



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

CHAPTER 8 STAKEHOLDERS MEETING

Attendees:

Mark Bross (Klinger & Associates), Randy Clarkson (Bartlett & West), Seth Cogen (Total Environmental Services), Tom Ratermann (Boone County Sewer District), Ted Forester (USDA-RD), [Emily Lyon](#), [Cynthia Smith](#), [Dave Uhlig](#), [Leland Neher](#) (on conference call), [Keith Forck](#), and [Byron Shaw](#)*

* DNR employees are denoted in blue.

Introduction:

- ❖ We will be discussing rules 170 through 190 today.
- ❖ Will be presenting the RIR for 110 soon.
- ❖ After discovering the involved requirements for the rule making process, we will be presenting one rule at a time.
- ❖ Maybe after getting into the swing things we could present three rules at a time.
- ❖ The intent of the rules was to mimic 10 States Standards

10 CSR 20-8.170:

This rule does not contain the 503 federal rules, because EPA has that jurisdiction.

Clarkson:

- ❖ **(6)(B)**: Are multiple units needed? Do you have any examples of when this is true or used? If the aeration equipment is retrievable without dewatering the basin, why do you need multiple units? The aerated sludge basin is no more critical than an aeration basin, where a single unit is acceptable.
 - Will give this some thought.
- ❖ **(6)(H)2.**: Are the values in the table from 10 States or are the same from the current regulations? 10 States has more conservative sludge storage values due to the colder climate states. Wanted to bring this to our attention to confirm that these values are not too conservative for MO.
 - It appears that these values came directly from 10 States. Will look into these values.
 - Neher stated that sludge storage is based on treatment requirements + storage needed due to inclement weather.
 - Discussion on how MO usually has one basin that provides treatment and storage.
 - Neher said that the values were supposed to be multiplied by the # of days of storage needed, which would give ft³/PE. MDNR doesn't necessarily want to decide the appropriate # of days needed for storage.



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Land application has been removed from the rule. The department thought a guidance document would be a better use than as rules. Dave asked what the stakeholders thought.

- ❖ The current rule doesn't really follow the federal 503 rules.
- ❖ Guidance documents may be available through the MU Extension offices.
- ❖ Land application is more of an operation and maintenance issue.

Forester asked if the Cameron tannery sludge issue affected the rule development?

- ❖ No.
- ❖ The sludge testing requirements should catch heavy metals and toxics.

Uhlig:

- ❖ **(11)(D)**: MDNR no longer allows ultimate disposal at lagoons. Proposed removing this section.
 - (11)(C) Allows for 2 years of storage

10 CSR 20-8.180:

The section on RBCs has been removed. Added a SBR section directly from 10 States. Added a section on lagoon design and turned rule 200 into an earthen basin design guide. Land application sizing is in rule 220.

Uhlig:

- ❖ **(3)(C)1.**: MOP 13 is no longer available, so we will reference the appropriate ASTM standard

Bross:

- ❖ **(3)(C)1.**: The sentence about the media being structurally capable of supporting a person's weight is vague. How much weight should it support? Proposed removing this and requiring a walkway to be installed in all instances.
 - Agreed.
- ❖ **(3)(D)3.B.**: How do you determine the amount of adequate oxygen required? What design computations are required to show a MDNR reviewer that the ventilation is adequate?
 - Neher stated that there is a range of ventilation needed for larger plants. There are no exact numbers that need to be achieved. MDNR would accept manufacturer's data.
 - Uhlig said that he would research if a standard or range is available.
 - Neher said that ventilation could be uniformly distributed or in one area. If a filter isn't working well, a larger motor or additional blower could be added.
 - The department doesn't really want to come up with an exact number for the rules.
 - The department could provide guidance to the MDNR reviewers stating that there are no exact numbers and to accept manufacturer's proven data.



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Forester:

- ❖ **(3)(D)3.A.**: This is a repeat of B.
 - Will remove.

Bross:

- ❖ **(4)(B)**: Is this consistent with what was previously discussed in the screening section?
 - Will double check.

Forester asked if the department was going to address recirculating sand filters (RSF) in the new regulations.

- ❖ The department's thought was that it would be addressed in the small design guide. RSF are rarely 100,000 gpd or larger.

Clarkson:

- ❖ **(7)**: Proposed removing (A) and (B).
- ❖ **(7)(C)**: Proposed removing "(three (3) cell)". Proposed the following wording: "between 2' and *at least* 5'" and "between 2' and *at least* 8'". Also proposed adding in language to allow 2-cell designs.
- ❖ **(7)(B)**: Could leave this section in if it was generic
 - Will look at all of these comments.

Previous rule discussions:

Ratermann asked if monitoring or telemetry would be required for lift stations and wastewater treatment facilities.

- ❖ The department expects someone to look at these facilities everyday, but currently there are no requirements in the new rules.
- ❖ Discussion on the technology and how costs are coming down.
- ❖ Discussion on available technology: telephone dialers, cell dialers, etc
- ❖ Something to consider for these larger facilities.

Ratermann asked if flow measurement was required in the new rules.

- ❖ Flow measurement is covered in 140
- ❖ Discussion on how larger facilities should have electronic, continuous flow measurement
- ❖ Discussion on costs of these devices (approximately \$3,500)
- ❖ Consultants and MDNR wants meaningful data that is not instantaneous



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Ratermann proposed tackling Chapter 8 and 9 together since design and operation go hand-in-hand.

- ❖ Chapter 9 requires daily flow measurement and daily D.O. measurement
 - Chapter 8 should require devices in the design that can meet these requirements
- ❖ Chapter 9 is currently being looked at by the department for an update

Ratermann bought up a discussion of DMRs and MDNR's review of the DMRs.

- ❖ Believed that weather information should be downloaded from the internet and not a requirement for an operator to fill in.
- ❖ Uhlig said that he was most interested in rainfall when looking at DMRs.
- ❖ A rainfall gage at the wastewater treatment facility may not receive any rain, but the town or satellite towns may be receiving a lot of rain. So then a peak flow occurs, but the rainfall data would be zero on the DMR.

10 CSR 20-8.190:

Cogen:

- ❖ (4): Proposed requiring proportional feeding of chemicals for chlorine and dechlor.
If flow measurement is required of these facilities then they should be able to proportionally feed chemicals.
 - Will change should to shall.
- ❖ (4)(B)1. & 2.: Could combine these sections and remove with or without dechlor.
 - Will change.

Neher brought up a discussion on Bioassays for UV.

- ❖ Proposed getting wording from Trojan and letting the stakeholder group evaluate it.
- ❖ Concern on unintentionally striking out the chances of different UV manufacturers.

Cogen:

- ❖ (11): Asked why closed vessel UV was not included.
 - The department thought those were mostly used in small flows. (11)(A) does allow MDNR to review other designs on a case-by-case basis.
- ❖ (5)(A): Pointed out a wording issue.
 - Will change.

Bross:

- ❖ (5)(A): Brought up a discussion on how hypochlorite tablets are not cost effective for larger facilities.
 - Agreed, but will leave in.

Conclusions:

- ❖ Next meeting will cover 200 through 220.
- ❖ At the next meeting we could also look back at any previous rules.