

Technical Review Panel  
Environmental Public Health Division  
Indiana Department of Health  
Meeting Notes from October 25, 2024  
10:00am – 12:00pm, Yoho Conference Room, IDOH and via Teams

Panel Members Present:

In Person:

Kelly MacKinnon, IDOH, OLA  
Jason Ravenscroft, academia  
Mark McClain, IRSS  
Matt Stieneker, Indiana State Building  
and Construction Trades Council  
Brian Neilson, PE, ACEC  
Claude Goguen, IOWPA

Via Teams:

John Hack, OSS Contractor  
Dick Blazer, IBA  
Amanda Lahners, LaPorte County Health Department

Others Present:

In Person: Mike Mettler, Alice Quinn, Denise Wright, Rachel Swartwood, Erin Elam, IDOH

Via Teams:

Rep. Jim Pressel  
Carlie Hopper, IBA  
Will Stoddard, Dr. Wickham, Stuart Meade, Sludgehammer  
Josh Blauvelt, Gary Chapple, Mark Herber, Audrey Graff, Allen County Health Dept.  
Kristin Lien, Hendricks County Health Department  
Dr. Mike Gamble, Marci Shaw, Chip Dudley, Sullivan County Health Department  
Lonnie Stroud, Orange County Health Department  
David Bottorff, Ryan Hoff, Indiana Association of Counties  
Heath Butz, Jay County Health Department  
Jessica Rutschilling, Adams County Health Department  
Joe Rakoczy, IDOH

MacKinnon called the meeting to order at 10:07am (technical problems caused a slight delay).

**Minutes**

Minutes of the September 27, 2024 meeting were reviewed. McClain asked for the following corrections to be made to the minutes:

- Page 3, first dot point under Sludgehammer ABG Review, “mucous” to be changed to “mucus.”
- Page 3, third dot point under Sludgehammer ABG Review, “very well”. to be changed to “very well.”
- Page 4, first dot point under #6, “watertable” to be changed to “water table.”
- Page 4, under Rule Revision, the date of the new administration needs corrected. It is not 1/1/25.

With these revisions, McClain made a motion to accept the minutes; Ravenscroft seconded the motion.

Ayes: Ravenscroft, Neilson, McClain, Stieneker, Goguen, Lahners, Hack (Blazer not in attendance at this time.)

Nays:

Motion passed.

### **Sullivan County Ordinance Review**

The Sullivan County OSS Ordinance was reviewed, and the following sections discussed. Dr. Mike Gamble, Marci Shaw, and Chip Dudley, SCHD, were on the call to answer questions.

- Ravenscroft questioned the intent of D.6. Does this mean that the registered installer has to be on site at all times? “At all times” was removed from the verbiage of the model code. This is left to LHD interpretation, but it is not meant to mean every minute of the installation.
- Ravenscroft wanted clarification of G.1.c.ii. Quinn clarified that this section does not allow the use of best judgment for any new construction.
- McClain requested that B.6. be amended to include “safely in accordance with OSHA regulations.” This will need to be a change in the Recommended Ordinance Sections document, and there likely could be a few other ordinances in the works right now that come to the TRP without this change.

McClain made a motion to approve the Sullivan County OSS ordinance. Stieneker seconded the motion.

Ayes: Ravenscroft, Neilson, McClain, Stieneker, Goguen, Lahners, Hack (Blazer not in attendance at this time.)

Nays:

Ordinance was approved.

### **Orange County Ordinance Review**

The Orange County Health Department OSS Ordinance was reviewed, and the following sections discussed. Lonnie Stroud, OCHD, was on the call to answer questions.

- McClain stated he did not understand what it meant for a site to have limitations that would prevent the use of soil pits. Stroud gave an example of a wooded site proposed for new construction and they did not want to clear the site until they knew that it was suitable for a system.

Goguen made a motion to approve the Orange County ordinance as presented. Ravenscroft seconded the motion.

Ayes: Ravenscroft, Neilson, McClain, Stieneker, Goguen, Lahners, Hack (Blazer not in attendance at this time.)

Nays:

Ordinance was approved.

### **Sludgehammer Rejuvenation Product**

- a. Ravenscroft stated he was okay with the approval conditions outlined by IDOH.
- b. McClain asked about the required installation manual and how long this takes to review and approve. Mettler stated that it needed amended and then it can be brought back to TRP for review and approval.
- c. McClain stated “watertable” needed to be changed to “water table”.
- d. Goguen questioned how watertightness testing was to be done. Wright stated that IAPMO Z1000 standards should be used.
- e. Wright questioned if this approval only applies to the one specific product or if it would apply to any product approved under this IAPMO standard. Pirana was the only product tested to this standard and it was done in 2003. If someone wants to use the Pirana, would it be approved as well? Mettler stated it would be specific to the product until a standard is developed.

- f. Wright asked how to instruct LHDs and homeowners that this product is working? McClain directed to let Sludgehammer answer that question. Stoddard stated that they can expand on this as their product is compliant with the testing they went through at the ANSI institution.
- g. Stoddard stated that IAPMO had purged testing records from Pirana, but the Sludgehammer unit was still getting ANSI audits regularly.
- h. Wickham stated that systems were inspected in the field for verification that they were working and are compliant. IDOH's definition of failure is really clear and as long as the soil is accepting the flow, they are considered compliant.
- i. Wright stated that Massachusetts has a very specific approval but has no residential data on performance under IAPMO IGC 180-2013<sup>e1</sup>. The standard requires performance data, but that is not provided. Could IDOH contact Pirana for the test report?
- j. Stoddard stated that Pirana is not the owner of that test report as Dr. Wickham is the one that created the ABG. There was a legal process to change the name from Pirana to Sludgehammer and all testing documents went with Sludgehammer.
- k. Wright stated that Sludgehammer is the only product listed by IAPMO in this category.
- l. Goguen asked that if there is evidence that they meet the IAPMO standard, why is the actual data needed? Mettler stated that IDOH always requires the full report. Wright clarified that IDOH requires all data to be reviewed for performance on other products.
- m. McClain clarified that the TRP is evaluating only the one single product from Sludgehammer. No other products would be getting approval.
- n. Meade stated that the IAPMO certification is performance based, but not on water testing results. Sludgehammer removes biomat and rejuvenates the system. The definition of failure has 3 types of failure, and it is very clear what failure means. The local health department permits the installation and if the surfacing goes away (system is no longer in failure), the result is considered a success. The failure has been resolved. The LHD and IDOH field reps can check on them periodically. The system in failure must always be evaluated to ensure that it is a good candidate for rejuvenation prior to the permitting of the rejuvenation effort.
- o. McClain stated that he agrees with the legal standard and making it a level playing field.
- p. Metter stated that in review of their installation manual, typically there is a lot of back and forth between IDOH and the manufacturer, and he would like to facilitate that review for the TRP by getting the manual in a form that IDOH approves first and then taking that to the TRP for final approval.

McClain made a motion to approve the Sludgehammer application with the stipulations set forth by IDOH. Neilson seconded the motion.

Ayes: Ravenscroft, Neilson, McClain, Stieneker, Goguen, Lahners, Blazer

Nays:

Present: Hack

The Sludgehammer application for use as TNI was approved.

### **Revision of Rule 410 IAC 6-8.3**

Portions of Rule 410 IAC 6-8.3 were brought before the panel for review. This included 2 sections: one section is based on what has been previously approved in the Recommended Ordinance Sections for local OSS ordinances and the second is based upon comments made by the TRP members in meetings concerning things that they would like to see included in the rule. Comments on the proposal are as follows:

1. McClain likes the definition of malfunction and is glad it has been incorporated.
2. McClain would like for the definition of soil pit to include “safely as per Occupational Safety and Health Administration (OSHA) requirements.” The intent is to reference federal standards.
3. Ravenscroft thought that an “a” was needed in front of “sanitary sewer” in section 3 under General Sewage Disposal Requirements. He also asked if this should refer to just public sanitary sewers. Reference to just sanitary sewers is sufficient because if there is a private sewer (or any other kind of sewer) that cannot be connected to for one reason or another, it would not be considered available.
4. Rep. Pressel asked why the section on required sanitary sewer connection could not be exactly like the statute for districts and other sewers. He said that the way it is written poses a conflict with statute. Quinn stated that she was unaware of a statute that allowed LHDs authority to require sewer connection in any circumstance, and that this one was strictly in the event of a failed OSS. The exemptions allowed for homeowners to not connect to sewer would not apply in this case because the system had already failed. Presell stated that statute within the last 2 years had mandatory connection to sewer required if there was a system failure and sewer was available. LHDs were prohibited from issuing an OSS permit if sewer was available. Swartwood thought that this was in the Utility codes. It was suggested that statute be reviewed to confirm that there are no conflicts.
5. Ravenscroft noted that the “shall” has been replaced with a “may” in the section where LHDs can require connection to sanitary sewer in the case of OSS failure. Quinn stated that this was to allow LHDs to make that decision.
6. McClain stated that #1 under Professional Standards needs to be stricken as it is already implied in the rule. MacKinnon stated that legally, this was a good thing to have in the rule and she thought it should stay.
7. McClain stated that #3 under Professional Standards needs to be reworded and just state that the registered installer has the responsible charge. The registered installed should not have to be on site but is still responsible. Ravenscroft stated that the way it is worded, a LHD could interpret that to mean that the installer had to be on site at all times. MacKinnon suggested that the rule include a definition of “on site” as it pertains to this section, and this can be clarified that it does not mean at all times. She has examples she can share. McClain stated that surveyors were responsible for their crew even if the surveyor was never on the site, and engineers were too. Quinn suggested that specific times could be stated that required the registered installer to be at the site such as for final inspection, soil moisture check, etc. Neilson stated that construction inspections are conducted on the principles of responsible charge.
8. McClain stated that “best judgment” needs to be defined and clarified as it was used carelessly throughout the rule.
9. There was discussion about the On-site Evaluation of the soil absorption field using 3 profile descriptions in the area of the soil absorption field and providing good coverage of the entire area. This does not mean that the profile descriptions need to be “in the footprint” of the soil absorption field.
10. Meade stated that the 3 profile descriptions required in the area of the soil absorption field and best judgment were contingent upon what the LHD felt was right and necessary. He does not want to take that away from LHDs, but also does not want LHDs to interpret those so strictly that the design cannot be done to meet requirements. He feels that to require soil profile evaluations in the footprint of the soil absorption field is too strict.

11. McClain stated that a definition of “watertight” should be included in the rule. It was suggested that it could reference the IAPMO Standard Z1000 in the definition.
  12. Goguen stated that the requirement for a watertight lid on the distribution box needs to be reinserted into the rule.
  13. McClain stated that the change from Regulatory Flood Elevation to Base Flood Elevation should not be done right now. Agencies, surveyors, engineers, etc. need to be checked with before changes are made. Neilson stated that Base Flood Elevation is the commonly used term, but FEMA references the “best available” data, and that may be the way we want to go so that very old maps, which are not always consistent with current data, will not be used for these determinations. McClain stated that he had no problem changing the terminology to Base Flood Elevation if that is the currently used term, but he still has concerns dealing with flooding issues.
  14. McClain stated that the definition of Expansive and Contractive Clay needs to be removed and put on hold for now. Also, illite is not an expansive and contractive clay mineralogy.
  15. McClain stated that “permanent” needs to be removed from the definition of Fixed Reference Point.
  16. McClain stated that subscripts need to be used for BOD<sub>5</sub> rather than BOD5. Denise will check with NSF to see if this should be BOD<sub>5</sub> or CBOD<sub>5</sub>. There is a typo in the second part of the definition, subsection (C), twenty-five should be twenty-five.
  17. McClain stated that in the definition of Limiting Layer, (b)(1) stating that anything <0.25 gpd/ft<sup>2</sup> is considered a limiting layer should be put on hold for now and that (B)(3) concerning slickensides should be put on hold. Lahners stated that she disagreed with putting (b)(1) stating that anything <0.25 gpd/ft<sup>2</sup> be considered a limiting layer on hold as it is already in the current rule that way.
  18. Ravenscroft indicated that he had reservation about including a drywell and a cesspool as a failure because there were many that had drywells that had no other option for a replacement, and this would be a hardship on many. Mettler indicated that IDOH guidance has stated for a long time that a drywell and a cesspool were not considered soil absorption fields and were, in essence, failures because there was no soil absorption field, there was point loading, and that it was hard to detect if the drywell was contaminating ground water. Mettler stated that it would not require LHDs to go out looking for drywells. Holding tanks could be an option to replace a drywell if a full OSS could not be installed.
  19. McClain stated that the definition of Slickenside should be removed and put on hold. Smectite should also be included as a shrinking and swelling clay mineral.
  20. The updates to the plan submission requirements for Construction Permits was review separately and there were no recommended additions or deletions.
  21. Ravenscroft stated that the definition of bedroom equivalent and tiny homes should be investigated. Mike stated that previously IDOH has allowed sizing OSS for RVs to be based upon 75 gpd per sleeping space rather than on 150 gpd per bedroom, and that might be an option for tiny homes as well. McClain stated that the definition of bedroom equivalent should be considered for updating. Mettler stated that would be best for round 2 of revisions.
- Mackinnon stated that those changes discussed and agreed upon by consensus would be made and the Regulatory Analysis Documents should be reviewed as well. All standards in the rule would need to be considered for updating as well.

The next meeting is scheduled for November 22, 2024.

Ravenscroft made a motion to adjourn the meeting. Goguen seconded the motion. The meeting was adjourned by consensus.