

AOSS Periodic Review Workgroup Meeting Minute

November 1, 2017

9 a.m. Madison Building, 109 Governor Street, Richmond, 5th Floor Conference Room

Polycom Location: 1502 Williamson Road, Roanoke Health Department, Roanoke

Members Present: Dwayne Roadcap, Karri Atwood, Kemper Loyd, Doug Canody, Marcia Degen, Darren Mong, Mike Burch, Joel Pinnix, Nick Noble, Valerie Rourke, Alison Blodig, Colin Bishop, Marie Christine Belanger, Curtis Moore, Lance Gregory, Jim Bell

Objective: Recommend to the Sewage Handling and Disposal Advisory Committee changes and/or revisions to the AOSS Regulations with respect to Sampling, 12 VAC5-613-90 & 100; TL3 field sampling procedures, 12 VAC5-613-70; and Performance Requirements, 12 VAC5-613-80 & 90.

VDH staff began introductions and started meeting discussing 12 VAC5-613-70.

VDH staff recommended clarifying subsection (5) and the need to clarify that it referred to samples already taken.

Generally approved treatments that do not perform in accordance with applicable performance standards can be revoked.

-A member proposed getting rid of section 70 and simply using NSF 360, it would also get rid of de-listing, and it would be up to the design engineer.

-Manufacturer suggested further language around de-listing process, saying add language about de-certification following APA process. Also, don't want to de-list based on grab samples every 5 years. Not aware of any manufacturer that have been through NSF 360 to this point so it would be a huge cost burden for manufacturers. NSF 360 in part 4.1, the systems will be in random climates.

-Another manufacturer stated that there should be a mechanism for de-listing, suggested using 10 units with 24 hour composite sampling. Some members were concerned that de-listing could create a cloud on a property that would inhibit transferability.

-Other members concerned NSF is not predictive of field performance. Treatment unit identify waste dosage and volume. Different sizes of BODs that NSF doesn't address. There has to be a mechanism to de-list, member concerned that more and more failing systems installed on property without de-listing.

-VDH staff comment that there appears to be two issues, barrier to entry for new systems, and confidence that systems will do what they say they will do.

-Members talked about getting rid of TL3. Member said that VDH data doesn't support TL3 standard, that 30-30 is the gold standard any other sample doesn't stand up, so it is basically hit or miss

-VDH staff commented that if we got rid of TL3 for general approval, then we would need to get rid of the closer separation distances and higher loading rates for TL3.

-Discussion about why systems not meeting 10-10 standards. Member stated that margin of error is much smaller and you need to increase enforcement. If we take NSF 360 approach, then you need a tertiary treatment on the end of the system and step up enforcement.

-Manufacturer added that there has to be some sampling. There has to be some engagement in the regulatory environment. Most manufacturers would welcome a step-up in enforcement because it really impacts the market when stuff goes in and it doesn't work. Or our products are misapplied or installed improperly. For enforcement there is a common sense approach, regulatory enforcement has to happen where they are installed correctly but not performing appropriately.

-VDH staff talked about the 5 year plan and separating permitting and enforcement. Staff will be focused on data analysis and enforcement. We are not where we want to be in enforcement right now but we are headed in that direction. With active enforcement, a 10-10 field expectation is not unreasonable. From VDH perspective, we would like to keep this with TL2 and TL3, we went through multiple stakeholders to get the rule. Without huge manufacturers disagreement, we want to keep it. Member stated that he would like to see the scientific reason why VDH should keep it 10-10. Staff responded that we are moving into a world where we're expecting higher treatment, referenced SWIFT program. Higher standard will improve the environment, we're looking at putting these things into sensitive receiving environments to protect groundwater and public health. DEQ representative stated, in reuse program, DEQ level 1 reclaimed water standards, where there is potential for human contact is 10 mg/liter, what VDH has from 0 to 6, there is potential for human contact so 10 mg/liter BOD is consistent with DEQ.

- Member stated DEQ regulation is written around huge flow facilities, so you can't compare. These things are being sampled 5 out of 7 days. Disingenuous to make that comparison. What we're trying to do is mitigate risk, the struggle is that we have TL2 v. TL3, which is really splitting hairs. Government is picking winners and losers and scientific point of view, randomly sample over and over they won't make 10-10. We would support a better effluent for environment. Struggle is that we aren't really protecting the environment.

-Several manufacturers stated that there is a design difference in 10-10 and 30-30 and that some field data from Ohio is showing 60-60 effluent where it was supposed to be 30-30. They agreed that enforcement is important and there should be a process to show that system meets level of standard and if not then step up enforcement.

-Member pointed out that NSF standards reference CBOD. BOD ok until you get into nitrogen. Change to 8.3 CBOD, modify TL2 as well to about 25, as well as NSF standards. We would have to change general approval and non-general approval to CBOD from BOD.

-For more enforcement, if you get into sampling for enforcement, you need to change how you do service provider, get certification from manufacturer. When you pull a bad sample from the system, it could be homeowner abuse, the treatment technology, installation and service. If you consider de-listing the manufacturer, you need to give manufacturer the ability to “control” the service provider. Manufacturer could say we no longer certify this provider to install the system.

- Member pointed out that 12 VAC5-613-70 (5) needs more clarification, that it refers to manufacturers and possibly an enforcement mechanism for de-listing, or we talking about de-listing for a manufacturer or a particular system.

-Members discussed the plant hardiness zone amendments to 12 VAC5-613-70, several members were in favor of getting rid of this and instead utilizing NSF 360 and state which states specifically Virginia would accept data from.

-VDH staff and members discussed BOD performance and temperature, and how reaction rates change with temperature. If NSF 360 already has a component to pull in systems from different climates and randomly select, then member indicated that it would be ok to just use 360 and eliminate plant hardiness zones.

-VDH staff would like to keep provision C, so if they don't do NSF 360, they can submit out of state data.

-Member brought up issue of where climates similar rainfall can be quite different, need sampling that has a bunch of different areas and has to be random or be very specific about where we will accept data from.

-Several members stated that they would like to see a stringent O&M requirement program for operators, with some degree of control by manufacturers, and perhaps collect more samples for enforcement. After strong O&M program in place, then enforcement for de-listing would be appropriate. Member stated that no system will meet the performance standard if they are not maintained and operated appropriately.

-Manufacturers, program needs to focus on enforcement and certification of providers. Member says North Carolina does good enforcement and gets performance numbers.

-Member proposed a checklist to be filled out by the providers to make sure proper maintenance is occurring. Regulated O&M program. Technology compliance sampling (can we all agree on that?) Yes, but a random audit of systems, with a composite sample taken, and if data shows problems with it, then perhaps de-listing. If you have a system that doesn't meet the standard then there should be a de-listing procedure.

-Member says we wouldn't need the regulation if the market would naturally move away from certain systems, but that's not the case because builders still choose cheap systems regardless of performance. Enforcement should be on homeowner, you're not meeting 10-10, the owner takes burden. Member concerned that if no de-listing procedure, it opens manufacturers up to class action law suits. Member says that it is important to have a de-listing procedure, but it won't

happen that often because manufacturers will continue to improve their product based on feedback in the field.

-Members discussed issue of where system is maintained and installed properly, and system still isn't meeting requirements, would you cite the engineer? Talked about the role of DPOR (Department of Professional and Occupational Regulation). If you follow the Department's requirements, then you can't be responsible for anything.

-Member brings up that if you are modifying O&M program, then you need to modify 12 VAC5-613-70(1)(C)(3), the O&M from other states has to be similar to Virginia's program.

-VDH staff- Part of the reason for general approval, is so we don't have to do individual site evaluation and testing. If we drop general approval, how does the state or anyone know that the unit is functioning as advertised?

-Manufacturers are willing to do testing and sampling, how would you want to connect the O&M and enforcement to general approval.

-Member stated the regulatory agency has to level the playing field. As part of the general approval process, manufacturer provide minimum O&M, general approval is only applicable if the system is maintained in accordance with O&M manual.

-Manufacturer stated that retesting every 5 years is not that bad but recertifying and retesting 20 systems every 5 years does not make sense.

-Manufacturer proposed foregoing testing 20 systems in the field and instead put in BMPS for all these systems, it will be more prescriptive. BMPS will include adequate vertical separations so that there isn't impact to groundwater. Mitigate risk through BMPs.

-VDH needs to empower designers or providers to make a system be corrected.

-Member suggested looking at 12 VAC5-613-120 O&M operator responsibilities, maybe make changes there. Does there need to be more reporting by operators to ensure systems maintained?

-VDH staff stated that the issue is we aren't getting enough O&M reports submitted currently.

-Manufacturer asked staff about approval process right now. Most systems previously approved under GMP146, everybody sought a variance to recertify for time frame. If these things are possibly available under proposed draft language 12 VAC5-613-70 (1) during the periodic review, do manufacturers rely on these changes or will you extend the time frames? VDH staff responded that these draft proposals are just suggested changes based on member feedback, have not been reviewed or certified by the Commissioner or the Board of Health, must rely on what is currently in place.

- Conclusion, staff will draft more revisions to 12 VAC5-613-70 and set a new meeting date to discuss section 12 VAC5-613-80 & 90 and 12 VAC5-613-100.