

Water Quality Division: On-Site Wastewater PPL TWG
Meeting 5: Monday, November 15, 2021 10 am - Noon
(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
- Ray Morgan, ADEQ
- Jim King, Eljen
- Dick Bachelder, Infiltrator Water Technologies
- David Lentz, Infiltrator
- Heidi Welborn

Agenda (Est Time)	Lead	Overview	NOTES
Flesh out the 4 Assumptions		All Technologies to be installed as they were tested: How would this be implemented?	See the white board.
Flesh out the 4 Assumptions		ADEQ commits to enforcing regulations. How would this be implemented?	See the white board.
Flesh out the 4 Assumptions		Third Party Testing Gets in Door - Field testing gets certification: How would this be implemented?	See the white board.
Tentative ADEQ PPL Treatment Levels		See whiteboard	See the white board.
Next Steps	Joelle	Open Discussion Next agenda topics	Next Meeting: November 30, 2021 at 10 am

Action Plan:

Task	Person Responsible	Due Date	Status
ADEQ to answer the industry the question about over reach and going beyond the rule today	ADEQ		
Refine discussion paper on parameters and SAR formula with some examples from residential and commercial	Karthik		Based on the discussion during the meeting

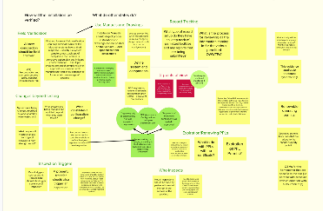
OCTOBER HOMEWORK

Key Elements of the Phase 2 PPL Process

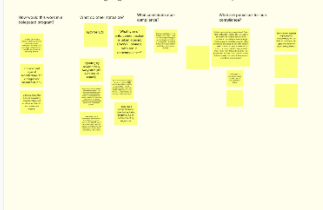
- Please answer the following questions by adding a sticky note under each of the questions.
- Double click to add a sticky.
- Use your mouse scroll button to zoom in and out.

From the 4 Assumptions

All Technologies to be installed as they were tested. How would this be implemented?



ADEQ commits to enforcing regulations. How would this be implemented?



Third Party Testing Gets in Door - Field testings gets certification: How would this be implemented?



Tentative ADEQ PPL Treatment Levels

Begin populating the table below to start discussion of an ADEQ tiered treatment levels.

Double click on a sticky and add your number (only put numbers for the parameters you think should be included at each level) Add additional stickys if needed.

Use your mouse scroll button to zoom in and out.

Should all technologies be included in the list or this would only be for those that are not included.

It is important to realize that water resource protection awareness will continue to increase and as this happens there will be a need to adjust regulations. If we can account for what we know now and what is likely to come next we can address future states via the rule making, we are not concerned, therefore I added additional T1 levels. Continuing this line of thinking, phosphorous and microplastics are likely to be the next parameters requiring regulatory management. Let's set phosphorous treatment levels while we have the opportunity... microplastics might not be our default.

This group has the opportunity to craft regulations with a forward looking vision that will ensure they will be germane to evolving water resource management for a longer duration.

Other State's Tables

Table 6-1 Treatment Levels

Level	BOD5 (mg/L)	TSS (mg/L)	O&G (mg/L)	FC (1000000)	TN (mg/L)
A	20	20	---	---	---
B	15	15	---	---	---
C	10	10	---	---	---
D	10	10	---	---	---
E	10	10	---	---	---
N	---	---	---	---	---

Note: Values for Levels A, B, C, D, and E are based on 1000 mg/L BOD5, 100 mg/L TSS, and generally based on 100 mg/L TN. Values for Level N are based on 100 mg/L BOD5, 100 mg/L TSS, and generally based on 100 mg/L TN.

Table 6-2 Treatment Levels

Treatment Level	BOD5 (mg/L)	CODCr (mg/L)	TSS (mg/L)	Total Nitrogen (mg/L)
TL1	100	---	80	80-100
TL2	---	200	80	80-100
TL3	---	200	80	80-100
TL4	---	200	80	80-100
TL5	---	200	80	80-100

Notes: TL1 through TL5 are based on actual samples from higher level treatment systems.

Treatment Levels TL1 (B&C) or TL2 (B&C) will have increasing levels of reduced reductions and that require a more rigorous review. For example, TL1 has a 25:50 BOD5/TSS requirement that is probably adequate as the only justification needed for this approval. Judgment is an approval for TL2 that requires 100:200 BOD5/TSS. This level of approval will only be required for environmentally sensitive areas and has a much higher level of confidence in the technology used for treatment. This should be done through a number of both field and test center data that has been previously presented for said technology. Dependent on additional requirements for data analysis, further field testing may or may not be required. Concurrently, there should be initial field monitoring of these systems to ensure they are working in the field. So conducting compliance testing the first 6 months after getting approval of how the system is performing but also how attentive and capable the service provider network is.

Future State PPL Certification Process

