC has been developing a data evaluation system. Obtain and provide to TRC.**

### **TN Reduction Criteria**

**There was brief discussion concerning the merit of developing new nitrogen criteria; Rob Adler of EPA has been considering a standard of 5 or 10 mg/L for adoption by Wastewater Management Districts. While such a low TN concentration requirement for treated effluent may drive the advancement of treatment systems, the necessity a realistic standard was acknowledged. The 19 mg/L TN in use in RI is from MA; it represents 50% reduction of TN, assuming 38 mg/L TN residential wastewater.**

**If a more stringent standard were to be adopted there would have to**

**be sound justification of why as well as a realistic method for achieving it. It should be linked to typical daily sewage flow and/or consider percent removal and total mass nitrogen removal.**

### **Annual Reports**

**Annual reports from Bio-Microbics and OSI were distributed. Bio-Microbics reports that 78 systems were installed during the one year reporting period. OSI reported that 19 AX20s and 216 RX30s were installed during the one year reporting period.**

**Russ reported that about 20% of the approximately 1,500 NBC permits are issued annually are for I/A systems.**

### **Bioclere**

**The Bioclere Class II application for removal of BOD and TSS and when configured in a recycle mode, for reduction of TN, was unanimously approved at the last meeting (April 2004). The Draft Certification and design manuals for commercial and residential use were distributed to TRC.**

### **Nitrex**

**Questions and issues raised by the TRC were directed by Peter O'Rourke to Pio Lombardo who did respond in writing. This application will be re-evaluated in the near future.**

### **Cromaglass**

**Application (Class II System – BOD / TSS reduction) is approved (certification issued 3/22/02 and expired 12/31/04)**

**An application for de-nite requires review; additional TN removal data was submitted 3/03**

**Zoeller**

**Copies of pump and filter spec sheets distributed to TRC members. No application pending.**

**Freezing BSFs**

**The memo which was sent to designers April 30, 2004 was distributed to TRC members. None of the TRC members present reported having any knowledge of BSFs freezing during winter 04/05.**

**BSF Guidance Update**

**It was noted by George, that the BSF document is due for update; group agreed.**

**Pea stone**

**There was some discussion regarding availability of pea stone. It was reported that Holliston does not wish to provide pea stone independent of sand media. Dry Bridge (a supplier in North Kingstown) is meeting the spec for pea stone.**

**Cesspool Phase Out Bill**

**Russ summarized the activity on this proposed legislation for the legislative session 2005. A meeting to discuss this with the acting DEM Director and interest groups has been scheduled.**

### **Next Meeting**

**Next meeting was scheduled for July 8, 2005 from 8:00 to Noon at the Warwick Sewer Authority. Note that the time is one half hour earlier than we usually meet!!!!**