

Technical Review Panel
Environmental Public Health Division
Indiana Department of Health
Meeting Notes from November 22, 2024
10:00am – 11:30am, Yoho Conference Room, IDOH and via Teams

Panel Members Present:

In Person:

Kelly MacKinnon, IDOH, OLA
Jason Ravenscroft, academia
John Hack, OSS Contractor
Matt Stieneker, Indiana State Building
and Construction Trades Council
Brian Neilson, PE, ACEC

Via Teams:

Mark McClain, IRSS
Amanda Lahners, LaPorte County Health Department

Absent:

Claude Goguen, IOWPA
Dick Blazer, IBA

Others Present:

In Person: Mike Mettler, Alice Quinn, Denise Wright, Erin Elam, and Jake Torrie, IDOH

Via Teams:

Carlie Hopper, IBA
Will Stoddard, Dr. Wickham, Stuart Meade, Sludgehammer
Heath Butz, Jay County Health Department
Faith Freed, Marshall County Health Department
John Linn, PE
Allison McCarty, Putnam County Health Department
574-551-0812 (no name given)
Jacob Osowski (joined very late in the meeting)

MacKinnon called the meeting to order at 10:00am.

Minutes

Minutes of the October 25, 2024 meeting were reviewed.

Stieneker made a motion to accept the minutes; Ravenscroft seconded the motion.

Ayes: Ravenscroft, Neilson, Hack, Stieneker, McClain, Lahners

Nays:

Motion passed.

Jennings County Ordinance Review

The Jennings County OSS Ordinance was reviewed.

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

Ayes: Ravenscroft, Neilson, Hack, Stieneker, McClain, Lahners

Nays:

Ordinance was approved.

Marshall County Requests

Faith Freed, Marshall County Health Department, attended the meeting to request approval of the inclusion of three items, as listed below, in the Marshall County OSS Ordinance.

1. A “site survey” is required prior to permit issuance. A site survey is defined as “an inspection of a property conducted by the Marshall County Health Department prior to the issuance of a construction permit to verify the proposed or repair/replacement of a residential on-site sewage system or commercial on-site sewage system meets requirements in Rule 410 IAC 6-8.3 or Rule 410 IAC 6-10.1. Inspection is conducted on-site with the property owner’s registered septic installer. At the discretion of the department, a site survey may not be required on some repairs.
2. A floor plan showing all bedrooms, bedroom equivalents and closets is required as part of the construction permit application.
3. A construction permit expires 2 years from the date of issuance unless construction has started and is completed within 180 days of the expiration date.

There was consensus among all TRP members that these items would be approved in a Marshall County OSS ordinance.

Pending Ordinance Submissions

Vanderburgh County submitted an OSS ordinance signed by the Vanderburgh County Commissioners; however, the ordinance that was signed differed from the one that IDOH had previously approved. The revised ordinance was not approved by IDOH.

Switzerland County and Putnam County have both submitted complete applications for TRP review of OSS ordinances. These were submitted too late for inclusion in this meeting and will be discussed at the next meeting.

SludgeHammer Rejuvenation Product

SludgeHammer representatives were present at the meeting because they had two questions posed to the TRP concerning the approval of the rejuvenation product discussed at October’s TRP meeting.

The first question concerned number 6, dot point 2, in the draft Approval Conditions. Stuart Meade stated that they requested to have this condition state that the septic tank needs to be “inspected” rather than the septic tank needs to be “tested.” Meade stated he has been designing systems for 30 years, and he felt that the requirement for testing the septic tank for watertightness was excessive and unnecessary. He stated that the checklist previously presented to SludgeHammer and to the TRP stated that the septic tank had to be inspected, not tested. Mettler stated that the previous document was provided only as a starting point and was a very old document.

Quinn stated that there was a testing protocol for in situ tanks included in IAPMO/ANSI Z1000-2013 9.1 which included having the tank pumped, filling the tank with water up to the normal operating level, capping or plugging the inlet and outlet, and observing the tank for 24 hours for any increase or decrease in water level. Vacuum testing is not recommended for in situ tanks.

McClain stated that he recommended that the requirement be changed to inspected and to defer all references to testing a tank to the rule.

Wickham stated that he had some knowledge of infiltration into tanks and also rainwater infiltrating the soil absorption field. He considers both infiltrations similar and does not know how to delineate infiltration in the tank from infiltration into the soil absorption field. Ravenscroft replied that he felt there was a major difference between the two types of infiltration. Neilson stated he concurred with McClain's recommendation of changing the requirement to the tanks being inspected and to defer all references to testing to the rule, and he agreed that infiltration into a tank and infiltration into a soil absorption field were two different issues.

McClain again said he would like to approve SludgeHammer's request for a change to inspecting the tank rather than testing the tank and to table any other changes to the rule so that Claude Goguen could be involved in the discussion. Neilson asked that if such a change was proposed to the rule, would that come back before the TRP. All changes to the rule must have approval from the TRP.

McClain made a motion to approve the change from "tested" to "inspected" in this condition. Stieneker seconded the motion.

Ayes: Hack, Stieneker, McClain

Nays: Ravenscroft, Neilson, Lahners

This request was not approved.

The second question concerned number 5 in the draft Approval Conditions. The intent of this Approval Condition was that if the soil absorption field that was to be rejuvenated did not meet 100% sizing requirements of the current rule (410 IAC 6-8.3), the repair had to include two septic tanks or a two-chamber treatment tank with the SludgeHammer Rejuvenation Product. Wickham stated that this was counterproductive as they are trying to grow bacteria to send to the SAF and this would not accomplish that. Mettler stated that other states have this requirement for this product. Dr. Wickham stated that in Arizona, they are meeting the requirements of NSF Class 1 plant in a 2 compartment, 1200-gallon septic tank according to the testing.

Wright stated that in Indiana, we typically see 1000-gallon septic tanks. Much of the TSS coming out of a septic tank is inorganic in nature and cannot be broken down with facultative bacteria, and this tends to plug the soil pores.

Dr. Wickham referenced a study done in Calgary, Alberta Canada by Angus Chu in which Chu found that the SludgeHammer Rejuvenation Product does not pull from the bottom of the septic tank and the product creates 2 zones – a mixing zone and a settling zone. Dr. Wickham stated that the study shows that the TSS is not important to the system and that this product is not meant to provide advanced treatment but is just a remediation tool.

Wright stated that the study used low flow, "green" homes which are not comparable to Indiana homes which typically have water softeners. She indicated that the flows listed in the study should be considered.

Meade stated that IAPMO has approved a 2-day retention time period for the product to work as tested. If a tank is undersized on a legitimate system, tank capacity would need to be added to the system as part of the rejuvenation process.

Mettler stated that the requirement is for sizing of the tank per the rule, not as tested, and does not specify the sizing of the SAF.

Hack stated that on many existing sites it is impossible to add tankage as there may not be sufficient room or fall in the sewer line to add additional tank(s). He questioned whether the inlet and outlet of the clarification chamber can be at the same elevation.

Dr. Wickham stated that to protect public health this should be changed because the population is resistant to an increase in the required changes and costs. If remediation options are not feasible and economical for failing systems, homeowners will continue to allow systems to fail rather than attempting to rejuvenate them.

Neilson and Mettler stated that if a tank cannot be added to a site, the LHD can use best judgment. Ravenscroft stated that a 2-compartment tank is always better than a single compartment septic tank and almost all will need a 2-compartment tank. Meade stated that the rule required 2-compartment tanks in some circumstances, but many LHDs will not permit small tanks.

Wright stated that when used for rejuvenation, this tank no longer functions as a septic tank. She questioned if the tank size needed to comply with the septic tank size of the rule or with the tank size as tested. Dr. Wickham stated the tank needed to be sized in accordance with the rule.

Hack made a motion to approve a change in condition number 5 to indicate that the tank on any SludgeHammer rejuvenation site must only meet or exceed current rule requirements for septic tank sizing. Neilson seconded the motion.

Ayes: Ravenscroft, Neilson, Hack, Stieneker, McClain, Lahners

Nays:

This requested change was approved.

Revision of Rule 410 IAC 6-8.3

Additional recommended rule revision changes were supplied to the TRP. The following items were discussed.

Definition of Best Judgment

- Ravenscroft stated that this definition needed to include “due to restrictions of the site”.
- McClain stated that including “residential” caused a conflict with the local ordinances being passed because they included both residential and commercial.
- The rule being revised is only for residential OSS. Commercial OSS and best judgment would need to be included in an update to the commercial rule.
- Neilson stated that the IDOH needs to be involved in the best judgment decisions because the state needs to know about where systems cannot meet requirements. He felt that these need to be sent to the state for documenting.
- Hack asked if IDOH would be overwhelmed with this amount of information.
- Quinn stated that the use of best judgment can be a real problem because many best judgment calls were made without the homeowner’s knowledge, especially if the home was being sold.
- MacKinnon stated that information on use of best judgment could be used for regulatory analysis.

- Hack asked why there were 2 different rules for residential and commercial OSS. MacKinnon stated that the two rules could possibly be combined in the future with specific sections for both residential and commercial.
- Hack stated that there should be a list of non-negotiable items that cannot be violated with best judgment. Lahners stated that they do not allow encroachment on wells as a best judgment decision unless it is the owners own well, and they sign a “hold harmless” agreement. Mettler stated that in some cases an IDEM variance may be needed and could require testing and chlorination of the well.

Definition of Soil Pit

- Neilson stated that “safely” probably needed to be removed from the definition and the definition should be left “generic” so that no standards were missed. He stated that the definition should be changed to include “applicable federal, state and local requirements.”
- MacKinnon stated that following the standards indicated that it should be done safely, so “safely” should be left out of the definition.
- Ravenscroft stated that he felt OSHA should be kept in the definition.

Definition of Watertight

- Quinn stated that the rule requires tanks to be watertight already, but there is no definition or method of determining watertightness specified in the rule.
- Wright stated that not all tanks used in Indiana are manufactured by NPCA members. Vacuum testing and static water testing can be done according to IAPMO standards.
- Ravenscroft asked what the testing entailed.
- Hack stated that a distribution box is not likely to be watertight unless they have the rubber boot pipe connectors like tanks are required to have. He does not believe that the lid to a distribution box should be sealed.
- MacKinnon stated that the definition should not have requirements for the tanks; those should be elsewhere in the rule. The definition is just to state what “watertight” means.
- Neilson pointed out that risers can be made to be watertight.

The meeting scheduled for December 27, 2024 was cancelled. The next meeting is scheduled for January 2025.

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