West Virginia Sewage Advisory Board Meeting
Charleston, WV – June 3, 2004

9:10AM- Meeting Called to order

Member Attendance- Mark Whittaker-WVBPH, Paul Ashburn-Ashco-A-Corporation, Joe Eagle-Installer, Dave Watkins-WVDEP, Kirk Powroznik-WVBPH, Bill Clark-W.J. Clark Inc., Rick Hertges-Tri-State Environmental, Marvin Kerr-Installer, Larry Main-Brooke County Health Department, Todd Powroznik-Monongalia County Health Dept., John Perkins-WVDEP, Mike Aiton-Small Flows Clearinghouse, Steve Bayer-MOVHD, Stan Walls-Raleigh County Health Dept.

Guest Attendance- Evelyn Hopkins-WVDEP, Clement Solomon-National Small Flows Clearinghouse, Maryanne Kraynanski- Kanawha County Health Department, Steve Bayer-MOVHD, Dan Arnold-WVDEP

9:12AM- Mark welcomed Dan Arnold of the West Virginia DEP to the meeting.

9:15AM- Mark asked if everyone received a copy of the minutes and if there were any corrections or additions.

MOTION- Dave Watkins made a motion to accept the February 5, 2004 minutes, Bill Clark seconded, All in favor, motion carries.

9:25AM- Mark said there is going to be a training course for onsite evaluators at the onsite training center. He said he discussed with Small Flows the need for ongoing maintenance at the training center.

Dave- asked if there is a training session at the site.

Clement- there is one for the Appalachian Commission and it will be a day and a half long.

MOTION- Stan Walls made a motion for the board to authorize Mark to pursue maintenance with NODP. Larry seconded, all in favor, motion carries.

Clement said they are trying to generate more revenue for the site.

9:30AM- Paul Ashburn introduced Anish Jantrania. Paul said the SAB started talking about Product Verification Protocol (PVP) at the first meetings. He said this document will create a level playing field for the industry. Paul thanked the Technical Review Committee (TRC) for their time.

Anish said he was trained and educated as a wastewater engineer. He stated that there a re 5 important things in the document.

1. What is approved under this protocol
2. Why should a manufacturer or designer be interested in getting the approval
3. How does the approval process work and how much does it cost
4. When is product considered as approved or not
5. Where and how the product can be marketed in the state after the initial approval and after

Anish stated that the concept of this PVP was based on two concepts. The first was to allow the manufacturing industry to come into the state. The second was to offer citizens of the state performance assurances and financial protections against improperly functioning onsite wastewater systems.

Who's involved in the process?

1. applicant
2. OEHS
3. SAB
4. TRC
5. people who use the systems

Anish said there were two documents that were the turning point for the onsite industry.

EPA 832-R-97-001b April 1997 Decentralized Wastewater Systems are a cost effective long term option for meeting public health and water quality goals.

Voluntary National Guideline for Management of Onsite and Clustered Wastewater Systems EPA 832-B-03-001 2003 (1-800-490-9198)

1. Homeowner awareness
2. maintenance contract
3. operating permit
4. responsible maintenance entity (RME)
5. RME ownership

Application Form (page 27)

Technology vs Component-
A technology cleans up the sewage (dark to clear). A component does not clean up the water. It performs a different function (distributes)

Marvin Kerr asked why a professional engineer is needed.

Paul said this ties into WVOEHS engineering division.

Anish said you get more closeness. It is good. It should be a P.E. who understands sewage.

Paul said it would be a big liability for a P.E. to sign or rubber stamp.

Mike Aiton asked why it has to be a P.E. from WV.

Anish said WV has no control of P.E. from other states. There is no legal recourse.

Rick Hertges stated that there are enough P.E.'s specialized in WV.

Approval Levels (AL)

Anish began to talk about data. He said there are 4 approval levels:

Level 1: A technology or component for which little info on performance is known; however there is adequate scientific documentation and engineering design.

Level 2: Has met level 1 and has been tested at the design flow by a third party testing entity. Field data is not available.

Level 3: Has met level 1 and the field performance has been successfully evaluated in other states. However, performance of the component may not have been tested by third party recognized by the state.

Level 4: Field performance has been successfully evaluated in WV. Approval level 4 is the final approval. He said to get to level four you must have field data. That data can be from WV or data from another state. The flow chart on page three of the document explained this.

Mike said AL-1 will require more intensive field testing as opposed to AL-2 or AL-3. This should be in the document.

Key Elements in the Approval Process

- Design is based on sound scientific and technical principles
- 3rd party testing under control conditions is encouraged but not required
- 3rd party testing is required under field conditions, out of state data may be accepted
- Routine annual performance assessment if final approval is obtained
- "Delisting" if field performance does not meet requirements

Performance Data Classification Scheme

Mike asked what second party data is.

4 Levels of Treatment- Constituents of interest:
BOD and TSS are Group #1. Nitrogen and Phosphorous are group #2. Fecal Coliform is group #3. Dissolved Oxygen is group #4. The state can add constituents later on as needed.

Mass Loading of Constituents

$$\frac{\text{Mass loading (lb/day)} = \text{concentration (mg/l)}}{\text{Flow rate (gpd)} * 8.34 \text{ X } 10}$$

Treatment Performance Standards Pg.16 Table #2
Anish stated that mass loading is the starting point from there you can go to four different treatment levels. Anish talked about treatment levels. He said the sand filter and the peat filter will get you 30/30. He said table #3 (pg.17) explains how to calculate when you can meet various treatment levels. Anish gave different examples of the three groupings to come up with treatment levels. BOD and TSS are Group #1. Nitrogen and Phosphorous are group #2. Fecal Coliform is group #3.

Performance Evaluation in the Field

- This is a must to get to the final AL-4
- Minimum number of sites is 30
- Quarterly evaluation for 5 quarters
- Effluent quality data meets requirements of performance class Data L
- Use onsite system inspection form for data collection
- State and applicant work together during the evaluation process

We reviewed the on site inspection form on Pgs. 27-30

Mass Loading in –vs- out calculation

$$\frac{\text{Mass loading in} - \text{Mass loading out}}{\text{Mass loading in}}$$

Credits for Dispersal

Soil and site conditions credits are grouped into 4 categories:

1. size of drainfield
2. horizontal separation to natural or manmade features
3. vertical separation to limiting conditions

4. lot size

The soil and site credits are presented in table #4 on page 20.

Financial Assurance Determination

$ = N X F X C

$ = performance bond
N = number of systems
F = failure rate assumed
C = cost or repairing failure

The application fee is $150. The application fee for technology is $1500

Mike Aiton made the announcement that he will be resigning from the SAB. Dave Watkins thanked Mike on behalf of the WVDEP and himself

Mark said that Mike is a member of the SAB and the TRC and that we will have vacancies. Mike mentioned that Clement Solomon had attended many meetings and would serve well as a representative from Small Flows Clearinghouse.

MOTION- Bill Clark made a motion to nominate Clement Solomon to the Sewage Advisory Board. Dave Watkins seconded. All in favor motion carries. Mark will write the commissioner to request Clement's placement on the WVSAB.

Mike said that keeping the TRC at eight is good, and that any smaller may not be a good thing.

Mark said that smaller numbers may help as far as travel goes. He said to table the TRC appointment until the next meeting.

MOTION- Paul made the motion to accept Clement to the TRC until we can discuss further how many we want. Dave seconded. All in favor motion carries.

Rick said that we may need more non-industry on the TRC.

Mike said that some people may need to recluse themselves on a vote, so more may be better.

12:50PM Questions and Comments

Marvin- 30 sites seem large.

Anish- It adds a level of confidence; if you do quarterly it is a doable task.
Mike- You could consider taking a sample in the winter.

Anish- 30 samples in each quarter (spring, summer, fall, winter)

Clement- You could set a fiscal year sampling scheme.

Stan- It would be spelled out in the permit.

Clement- What if a manufacturer wants to target an area of the state.

Dave- We're only going to give them 30 permits

Mike- Maybe 150 data points should be required, not necessarily 30 systems.

Anish- That may open up the loop hole.

Paul- We are trying to keep this as simple as possible.

Mike- Fewer systems (15) may be easier.

Rick- A larger number of initial systems may be better. Selecting what to monitor? The company may want to sample their better working systems.

Anish- The state and the company agree to sample.

John- If their regional they may do less sampling.

Mike- Are they required financial assurance on these 30 systems.

Dave- 3 regions (East, Middle, and West)

Rick- We should characterize these different regions.

Mark- 30 sites statewide and if they want to regionalize later that's OK.

Mike- It could be written in the permit.

Mike- AL-3 if their approved in other states with sampling, we should accept them.

Clement- May be we should have a guidance document.

Dan- explained 1st, 2nd, and 3rd party.

1st party- The company takes the sample and analyzes it.
2nd party – The company takes the sample and it's analyzed by a lab.

3rd party- Sample is collected by a contracted company or lab and it's analyzed by a certified lab.

Joe Eagle- 30 areas? What if 2 fail?

Dave- You need to achieve reduction before hitting the soil.

Mike- Reduction in drainfield size. There should be some hydraulic testing.

Stan- We have to approve this and Barbara Taylor has to put this through by policy.

John- pg. 19 percent credit based on site specific conditions.

Anish- Secondary effluent or better (permanent), septage effluent (15 years)

Discussion on Bonding

Paul- Thought the bond would be for the period of monitoring.

Rick- The site evaluation is the key.

Paul- Industry and regulators must work together.

MOTION- Stan made the motion to accept this protocol and we go forward for approval to Barbara Taylor.
DISCUSSION: Paul- 30 sites acceptable. We make changes necessary then approve the document.

Rick- Can there be something written in that the TRC can make some changes down the road.

Mark- The fees may be an issue. They must be changed legislatively not by policy.

Rick- pg. 20. Stay at 66% not 100%

Stan Walls withdraws his motion.

MOTION- Dave made the motion to accept the changes made. John seconded. All in favor motion carries.

Bond good only on evaluation process

MOTION- Dave made the motion that the bond release comes after passing the evaluation and Health Department certification. Marvin seconded. All in favor motion carries.

Anish- Any other questions or problems with the spreadsheet. Mark can call Anish.

Corrections to the document:

Pg. 19- percent credit granted may be up to the levels listed in the table 4 based upon site specific evaluations.

Rick-pg. 6- strike the last statement
Dave-pg. 5- "consistent"
Dave-pg. 13- "state" not states. Strike "and acceptable to". "meets not meet
Dave-pg.14- are
Dave-pg.15- lb/mgd
Dave-pg. ii- is strike "be"
Dave- pg. ii- The

Rick-pg. 2 changes see page 2

MOTION- Dave made the motion to accept all changes to the PVP. Marvin seconded. All in favor motion carries.

MOTION- Stan made the motion to approve this protocol by the SAB with the recommendation to Barbara Taylor to be accepted. Marvin seconded. All in favor motion carries.

Send a letter with a revised copy to Barbara Taylor.

Paul thanked the TRC, Evelyn, Melisa, John, Julie, and Anish.

George Hanna presented a problem with a site that is 1.6 acres with 0 perc rate, and the property was bought for $40,000.

MOTION- John made the motion to adjourn the meeting. Seconded by Marvin. All in favor motion carries.

Next meeting will be in Flatwoods on September 2, 2004, at 9:00AM