ADEQ Arizona Department of Environmental Quality Meeting Agenda/Summary

Water Quality Division: On-Site Wastewater PPL TWG
Meeting 3: Tuesday, September 27, 2021 9:00-11:00 am

(See Link to Google Meets in Calendar Invite)

Members in Attendance:

☐Ashley Chatfield, Maricopa County Environmental Services
☒Bryan Chiordi, Essential Operations
☐Todd Christianson, Premier Environmental Products, LLC
☐Suzanne Ehrlich, Yavapai County
☐Marc Fleetwood, Fleetwood Engineering
☒Karthik Kumarasamy, ADEQ
☒Linneth Lopez, ADEQ
☒Nicholas Noble, Orenco Systems Inc
☒Naveen Savarirayan, ADEQ
☒Michael Stidham, EZ TREAT, INC
☒Michael Sundberg, MST Manufacturing DBA MicroSepTec
☒Fred Vengrouskie, Eljen Corporation
☒Joelle Wirth, Summit Environmental, LLC

Agenda (Est Time)	Lead	Overview	NOTES
Input from Delegated Counties	Linneth and Joelle	Review any input from counties which have delegation for alternative systems	Pima County stated they had no issues. Linneth will follow-up her email from last week with phone calls this week. Concern from Maher about a county allowing use of a non-listed product if similar. The group discussed the phase 1 rule change which could allow a single use of a non-listed product. ADEQ added language that a request could be made but ADEQ would only do the review if the time and workload would allow.
CTQs for the Ideal PPL Program	Nick	Review homework assignment	The group reviewed Nick's draft paper on a future state PPL program. Comments on 4 assumptions: • Any deviations from the tested installation may require further review • Technologies are a component of a system which can be installed in various configurations for specific site conditions and in-field data should support different configurations • Some technologies have installation configurations that impact the performance and longevity • If the installed configuration is similar or equivalent then it can be allowed, if not, it would take engineer review of the revised configuration

			• Want to allow some flexibility in the configuration if it wasn't tested by NSF especially for higher volumes • NSF is not the only testing ADEQ accepts, ADEQ also accepts real world data submitted through a third party • Need to focus on how to evaluate the data and the criteria the data needs to meet • Third party data is great if there is integrity and defined process with a specific set of criteria (someone without a connection to the company) • Agreement need to ensure the product is installed as tested for the approval • Need to be sure that there is a way to sample and test • If going to take seriously must have an O&M contract

Outline of a Tiered Approach	Karthik	Review homework assignment	Karthik presented a potential approach to parameters.
			
			Comments on parameters:
			• Need to know source level to determine the alkalinity needed to achieve the nitrogen reduction; may need to add alkalinity
			• For consideration: TMDLs
			• Statistics depend if we want percent reduction or end of pipe rates
			• Nitrogen concentrations are going up which leads to alkalinity issues
			• Distribution of data could also look at confidence level
			• Sample size is not just number of samples, but the number of systems sampled
			• We are seeing phosphates
			• Need provision for water softeners and impact to the septic tank is drastically impacted
			• How do you do influent testing in the field to understand the treatment reduction?
			  ○ Do testing in Mode 1 for a month
			• pH is also an important parameter
			• Oxygen
			• Grove's report speaks to the sampling size
			• Without enforceable O&M will make it difficult
			• Concern about ADEQ approving manuals as it would be difficult to keep up with the versions of the manuals
			  ○ Without the manual approval, people won't know what the PPL was based upon
			  ○ Will need to use the manual that was reviewed for the PPL in the field
			  ○ Need to make the process reasonable on when a manual is updated
			• We are seeking performance-based approvals based on testing
			  ○ Manuals are prescriptive codes from the manufacturers
			  ○ State shouldn't get into the business of how to build the system which interfere with innovation
			• With prescriptive code, each manufacture will have to deal with differences in each state

			• Performance is based on meeting the testing conducted by a third party and backed up by a bond • Potentially use different BOD numbers and the formula (next meeting) Discussion of an experimental program to approve a product that has no testing • In Oregon, they are limiting the number of limitations and testing and when passed additional systems can be installed • North Carolina has a conditional approval process • Should have more reciprocity between the testing done for other states • Can limit where these can be installed; locations with low risk What do others do for delisting or if the parameters are not met? • Either you do this or we take this? (Rhode Island) • If we are not willing to hold people to the parameters why are we doing this? • It is the manufacturer not the homeowner to determine why the system is not performing and has the responsibility General comments: ○ Nitrogen management areas in Arizona; have they been updated. ○ Need pathway to innovation but still need some regulation ○ Prescriptive codes limit innovation ○ Proven technologies that work and protect human health and the environment and less on being an incubator for innovation.
Next Steps	Joelle	identify the gaps between current state and the ideal future state and develop actions to bridge the gap.	Tuesday, October 12, 1-3 Future topics: SAR formula, stacking, seasonal use

Action Plan:

Task	Person Responsible	Due Date	Status
Send calendar invite for the next meeting.	Theresa		Complete
Gather information from County partners on concerns they have about PPLs and the process	Linneth/Joelle		Linneth will follow-up email with phone calls

ADEQ to answer the industry the question about over reach and going beyond the rule today	ADEQ		
How will a performance-based program work?	Fred		If time permits
Refine discussion paper on parameters and SAR formula with some examples from residential and commercial	Karthik		Based on the discussion during the meeting
Joelle to put assumptions into a spreadsheet to begin to put in additional information			