Virginia Department of Health (VDH)
Meeting Summary
Sewage Handling and Disposal Advisory Committee (SHADAC) Meeting
July 17, 2013

List of attendees at central location:

Advisory Committee Members

Valerie Rourke – Acting Chair	Dr. John Galbraith	Jeff Walker
Pete Kesecker	Bob Mayer	James Hall
Joel Pinnix	Dr. James Pyne	James Davis-Martin
Tom Ashton	Dwayne Roadcap	

VDH Staff and Guest

Lance Gregory	Dr. Marcia Degen	Jim Bowles
Tony Bible	Jim Slusser	Bob Marshall
Mike Burch	Tim Wood	Mark Courtney

List of attendees at remote location:

Advisory Committee Members

Bob Lee

Administrative

1. Welcome & Introductions of Members

Mr. Gregory stated Mr. Walker will sit as proxy for Matt Tolley from the Virginia Association of Professional Soil Scientist (VAPSS). Mr. Ashton will sit as proxy for Colin Bishop representing manufacturers. Mr. Mayer will sit as proxy for Curtis Moore for Virginia Onsite Wastewater Recycling Association (VOWRA).

Chairman Day is unable to attend. Mrs. Rourke was selected by the committee to sit as acting Chair for the meeting.

2. Introduce New Members

Mr. Gregory stated Mr. Tolley was officially appointed as the representative for VAPSS by the State Health Commissioner. Dr. Galbraith was nominated to replace Dr. Greg Evanylo as the representative of state universities and colleges, and Mr. Martin-Davis was nominated to replace Ms. V'lent Lassiter as the representative for Department of Conservation and Recreation (DCR).

3. Approve Agenda

SHADAC members requested several additional items be included on the agenda.

Under old business, the SHADAC added a discussion topic about whether VDH should draft a policy addressing the recent Attorney General opinion's about local ordinances.

Under new business, the SHADAC discussed VDH should clarify the role of Onsite Soil Evaluators (OSE) and transitioning certain elements of 12VAC5-615 (the AOSE Regulations) into policy.

Under new business, the SHADAC added the topic of tracking permits and the use of substitute materials.

The SHADAC approved the revised agenda.

4. Review and Approve Minutes (January 23, 2013)

Mr. Gregory commented that the revised minutes were not provided in advance to SHADAC members for review and asked that approval be postponed.

The committee agreed to postpone approval of the January 23, 2013 minutes until the next SHADAC meeting.

Old Business

1. Draft Policy on Local Ordinances.

Mr. Pinnix commented that Chapter 786 of the 2009 Acts of Assembly preempted local government's authority to create local ordinances for alternative onsite sewage systems (AOSS) that would prohibit the installation of AOSS otherwise permitted by VDH. Mr. Pinnix stated that VDH was asked during the previous SHADAC meeting to create a policy on the authority of local ordinances in relation to state regulations in light of the recent opinions from the Attorney General. Mr. Pinnix inquired as to the status of that policy.

Mr. Lee commented local governments have broad authorities regarding zoning requirements that may limit AOSS but do not prohibit AOSS.

Mr. Roadcap asked for clarification of the SHADAC's recommendation and whether the intent of the request for policy was to discuss how local health departments should handle perceived inconsistencies between state requirements and local ordinances.

Mr. Walked commented he believes state employees are acting on behalf of the localities to enforce local ordinances.

Dr. Pyne stated that VDH employees must uphold state requirements.

Mr. Pinnix commented that to his knowledge only Augusta County had statutory authority to assess local fees.

Mr. Davis-Martin asked whether the intent of the SHADAC's request is to create a policy that inventoried conflicting ordinances or just how VDH employees would deal with issues as they arose.

Mr. Roadcap provided background on the Division's present guidance to local health departments when a determination was made that an application complied with state regulations but did not with county ordinances. State employees have been advised to evaluate designs for compliance with state rules and to have a county employee evaluate compliance with local ordinances. If the state rules are met, but the local ordinance are not, then the owner should receive a letter from both a state employee and a county employee. The letter would confirm compliance with the state regulations as determined by the state employee and the county employee would provide notice about not complying with the local ordinance. In those cases, if the county provided an administrative appeal, then that information would be included in the letter. Mr. Roadcap asked whether there were concerns with the current guidance.

Mr. Lee felt the owner should at least be informed of the recent Attorney General's opinion and let the owner choose what they want to do with that information.

Mr. Ashton commented that the legislation was clear and localities disagree with the Attorney General's opinion.

Mr. Pinnix raised concerns of how appeals would work and whether the Administrative Process Act (APA) standard was met. He felt a VDH policy on the issue would be appropriate.

Mrs. Rourke commented that one solution might be a white paper stating the facts for localities to review.

Mr. Pinnix commented that the initial recommendation was to draft a policy and bring that to the SHADAC for review, which to this point had not been done.

Mr. Lee added that another alternative was for VDH to say no to the recommendation.

Mr. Roadcap raised concerns that VDH would be value-judging other agency's or locality's regulations or requirements. VDH does not have authority to adjudicate another governmental body's rules or determine whether another agency or local government ordinances or rules were valid.

Mr. Walker commented the policy should be expanded to include conventional systems as there are some local ordinances that also deal with conventional systems. He asked at what point are local ordinances up to a local employee to handle.

Mr. Pinnix responded that the Attorney General's opinion describes preempting AOSS requirements but localities still have the ability to enforce requirements for conventional systems. The question about who enforces the ordinance was important for VDH to answer.

Dr. Pyne raised concerns that the agreements between VDH and localities may present a conflict of interest.

Mr. Mayer motioned that this issue be placed on the agenda for the next several SHADAC meetings. The motion passed unanimously.

New Business

1. Discuss process to update confirmation of representatives for the SHADAC (Gregory)

Mr. Gregory stated VDH will be reaching out to SHADAC organizations with odd year appointments to reconfirm SHADAC representatives and to allow an opportunity for new representatives as the organizations and current representatives see fit.

2. Update on House Bill 1726 (HB 1726) Emergency Regulations – Gravelless and Drip Dispersal (Degen/Gregory)

Mr. Gregory provided a brief outline of the emergency regulation process which began in March with the enactment of HB 1726. VDH convened two advisory committees, the Chamber and Bundled Expanded Polystyrene Technical Advisory Committee (CBEP TAC) and the Drip Dispersal Technical Advisory Committee (DD TAC). The CBEP TAC met three times and the DD TAC met twice.

Mr. Gregory stated the draft language was based on feedback from the two TACs and existing VDH policies. The draft emergency regulations approved gravelless products already approved by existing VDH policies. The draft regulation established a process for new products to be approved and set requirements for minimum exterior width, minimum height, permeable interface, storage capacity equivalent to a gravel trench, loading rates based on Guidance Memorandum Policy 135 sizing, a method for manufacturer's to request deviations, a requirement for reducing effluent velocity with open bottom materials, and a process for substitution of products in accordance with 12VAC5-613-310 and 12VAC5-613-330 of the Sewage Handling and Disposal Regulations. Mr. Gregory stated that VDH was internally vetting a policy for substitutions on VDH designs.

Dr. Degen provided a PowerPoint presentation on the development of the draft drip dispersal regulations. (See Appendix D)

Mr. Gregory stated that the regulatory package would likely be sent to the Board of Health (the Board) on August 12, 2013, and would be formally presented to the Board during their September meeting. Once approved by the Board the regulatory package would go to executive branch review. Once approved by the Governor, the emergency regulations would be posted

along with a Notice of Intended Regulatory Action (NOIRA) to draft permanent regulations. The NOIRA would provide a 30 day public comment period.

In regards to drip dispersal, Mr. Walker was concerned that VDH was mandating designs by professional engineers (PE) and asked whether PEs had reviewed the drip proposal.

Dr. Degen commented that PE's can still design pursuant to 32.1-163.6 of the Code of Virginia (the Code). The emergency regulations were a baseline for designs under 32.1-163.5 of the Code.

Mr. Walker raised concern about substitutions and homeowner education when reviewing bids for construction of onsite systems.

Mr. Pinnix asked when the public comment period would begin for the emergency regulations and if the SHADAC would see the final draft version prior to the Board meeting. Mr. Walker put forward a motion to have VDH provide a final draft of the emergency regulations to the SHADAC. Mr. Pinnix seconded the motion adding that it be provided 14 days prior to the Board's meeting. The motion passed.

Mr. Rourke supported the motion but added that the SHADAC must recognize VDH is following a process and there can be no further changes to the emergency regulations at this point unless completed by the BOH. However there would be an opportunity to make recommendations during the emergency regulations process and NOIRA to develop a final regulation.

Mr. Walker raised concern with VDH being asked to approve an OSE design. He felt VDH needs a policy that a substitution must be approved before the system is installed.

Mr. Lee suggested that one way to address Mr. Walker's concern would be to have the permit acknowledge that a substitution must be approved prior to installation.

3. Update on SHIFT (Roadcap/Bowles)

Mr. Roadcap provided background information on the "Safety and Health in Facilitating a Transition" (SHIFT), which was a process to maximize private sector input to the greatest extent possible while protecting public health. He discussed Appendix B, including the tentative meeting schedule and meeting topics. He discussed the SHIFT committee members, which would include help from the Department of Professional and Occupational Regulation (DPOR) and the Department of Planning and Budget (DPB). He stated that the SHIFT may present ideas for legislation, internal policy change, or regulatory change. Mr. Roadcap explained that VDH would also be talking with internal staff for ideas on how to move forward.

Mr. Bowles stated that Vincent Day is SHADAC representative on the SHIFT committee.

Mr. Walker commented that he thought economics would be an interesting component of this process and that VDH may be surprised by local responses.

Mr. Ashton commented that with years of work on this issue VDH must have an idea of how they are going to move forward. He added that no one knows better how to change their business model than VDH, but VDH needs to have some input if this is actually going to get done.

4. Update on process to rescind AOSE Regulations (Roadcap)

Mr. Roadcap provided a background on the handout regarding the fast track process for rescinding the AOSE Regulations (see Attachment C). He stated that the Governor had approved the fast track, and it would be published on August the 12, 2013, opening a 30 day comment period on the fast track process. The anticipated effective date of repeal would be September 20, 2013.

Mr. Roadcap pointed to page five of the handout for a detail list of changes, which provided a complete breakdown of the Board's authority about rescinding the AOSE Regulations. He commented that one frequent question how VDH would enforce some of the technical standards in the regulations. VDH would not experience any change in the program after rescinding the regulation and requirements for processing applications would not change.

Mr. Walker commented several critical sections in the AOSE Regulations would be lost, specifically section 30, section 100, definition under 120, section 200, and section 280. He commented that OSE work product was governed by the AOSE Regulations and if those regulations were rescinded, then in his opinion product quality was not governed.

Mr. Walker also raised concern regarding the quality of services provided by VDH and asked how this regulation would be captured moving forward. He also was concerned about how all parties would make sure that the design needs of clients were met.

Mr. Roadcap commented page two of the townhall document provided the legal basis for the action and VDH's authority moving forward. Concerns regarding design professionals being held to a lesser standard could be addressed in different and other ways.

Mr. Lee believed the regulations had to be eliminated. However, sections of the regulations and Guidance Memorandum Policy (GMP) 126.B had to be put back into guidance. He believed that DPOR used this regulation in the context of creating their testing and if it disappeared, then a portion of the standards of practice would also disappear. Mr. Lee suggested that there may be other kinds of documents, such as a white paper, that could assist people in terms of what was expected of them when putting together a permit package.

Mr. Roadcap commented that VDH was open to ideas.

Mr. Pinnix echoed previous concerns that there are components of the regulations that VDH and the private sector rely on. He raised concerns that if VDH eliminated the regulatory basis for some of these policies, then VDH would have an indefensible position. He believed GMP 126.B derived its authority from this regulation. Mr. Pinnix echoed concerns about different standards

of practices for private sector and public sector OSEs, adding that standards of practice have nothing to do with the SHIFT process.

Mr. Walker commented that GMP 126.B should be applied to all OSEs and PEs who perform site evaluations. He asked why VDH employees did not sign a certification statement.

Mr. Roadcap commented that the certification statement is required by the Code for private sector evaluations. He also commented on deemed approval and other differences between private and public sector designs. Mr. Roadcap added that VDH was open to discussion and was currently reviewing GMP 126.B and ways to move forward on this issue.

Mr. Pinnix commented that in his opinion when an applicant comes to VDH for a site and soil evaluation and design, the authority for VDH staff to perform the evaluation and design came from the authority of the individual OSE license through DPOR. Therefore, OSE forms should be signed, stamped and certified by VDH OSE.

Mr. Walker stated that a policy was necessary before the SHIFT process was completed. He made a motion for VDH to make GMP 126.B universally required for private and public sector OSEs.

Mr. Lee seconded the motion.

Bob Mayer abstained from the vote. All other members where in favor.

Mrs. Rourke commented that if the SHADAC is to continue making motions and recommendations for VDH to create policies then the SHADAC should prioritize the motions. The SHADAC also needed to hear back from VDH.

5. Variances for direct dispersal of effluent to ground water, repairs and voluntary upgrades (Gregory)

Mr. Gregory informed the SHADAC that VDH had received several requests for variance from section 90(C) of the 12VAC5-613 (the AOSS Regulations) to allow repairs on failing onsite systems. Two requests had been granted with specific conditions. Section 90(C) had specific requirements for AOSS with direct dispersal of effluent to ground water. Requirements included: 5 mg/L BOD_5, TSS, and TN, high level disinfection, pressure dispersal, renewable operating permits; increase sampling; and a hydrogeological analyses. The cost of meeting those requirements could be substantial. Several individuals with failing onsite sewage systems, which were already direct dispersal, sought variances to reduce treatment requirements to make the repair installation financially feasible and to remediate the existing public health risk.

Mr. Davis-Martin asked whether VDH was meeting the anti-degradation requirements and whether there were concerns regarding meeting those requirements during the regulatory promulgation process.

Mrs. Rourke commented that she was not aware of any situation where the variance was brought forward to DEQ for discussion; if the proposal was not meeting the object of the Chesapeake Bay Total Maximum Daily Load (TMDL), then there needed to be something clearly established between VDH and DEQ.

Mr. Davis-Martin agreed with comments on the TMDL and that VDH should offset those loads in some way. He commented that he hasn't seen anything where VDH was trying to address the TMDL.

Mr. Pinnix commented the standards that apply right now are unattainable for a single family residence and no one has attempted to design a system that meets the requirements for direct dispersal. He commented the treatment waiver was not a good option as it allowed a house with a failing system in the groundwater to put in a brand new system without treatment. The variance proposals were a far better design and was also affordable in many cases.

Following up on the TMDL discussion, Mr. Walker stated there were many other programs that had much more impact on the TMDL.
Mr. Roadcap commented that parts of section 90.D in the AOSS Regulations were meant to address nutrient pollution to the Chesapeake Bay.

In regards to the variance request, Mr. Davis-Martin commented that if current standards were unattainable, then having better treatment was beneficial.

Mrs. Rourke added another possibility would be that if VDH granted a variance, then the owner could be asked to identify some nitrogen offsets.

The SHADAC voted to adjourn the meeting and carry over the remaining items to the next meeting.

Adjourn

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Sewage Handling and Disposal Advisory Committee Meeting

AGENDA

Date: July 17, 2013

Time: 10 am to 2 pm

Location: 5th Floor Large Conference Room
James Madison Building
109 Governor's Street
Richmond, Virginia 23219

Administrative
1. Welcome & Introductions of Members
2. Introduce New Members
3. Approve Agenda
4. Review and Approve Minutes (January 23, 2013)

Old Business
1. Draft Policy on Local Ordinances

New Business
1. Discuss process to update confirmation of representatives for the SHADAC (Gregory)
2. Update on HB 1726 Emergency Regulations – Gravelless and Drip Dispersal (Degen/Gregory)
3. Update on SHIFT (Roadcap/Bowles)
4. Update on process to rescind AOSE Regulations (Roadcap)
5. Variances for direct dispersal of effluent to ground water, repairs and voluntary upgrades (Gregory)

Adjourn

Appendix A
Addendum to Meeting Minutes for July 17, 2013

To: Members of the Sewage Handling and Disposal Advisory Committee
From: Marcia Degen, OEHS

The following items were on the agenda as points of information, but time ran out and they were not presented. The following is a summary of points of information.

- Pump control panel clarification
- Potential Revisions to GMP 143 – Peat Disposal
- Revisions to GMP 147 (not on agenda, but an update was to be presented)

Pump Control Panel Clarification

12 VAC 5-610-880.8 states: *"Alarms. A high water alarm with remote sensing and electrical circuitry separate from the motor control center circuitry shall be provided. The alarm shall be audiovisual and shall alarm in an area where it may be easily monitored. When multiple pumps are utilized, an additional audiovisual alarm shall be provided to alarm when a pump motor fails to start on demand."*

It was recently brought to our attention that some standard panels do not strictly comply with this section of the regulations as often the control panel does not have the alarm on separate circuitry from the pump motor controls. The alarm is often on the same circuit as the control panel.

The most common arrangement is that there are two breakers in the home, one for the pump and the other for the control panel and floats, including the alarm float. If the breaker for the pump in the control panel or in the house is tripped the alarm still works. However, if the breaker for the alarm/controls in the house is tripped the pump will not work. That is because the control panel obviously controls the pump so if it is not active, there is nothing to 'tell' the pump to run. The pump could be run in manual mode – it has power.

From manufacturers: when a circuit breaker is tripped in a control panel, it is almost always the result of a motor (i.e., pump failure). In more than 95% of the cases where a circuit breaker is blown, it is the breaker controlling the pump rather than the breaker controlling the controls/alarms. That's why it is important that the pump be wired in a separate circuit from the controls/alarms. Because it is so rare for the controls/alarms circuit to trip if the pump is wired in a separate circuit, there is usually little concern that the controls/alarm breaker will trip, and that's why for single-family residential systems it is generally considered sufficient to wire the controls/alarms and pump in separate circuits without any special additional measures. Some manufacturers suggest wiring the control panel/alarm circuit to a frequently used light switch so that the homeowner would know when a circuit has been tripped.

In researching this, VDH considered if there were other alternatives that would provide a way to detect if the control panel/alarm circuit had been tripped. Those options were:

- A light that is powered when the control/alarm circuit is active.
- Battery backup to the alarm.
- Adding a third circuit for the alarm.
- Some manufacturers suggest wiring the control panel/alarm circuit to a frequently used light switch so that the homeowner would know when a circuit has been tripped.

After researching the regulatory language, it appears as if the language is more applicable to larger systems where the intention is to isolate the alarm from the higher voltage motor control center and pump circuits. Today in residential systems, we are using low voltage controllers and it is common to have the alarm on the same low voltage circuit as the controller. The alarm is still protected from any surges from the pump and it is isolated from a pump outage.

Conclusion: For small systems, the alarm must be on a separate circuit from the pump. The alarm may be on the same circuit as the control panel.

Potential Revisions to GMP 143 – Peat Disposal Policy

VDH is considering updating its peat disposal policy. A meeting of stakeholders will be held on July 24th, 2013 from 10-4 in the 5th floor conference room of the VDH Central Office (109 Governor St.). The SHADAC members were invited on July 2. Only one SHADAC member expressed interest in attending. The SHADAC will be updated as the status of the GMP revision at the next SHADAC meeting.

Potential Revisions to GMP 147

In addition to revising GMP 147 (Wastewater treatment unit testing protocol for TL3) to reflect the final AOSS Regulations, VDH is also proposing to correct the statistical procedure. Dr. Kevin Sherman pointed out an error in how replicates were analyzed which resulted in pseudo-replication. The current method treats all data points as independent measures and the number of 'n' in the current procedure is 80 as a result (20 systems sampled quarterly). The data collected from a given treatment unit are not independent, however. The correct way to analyze the data is to calculate the mean of the data from a given unit and then conduct the rest of the statistical analysis. The 'n' will now be a minimum of 20. This will result in a more conservative evaluation of the data. This effort will likely start this fall.

An additional revision or new GMP will also be developed to provide guidance on how to address N removal systems under 90.D. or the AOSS Regulations. Again this effort will start this fall.

Appendix B
Meeting Agenda for First SHIFT Meeting

A copy of this document can be found at:

http://www.vdh.virginia.gov/EnvironmentalHealth/Onsite/SHIFT/documents/handouts/SHIFT%207_18_13%20Meeting%20Agenda%20&%20Process%20Overview.pdf

Appendix C
TH-04 Form for Fast Track Proposed Regulations
Agency Background Document

A copy of this document can be found at:

http://www.townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\58\3981\6592\AgencyStatement_VDH_6592_v2.pdf

Appendix D
Drip Dispersal PowerPoint Presentation

Proposed Drip Language

Tubing

- Color coded
- certified by manufacturer for wastewater
- For septic effluent, self cleaning emitters
- Minimum linear feet = ½ absorption area
- Tubing on contour
- No more than 10% variation over field/zone
- Septic drip = 18 inch install depth, but recognizes AOSS regs and 12 inch cover install
- Secondary or better drip = 6 inches of cover

Absorption Area

- Uses same method from GMP 107
- 3 x the LPD trench bottom area from Table 5.4 for septic drip
- 3 x the pressured dosed trench bottom area from AOSS Regs for higher quality effluent
- Slope correction removed
- Landscape linear loading to be considered
- Air/vacuum release valves at high points

Dosing

- 6 hours emergency storage
- 18 hours EQ storage
- Time dosing
- 3.5 times drip lines plus supply and return manifold lines = minimum dose volume
- Restrictions on drain down (10% or less)
- Full dose requirement
- >1000 gpd ability to bypass a zone required

- Filtration required
- Flushing required at manufacturer recommended rate
- Flush waters to be returned to the treatment train where no adverse impact occurs
- Means to measure or estimate flow to drainfield and verify dose and flush rates
- Electrical requirements added
- All components protected from freezing
- Startup inspection required to verify design