BEFORE THE WATER AND WASTE ADVISORY BOARD
STATE OF WYOMING

HEARING TO DISCUSS PROPOSED REVISIONS TO WATER QUALITY RULES AND REGULATIONS CHAPTER 25 FOR REVIEW BY THE WATER AND WASTE ADVISORY BOARD

TRANSCRIPT OF HEARING PROCEEDINGS

Transcript of Hearing Proceedings in the above-entitled matter before the Water and Waste Advisory Board, commencing on the 14th day of June 2013 at 9:40 a.m. at the Oil and Gas Conservation Commission Building Hearing Room, 2211 King Boulevard, Casper, Wyoming, Ms. Marjorie Bedessem presiding, with Board Members Mr. Calvin Jones and Ms. Lorie Cahn in attendance. Also present were Mr. Kevin Frederick, Mr. Rich Cripe, Mr. Frank Strong, Ms. Gina Johnson and Mr. Bill Tillman from DEQ.

I N D E X

P R O C E E D I N G S

(Hearing proceedings commenced 9:40 a.m., June 14th, 2013.)

CHAIRMAN BEDESSEM: So, Kevin Frederick, our new water quality division administrator, if you'd like to introduce your staff.

MR. FREDERICK: Thank you, Madam Chairman. Good morning, members of the board. We have with us here

today Rich Cripe, who is our manager for the water and wastewater section in Cheyenne, Gina Johnson, who works with Rich and his group. And they have been instrumental in assisting, developing this draft rule for your review today. And on my right, Frank Strong. Frank is an engineer that works with Rich Cripe.

I think, first of all, we would like to take a few minutes to review with the board, Madam Chairman, the process that the water quality division has undertaken in developing this draft regulation and give you a little background on what the rule, draft rule, at least is intended to accomplish. And after Gina's review of the process that we've gone through, Frank Strong will provide a presentation and general overview of the draft regulation, kind of review with you the highlights of the rule.

MS. JOHNSON: So, back on the 26th of

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April, we sent out -- we sent to each of you a bound package, and we also published to our website a version -- or, a draft version of our Chapter 25. We have a clean version in there and a strike-and-underlined version and analysis of stakeholder comments that we took earlier in the year. We sent out a letter to a group of stakeholders inviting comments on a draft that we had ready in February. We got quite a few helpful comments, and so we incorporated those changes and sent you the analysis of comments from that stakeholder period.

And then on the 12th, we -- by that time, we had received our public notice comments. And that notice that we sent on April 26th, we requested that if parties were wishing to do a written comment, that they send them in advance so that we could discuss those with you today and be prepared to have a good answer to any comments we received.

So, on June 12th, we sent -- we e-mailed you a copy of that analysis of comments and also a new version of Chapter 25 which had incorporated a lot of those suggestions. There was a clean copy and a strike-and-underlined copy. And then today we will be giving you yet another copy of Chapter 25 which will -- Frank will go over in his presentation. It really compares the April version to the June version, whereas the current

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strike-and-underlined versions are comparisons of changes to the existing rule as it's currently promulgated.

So I apologize for the intense volume of paper, and hopefully we'll be able to be as clear as possible so it's not confusing.

CHAIRMAN BEDESSEM: So the April to June comparison will be a new handout?

MS. JOHNSON: Yes. I will hand those out when he is ready to go. It's just one more bit of paper.

MR. FREDERICK: Thank you, Gina. Frank?

MR. STRONG: Okay. As Gina said, we apologize for an extra piece of paper, but it's going to make it very easy for you to see what changes we made from the public comment period. I think that was the critical thing for everybody to see and be able to view.

I'm going to go through hopefully a brief presentation. I'm trying to be fairly thorough and cover questions to explain why we did the changes we did. Of course, if you have any questions feel free to ask at any

time. And we'll get this started.
MS. CAHN: Let me just ask a question about this, what has just been handed out. The red-line strikeout on here is now from the rule that was in the -- the proposed rule that was in our packet? So this is changes between those two? I'm getting lost.

MR. STRONG: It's a comparison to the 4/26 version we sent out for public comment that you guys received to the changes we're proposing from the public comment period and the responses we got.
MS. JOHNSON: Normally when we prepare a strike-and-underline version, it's in response to the rules-on-rules requirement. And you show your strike-and-underline and compare it to the existing rule, and we just had a lot of changes in that period. It was confusing.
MS. CAHN: I appreciate that. I just needed to make sure I understood what I have. But I think that's a good way to present it. Because there's so many changes from the original rule that the whole thing would be red-line strikeout. So it's good. I just have to understand it.
MR. STRONG: As you just commented, this is a pretty complete revision of this chapter. It was originally promulgated in '84. A lot of things have changed in that time frame, and we needed to update it and to get the form better. One of the first things we did was reorganize the section to kind of follow the design process. The old 25, which were the old Chapter 11, Part D, it kind of jumped around a little bit, so we tried to streamline the process.

We did add quite a few sections. The old Chapter 25 consisted of about 26 pages. The new 25 consists of 43 pages. The additional pages came from a variety of sources. What we ran into is we have to pull a lot of stuff from Chapter 11 that was not included in Part D into 25 to make it a complete document. When 25 was pulled out, it had to be pulled out as is, as exactly as it was in Part D. So some of the stuff that I'll go through had to be pulled back over.
Section 1 was added. Section 3, the definitions were expanded by three additional pages. We had to add Section 5, which provides alternative systems. We added in -- and I'll go through more of these in detail in the future -- or, through this presentation. Section 12 was added, another page. 16, greywater, was seven pages. So we have some pretty large additions to this section -- or, to this chapter. Section 15, operation and maintenance, and then Appendix B was added.
So what I'm going to do now is kind of go through each section, talk about why we did the changes we did for the 4-26 version and then talk about the changes we made to the 4-26 version. And hopefully everybody will stay on the same page.
Section 1, the authority, when 25 was pulled out, we actually had no authority to do any of this stuff

because that was still left in Chapter 11. So we had to get that included into this regulation -- or, in this chapter. Section 2, objective, which was the old Section 1 in Chapter 25, basically we added some clarification

for when a PE is required for the design of these on-site wastewater systems. The ones we included was advance system, system with high strength wastewater and standard drain fields with perc rates over 60 minutes per inch.

We got a few comments in this area, and we realized we needed to clarify a few things. We revised some of the descriptions and the definitions for the on-site wastewater system to make it clear that it's for systems that are 2,000 gallons or less. And then we had to remove the word "average" in there. We had it referred to an average of 2,000 gallons per day. And actually, it's a maximum. These systems are designed for the max day, so the permit is based off that.

We had advanced system listed in this section, and that actually is not referenced anywhere else in the regulation. It was part of the iteration we went through trying to address all these things. It got left in. We needed to get it removed.

In doing the review and getting the comments, we realized we left out an area where PE is needed, and that's for commercial and industrial facilities that

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produce nondomestic waste. There are still some out there that kind of fall into our regulations. We didn't have it clearly defined what we needed to do. And then we inserted the final paragraph there, which is another carryover from Chapter 11, which actually establishes that permits are required. We did not have that in the 4-26 draft. We needed it in this one.

Section 3 is definitions. This has been expanded greatly to include the definitions we needed for greywater, for effluent devices and for clarification. We had a lot of terminology in this chapter that the homeowners and the regulators weren't quite sure what it meant, so we needed to make sure we were all on the same page. We did make some revisions based off the comments of this section. Obviously, advanced treatment had to be removed.

We have a question?

MS. CAHN: Where's the effluent devices definition?

MR. STRONG: It wasn't a definition for effluent devices. It was a definition for the components that are part of that. We really didn't have anything in the old 25 that said how you got the effluent from the septic tank to the drain field. And if you notice here on my slide presentation, like I say, line 30, line 11,

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that kind of gives you a quick reference on how to get to where these changes were made.

Advanced treatment had to be removed because we did not have it established anywhere. In the mulch basin definition, we kind of had a duplicate word that needed to be removed. Pathogens, definition for pathogens was added to this Section 3. And that's in response to revisions we made to Section 6 I'll talk about here in a little bit. A permit by rule definition was added. This was needed for Section 9. We allowed applying of seepage from septic tanks in remote areas as a permit by rule when we did not have it defined.

Pretreatment was removed. That was a carryover from old 25. It referred to septic tanks and everything as pretreatment. We've gone to more of a plain language,

calling them septic tanks, calling them grease traps. So that needed to be removed. The restrictive layer definition was revised to remove the frozen layer and the thermal property. That was just providing more confusion. And we don't want to have anything solid in frozen layers, anyway.

Service provider definition was revised to remove advanced treatment from its definition. And finally, we did some clarification of the soil absorption system just to make it clear, most notably, going to the

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plain language, saying we're not going to apply pretreated wastewater to the drain field. We're going to apply the effluent from the septic tank. Just plain language, simple language. One thing that we kind of lost focus on a little bit is this regulation is used by homeowners extensively, and we needed to make sure we keep it with the plain language for the people that are utilizing it.

Section 4, design flows, here we did a lot of update on the flows. The flows were originally established in 1984. Obviously we've seen a trend of lower water use through the -- since that time. All the new flows are based off water and waste -- or, excuse me -- Wastewater Engineering Treatment and Reuse by Metcalf and Eddy. That's kind of the standard in the wastewater industry. They're based on the low rates for residential and the typical flows for nonresidential.

One of the other things we did, we got a lot of good comments from our stakeholders. They had a lot of concern with unfinished basements. When they get built out, how does that impact the on-site wastewater system? So we added the requirement that any unfinished basement counts as two bedrooms so they have some cushion for when the home grows or it gets remodeled.

We got two comments that needed to be addressed

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during our public comment period. Mobile home flows had to be revised. They were based off the unit as a mobile home, and they were low. After much discussion and seeing that there's such a variance in sizes these days in mobile homes, where in the past it was the three bedrooms, and now you can get double-wides, triple-wides, whatever the case may be, so we're now basing the flows from the mobile home on the bedrooms, just like a residential unit. The other item added to Table 2 is restaurants, kitchen waste only. And that's used for sizing the grease traps. We did not have that, so our grease traps would have been oversized.

Section 5, this was a section that was carried over from Chapter 11. This allows for alternative designs, as opposed to traditional rock and pipe or the chamber systems.

Section 6, site suitability, language was clarified, and this was reorganized to make it flow better. We had added a minimum horizontal setback for public water wells and cisterns to on-site wastewater systems, and then we have, for areas of tight residential construction or limited space, the ability to do a hydrological study to reduce that setback.

We've gotten a few comments on this. One of the comments we got was we require vertical separation to

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any restrictive layer or highly permeable layer. For separation at the bottom of our soil absorption system, it got pointed out that fractured rock doesn't always get considered and can cause some problems. So we added that in. On the table, we clarified it to make sure that everybody understands it's a public water supply well, as opposed to a public water irrigation well or whatever the case may be.

We got a lot of concern, a lot of comments in regards to our 600, 300-foot setback for public water wells to on-site wastewater systems. People understood the concept, but they were concerned about small wells. We took a step back and relooked at it, and we've added in a new requirement that takes place for that which requires additional treatment for an on-site wastewater system that's located within Zone 2 of the public water well. What this does is it still allows, you know, I'll say urban construction around public water wells, the small acreages, the three-, the five-, the ten-acre tracts that get built up. They provide additional treatment to ensure they don't contaminate the public water well. And that was something we were very concerned about.

To give you an example of what a Zone 2 zone would look like for a public water well, there is a good

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example of a source water assessment that was done for Chugwater, Wyoming. This red dot here are the two wells they have. And this dark blue -- it comes out blue on everybody's screen -- is the Zone 2. This is the two-year travel time for water to that public water well. This was pulled primarily from the wellhead protection guidance document that was put together by Wyoming DEQ that clearly states that you should not have any sources of potential contamination within these zones. That's where that two-year, that Zone 2 came from. It's going to provide protection for the public water wells that we think is drastically needed.

MS. CAHN: I need to ask again if people in the back can hear Frank.

MR. STRONG: Do I need to move the microphone closer?

MS. CAHN: Just a little closer.

MR. STRONG: The next section, drain field sizing, this replaces the soil absorption system in the old Chapter 25. It was expanded to clarify to give better steps, better information for people using it and provides a better description and requirements for determining the absorption area.

We do allow -- continue to allow a sidewall credit for trenches, but it's been limited to twelve

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inches. And we also converted the loading chart based off the perc rate from a graph that sometimes interprets -- how people view it or how people interpolate it came into question, and we converted it to a simple table so it's easier to determine your loading rates.

We got a few comments in this area. The one area -- or, the one item we missed or overlooked, there was a policy in place that allowed for a reduction in the bottom area, requirements for infiltrators that did not get included in the 4-26 draft, and we needed to get it

included in this one.

If I'm going too fast, please tell me. I don't want to keep you guys here all day.

THE REPORTER: You're going too fast.

MR. STRONG: I will go slower. I apologize.

Section 8, building sewer pipes, basically we updated to reference the current plumbing code. Had been referencing an outdated code for some time. We updated the allowable pipe that can be used on these on-site wastewater systems. And the other thing we did was start requiring cleanouts at the deflections and connections going from the home to the septic tank or from the septic tank to the drain field.

Section 9, septic tanks and other treatment, we combined two sections from the old Chapter 25, the pretreatment and holding tanks, just combined them into one area. We updated the size for septic tanks based off the revised design flows and the 36-hour retention time. We had a section in there for mobile units. It was removed and is now covered under Section 5 and requires a PE. And the final thing we did was do some revisions to the pump tank table to make it easier to understand what's going on. We know we've gotten some confusion in that area.

In addition, we updated the requirement for grease interceptors and sand interceptors into this regulation. Configuration requirements were added. Additional retention times were added and things updated, car washes. All this was trying to update it to more of the current standards or the current things that are out there.

The other thing we did for grease interceptors is we started to require an effluent sampling point. So, if we have an issue where a leach field is filling or something like that, it can be easier to identify what the issue is.

The comments we got did create a few revisions that we feel were needed. The first one was in regards

to the tank -- excuse me. The septic tank size, as I stated earlier, we looked at doing it based off a 36-hour retention time. We got some concerns that may be too little of retention time. We did some more research. And based off the EPA manual, we realized that we weren't providing adequate retention time when the tank is full of sludge. EPA recommends you have 24-hour retention time when the tank's half full. Obviously we weren't doing that with 36. It's pretty easy to do the math. So we need a 48-hour retention time. We did those revisions.

The liquid depth requirements for the tanks was clarified. The way it was written, it appeared that it only applied to the multi-compartment tanks and not the single-compartment tanks. So I moved it down to line C so it shows that it's a requirement for both.

The other item we did is with regards to baffle, a slide show I'll show here in a little bit. The depth requirements for the baffle is to prevent scum from migrating to the soil absorption field or the solid to migrate to the absorption field and were revised to perform better.

And what we're talking about here is how far the baffles extend down below the liquid water level. Before we had it to be a one-third, but now it's based off -- I apologize. I lost the number in my head -- to extend 30 to 40 percent down into the liquid level. This, once again, was based off the EPA manual for on-site wastewater system. Hopefully it makes our system perform better and operate better.

MS. CAHN: Will this graphic be available on the website, then? Because I find it useful to have a graphic that's a little -- you know, this isn't my area of expertise. I'm trying to follow along without a graphic. And it's probably not appropriate to put the graphic in the rules, but maybe on the website.

MR. STRONG: Actually, what we do, once these rules are established, we prepare design packets for the homeowners to use, which has graphics, which has charts and stuff to help with their calculations. So we will have those, yes.

MS. CAHN: Okay. Thanks.

MR. STRONG: Section 10, effluent devices. This has been expanded and a new component added to it. One of the major changes we did is we required that distribution box and flow divider tees will be allowed into the -- to distribute effluent to the drain field or the soil absorption field. The reason that is is these flow dividing tees and these distribution boxes promote even distribution of the effluent across the drain field, where previously with the straight tees, if the pipe isn't laid perfectly level or have any settlement, all the effluent goes to one row of chambers or pipe, and it doesn't get anywhere else.

And I have some examples here. On the left, you can see the flow divider tees, and they just have some baffles in there to help distribute the flow evenly, and then on the right, a distribution box. We did get a lot of comments in support of this from the counties. There's counties up in -- Lincoln County, Teton County pretty much use these exclusively to have a better performance of their system. So we definitely feel this is a good thing.

Section 11, standard drain field systems. We updated for chamber systems. There's been a policy in place for numerous years allowing chambers to be installed in Wyoming. Previously regulation did not address it, so we updated to include those requirements. We added a new requirement making the maximum depth of the drain field to be five feet. That is needed to promote aeration of the on-site wastewater system, which is essential for treatment.

The sand mound system that was in here has been moved to its own section. And the evapotranspiration beds were removed. They just don't get installed. They don't get used. They weren't needed for this chapter anymore.

Section 11, the comment revisions we had, we needed to do a clarification. We had a typo. On the bed sidewalls for bed systems, we had a statement saying they shall be more than three feet. And actually, it should be shall not. And I have a little graph kind of showing

you what that is. And what we're saying is, from this distribution pipe right here, this is a nice cross-section. The largest this distance can be is three foot to count towards your bed area. It got overlooked. We read it, and it said what we thought it did.
MS. CAHN: Thank you. You've just addressed one of my comments.
MR. STRONG: Hopefully we can get more of them addressed.
Section 12, pressure distribution systems, this is a new section that was added in. In the past, it was a requirement to have a PE involved to do a pressure distribution system on an on-site wastewater system. This section establishes the requirement so it can be designed -- can be dealt with a design package and not require an outside consulting engineer to be involved. And we are working on the design package. We are just waiting to see how this meeting goes before we finalize
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it.
Section 13 is essentially a repeat. This was expanded and included so we can have effective designs without a consulting PE. We established a maximum bed width of 25 feet. Once again, that's needed to promote aeration of the system. If it gets too far out, you end up with an anoxic zone in the center of your bed, which doesn't provide good treatment. We are developing a design package at this time, too.
Section 14, small wastewater lagoons, this is what we had much debate on if it was needed. It absolutely is. We're adding some new requirements that a minimum acreage of three acres is needed for a lagoon. The property has to be three acres in size, cannot be constructed in a hundred-year flood plain. Then we removed a factor statement that was in the equation for determining the size of lagoons. We had a factor of 1.3 that was included in the calculation. This was resulting in oversized beds -- or, excuse me -- oversized lagoons. And homeowners were actually having to turn on their garden hose to fill the lagoon to maintain level. That's not what we want. That's a waste of water. So we've corrected that.
Privies, Section 15, it was clarified, cleaned up a little bit. And we still are continuing to require
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permit for construction for these. These things do need to be regulated. It is wastewater. And there's a few bugs in those things. We did have one revision from our comments on privies. The way it was written, it was inferred that unsealed privies that require permits can still be constructed. So we added in a requirement saying that they -- all privies shall be sealed, watertight walls.
Section 16, greywater, this is by far the biggest revision we had to this regulation, and it had a lot of discussion and debate. Basically, we're expanding this section to replace the current policy. Greywater was really only referenced in the old regs under privies and chemical toilets, saying basically you still have to treat it as wastewater and do an on-site wastewater system.
We are requiring a permit to construct for these systems. Greywater, yes, is not toilet water. It

is not blackwater, but there's still quite a few bugs and potential health issues associated with it. We definitely felt that needs to be regulated. We have procedures for estimated flows so homeowners can establish how big an area they need. Does allow for irrigation of food crops. This is allowed in Chapter 21 on reuse. The normal requirement is that the crops

cannot be harvested for 30 days after greywater irrigation. We do allow for surface irrigation. With greywater, we do have a requirement that it has to be disinfected to a level of less than 200 count per 100 millimeters.

The final item that we had a lot of debate on was spray irrigation. We do not feel that spray irrigation is appropriate for greywater, and we were not allowing it.

Actually, oddly enough, we got no real comments on greywater as far as saying this is wrong, this is wrong, during the public comment period. During the stakeholder meeting, we got a lot of support for it. Several counties said they were glad to see it. Albany County said they get asked about it all the time. Not sure how to handle it. So we did get a lot of support for it.

The older revision we have is that, as we were going through, we see that in Section 16 there was an Item D that had nothing behind it. It was blank. Obviously that needed to be removed, so we did it.

Section 17, operation and maintenance, this is a new section of Chapter 25. Basically, it provides basic requirements so a homeowner has a benchmark on what he should do or shouldn't do with their property with

their on-site wastewater system, including recommendation for pumping and that kind of stuff.

Appendix A, the percolation test procedure, all of the on-site wastewater systems are designed based off the percolation tests of the soil they're installing into. We took a long, hard look at this, revised it for clarity and to improve accuracy. We provide a little more cushion for a homeowner to fill the holes and better procedures for him to measure the flows. This is the key to the on-site wastewater system. If they don't have accurate test results, we don't get properly sized drain fields.

Appendix B, land application of domestic seepage, was added to this chapter. This is a new section. And what it does, it allows for disposal of seepage from the septic tanks in remote areas. There's requirements you have to be so far away from the road, various other things. This was taken from Section 15 -- or, Chapter 15. I apologize -- Chapter 15, which is bio-solids. This chapter is going to have to be rescinded because that is regulated by EPA. EPA has primacy over it. But that component was needed for these on-site wastewater systems.

With that, that's my brief and too-fast description of the changes we made. I'll open it up to

any questions that the advisory board has.

CHAIRMAN BEDESSEM: I have just one request, Frank. Can you send us your PowerPoint

presentation to the board members?
MR. STRONG: Absolutely.
CHAIRMAN BEDESSEM: I think it will be especially helpful for members who aren't here to help them catch up. Thank you.
Lorie reminded me that we have a number of individuals here that may want to speak and provide comment. And typically the board would like to hear those public comments before we make remarks with regard to the rules, so that especially if they don't want to spend the entire day here, that they may decide to do something else with the afternoon. So I'd like to ask if anybody from the public who's here today would like to come and speak, be very pleased to hear your remarks. And if you come up, first identify yourself clearly so that your name will appear in the transcription, and we'd much appreciate that. If you'd like to come up.
MR. HARMON: Madam Chair, board, thank you for this opportunity to speak. I'd like to -- I won't go through all my comments.
MS. CAHN: Excuse me, Lou. Could you identify yourself?

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MR. HARMON: I apologize. I am Louis Harmon. I'm a public -- I mean, a private citizen. I'm speaking as a private citizen. Probably most of the board realizes at one time I was employed by DEQ and the Water Quality Division. But I'm speaking as a private citizen and expressing my own opinions.
First of all, these rules, this particular rule, Chapter 25, has to be written to probably a different and higher standard because it's about the only rule that is used by the general public. All the rest of our rules are written by professionals, and the municipality or the industry then hires another professional to deal with the whole issue of the permitting process. This one is unique in that the public has to read it and understand it.
I guess my first comment will be on the requirement every permit, one way or another, has to be covered by a professional engineer. This includes the permits prepared by the private homeowners -- or, the application prepared by the private homeowners. The engineer is the Water Quality Division engineer that prepared the design packet, the preengineered design packet that the individual is using.
So the requirement of the state statute -- and I won't go through all the numbers -- that says that

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every document submitted to a public agency has to be prepared by a professional engineer is satisfied by the predesign packet. It would seem to me that that ought to be discussed a little more fully and explained in the rule just to prevent a disaster like the one I was involved in 24 years ago where a county attorney decided that the statute requiring a professional engineer is being violated. And it caused about a six-month disruption before we finally got everybody educated. So, if that was spelled out in the rule, I think it might save a disaster down the road.
The next issue I'd like to address is the requirement of permits for greywater use and for privies. I agree that we need some minimal or -- we need some

rules for both greywater use and for privies. But to require a permit is to cause people to be violating the requirement to get a permit. If I'm a rancher out here two miles from the public road with my farmstead, I'm not going to get a permit to build a new outhouse. So let's just make some rules on how an outhouse ought to be built and forget the permit. If I'm on five acres outside Cheyenne or outside of Jackson, if I build an outhouse, it's going to come to somebody's attention. And it's the local people that forbid the construction of the outhouse, not the State, anyhow. So I think that should

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be permit by rule just to avoid making lawbreakers out of our citizens.

The same is true of greywater, greywater reuse for irrigation. The people that do this are very passionate about it. They are very concerned about their environment and water conservation. Again, we can allow that by rule. We don't need to require a permit. And frankly, there's no history across the nation of illnesses associated with greywater reuse. Even California has far more generous or liberal reuse -- greywater reuse requirements than what is proposed in this regulation. I stick by what I said in my comment. You just need one rule. Keep it on your property.

And for gosh sakes, let's not worry about washing a dirty diaper. If you're going to get that diaper clean, you've got enough stuff in the washing machine that you're going to knock out the bacteria, anyhow. So I think greywater reuse should be permit by rule, and the only rule that needs to go with it is you got to keep it on your own property.

And the last area I would address is the use of Figures 1 through 6. There is one comment in the response to comments that they didn't want to use a report because it wasn't documented. Well, to the best of my knowledge, actually Figures 1 through 6 and

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actually Table 5, which is the table for determining loading, are not documented. In particular, Figures 1 through 6, they don't need to be cluttering up the regulation, because there's not enough instruction in the regulation as to how to use them. There's no documentation. Do Figures 1 through 6 apply to a bed? Maybe. Do they apply to a long, skinny trench? Probably not. But that's speculation. And the regulation certainly doesn't say what type of situation does this mounding apply to? So I think you can save six pages of the regulation just by taking those out.

And finally I would say, given all the variables that go into a percolation test, that that Table 5, with however many, 40 or so different numbers that you use to calculate, could be reduced to about five. You pick five ranges and pick a range and design to that. Because the fact of the matter is percolation tests just don't justify the type of accuracy that is implied by that very elaborate table.

Many states are using soil classification in lieu of percolation rate. My comment -- the response to my comment as far as using NRCS soil types was that they're too general. Actually, NRCS soil maps are very specific and very accurate, and at times it will save you a disaster that a percolation test might not pick up on.

Percolation tests aren't particularly sensitive to things as slowly swelling soils and things like this that the NRCS soil classification will, in fact, identify.

And thank you, ladies and gentlemen. Unless you have questions, I will --

CHAIRMAN BEDESSEM: I wasn't clear on what you were suggesting in your last comment about the soil classification, versus the perc range. Are you suggesting using both?

MR. HARMON: I'm suggesting that soil classification should at least be an option.

CHAIRMAN BEDESSEM: Any questions for Lou?

(No response.)

CHAIRMAN BEDESSEM: Thank you.

MR. HARMON: Thank you.

MS. CAHN: Is DEQ prepared at this point to address Mr. Harmon's comments?

CHAIRMAN BEDESSEM: Can we hear the whole summation in case there's more on those topic areas? Then if DEQ wants to speak to some of them, they can do that kind of in batch, if that's okay.

Another speaker? Someone else like to speak?

MR. WOODWARD: Madam Chair, my name is John Woodward. I'm with Lincoln County Planning and Engineering. And would it be okay if I handed out a two-page handout that I have?

CHAIRMAN BEDESSEM: Of course.

MR. WOODWARD: I've been in the stakeholder group for the last couple years with this process. It's been kind of a roller coaster, especially the last few months, with some of the radical changes. But I think a lot of progress has been made in a lot of areas. I'm particularly pleased that they've gone away from the 600-foot protection area as an arbitrary marker down to a 200-foot and with provisions for the Zone 2 consideration.

I've drawn in some of the public water supplies that we have in Star Valley. Star Valley is a narrow valley, about 50 miles long, with quite a bit of second-home development and commuter housing for the Jackson job market. And our land use regulations actually encourage community wells so that we don't have too many individual wells that can be point sources of pollution. So the 600-foot marker would have been difficult. The 200-foot is identified by the yellow line. It's much more workable. And then, of course, we'll have to be educating ourselves on the Zone 2s for these supplies.

The other comments I have, for a while it looked like the setback from a foundation to a septic tank was going to be 20 feet, which would have been difficult in some of our existing lots, particularly in an area like Star Valley Ranch. Even though it's an incorporated town, it consists of 2,000 half-acre lots that are on septic systems. They're about 50 percent built out. A lot of nice people live there, people like John Corra. And some of them are building homes that are too big for a half-acre lot. And 20 feet would have been tough. Obviously I think the intent was to create a situation where you weren't building a deck or a house addition over a septic tank. And I think we got that

message. And so we'll work on getting that to the public.

I think Mr. Harmon's comment about the professional engineer required for many of these kind of environmental devices and that the preengineer design packet satisfies that statute requirement should be clarified in the rules. The public does use this packet. And there are many times when professional engineers will be required and the public will be coming to my office to ask about that.

I think that's the extent of my comments. Thank you.

CHAIRMAN BEDESSEM: Thank you very much. Do we have another speaker?

MR. STEVENSON: Jim Stevenson, Rock Vale

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Systems. I represent Presby Environmental.

Several short comments relative to the written that I submitted. I agree with Lou. I was the primary commenter on Figures 1 through 6. My discussion with Wyoming engineers is that Figures 1 through 6 rarely, if ever, apply. And most of them are -- the figures are really the basis -- the technical basis of the figures is I think quite antiquated and limited. I agree with what Mr. Harmon was saying. It just seems that it might be viewed as superfluous at this point, both due to maybe an outdated basis and lack of use.

That's not to say that groundwater mounding potential isn't an issue. But it just seems that Figures 1 through 6 are maybe not the tool for that evaluation, nor really, again, for the public to attempt to apply, or if you do not apply them, then you're in violation of Chapter 25. My background is as an agricultural engineer. And they are about the only trades that are taught some of those soil dynamics. And there aren't that many agricultural engineers in the state.

I think that just for adopting -- as a technology representative to the wastewater industry, I believe that there maybe should be some clarification in the rules as to what the administrative process is for adoption of a technology into rule. How does that

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happen? Let's take, for instance, pressure distribution. How is that technology, or chambers, how are those technologies adopted into rule? What's the regulatory process for adoption? I think just maybe stepwise, that could be defined.

As well, then, soil loading area reductions for certain technologies, whether -- maybe define whether soil loading area reductions that are incorporated now for certain technologies, whether those are based on strictly hydraulic or whether they're based on the technology's ability at that increased soil loading rate to deliver treated water quality that's still protective of groundwater and the threshold of proof required.

Thanks.

CHAIRMAN BEDESSEM: Any questions?

(No response.)

CHAIRMAN BEDESSEM: Our next speaker?

MR. BACHELDER: Good morning. My name is Dick Bachelder. I represent Infiltrator Systems. We're the country's largest manufacturer of on-site wastewater disposal products. And we're from Connecticut. I'm from

Maine. And thanks for the opportunity to be here and comment.

I, first of all, want to commend the Division on a couple of changes that were made to the process. I

make a living getting products approved. So I work with the Lous and the Franks of the world all over North America. Every state at different times takes a run at these rules. It keeps me in a job. If we had one standard across 50 states, then I'd be doing something different. But it varies state to state. And a lot of what gets incorporated into regulation is based on common practice in the local jurisdiction, a state, a county or the like.

Our company invented the plastic leaching chamber in the early -- middle 1980s. And through a policy, chambers have been used since 1988, I think in this state, at a 50 percent bottom area reduction. There are, by our sales estimates, over 20,000 infiltrator systems in the ground with a significant positive history of use.

And I think we've come to a -- we very much wanted to continue that -- the use of the chambers with the soil loading rates that are more aggressive than for pipe and stone, based not only on the history of performance here in Wyoming and throughout the country, but also on stacks and stacks of both lab and field studies that show, from a functional perspective, these systems work not only in Wyoming, but also in every other state. And there are a number of studies that speak to

the treatment component through the subsoils and chamber systems at more aggressive load rates.

The initial draft of the rules did not recognize the sizing advantage. In fact, they pushed chambers back to one-to-one sizing. And through comments, we've come to -- the draft regulation that I'm looking at now includes about a 30 percent bottom area reduction, which is what the IAPMO, the plumbing code, which is the international association of mechanical and plumbing engineers' association, recommended a .7 multiplier, or a 30 percent reduction. The language in Section 7 on sub 2 for chambers is a 1.43 multiplier of the bottom width of the chamber. And that, when you do the calculations, comes out at about 30 percent if you use a 34-inch-wide chamber as a bottom.

So I believe that's where we moved as a cooperative effort. And I want the board to understand that that's great. It doesn't have to be adversarial. I think that Infiltrator has a very strong case to say we want our 50 percent. And the Division could take the position that chambers should be one-to-one sizing. And we -- through comment and cooperation, I just thought the board ought to know that the process can work. It doesn't always work, but it can work. And in this case, it has.

A couple of comments on tanks. We make tanks. We provided a couple, three pages' worth of comments on tank specifications. The bottom line is that we are advocates of lower-profile tanks. It's not about what materials are made of. It's about site availability and the ability to get septic systems on sites with greater

restrictive conditions.
So I want to commend the Department on line number 476, the liquidate depth shall not be less than three feet. That's a change from four feet. That's a good thing. You still got to have a thousand gallons for four bedrooms. So there's no loss of function, retention time and the like. So I commend the Division for that.
If you look at 488, 89, tees or baffles shall extend a minimum of six inches above and 30 to 40 percent of the liquid depth below the liquid. I mention that as I move forward to the next page at the top of 25-19. We're going to still ask the Division to work on this. This says that you got to have at least two inches -- nine inches of open pipe or 20 percent of the liquid depth, whichever is greater. And that doesn't help low-profile tanks, whether they're concrete or plastic or anything else. If you've got a baffle that's got to be six inches above the liquid level and you've got three inches of clear board, elsewhere in here we require three

inches of airspace. That's nine. So, when you use the whichever is greater on the 20 percent -- I'm on the line 494.
MS. CAHN: On this red-line strikeout --
MS. JOHNSON: I think he's in the one I gave you. It's line 509 on page 25-19.
MR. BACHELDER: It probably isn't even worth it, but I feel badly -- Ms. Cahn, is it?
MS. CAHN: Cahn, yes. I'm getting there.
MR. BACHELDER: It isn't that big a deal. Again, I just want to be -- go on record as saying that we're not trying to sneak anything by here. What we are advocating is low-profile tanks, even if they're made out of concrete, if we -- the way it's worded is -- subsection 3.
MS. CAHN: Which line number?
MR. BACHELDER: I'm on 509, 510. The outlet elevation shall be designed to provide a minimum distance of nine inches or 20 percent of the liquid depth, whichever is greater, between the top of the liquid and the bottom of the tank cover.
So what we're advocating is that the reason we need space above the outlet baffle is air movement. The reason we have a baffle in the first place is so, as the scum builds up, it's got to really build up to get into

that outlet and get out in the leach field. So we've got six inches above the liquid level for that, in my opinion -- and I'm a history major, so jump in here and correct me. But that's what that's for. So the space above the baffle to the roof of the tank is about air movement and vapor lock, is my understanding of the tank business. And so there isn't much out there that says one inches, three inches or whatever. Are three inches a heck of a lot more important than one? What we're advocating is, if you require nine inches above the liquid level, the 20 percent of the liquid depth is really unnecessary. And it's a disincentive on lower-profile tanks, which use less material, less expensive to produce and make some sites more available in terms of water table and bedrock. Something that we'd asked the Division to continue to consider.
Does that make sense?

CHAIRMAN BEDESSEM: So was your suggestion that it's just nine inches, as opposed to liquid depth percentage?

MR. BACHELDER: Yeah. The whichever is greater is going to work against the low-profile tank, is what I'm suggesting. And let me say this. In our submittal, we provided an attachment which listed the requirements of all the states. And this is -- I really

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thought to myself that I'm not going to say this, but once again, my dad says what makes you good makes you bad. I'm going to open my mouth. Most of the states do the percentage based upon liquid volume. It's 20 percent of the volume needs to be available, not the liquid depth. So, in Wyoming -- and this is true of the previous regulations, and it's true as you drafted them now. The measurement is in inches. The IAPMO spec. is on liquid volume, 20 percent of the liquid volume. The other states talk about liquid volume. And so I think we didn't pick up on that until just recently. So, again, I'm only bringing this up to keep it on the table in the hopes that we can continue to discuss this.

So that's it, for the most part. Again, I stand in front of these microphones from time to time in these processes. And the Division should be commended for -- you know, one of the gentlemen earlier said there have been a lot of changes, and that's part of the way it works when you take public comment. That's the whole program. So thank you very much.

CHAIRMAN BEDESSEM: Thank you.

Any questions?

MR. JONES: Just clarification here, because I'm not even a history major. What you're suggesting, then, is to do away with the nine inches and

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the words "which are greater" and go with just the 20 percent. Is that correct?

MR. BACHELDER: Either/or.

MR. JONES: But not both?

MR. BACHELDER: That's right. Because you've still got -- elsewhere, you've got the inches of space between the top of the baffle and the roof. So it can't get too low. See what I mean?

MR. JONES: Yeah. Thank you.

CHAIRMAN BEDESSEM: Do we have another speaker this morning?

(No response.)

CHAIRMAN BEDESSEM: So, hearing none, I believe we're done with public comment. Thank you.

Would you like to hear responses to any of these before we --

MS. JOHNSON: Madam Chair, would it be possible to get a ten-minute break or so?

CHAIRMAN BEDESSEM: You bet. We'll recess for ten minutes.

(Hearing proceedings recessed 10:43 a.m. to 11:04 a.m.)

CHAIRMAN BEDESSEM: Like to reconvene our meeting, going over Chapter 25 of the proposed water quality rules and regulations. I'd like to hand the

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floor over to Kevin with the DEQ, Kevin Frederick, to perhaps have your staff make any remarks with respect to

the comments that were provided earlier by the public presenters.

MR. FREDERICK: Yes. Thank you, Madam Chair. First of all, DEQ and the Water Quality Division certainly appreciate the gentlemen that provided comments today. We're very interested that they showed such interest in this regulation and are really thankful that they participated with us in not only the stakeholder process -- in fact, in my time at DEQ, this is probably one of the regulations that I've seen the Division work as closely as they have in trying to get comments from stakeholder groups and so forth. And we were very fortunate to have a lot of good input and feedback from those folks, and we certainly do appreciate that.

I think staff have done a very good job in taking those comments into consideration. They looked at them seriously and closely. And we do have, I think, some responses that we would like to provide to some of the comments that were provided here today. And I will turn it over to Frank Strong and Rich Cripe.

I did want to quickly introduce another staff member from DEQ that has attended here with us today, Bill Tillman. Bill is managing our regulatory affairs

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program with Gina here in moving rules and regulations through the Division. So, even though he's not at the table, he is a valuable staff member for us.

Rich and Frank?

MR. STRONG: Madam Chair, members of the board, we're going to take a few minutes and try to address most of the comments. Most of them we have seen before, so we did have some responses.

MS. CAHN: Maybe tilt the mic up more.

MR. STRONG: Is that better?

As I was saying, most of the comments we have heard before, so I think we have responses for all of them. We'll go through them and discuss them briefly.

Starting with the comments from Lou Harmon in discussion of whether we should discuss meeting the DEQ requirement and regulations --

MS. CAHN: Can you tilt it up?

MR. STRONG: I apologize.

With the discussion of whether we should include in the regulation discussion on how the design packages meet the requirements of a professional engineer, currently that's addressed in the policy. We felt it best to leave it there and not to -- we can provide copies of that policy to all the delegated counties to prevent any confusion in the future. We just

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didn't see the need to include it in the regulation.

The next set of comments in regards to greywater and privies, we do one at a time here. We kind of had them together. In regards to permits for privies, we feel very strongly that they are needed. We are dealing with wastewater here, the same thing that's being disposed of in an on-site wastewater system. And without having permits, these privies can be constructed in any location with no means to track or to regulate them. We don't feel it would be a good situation. Looking back at the history where we've seen privies that were installed without a permit within flood plains or various other situations, issues did arise. Definitely both are

needed.

MR. FREDERICK: Madam Chair, I'd like to interject just a comment at this time. I appreciate Mr. Harmon's recommendation of, rather than requiring an individual permit for privies, that we provide design standards, if you will, and consider a permit-by-rule approach instead. And I think that's a comment that's worthy of a little closer consideration, and I'll certainly be visiting with staff about the practicality of doing that with privy systems.

MR. STRONG: Thank you.

Madam Chair, greywater, there was discussion

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about a permit by rule for greywater and the concerns we have with greywater. Greywater is wastewater. It's the same components coming out of the house. We have done a lot of research and looked at a lot of studies. And greywater can have some pretty good fecal counts. Let me give you a few examples of why we are so concerned and are requiring a permit.

This is a study that was done by the University of California in September of 2012. And when we discuss the fecal counts, it showed, when they did their study, coming out of a laundry washing machine, fecal counts were 1,400 to 6,300, where we're requiring a reduction down to 200. So that's seven times on the low end. If this is left wide open, washing machines do remove the soiled material, but it doesn't disinfect it. It doesn't make it clean. These are just a few examples of why permits are needed and regulations are needed for greywater.

MR. CRIPE: Madam Chair, there are other things that are also in there. You're dealing with pathogens. And so this is not an uncommon thing, having it permitted. As a matter of fact, it -- and we could provide this report to you. It goes into great length that that's one of the things that gets undermined nationwide. Some of our neighboring states don't even

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allow it, Nebraska, Idaho and Colorado. We didn't take that stance because of the shortage of water and the demand and things of that nature, that there is a beneficial use if you have some boundaries there. But health standards are a thing there.

And we did get a lot of support from the communities that had to deal with this. This had previously been thrown out there as a permit by rule. And Natrona County and Laramie County had major issues because enforcement and things of those natures were hard to do, because you did put some guidelines, but they didn't follow it. I would hope all of us would try to follow the rules and things. But it was an inconsistency, so they were requiring it to be permitted, where we had a different stance, and we were inconsistent.

We also would promote that, for this to be effective, education to the public would be one thing we would want to include with it to get that cooperation of applying it properly and using that resource like it needs to be used.

CHAIRMAN BEDESSEM: Rich, can you tell me, when you were kind of describing almost a conflict between Laramie County and Natrona County, what might

come of these state rules? So are they doing county
permits for greywater?
MR. CRIPE: Yes, they were. What we have at the moment, when I first got into this position, was a permit-by-rule policy was there in place. And we had an inconsistent approach there, where they were actually permitting in Laramie County, in the county, not the city, because Cheyenne and some of them have ordinances that don't allow that. And some don't. Some just, you know, you can do whatever. But they were having that issue. So there was a discrepancy. And so that creates an issue, because we give that delegated authority to them through delegation agreements. And not to say everybody doesn't follow the rules. They could potentially, if they wanted to, stick their tongue out at them, and it would progressively go up. And here we're sending a mixed message where nondelegated counties would have a different thing as delegated. The lion's share is most of them are delegated.

So there was a conflict there. And when we did do this, as you can see through the stakeholders' comments, it was very supportive. As a matter of fact, they breathed a little bit because we had resolved an issue that we didn't realize was an issue until that door got opened a little bit. John Drinnon up here had major issues on Casper Mountain and throughout trying to address that, because the burden of proof of trying to prove that becomes even more hard to achieve. Albany County was very good.

And as you see, there weren't a lot opposed to it. There were some differences of -- you know, at first we tried to do an approach of leaving the chlorine in there as a residual, and that was kind of a conflict with our reuse policy, so we backed off and proposed what we did. We will have a policy that would address how to do that so that they could follow their -- and that was the only real big issue, other than Mr. Harmon's comments. Most everybody throughout the state -- you can look -- were in support of that because we actually provided kind of a boundary for them to follow.

MR. FREDERICK: Madam Chairman, if I may add, DEQ's previous regulations for permit by rule would essentially allow these types of activities to occur with a minimal amount of regulatory requirements and so forth. And as Rich alluded to, for those counties that were delegated the authority to issue these permits, some of them felt that the more rigorous process of requiring an individual permit was more appropriate, given their concerns with respect to where some of these activities were occurring.

They certainly have the prerogative to be more stringent than DEQ in their permitting requirements. However, I think what we heard was that it did place them in somewhat of an uncomfortable position, where the county or the city was perceived as being more regulatory than DEQ. They certainly felt that in some instances our regulations weren't stringent enough, and it did place them in somewhat of an uncomfortable position, I'm sure.

I think the approach that we're taking here is justified and reasonable and will hopefully eliminate

that perceived conflict, I guess, between the two different permitting approaches that were in place prior to the changes in this draft regulation.

CHAIRMAN BEDESSEM: Thank you.

MR. STRONG: The next comment that we had from Mr. Harmon was with regards to Figures 1 and 6 being included in Chapter 25 and their use. The reason the Figures 1 through 6 are included is to provide an easy chart or easy reference for individuals to use, as opposed to several complicated calculations or actual model being conducted.

Probably the one new concern or new comment we got, these charts are hard to understand or hard to follow, these figures. So what we'd like to do as part of our design package is provide an example, an illustrative example, showing how to utilize those charts

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to benefit the design process. Those figures do get used. They primarily become an issue when you have a situation where a leach field is going in above a very shallow groundwater formation where you only have ten, five feet of actual saturated thickness. That actually is where mounding is the worst, and that's why those are there.

In regards to soil classification, we are looking at developing a policy to allow soil texturing to be in check with a protest. We did not include the soil texturing in this regulation for several reasons. There seems to be a lot of conflict out there on this soil type will do this. And ultimately, there's not that many people who are qualified to be doing the soil texturing in Wyoming. It would be very difficult for a homeowner to do soil texturing or soil classification or to find somebody.

MS. CAHN: What about Mr. Harmon's suggestion that you do either/or, that somebody can do soil classification or a perc test?

MR. CRIPE: Madam Chairman, Ms. Cahn, what he proposed with what he was saying there is, in a policy, what we were doing is provide that as a check, that if you have the delegated counties that went through the proper training and certification, that they would

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have the mechanism of doing that to see that someone didn't fudge a perc test, that it was legitimate. But we were gearing it toward the ones that would have a need and a use and could be certified. A homeowner or an installer would have a difficulty.

The other thing is that soil texture and perc, the correlation between them is not as clear as it was portrayed. Table 5, which is the perc, it is that exact. I've actually looked and read on this in great length. It's been around 80 years. It's been tried and true. The new concept of soil texturing is coming in, and it does have merit, but soil does not act as those five classes. You could go in your backyard and dig three different holes, and the makeups are a little different.

The perc does, if used properly, display what is going on there. The soil texture done by a qualified professional can be used as a check to make sure that's a legitimate thing, especially if they have areas where they know they've had problems and that perc is something beyond what they normally see when they're permitting.

MR. FREDERICK: Madam Chair, Ms. Cahn, I might add, as well, that the accuracy of the NRCS soil classification maps obviously beg some question, too, with respect to what the actual percolation rates might be in a very site-specific situation. Certainly the soil

classifications can differ quite significantly from how they've actually been mapped due to the scale of the map.

MR. STRONG: Madam Chair, I believe that is all of Mr. Harmon's comments. If we missed any, please let us know. But I think we got them all covered.

The next individual we had, John Woodward.

CHAIRMAN BEDESSEM: Frank, I think there was one where he talked about that one of the tables he wanted, rather than it being so elaborate, that it reduce the ranges.

MR. STRONG: That was in regards to Table 5, which is the perc test. And we feel that that perc test can be done and produce that kind of accuracy for the design of the systems. It's been around for 80-plus years and been very reliable and a very relied-upon method of soils absorption systems.

CHAIRMAN BEDESSEM: I find this discussion interesting, because I remember back in Maine 30-plus years ago, they did allow soil texture. But to get your certification to be able to evaluate sites was rather complicated because it wasn't a very simple thing to learn how to evaluate all those textures for Maine soils, and it was a big deal to be certified to do that. So it's been in place for a long time, but it's more complicated.

MR. CRIPE: Yes. Madam Chair, it's very easy to make an error in that process if you don't have the proper training. Myself in a lab, not intentionally, messed up one of those and realized something didn't seem right and had to redo it. But that's why we would suggest that approach of having qualified and addressing it as a policy as a check.

CHAIRMAN BEDESSEM: I imagine that's why they had a certification program. Thank you.

MR. STRONG: Mr. Woodward's comments, as he stated, we did eliminate the 600-foot setback and went to the Zone 2, and we'd be happy to work with him on developing on how to check that and to work with us on that. He did comment on the 20-foot setback on the foundation. That was brought up in the stakeholders' comments. We did revise it back.

And then we also previously discussed Lou Harmon's comments about the requirement of discussing how the design packages meet the PE requirements. And I believe that was all of his comments.

MR. CRIPE: No. He had clarifying the rules. There was a comment -- I took a note, something about clarifying rules, something.

MR. STRONG: I didn't get that one.

MR. CRIPE: I believe he was reiterating

what Lou Harmon said about the policy, PE.

CHAIRMAN BEDESSEM: I think so.

MR. CRIPE: Jim Stevenson.

MR. STRONG: Yes. The next set of comments was Mr. Stevenson with Presby. He discussed

Figures 1 through 6, which we've already covered. He asked for recommended clarification in rules on how to adopt new technologies into the regulations. There is a procedure in place at this time. What an individual such as him could do is they can apply for a statewide general permit for their system and create a design package that can be reviewed and approved by DEQ. Once that's approved and in place, it is a five-year permit, where homeowners could utilize that design package to design an on-site wastewater system that meets their -- that utilizes their technology and would not require a PE, an actual PE submittal.

CHAIRMAN BEDESSEM: And where is that described?

MR. STRONG: That's located in Chapter 3.

MR. CRIPE: Madam Chair, further description, too, is addressed in the general permit of what can be and what cannot be in that. And what he was referring to was the general permit. Chapter 3 goes through explaining the different things of applications.

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As well as Section 5 in this regulation says when you do not fall within the technology, this is the application you must follow.

CHAIRMAN BEDESSEM: I remember seeing that.

MR. STRONG: Mr. Stevenson's final comment that I have was in regards to soil loading reductions in regards to chambers and how it was determined and defined. There is not a set standard for this, because each treatment system has its own unique aspects and abilities. Some apply the effluent directly to the soil. Some provide some secondary treatment before it gets to the soil. So, for each technology, it has to be evaluated on an individual basis, as opposed to a set standard for all.

We've had discussions with Mr. Stevenson on how we could do that, and we are moving forward in that process. But as far as saying, you know, all would be based on hydraulic loading or all would be based on treatment loading, we can't do that because each technology is different.

The next set of comments I got was from -- I didn't get his last name.

MR. FREDERICK: Mr. Bachelder.

MR. STRONG: Mr. Bachelder with

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Infiltrator. His first comment was discussing how the procedure has worked for him. And we're glad that we've been able to work with him. His next set of comments was in regards to low-profile tanks and wanting to reduce that nine-inch clear space above the liquid level. I put up a diagram so hopefully I could help describe it a little bit better. I didn't know if the board members, Madam Chair, were following along with this description. What we currently require is from the liquid level to the top of this tee to be six inches. And then above the tee, we require three inches of clear space, as stated, for air movement. His comment was he'd like to see it be nine inches, or 20 percent. The concern we have with that with a low-profile tank that only has three foot of liquid depth, that would only provide seven inches. It would not meet the nine inches at the minimum that we're

establishing with that requirement.
These requirements, once again, looked at several different states and looked at the EPA's on-site wastewater manual, and they recommend the six and three inches. And we feel it's appropriate and provides a robust system that is reliable for a homeowner.
MR. CRIPE: Madam Chair, his comment was a good comment. And I would further add that we will communicate with them and see if we can come to some
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common ground there to address the concern. There are other low-profile tanks out there. And sometimes low-profiles are different than the regular tank. So we will entertain and see what we can come to a common ground with him on that.
MR. STRONG: And then his final comment was in regards to basing the 20 percent off the volume of the tank, as opposed to the depth. We need to take a second look at that. I can say with a square or a rectangular septic tank, basing it off the volume or the depth gives basically the same dimensions, because all you're affecting is the height. So it would still be 20 percent. We need to take a second look at that for the ground politics.
I believe that's all the comments.
CHAIRMAN BEDESSEM: I have a quick question here. On page 25-15 --
MS. CAHN: Which version?
CHAIRMAN BEDESSEM: The one they gave us.
So, in the section -- I'm looking kind of at 373, 374, that area, where it sort of looks like there's a performance specification, where the individual permit to construct and the treatment shall be in accordance with a certain chapter, but the treatment shall reduce nitrates to less than ten milligrams per liter of
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nitrate-nitrogen and provide 4-log removal of pathogens before discharge leaves the property boundary of each small wastewater system.
So my question is, when someone gets a permit for this, are they going to be required to have the sampling, and is this location at the surface to groundwater? What does this mean? Please explain.
MR. STRONG: What this is getting at is trying to protect public water wells. And when we have encroachment by on-site wastewater systems, we have concerns. What this regulation or what this section is requiring is that if an individual wants to construct an on-site wastewater system in a Zone 2 or public water well, they need to have an engineer involved and have the system designed to meet these requirements.
MR. CRIPE: Madam Chair, there's a couple conditions here before you get into the -- the first thing is that we're talking about shallow wells, and that condition would have to first be met. It would be a different situation where it was a deeper well. With that being done, then those two things could be addressed by a technology that would meet that. For instance, Avantek treats effluent to that standard. UV could be the mechanism to get your log removal. But it would require that so that you didn't have the nitrates and the
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pathogens and all of that being put into your well

supply. Those things elevate in technology level, where it's not a general permit, but it's more of an individual and a PE ensuring that would be done. That type of technology would address that.

MR. FREDERICK: Madam Chairman, let me add that the intent here is to place design standards on the effluent that essentially preclude the need for monitoring.

CHAIRMAN BEDESSEM: Thank you. That's all I wanted to hear. It's a technology assessment. It was a technology to meet this standard?

MR. FREDERICK: Yes.

CHAIRMAN BEDESSEM: But you're not talking about a compliance point?

MR. STRONG: Correct. There would be no samples, but you would be seeing a technology base that can handle this. The reason we reference the property boundary is because actually in an on-site wastewater system, the soil beneath is part of the treatment process.

CHAIRMAN BEDESSEM: That's what I wanted to hear. Thanks, Frank.

MR. STRONG: You're welcome.

CHAIRMAN BEDESSEM: I just had a couple

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of, just as we were reading this, just little, minor word things. I think on line 1061, it says prefabricated privies and outhouses shall be sealed watertight vaults. And I think you need the word "and."

MS. JOHNSON: "Shall" in there, too.

CHAIRMAN BEDESSEM: Shall be sealed watertight vaults and shall meet the following conditions, I think would fix it. And then I don't know if this is just something that was supposed to be struck out. The title for Section 11 is supposed to have "system" in there twice?

MR. TILLMAN: No. That's a typographical error.

CHAIRMAN BEDESSEM: Calvin, do you have any specific remarks?

MR. JONES: I just have one comment. I guess on 25-5, I'm a little confused of the difference between a rest home and a care facility.

MR. STRONG: What's your comment, Mr. Jones?

MR. JONES: The difference between a rest home and a care facility.

MS. JOHNSON: Are you wondering if that's redundant?

MR. JONES: Yeah. If that's redundant,

0061

yeah.

MR. STRONG: I don't believe so. I know it's been distinguished. In the engineering manuals we utilize for this, it's consistently distinguished. So it might be in regards to the level of care being provided at a rest home, versus a care facility.

MR. JONES: Because most of the old rest homes in the state of Wyoming are now called care centers or care facilities.

MR. STRONG: Maybe we're behind the times.

MR. JONES: Well, I had a mother who was in a care center. And it wasn't a rest home. She made

sure of that.
MR. STRONG: Madam Chair, Mr. Jones, we'll take a second look at that.
CHAIRMAN BEDESSEM: And I know this might take a while.
MS. CAHN: Grab your lunches.
I first want to just make a general comment about responses to comments. And I appreciate that you guys are inundated with a lot of comments. And I think you've done an excellent job of trying to address the comments.
There are places where there are no responses to the comments. And I can point those out to you. So I

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think you need to go through and carefully make sure you do have responses to the comments. But having been in a similar position myself with responding to public comments, I can offer some suggestions, and you can take them or leave them. But what I like to do -- and I appreciate that you've grouped the comments, rather than by commenter, but by section. I think that's very helpful. I don't think -- and, Kevin, you correct me if I'm wrong. But I don't believe you need to state each comment verbatim, particularly since they're attached in the back, that you could paraphrase the comments. And so, in each section or in each -- I forget what subsection. But you could say two commenters suggested we do this, and one commenter suggested we do that, and therefore, and our response is this. And you can kind of kill a bunch of birds with one stone.
So, to make it more manageable, I would maybe perhaps -- if the commenter --
CHAIRMAN BEDESSEM: It's good to reference who the commenter is so that if we wanted to look at the verbatim language of what the actual comment is, then we can refer to it. But since we're making you attach the comments --
MS. CAHN: Right. And you would need to identify -- and you could do it by initials or like you

0063

have. But that might help.
MR. STRONG: I like that a lot.
MS. CAHN: I'll start with my responses to comments, and then we'll get to the rule. On page 19, so I'm on the responses to comments. In the April 26th, 2013 version, on the bound version, page 19, the commenter, David Anderson, basically said it's really hard to know what the definition of saturated thickness is in the figures. And so, basically, your response was that you added a definition to the list of definitions of saturated thickness. But I'm not sure that the definition that's been added has addressed his comment. It says the saturated thickness is not going to be known at most current facilities and will be difficult to determine at new sites.
And so, even though you say, well, here's how you define saturated thickness, an issue comes up with they don't necessarily always know what the highest groundwater level is. I think that came up with some other comments, as well.
MR. STRONG: Okay. We'll definitely take a look at that. Maybe we need to make it part of the design package to help give an idea or suggestions on how

to determine what the depth of the aquifer is. Typically, you utilize well -- surrounding well pads to establish where the bottom of the aquifer is.

MS. CAHN: Yeah. So I think the response to comments addresses only how you define it, but not how you measure it or determine it. So I think the response to comments should go into that you'll have a policy that will help them with how to determine it.

The next one I have is on page 21. And I think it's James, and I'm not going to pronounce --

MR. STRONG: Brough.

MS. CAHN: Brough. He kind of got at the same question about saturated thickness. How often is the saturated thickness really known? So, again, I think the response can address kind of the particular problems with addressing saturated thickness. That will be in policy?

MR. STRONG: Yes.

MS. CAHN: On page 34, April Gindulis -- is that how you pronounce it?

MS. JOHNSON: I think so.

MS. CAHN: -- from Casper, Natrona County Health Department, she brings up some issues about drain field sizing and chambers and how they've seen numerous failures where chambers have been used. And then your response is just, "Thank you for your comment." And so it's unclear to me what you intend to do about that. Are you saying -- I don't know what, "Thank you for your comment" means in terms of the response. So, in the next set of comments, if there could be a response to that. I don't know if you want to respond now or if you wanted time to think about it.

MR. STRONG: We'll definitely put some thought to it. I can say we have looked at a lot of the failure data for the Wyoming area and some of the counties' argument there. And we have been -- we've researched in these discussions about increased failures, and typically we have found it's been caused by the home being expanded or some other outside component that caused the system to exceed the design capacity of the drain field. We're definitely going to incorporate it into the comment.

MR. CRIPE: Ms. Cahn, she referred to chambers. I might make note that our change in the factor of 30 plays into that because that's a safety factor. Typically -- and you've seen the comments from Infiltrator. Those are verifiable, that they do have those type of results. When you reduce that factor or when -- yeah, when you reduce that correction, then you're increasing your safety factor. And so it will be addressed with this regulation. We could give a better response to her. She's one of the delegated counties. I think it was misintended by "thank you" that we were not considering her. We could have been more explanatory. But we were addressing, and that's why some of that got adjusted on 30, as opposed to 50.

MS. CAHN: And I think Bill was trying to get your attention.

MR. TILLMAN: Ms. Cahn, Madam Chair, I guess sometimes in the responses that we've got in both

stakeholder -- mostly in the stakeholder comments, they were statements. They weren't really comments. And so, in some of those instances, it was hard to determine what their -- what their point was. So it was kind of -- I really didn't know how to respond. I do quite a few responses. So sometimes when it was just a statement, I just said thank you because I really didn't know what their intention was. And this one we probably could have done better. But sometimes when you see that, it's because they made a statement that I really didn't -- they didn't have a position, if that makes sense.

MS. CAHN: Yeah. And I think now, like you say, you can go back and respond now, perhaps.

On page 45, at the top of the page, there's a comment from Dave in Teton County. The comment is, these should be combined. It currently sounds like you have a two-compartment tank, and they have to be two-to-one

ratio. It should be either/or. And there's no response.

MS. JOHNSON: You can blame that on me. I was formatting the document and missed inserting the response.

MS. CAHN: Okay. Just to bring to your attention, no response there.

On page 46, about halfway down the page, Jason Vreeland made a comment about gases generated during liquefaction and then will be vented through the building stack vent. This sentence doesn't appear to be necessary to the regulations. And the response is, we will consider reviewing this sentence. But was it removed, or did it stay in? So, again, I'm not sure what was done. Do you see where I am?

MR. STRONG: Yes.

MS. CAHN: On page 47, about a third of the way down the page, the James Brough comment, the response -- second response on the page says, we will review the dimensions and correct as necessary. So, again, did you find an error that you corrected or --

CHAIRMAN BEDESSEM: I think essentially what he's saying there is in the response to comments, he doesn't know what the final resolution is.

MR. STRONG: Okay.

MS. CAHN: I mean, I can go through all of

them, or if you want me to do that later for you --

MR. STRONG: Later is fine unless you really want to do it.

MS. CAHN: No.

MR. STRONG: If you want to, we'll be happy to accommodate.

MS. CAHN: I can leave you with my copy.

MR. STRONG: That would be greatly appreciated.

MS. CAHN: All right. So, to the proposed rule, or the changes to the rule. And I'm working off the clean version in the bound copy, just so you know what I'm working from. So I haven't had time to check through the --

MR. STRONG: Additional one.

MS. CAHN: -- additional one. So some of my comments may have already been dealt with. A lot of them are editorial. And I'll try to be quick, or we can hand you those, as well.

Page 25-1, the definition under (g), 3(g), a five-day BOD, the second line says "dissolve oxygen." Should be "dissolved oxygen."

MR. STRONG: Correct.

MS. CAHN: Just a general comment. The first place I saw it was on page 25-2 under (v), as in

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Victor, high strength wastewater. In milligrams per liter, it's typical for the liter to be capitalized. So just do a global search for that. The L is capitalized. You're looking at me like --

MR. STRONG: I'm just looking at the other engineer reference manuals I've used, and I can't think of when I've seen it capitalized. Just figuring it out in my head.

MS. CAHN: I will leave you my copy for some of these editorials.

MR. STRONG: That would be appreciated.

MS. CAHN: On page 25-6 in Section 6, number (d) -- or, letter (d), the depth of the high groundwater shall be at least four feet. I believe it might be more clear to say the depth to high groundwater when you're talking depth.

CHAIRMAN BEDESSEM: Yes.

MR. STRONG: Yes.

MS. CAHN: I would take out "of" and replace it with "to."

CHAIRMAN BEDESSEM: That's much more understandable.

MS. CAHN: I puzzled over that. Page 25-13, I'm not sure why -- I had rewritten I -- or, Number 1 at the top of the page. I'm not sure why,

0070

though. But I had rewritten it just as Table 3 shows the maximum permissible natural slopes of the site in which an absorption system may be constructed. And I have to tell you that was late last night, so I'm not sure.

CHAIRMAN BEDESSEM: It looks okay to me.

MS. CAHN: I'll just retract that because I'm not sure what my concern was at that point.

I've got a question on Footnote 1 on that table. And I've rewritten it, instead of, "where the effluent may surface downslope," to, "Flatter slopes may be required where the effluent surfaces downslope." I have a question about how that's determined. So I don't know if your policy addresses -- I mean, I realize it wouldn't be in the rule. But does the policy address the surfacing of the effluent?

MR. STRONG: Let us take a second to look at that and make sure.

MS. CAHN: Below that Table 3, Roman Numeral IV, "All absorption surfaces must be located at least fifteen feet from the top of any break in slope." And I just -- are we talking about fifteen horizontal feet, fifteen vertical feet?

MR. STRONG: Horizontal.

CHAIRMAN BEDESSEM: So can you just say at least fifteen feet horizontally?

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MR. STRONG: Yes.

MS. CAHN: And then where it says "any break in slope." And on Roman Numeral (iii) at the bottom of the page, the word "may" in the last sentence,

I'm wondering if "in lieu" -- are you talking in lieu or shall?
CHAIRMAN BEDESSEM: No. They talked about the confirmation if they wanted an experienced person to confirm that, but it's not required.
MR. CRIPE: Ms. Cahn, that was the policy we were covering on soil texturing.
MS. CAHN: But that's in addition to, or is that in lieu of, that "may"?
CHAIRMAN BEDESSEM: It's written as in addition to.
MR. STRONG: That's saying you can do it in addition if you choose.
MS. CAHN: So maybe we need to add the words "in addition."
CHAIRMAN BEDESSEM: I don't think so.
MR. CRIPE: Ms. Cahn, not every case would -- well, first, for clarification, if they felt it was warranted, that something seemed odd, then they would do it. But it wouldn't be all the time. It would be at their discretion if they felt it was warranted.

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MS. CAHN: So it's in addition. It's not in lieu of.
CHAIRMAN BEDESSEM: But I think the language is clear, because it says it may be used to confirm the percolation rate if the percolation rate is determined by the perc test, the first line.
MS. CAHN: Okay. I'll retract that. On Table 4, on the next page, I think you need feet in the second two columns. It says "two minimum horizontal setbacks," "to septic tank or equivalent," "to absorption system," but doesn't say --
CHAIRMAN BEDESSEM: Well, (g) above says.
MS. CAHN: Sorry. I didn't see that.
CHAIRMAN BEDESSEM: Just throughout, I don't know if it's just a clerical thing, but there's lots of titles that seem like there's a capital at the beginning and at the end but not in the middle, as far as the words. Like Table 6, "dosing tank volume," "tank" isn't capitalized. And Section 7, "soil absorption system sizing," and "sizing" is capitalized.
MR. TILLMAN: The computer.
CHAIRMAN BEDESSEM: You might want to just read through it and see if you can find those, because that's just kind of bizarre.
MS. CAHN: I have lots of those. I'm just

0073

marking with an E in the margin. So you can have my copy and find them.
CHAIRMAN BEDESSEM: If you're not completely tired of going through this 500 times that you already have.
MS. CAHN: So page 25-16, Section 8, the second line mentions the IPC, but it says the 2012. Do we need to say "or current" so that -- I don't know how you deal with this if you're referencing a code that might get updated. Go ahead, Bill.
MR. TILLMAN: I thought we were told -- Ms. Cahn, I thought we were instructed by our AG that we needed to reference a specific year that we used and not ongoing, so that if someone were to look at it, they would know that was the one used, and there was nothing

that could --
MS. CAHN: Okay. Thank you.
MR. CRIPE: And, Ms. Cahn, if we did that, we'd kind of have possibly a moving document and maybe some inconsistency if there was changes.
MS. CAHN: Okay. I just wanted to understand that. Appreciate it.
In the same page, on (d), building sewer pipes should be laid at a standard slope of one-quarter foot per inch -- or, inch per foot, but shall not be flatter

than one-eighth inch per foot. So I'm confused, because you're saying it should be one-quarter inch but not flatter than one-eighth. So I'm thinking the language might be -- after "one-quarter inch per foot" might be "where possible, but shall not be flatter than one-eighth." Because "shall" says you have to do it.
MR. STRONG: I understand what you're saying. That's our intent. The standard is laid at a quarter-inch per foot, but if there's just no other way, you can go down.
CHAIRMAN BEDESSEM: So, "where possible."
MS. CAHN: "Where possible" at the end of "one-quarter inch per foot."
On the same page, Section 9(a)(i), or (a) little (1), the approved material for the concrete, fiberglass or an improved material, and I guess it's just who's the approval authority? Is it DEQ?
MR. STRONG: That would be DEQ or the delegated counties during the application process.
MS. CAHN: So can we just specify who is the approver, if DEQ approved or a regulator approved or something? Because I'm wondering, you know, how do you know what you're using is approved?
MR. STRONG: We'll take a look at that and see the best way to include that.

MS. CAHN: And then the same paragraph, the design of prefabricated septic tanks shall be reviewed for compliance, and I'm wondering who's the reviewer here?
MR. STRONG: That's us again. That's part of the application process. What we were intending to do with that is we get barrages of submittals saying approve our product so we can put it in the state of Wyoming. We do it when the application comes in, so therefore, it's actually part of the project.
MS. CAHN: On page 25-19, little (c), Number 5, starting with, "All holding tanks shall be equipped with a high water level alarm," and the last sentence says, "The alarm shall be placed at three-quarters the depth of the tank." And I'm wondering if that's three-quarters of the height of the tank. They're two different things. Three-quarters of the height of the tank is up here, and three-quarters of the depth of the tank is down there. And I'm not sure what you mean. If you're talking about high water level alarm, I would think you would want it to be the height of the tank, not the depth of the tank.
MR. STRONG: Actually, we need to compare the Table 6, because the intent is when that high-level alarm goes off, it has enough storage capacity left for

them to get somebody out there before it starts running across the --

MS. CAHN: Do you need 75 percent of the tank volume left, or do you need 25 percent of the tank volume left?

MR. STRONG: We actually -- it's 75 percent. I'm double-checking the table. Table 6 lays it out in better detail. Maybe we have some redundancy here that we need to make sure we're consistent. We'll take a second look and get it clarified.

MS. CAHN: On page 25-20, next page, just above the "kitchens" table, there's a (B). And it seems funny. It starts out at 15. "Grease interceptors shall be sized according to the following," A, which is volume shall not be less than 750, and B, shall be sized according to the following. Seems like B shouldn't be a sentence. It should be the table. So I would just delete the sentence and make B the table.

MR. STRONG: Okay.

MS. CAHN: Does that make sense?

CHAIRMAN BEDESSEM: Just because it's redundant.

MS. CAHN: Yeah. Page 25-25, just above Section 12, the last line in Section 11, it says, "by completing the forms, the system will comply with those

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requirements." And I think you mean "these requirements."

MR. STRONG: I believe you're correct. Yeah, I believe you're correct. We'll double-check that. That statement's in here in a couple spots, so we'll confirm that we're consistent throughout.

MS. CAHN: And so you're saying that -- I couldn't hear your answer.

MR. STRONG: I said I think you're correct.

MS. CAHN: "These"?

MR. STRONG: Yeah, "these." What I was stating is I think this is the same sentence as in a couple of the other different design packages.

MS. CAHN: On top of page 25-27, it's again with this below, feet below. So we have, "The high groundwater level, bedrock or impervious clay layer is less than four feet below the level of the soil absorption system excavation." And I'm thinking it might help to say less than four feet below the bottom of the level of the soil absorption system excavation. Because you have an excavation. There's -- where you started at the bottom --

MR. STRONG: Yes. Because what we're trying to say is the same amount is needed if you're four

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foot below the bottom of your absorption system.

CHAIRMAN BEDESSEM: Just get rid of "level."

MS. CAHN: Below the bottom -- the bottom of the soil absorption.

This is an editorial, but in keeping with the governor's request to make things more simple language, on 25-27(g) at the bottom of the page, infiltrative area, maybe you mean infiltration area.

MR. STRONG: Yes.

MS. CAHN: And then that -- do a global

search for that, because it occurs in other paces.
On page 25-30, for privies, I think (a), little (a), is referring to 6(a)(i). And I think it's supposed to be referring to 6 (e)(i).
MR. STRONG: We'll definitely correct that.
MS. CAHN: I'm glad that you have -- I commend you for having your vent openings screened. That's a good practice. You don't have little owls burrowing down in there and not being able to get out. So that's a good practice. Thank you.
Page 25-32, first line on the page, again keeping with the governor's request, saying that, "Subsurface irrigation shall not surcharge to overland flow." Can we say that it shall not overload? Are we talking about overwhelming?
MR. STRONG: Basically, so much water subsurface, it just builds up and starts flowing across the ground. So we'll come up with a plainer language description there.
MS. CAHN: I don't know if "overload" or "overwhelm" or "flow" or something --
MR. CRIPE: Would surface and flow -- basically, it's surface.
CHAIRMAN BEDESSEM: Surface and lead to overland flow.
MR. STRONG: Yeah. Subsurface irrigation shall not surface and create overland flow.
MS. CAHN: Yeah, that works great.
I'll just make a general kind of editorial comment on page 25-33. Little (ii) C, capital C, the last line, "when the tank is used for underground installation," it seems like you could just say when the tank is installed underground, rather than making it passive, when it's used for this, used for that. Just ask you to kind of look for those types of language.
On page 25-34, the one at the bottom, chemical disinfection has a 1, 2 under the capital -- Roman Numeral I, chemical disinfection, has a Number 1, Number 2. Right below it, Roman Numeral II has a -- sorry. It doesn't have parentheses. So just be consistent in how those are.
MR. STRONG: We'll review the document and make sure we're consistent.
MS. CAHN: I think that's it, other than the editorials, which I'll just provide to you.
MR. STRONG: Thank you.
MS. CAHN: As a board, discuss where we go next.
CHAIRMAN BEDESSEM: Well, I think you've done a phenomenal job with the amount of comments you've had and responding to them and producing a rather complex response to comments. I also really like that you do all the stakeholder work ahead of time, rather than just relying on the 30 days that typically comes ahead of the advisory board meeting. So we appreciate that very much.
But I think -- and I may have mentioned -- probably mentioned this earlier in the week, that when we get comments, we like to get comments at the advisory board meeting. We typically will not move to rule on just yet, but I think there's no reason that I can see to

extend public comment period on this. I think we've met the requirements. And we didn't have any specific requests today for additional time period. So I'm not

suggesting that any additional comment period be extended.

But I do believe that I would personally like to see it come back again to our next meeting to go over the revisions that are made with response to comments, the corrections in the rule, and also give our two members who are not here the ability to go over these documents and be able to comment, particularly because one of our advisory board members is related to municipalities. And a lot of it goes on in the periphery of many of these communities. And the interaction between some of these subdivisions getting moved on to sewer systems, as opposed to septic systems, is very relevant to a lot of those communities and would like input from our local governments' representative.

So I think that's my perspective. I'd like to kind of move it to the next meeting, with the intent that at the next meeting, we'll make a decision on moving it forward to the EQC for the next stage. So I am not proposing to vote to move forward at this point in time. I guess I'd like to hear from my board members as to whether they concur with that.

Calvin?

MR. JONES: Yeah, I concur. And I also congratulate you on doing a great job of deciphering and

going through all the public comments that you received and the detail that you did provide us. But I believe, in fairness to the other two board members that are not here, that they need to take a look at this, as well, and then we can go from there. Thank you.

MS. CAHN: And we probably would need to have a motion and a second, I think.

MR. STRONG: To table it?

MS. CAHN: Whether or not there's a public comment period. But before we get there, more board discussion. I do like, Kevin, what you mentioned about for privies, that you -- your organization will take a look at permit by rule for privies. And I would like to encourage you to do that for privies.

CHAIRMAN BEDESSEM: Especially bearing in mind kind of directive to make rules -- the regulatory burden less and rules simpler. If we can give enough guidance so that it also reduces the burden on DEQ staff so that if there are really some pretty solid guidelines, and when you're getting a permit application you're just reviewing those same guidelines, if those guidelines can be put out in a permit by rule, that saves your time for having to do permits for privies when you have a whole lot of other workload to do. And so I would encourage you to kind of look at that and see if that's a

possibility. We'd appreciate that.

MS. CAHN: And also, I would like to see you do whatever you can to encourage greywater reuse, make it as less -- I mean, obviously you need to be protective, but to make it as less burdensome as possible, so to really encourage greywater use. But I would be interested in the paper that you guys have from

the University of California, if you could e-mail it to me.
CHAIRMAN BEDESSEM: Well, all the board members --
MR. STRONG: I'll send it out with the PowerPoint presentation.
CHAIRMAN BEDESSEM: Because a committee that I work with right now for the Environmental and Water Resource Institute is AECE, who has been putting on greywater reuse webinars. And I'm curious to see how that kind of fits in with what their current approach is. So I appreciate that, providing that information.
MS. CAHN: Are we ready for a motion?
CHAIRMAN BEDESSEM: Uh-huh.
MS. CAHN: Let's see how to word this. I would move that we ask DEQ to come back at our next board meeting with revised -- or, responses to comments and revised rule. I guess I'm not sure. In terms of public

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comment, it really depends how much the revision to the rule is, whether you feel you need to go back out for public comment or not. I'm not sure.
CHAIRMAN BEDESSEM: It sounds to me that a lot of these comments are minor at this point, as you've gone through a lot. But things like permits by rules for privies, if that's the approach that's taken or -- to me, that's a significant change. And so we'll just have to cross that bridge when we come to it, I guess, if there's a significant change for the next time, whether additional comments would be required. But at this point, I think you've assembled enough comment. I don't see a reason to extend public comment for today's meeting until the next meeting.
MR. STRONG: Madam Chair, could I ask a question?
CHAIRMAN BEDESSEM: Uh-huh.
MR. STRONG: If we decide permit by rule is appropriate for privies, I imagine it would be prudent for us to go ahead and do the public notice, the public comment period, if we have time before the next meeting. Do you still want to receive comments at that meeting?
CHAIRMAN BEDESSEM: We'll see if we agree here, but my preference would be not to receive comments so that we can move the rule forward if we have

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sufficient time for you to receive those comments ahead of time and respond and get them to us in enough review time before the meeting.
MS. CAHN: But then he's saying -- then basically what you're implying is that with the revised rule that would go out ahead of time and without public comment, written comment, during that time period.
CHAIRMAN BEDESSEM: Uh-huh. I think we don't know at this point. I thought the question you were just asking is whether you wanted to extend it to the actual advisory board meeting.
MR. STRONG: Yeah. If we open up for public comment, do you want to have it like this time, where you receive public comment at the meeting, which would --
CHAIRMAN BEDESSEM: That would put us back.
MR. STRONG: Or do you want to have the

comments done beforehand and responses so that you guys can see them and move the -- hopefully move the regulation forward?

CHAIRMAN BEDESSEM: My preference would be to have it all done ahead of time, since you've already been out for comments once and we have heard comments, just to be expeditious. But I don't know if you guys disagree or not.

MS. CAHN: I guess I think it depends on the how DEQ feels. I think this current public comment -- I'll amend my motion to say the current one is closed. And we will ask you to bring it to us again at the next board meeting, the revised version.

Separate from that, whether you feel, with the changes that you're going to make, that you need to go back out for public comment, I think that's a decision DEQ can make. It's not a board decision at this point. Does that make sense?

MR. FREDERICK: Yes. Madam Chair, Ms. Cahn, I would agree. I'll have some discussion with staff with respect to their perceptions as to how much of an issue this actually is with the stakeholders based upon what we've seen or heard so far. I don't recall much comment on privies from the get-go like Lou --

CHAIRMAN BEDESSEM: Probably not.

MR. FREDERICK: Excuse me. -- from Mr. Harmon here today. I anticipate we probably haven't got a lot of interest whether we go permit by rule or not. But let me consult with staff. If we feel we need to go out with public comment again, then we'll do so.

CHAIRMAN BEDESSEM: And also, you do have a public comment period associated with the EQC hearing when that moves forward there. So it's not -- and so it may just be covered by that. So, as I said, I think our preference would be to not having public comments at the next meeting so we can move the rule forward.

MS. CAHN: And I don't know if we need a motion. Do we need a motion for that or not?

CHAIRMAN BEDESSEM: Huh-uh.

So, essentially, Ms. Cahn's motion I think was to request that DEQ come back at our next meeting with the changes, revised rules and addressing any particular comments that we have made, that the public have made today. And then we'll get our members -- our other board members up to speed. And perhaps maybe we should talk about when that meeting would be.

MR. JONES: I'll second the motion.

CHAIRMAN BEDESSEM: Yeah. Sorry. I got lost in the language there. All those in favor.

(All members vote aye.)

CHAIRMAN BEDESSEM: Opposed, same sign.

(No response.)

CHAIRMAN BEDESSEM: Hearing none, we're going to move this to our next meeting. And let's discuss, then, when that meeting will be.

MS. CAHN: I think we can close the official meeting.

CHAIRMAN BEDESSEM: Well, I mean, it's okay to discuss this.

So I'm assuming that we're looking towards

September for the next quarter meeting?
MS. JOHNSON: If we keep with the pattern that we've been on, yes.
MR. FREDERICK: I think that would be our preference.
CHAIRMAN BEDESSEM: That should give you plenty of time to get these changes made and everything assembled for a September meeting and also give time for our board members to catch up on the reading material.
MS. JOHNSON: And Mr. Doctor that spoke to you before, I think he was anticipating that you would have a meeting in September, as well. So that would work with the other division, as well.
CHAIRMAN BEDESSEM: To get that coordinated? Okay. And so, then, do we know who the DEQ contact is for the advisory board yet?
MR. FREDERICK: That would be me. And we'll inform the governor's office.
MS. JOHNSON: I wouldn't mind that. She'd like to have the meeting in Jackson.
CHAIRMAN BEDESSEM: So we've been meeting in Casper a long time. So we'll bring that up for

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consideration, that we can rotate around a bit. For a long time, we had meetings specifically here because of a particular topic we had been on. But this Chapter 25, anyway, is throughout the whole state. So something to consider. I don't know how that affects your budget.
MS. CAHN: If the meeting is in Jackson, the sooner that we set a date, the better, in terms of getting reservations. Hopefully September is a better time frame.
CHAIRMAN BEDESSEM: September is usually better.
MS. JOHNSON: September is about three months away. Do the three of you at this point have an idea of your schedule?
CHAIRMAN BEDESSEM: My schedule is open in September right now.
MS. CAHN: Mine is open right now.
MS. JOHNSON: So, if we send out a hold the date, would that be --
CHAIRMAN BEDESSEM: Yeah. Those Doodle polls are nice.
MS. JOHNSON: I find those very useful.
CHAIRMAN BEDESSEM: I would encourage that. Then that way you can get the solid waste group to respond to that, as well, and we can get the date

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settled.
MS. CAHN: Can you send the Doodle poll to my home address?
MS. JOHNSON: Is that the Cahn Brown Gmail?
MS. CAHN: Yeah.
MS. JOHNSON: Yeah.
CHAIRMAN BEDESSEM: I think with that discussion about our future meeting, unless you have anything else to wrap up --
MR. FREDERICK: Madam Chair, just a couple things. I know that you had asked for some indication with respect to plans for future rule development and so forth. So we wanted to just briefly touch on that a

little bit. Let me first say that the most recent rule that the board move to the EQC, Chapter 2 on surface water standards, is going to be heard before the EQC next month, in July.

CHAIRMAN BEDESSEM: July 11th.

MR. FREDERICK: Just for your information. And thank you for working with us in getting that rule moved ahead.

The next rule that you will see from us, obviously, is going to be Chapter 25 at our next board meeting, as we have discussed today.

Subsequent to that, we're working on a carbon sequestration regulation for financial assurance requirements. That's been in the hopper for quite some time. You probably would have seen it sooner, but we were asked to -- if we had interest in participating with the Interstate Oil and Gas Compact Commission, who had established a working group to essentially develop a guideline that they wanted to use as recommendations for states to consider, in part, dealing with financial assurance requirements.

So we felt it would be in our best interest to go through that effort, participate, see if we can learn something new, make sure that we had an opportunity to at least see the perspective from primarily the Oil and Gas Development Commission folks before we wanted to float our draft rule out. I'm hopeful that we'd be able to do that, depending upon your schedule and solid and hazardous waste plans for rule development, perhaps at the fourth-quarter meeting this year as a first look at this draft regulation.

Aside from that, we don't have anything else immediately in the hopper except for some plans to address the governor's wishes to look at ways to reduce the number of rules that we do have, as well as the overall volume of regulations that we do have. And I believe you had received a letter from the office of the governor April 9th of this year that kind of indicated what his thoughts and his plans were. If you haven't, I'll share that with you.

CHAIRMAN BEDESSEM: I don't remember that.

MS. JOHNSON: We have it scanned. We can make sure that all five of you receive that. We have it PDF'd.

MR. FREDERICK: We'll send it out to you. It essentially indicates that he's interested in seeing all of the agencies review their rules to see if they may be reduced by as much as a third. DEQ is going to be looking very closely at that in all divisions. In fact, we're beginning that process now. Just for your information, Solid and Hazardous Waste Division has the most pages of rules. I believe we also have the most chapters.

CHAIRMAN BEDESSEM: And the most redundant.

MS. JOHNSON: They will be bringing that to you. They'll discuss their plans for that with you. But that looks like it will significantly meet the Agency's target. But they can discuss that with you in detail.

CHAIRMAN BEDESSEM: It's also similar to

some water quality rules, where the federal requirements for a lot of the components, they have to be in there, and they're kind of stuck with some of the language.

MR. FREDERICK: Water Quality Division is number two on that list in content and volume, so we do have some work to do. Just to give you an idea of what we're looking at, we do have some regulations that essentially outlived their life. Rich referred to one, the biosolids rule, for instance, Chapter 14, that is essentially implemented by DEQ. We'll probably be eliminating a chapter and some pages just by withdrawing that rule.

Other approaches that we're thinking of, for instance, we have three rules that deal with underground injection control. One is associated with Class 1 nonhazardous waste disposal. Another is associated with Class 5 wells. The third is associated with Class 6 wells, which are for carbon sequestration. And we can't really come up with a good reason why we couldn't simply combine those into one chapter, since they're all essentially related to the same type of activity to a degree.

So we think we've got kind of a good start on how we're going to try to meet the governor's objectives. And I anticipate what you'll be seeing probably towards

the end of the year, maybe a first attempt to bring some of these easier issues before the board to consolidate chapters, perhaps to withdraw some chapters that are out there, things that we can do relatively quickly and easily that don't take a lot of your review time and so forth. And we hope we can get to the objective by simply withdrawing rules and complying with chapters. If we can't, we're going to have to go into the rules themselves.

Chapter 2 of water quality rules and regulations is one that is essentially a recital of a federal rule. And we think we can eliminate a lot of pages in that particular rule just simply by pointing to the federal reference, for instance. So I think there are going to be some easy things that we can do with the board without getting too deeply into trying to tweak language and reduce verbiage and rules and regulations.

So I just wanted to let you know that we're working on these efforts, and we don't want to make anything more painful for you all than absolutely necessary.

CHAIRMAN BEDESSEM: And we appreciate that, and we also appreciate the fact that it takes some effort to figure out where you can reference and where you have to repeat the rules, still remain user-friendly,

where people can use them without having to go find the Federal Register to figure out what it is they're supposed to do. So that's a tough balancing act. So we look forward to seeing all those great things and reducing the number of pages of rules.

With that, we'll conclude our advisory board meeting.

(Hearing proceedings concluded 12:31 p.m., June 14, 2013.)

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C E R T I F I C A T E

I, RANDY A. HATLESTAD, a Registered Merit Reporter, do hereby certify that I reported by machine shorthand the proceedings contained herein constituting a full, true and correct transcript.

Dated this 8th day of July, 2013.

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RANDY A. HATLESTAD
Registered Merit Reporter