## Meeting Agenda/Summary

### Meeting Information

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Water Quality Division: Onsite Wastewater Advisory Committee (OWAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>December 7, 2021</td>
</tr>
<tr>
<td>Start / End Time</td>
<td>10 am – 12:20 pm</td>
</tr>
<tr>
<td>Virtual Meeting</td>
<td>Zoom link in calendar invite</td>
</tr>
<tr>
<td>Documents</td>
<td>Located in ShareFile - <a href="https://azdeq.sharefile.com/">https://azdeq.sharefile.com/</a></td>
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</tbody>
</table>

### Members

- David Bartholomew, Bartholomew WW Services, Inc.
- Mark Basic, Basic Drilling Company
- Colin Bishop, Anua
- Suzanne Ehrlich, Yavapai County
- Jake Garrett, Gila County
- Thomas Hanson, Maricopa County
- Dawn Long, First American Septic Service LLC
- Kathy Mills, Mills Engineering, LLC
- David Monihan, PE, RLS, Coconino County (out)
- Cullin Pattillo, Mohave County
- Jake
- Thomas
- Michael Stidham, EZ Treat, Inc
- Jenny Vitale, PE, Civil Engineer
- Joelle Wirth, Summit Environmental LLC
- Kitt Farrell-Poe
- Ashley Chatfield (Design/Permit TWG Co-Chair)

### ADEQ Staff

- Trevor Baggiore, ADEQ, Water Quality Division Director
- Naveen Savarirayan, Manager, Groundwater Protection Value Stream
- Matt Ivers, Groundwater General Permits and Reuse
- Theresa Gunn, Project Manager
- Jon Rezabek, Legal Specialist
- Karthik Kumarasamy, PhD, Engineer III
- Linneth Lopez, Environmental Engineering Specialist III
- Raymond Morgan, Trainer, Groundwater Protection, Groundwater Permits & Reuse Unit
- Luke Peterson, Environmental Engineer Specialist 3, Groundwater Protection
- Heidi Welborn, Legal Support
- Morgan O’Connor, Community Liaison

### Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Lead</th>
<th>Overview</th>
<th>Documents (* on ShareFile)</th>
<th>Action Requested</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>Jake</td>
<td>Roll Call</td>
<td>Nov Summary*</td>
<td>Approval of</td>
<td>Theresa called roll.</td>
</tr>
<tr>
<td>(5 mins)</td>
<td>Garrett, Chair</td>
<td>Meeting Notes Review Agenda Review Ground Rules</td>
<td>Dec Agenda* Ground Rules*</td>
<td>Notes</td>
<td>No comments on meeting notes. Kitt moved to accept and Dave B seconded the motion. Notes approved.</td>
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| **Phase 1** Draft Rule Language (40 mins) | Heidi Welborn, Legal Specialist | Feedback from OWAC members on Phase 1 rule changes. Discussion of the comments received from members regarding phase 1 draft language and ADEQ’s proposed path forward. | For Discussion and Feedback | Heidi reviewed the comments received on the draft rule language and the proposed changes which ADEQ has determined should be removed from the phase 1 rule. | Member discussion:  
- Send comments on issues which are being moved to phase 2 to the work groups.  
- Need to have a review and discussion of Table 1 during phase 2.  
  - Table 1 should be reviewed and updated, including a column for BOD5 pounds. Commercial designs, especially, need to be designed for hydraulic load and organic load  
  - Values came from the 1960 UPC  
  - Usually the smaller the population served, the higher the peaking factor that is required due to less ability to address surges.  
- Need to remove statement that onsite systems are for use when sewer is not available (page 2 of the preamble)  
  - Connecting to sewer when available is an old paradigm when EPA would fund sewer for communities. Not enough money to sewer everything and EPA recognizes onsite/decentralized as permanent infrastructure  
  - It is not a fact that onsite systems are the waiting area for big pipes.  
  - Need words that will take us into the future  
  - To be the best in the nation we need to address the relationship.  
  - Need to fix the semantics in phase 2 not in phase 1  
  - Will need to have conversation with ADEQ in the future about the onsite wastewater systems versus sewers  
  - Collection systems are allowed to leak up to 10% of their flow!! This is sewage allowed to go into the environment untreated and there is evidence that soil is a better treatment media for the emerging contaminants which can be directly discharged to a waterway  
  - A treatment plant may discharge millions of gallons at a time versus an onsite system  
  - Perhaps the right question is what solutions are we going to implement going forward to solve the water paradigm. The old paradigms lack vision, creativity, and flexibility to ensure we are able to use water over and over and over in order to sustain the population  
  - Centralized treatment does not address adequately the return of water back to the groundwater  
- One thing we should look at moving forward is finding a solution to dispose of septage if wastewater treatment plants do not have capacity to provide service to pumpers.  
  - this is an issue that needs to be addressed by the O&M group (Dave’s group) ...pumping tanks |
every 3 to 5 yrs. will not fly in many rural areas, the local WWTP don’t have the capacity
- Consider taking out of the preamble discussion references to 4.01 E301 (page 3 of the preamble)
- In the preamble it states that reuse is not allowed in general permits - previous ADEQ presentation states there are general permits which allow reuse
- Centralized returning to GW seems to assume that the water originated as GW, which is not necessarily the case, so help me understand why that is important
- Because there are many areas in the state where water is withdrawn from GW and there needs to be a regional approach to return good quality water back to the aquifer. I realize that not all of the state has this situation.
- There is active subsidence in Arizona right now.
- Yes, but it is specific to specific areas, and it would be better to identify those areas on a map than generalize it’s a need for the whole state, it also negates the role of agriculture and ag pumping with regard to subsistence
- ADEQ is seeking information on toilet types that do not have a liquid stream:
  - Dry toilets (liquid waste collection) in the tiny homes (Nature Head) are different than compost. Also, there are incinerating toilets. Some are designed to evaporate the liquid.

<table>
<thead>
<tr>
<th>Technical Work Groups Reports (45 mins)</th>
<th>TWG Chairs</th>
<th>Status Reports</th>
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<tbody>
<tr>
<td>O&amp;M: Dave B</td>
<td></td>
<td>O&amp;M: Dave reported the team is completing the flow charts and they have coordinated with training and certification. They are working on wrapping up the future state.</td>
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<tr>
<td>1.09: Jake</td>
<td></td>
<td>D&amp;P: Ashley reported the work group is beginning to discuss sub-group issues which have cross-over. During the meeting tomorrow will discuss items for discussion at the Feb meeting. Priority crossover issues: Potential treatment levels and parameters; cumulative flows, SARs, 4.23 permits. Looking for where the septic tank numbers came from; developed from research conducted by Colin and Ed Swanson. Also looking for direction regarding renewable permits and how that relates to the 4.23 subgroup.</td>
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<tr>
<td>Design/Permitting: David M/Ashley</td>
<td></td>
<td>Member Comments:</td>
</tr>
<tr>
<td>Future State: Colin</td>
<td></td>
<td>- It is important that we keep track of the source of the numbers for future reference.</td>
</tr>
<tr>
<td>PPL: Joelle</td>
<td></td>
<td>- We don’t need to reinvent the wheel on the effluent numbers.</td>
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<tr>
<td>Training/Certification: Cullin</td>
<td></td>
<td>- Each group should seek information from OWAC and members will assist in getting that information</td>
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<tr>
<td>Future State:</td>
<td></td>
<td>Future State: Colin reported the last meeting was on November 30 and are looking for areas where OWWTF reuse would be useful in various parts of the state. Is there opportunity for allowing reuse under the current rule such as subsurface landscaping irrigation. Received mixed messages if this would be allowed under current rule. On Feb 2 AzWORA will have a training session to focus on the 5 pillars of water reuse, what are the parameters for the future, and a group doing a P3 with a municipality.</td>
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</table>
### Member Comments:

- How can we get the gray water rules back under the onsite rules

**PPL:** Joelle discussed the group met yesterday and did a snapshot review of some design elements and discussed the definition of typical sewage (influent) and effluent. Looking at some draft language around typical sewage. Also, looking at parameters for treatment levels under a tier approach. Doing homework on a risk based tier approach with treatment levels.

**Member Comments:**
Frustrated by the PPL process which requires an Arizona design manual but not referenced in the PPL which results in the counties not allowing the design per manual. (ADEQ staff is currently working on how to implement this recommendation.)

**T&C:** Dave reported that the team reviewed the needs to know and qualifications for different grades of operator/service provider; designer; installer; and soil inspector. Some in the industry may need to be recertified for the higher levels and the group discussed the transition into the new program. Current NOT inspectors may be impacted by the changes and need to be considered.

**Member Comments:**
Engineers have a body which regulates the certification but does not exist with registered sanitarians. For every level there has to be a body to hold people accountable. Maybe other organizations that have run certifications with high turnover of employees.

**1.09:** Jake reported the team met and reorganized and made assignments. Discussed systems where replacements can not meet current criteria and types of 1.09s currently in the ground. The group is preparing for the paper for the February meeting.

### Guiding Principles

- **Theresa Gunn, Project Manager**
  - Review the Guiding Principles in the 5-year plan which will be used as the principles for the Phase 2 changes.
  - Consensus agreement on the principles

### Potential New Guiding Principles:

- Consider impacts from environmental resilience (drought) - recent weather events have impacts to groundwater
- Subsidence; recharge; nitrates from farming - how do other factors play a role in the groundwater and regulation of onsite systems?

### February Joint TWG Meeting

- **Theresa Gunn, Project**
  - Identification of the key elements which need to be For Discussion

### Expected Outcomes:

- Coordination on key issues- type of treatment; setbacks; permits; etc.
- Afraid we are going to get into the weeds; group presentations and then a way to give their
### Manager

**the focus of the working session.**

- Speak for 5 minutes on what group has done; identify intersection with another work group and then come back and revisit the ideas that cross over after all presentations are done.
- Can we have an understanding of what is phase 2 and future state - all TWGs working on phase 2 and expect to be included in phase 2 - can bookmark those we think are future issues.
- Every TWG needs to identify the key elements.
- Potential structure for the rule - Have the TWG chairs outline the initial structure to organize the key topics.
- Each TWG - a statement of problems that need to be addressed.
- Sub groups are trying to answer the questions.

**Member Comments:**

- Tier approach may be over complicating the program and not sure modeling Arizona after states with more water.
- Not sure on board with risk based, tier approach.
- Tiered approach may simplify the process and allows for streamlining PPL.
- Have the rule structure discussion in the January OWAC meeting with the TWG papers.
- Should have blend of prescription and risk based and this may be a way to incorporate that into a tier approach.
- Don’t get too much into the weeds until after the February meeting.

### Program Updates (10 mins)

<table>
<thead>
<tr>
<th>Theresa and Naveen</th>
<th>An update of the other initiatives underway.</th>
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<tbody>
<tr>
<td>Theresa Gunn, Project Manager</td>
<td>New Action Items 2022 OWAC Roster</td>
</tr>
</tbody>
</table>

Theresa reported that there are two SPS approved and will be distributed soon: ASTM and COC signature. She also provided an update on the onsite sampling and monitoring program and the GIS mapping project.

Naveen reported ADEQ is contacting manufacturers to discuss the impact of a reset on the PPL certifications. ADEQ will try to have the final decision by December 14, the next PPL meeting. Question was asked if ADEQ was going to refund the costs of the PPLs and the damage to the marketplace. Original intent was each technology was with a category.

### Review New Action Items (5 mins)

<table>
<thead>
<tr>
<th>Jake Garrett, Chair</th>
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<tbody>
<tr>
<td>New Action Items 2022 OWAC Roster</td>
<td>Action Plan</td>
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Theresa informed the team that we received 7 applications for the 3 open OWAC seats. Jake and ADEQ will be reviewing them and the new members will be seated at the January meeting. The team reviewed and updated the list of action items.

### Adjourn

Jake asked the members to support moving the phase 1 rule package forward regardless of the final changes.
<table>
<thead>
<tr>
<th>No.</th>
<th>Action to be Taken</th>
<th>Person Responsible</th>
<th>Due Date</th>
<th>Comments</th>
<th>Percent Complete</th>
<th>Date Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Strawman for Phase 2 rule structure</td>
<td>Jenny and Jake</td>
<td></td>
<td></td>
<td>25  50  75  100</td>
<td></td>
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<tr>
<td>44</td>
<td>Need paper on radius of soil influence for Jenny</td>
<td>Kitt</td>
<td></td>
<td></td>
<td>25  50  75  100</td>
<td></td>
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<tr>
<td>45</td>
<td>Outline of the Strawman from O&amp;M and Training and Certification to Jenny and David</td>
<td>Theresa/Cullin</td>
<td></td>
<td>Design/Permitting/Technical Considerations</td>
<td>25  50  75  100</td>
<td></td>
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<tr>
<td>46</td>
<td>Which work group is working on ‘treatment train’</td>
<td>Theresa</td>
<td></td>
<td></td>
<td>25  50  75  100</td>
<td></td>
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<tr>
<td>47</td>
<td>Look at 4.08 D.11, b.</td>
<td>Ray</td>
<td></td>
<td></td>
<td>25  50  75  100</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Send any additional documentation to Theresa</td>
<td>Joelle</td>
<td></td>
<td></td>
<td>25  50  75  100</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Talk through pre-treatment (what is pre-treatment)</td>
<td>Ray, Kitt, Heidi</td>
<td></td>
<td></td>
<td>25  50  75  100</td>
<td></td>
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<tr>
<td>51</td>
<td>Discuss the book status for the February Meeting</td>
<td>Theresa/Jenny</td>
<td></td>
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<td>25  50  75  100</td>
<td></td>
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<td>52</td>
<td></td>
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<td>25  50  75  100</td>
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