

## Water System Committee Meeting

December 17, 2013

J.T. LANE: Everybody, we're going to get started. So thanks everybody for coming. I know everybody's looking forward to the holidays. Hopefully we'll have a very productive meeting before we get off to our celebrations. Sheree, will you start with roll call?

SHEREE TAILLON: Sure. Dirk Barrios, Vern Breland, Ben Bridges (absent), Robert Brou, Jeffrey Duplantis, Greg Gordon, Jimmy Guidry, Jimmy Hagan, Randy Hollis, Pat Kerr, J.T. Lane, Rick Nowlin (absent), Rusty Reeves, Chris Richard, Keith Shackelford, Cheryl Slavant, Delos Williams (absent). We have a quorum.

J.T. LANE: Okay. So like I said, I hope we have a productive meeting and maybe a little shorter than we planned to cover everything before we get off for the holidays. Thanks everybody for coming and hanging in there. We're now about almost six months into this process and I think there's been a lot of momentum. With that I'll go ahead and get into the third agenda item. Again, we ask given that this is our work with addressing the various fowleri amoeba and the new disinfection requirements. I felt like I don't know how long this agenda item should stay given that we need to focus on the future, but I do think this is a good forum for us to get some updates for all of you and then also to ask any questions you may have. But I just wanted this to be a brief comment from Jake about what he's been doing. I know he's been traveling a lot around the state and having trainings and hearing from a lot of systems about what they are facing and seeing. How we can provide some solutions, and what implementations would look like. Jake, if you would make some comments and we'll open up to everyone for questions if you have any.

JAKE CAUSEY: I'll touch on a few aspects of the amoeba response and emergency rule that we've been working on. I guess, briefly updates on Desoto and St. Bernard. Desoto is sort of

continuing their 60 day burn at one milligram liter per of free chlorine and they have certainly been maintaining that well and by the end of this calendar year, shortly after Christmas, that burn will be completed and then sometime in January, early January, prior to those guys switching back to chloramines we're going to come back out and do some sampling to send to CDC for the amoebas. We'll probably go grab some additional samples for information to use for evaluation purposes and going forward at the same time. We are working with our advisory group at CDC on that. I guess one thing I'll say in Desoto they certainly had the mentality before that they couldn't achieve the residuals they are maintaining now when they had chloramines which probably had some serious nitrification issues that were preventing them from getting there. To go into this free chlorine burn it looks like they went from one booster stage before and then it looks like the demand of the system dropped significantly and their chlorine levels really shot up and so they have been taking them offline to keep them back down. But I think just that whole story in and of itself says a lot about chlorine systems managing distribution systems, maintaining chlorine residuals. There's a lot of lessons learned there that I hope John Neilson, the operator, will be able to share with a lot of water systems and other things, just that experience alone. So in St. Bernard they are continuing their 60 day burn. I'll say that there was a two week period that it stopped because they didn't maintain that one milligram per liter residual, but their levels are back up. And I know that one thing they'd accomplish during that timeframe was remediation of their storage facilities. They took them offline, out of service, cleaned them out, inspected them and put them back in. I don't really have a detailed report. I'll tell you what some of those findings were, but it seems to have had a big impact on them maintaining their chlorine residuals. We are still doing that and they are boosting at one tank. Those systems are maintaining their burns and moving forward, having success there. With the implementation of emergency rule the monitoring plant portal website did go live December 9th, last Monday. As many of you may know we

are using it and building it at the same time. So there were some enhancements that came out midweek last week and more enhancements coming out this Friday so systems can actually submit their plans and that would be nice.

GREG GORDON: We don't have the healthcare.gov problem.

JAKE CAUSEY: So it is working well, and frankly all the workshops we've had had a lot of good feedback from operators. And I know as of Friday at noon we had 33 percent of our systems had logged in and started. That was wonderful. I will say one thing that I have seen in these workshops and systems looking at their plans definitely we've seen a lot of them that really had TCR sites located on main trunk lines. A lot of operators scared to go into the neighborhoods and put a TCR site and measure, you know, check for bacteria and chlorine residuals. I think the additional sites will be helpful in just this whole effort of reviewing the plans and is going to really do a lot of good for the systems and maintaining water quality. We are continuing to meet with our science advisory group and especially the folks from Australia are getting a lot of good feedback there. We are looking at laboratory test methods to use here in our OPH lab for thermophilic amoebas as well as naegleria. We got a lot of work to do, but we know where we got to go and get it done.

J.T. LANE: Any questions about, or does somebody want to share anything they are experiencing on the ground or hearing from the field that would be beneficial as we continue to learn, emphasize that, learn?

PATRICK KERR: When does emergency order expire and what are we going to do subsequent to it?

J.T. LANE: The emergency order expires...

JAKE CAUSEY: Effective date was November 6th so that was a 120 days and then we would have to renew it.

PATRICK KERR: But we're not going to write it as a permanent order?

J.T. LANE: At this point I don't know what the exact path will be. Still waiting on the deliberations, again to see what the final approach should be for the state. See what the recommendation is before we decide and if we're going to promulgate is it the same one, have more work to do, or is it a revised one that is based on all the stuff we've learned since then.

JIMMY GUIDRY: What I can share is that wherever there's been an outbreak, whether it's amoeba in Arizona or there was salmonella in Denver, once they up they didn't come back. They stayed up. I can pretty much predict at this time that probably we're going to be living with point five going forward, if not higher. In Arizona they went up to one and so I think after emergency rule it will become a rule.

J.T. LANE: Any other thoughts and questions? Next will be approval of the minutes.

PATRICK KERR: Did they get produced?

SHEREE TAILLON: Yes. They are on the website. Would y'all like me to send out an email when things get put on the website any time there's an update?

J.T. LANE: Okay. Well, everything's posted today. As soon as we get them on our website, that's where all the documents will be, we'll be sure to email them to you in the future.

SHEREE TAILLON: Also on there is yesterday's webinar. There's a live recording of it on there. If anybody missed it you can also go on there and listen to the webinar.

J.T. LANE: With that we'll go into review of part seven by Jimmy on what he found on his webinar.

JIMMY HAGAN: As y'all are aware the webinar was held yesterday December 16th at 2 p.m. And first of all I'd like to thank Sheree for helping me out because without her help it would have been a challenge for pulling off the webinar. Hats off to her. She did a great job clicking between screens. I really appreciate her help. My report's broken down in accordance with the standard format. First of all, facilitator's recommendations: We didn't have a great number of comments. It generally fell into two or three different areas that are those top five

comments. But facilitator's recommendations the only thing I saw that had not been commented on was that distribution system storage tanks ground and elevated probably look at considering baffles, mechanical or similar needs to promote mixing stored water, prevent short circuiting of water entering and leaving the tank and maintaining disinfection residuals. Requirements for clear wells, but the same requirements are not listed for distribution system storage. Top five comments, and these are comments that had one or more comments by people who actually submitted input. First is one that we will probably have on every section. We had a number of comments that were general in nature regarding grandfathering existing water storage tanks. I believe that's the same comment we've had on other water facilities as well. Facilities that were built and approved previously by DHH, but that do not meet current requirements of ten state standards and/or what has been discussed on the committee. Other than that going forward have the same comments regarding grandfathering. Second top five comment, consider constructing storage tanks such that the bottom is two feet above 100 year flood plain. That too is a comment we've talked about in other sections of the ten state standards. We talked about at or above a 100 year flood plain as long as the suggestion was put these tanks two feet above 100 year flood plain elevations. Third comment, consider the use of valves in lieu of or in addition to insect screens on overflow pipes on ground storage, and I assume elevated storage as well. The idea that the first time a tank overflows the insect screen is usually bolted down at the bottom of the pipe ends up in the yard and really doesn't do what it's intended to do. Suggestion was to possibly use some type of flapper valve or similar device in lieu of or in addition to prevent that insect screen from being a problem or just not being in place at the first overflow. Another comment concerning need for consistency between ten state standards, code requirements, state sanitary code, AWWA standards, and other standards regarding disinfection testing and so on in tanks. Apparently there's different recommendations and requirements related to a number of tests, how those test are taken,

and the comment was that certainly there needs to be some consistency or a decision made. How many, how far a part, if they fail, so on and so fourth. A clear description of what's supposed to happen when you are doing disinfection and testing on tanks. Probably apply as well on Robert's section, section eight. Probably some conflict in that area as well. Last comment was concerning requirements for two manholes above the waterline of tank compartments to access interior of storage tanks for cleaning and maintenance. I would guess that might be appropriate at very, very large ground or elevated storage tanks, but a great many of existing tanks only have one manhole. And I think the comment was the need for two is questionable given that there's already a pan and overflow on there. All comments, I guess I won't read all of them because the top five comments, in fact, comes from comments listed in number three. What you see in here are essentially cut and pasted parts of what people submitted by email, their attachment for the email itself. Again, they fall into three or four different areas. Location of reservoirs, we talked about the 100 year flood plain, those types of issues. Three or four different comments on overflows that were summarized by the top five comments. Access primarily dealing with manholes and then the number of other subject comments concerning manholes, vents, once again disinfection. Comment on provisions for sampling, whether to consider stainless steel valves and piping in lieu of an actual (inaudible) nozzle sample tap that's required currently. And then there was a comment on clear wells. Whether to require two clear wells and if there are situations whether it's one clear well, whether that is one of those things that will be grandfathered. Any questions on the report?

JEFFREY DUPLANTIS: One question, and this is probably going to show my ignorance, some of the comments was this standard should be applied as design criteria only. Isn't the ten state standards a design criteria? I don't know how that comment, why that comment's being made.

JIMMY HAGAN: I think I can answer that. I believe the design standard comes as a part of the grandfathering. If you are grandfathered in and you get to keep your facility then it becomes a design standard on all future facilities that are constructed in accordance with the proposed requirements. The requirements would not be something that you could continue to go back and revisit. Probably one big part of what the committee's going to talk about. I believe the design standards is intended as something going forward and not looking back necessarily.

J.T. LANE: All right. At this point jumping off any immediate reactions anyone wants to share, questions regarding Jimmy's report?

DIRK BARRIOS: One of the things that we said was top five comments was considered construction of storage tanks such that the bottom is two foot above the 100 year flood plain level. Come on. We live in South Louisiana. If you live in Central Louisiana, North Louisiana... South Louisiana? 100 year flood elevation is the golden (inaudible) and then you have plus 14. Ground plus three, plus two, plus four. And then you've got to build the ground storage tank. We don't build ground storage tanks away from our plants, but we would have to build an elevated tank 10 to 14 feet high to build elevated storage tank. Not just Lafourche, every parish in the southern part of the state.

PATRICK KERR: Bottom of the bowl, right?

DIRK BARRIOS: That's the clarification you got to get.

JAKE CAUSEY: Ground storage elevated would be well above, but ground storage.

DIRK BARRIOS: The way it's written...

J.T. LANE: I know we only have two mics, but we need to pass them around to make sure our record keeper can hear us.

JAKE CAUSEY: Talking about ground storage tanks and being elevated and the bowl, Pat said, is well above actually (inaudible) support an elevated tower two feet above the 100 year flood

is just relative in ground storage tanks where the water is literally stored at ground level.

That's what I was understanding anyway.

CHRIS RICHARD: What about clear wells? We're segregating between ground storage and clear wells? Clear wells are not going to be two feet above and why would we separate ground storage requirements for clear well requirements? It's a storage tank.

JAKE CAUSEY: I think that's something to look at. Frankly, I believe there may be some solid rationale why you would do that. I know that clear wells are built differently than ground storage tanks. We have steel bolted ground storage tanks, we don't have steel bolted clear wells. I think you got to get into the finer details in some of that to be quite honest. I know clear wells they still have to be protected from the 100 year flood elevation. I think that's the fundamental point when you look at each particular component. How is it protected such that it will continue to operate successfully during a 100 year flood event? If it's one foot above the 100 year flood I think you can make the same argument that it will be fine, but we all know these 100 year flood elevations change so if you are building a new one you might want to strive for something slightly above just because you expect the tank to last a long time. In what criteria you set that at if it's one foot or two foot above the 100 year flood. Something we can maybe look at, some of the best practices are for that.

CHRIS RICHARD: It's common to put steel above ground and you're right. Pre stressed concrete is common to have them partially buried and it is still a ground storage tank. You don't want to get yourself in a corner. The other thing is whenever we say 100 year flood we need to say at the time of design. You're right, it does change. Since the hurricanes it's changed more than once. If someone could do everything perfectly correct at the time they build it and then five years later FEMA changes the food elevation and you are not in compliance.

JEFFREY DUPLANTIS: You can't retroactively go back. Once they have met the criteria then

they have met the criteria.

ROBERT BROU: That goes to the heart of the reason you need grandfathering. We've got a clear well that was built in 1950 and it is below ground. None of the newer ones are built below ground. They're all built from ground up adjacent to the filters, but I can't go back and change the ones that were built, what's that, 63 years ago.

J.T. LANE: All right. Jake, did you want to offer any comments in terms of your initial, anything that he went through, anything you heard, anything you want to respond to as well in terms of some things that we're going to go back.

JAKE CAUSEY: I do have one question and I haven't researched it in depth. Maybe Jim is a little more familiar as far as the sampling for the storage tanks. Maybe I got my pages mixed up here. Talking about discrepancies between the sanitary code for sampling tanks. You know, disinfection, sampling, bringing them back into service, verses ten state standards, verses AWWA C652. I'm just trying to elaborate on what some of those differences are. I think I know fundamentally as far as a sample verses two samples of two consecutive days. Just curious is that really the only difference, I guess, is maybe the disinfection of the tanks too may be different. I guess what the recommendation is. Looks like it's just consistency, but I guess consistency to what end?

CHRIS RICHARD: I think at this point that's what we're here to do. So as far as there won't be any conflict with ten state standards because ten state standards is not going to be an enforcement tool or review tool. It's going to be this code. Whatever this committee comes up with is what, there's not going to be a conflict because that is going to be what's going to be used from that point forward.

JAKE CAUSEY: I guess in my mind I think for disinfection practices similar to what we're looking at, I guess with water main repairs sanitary code or alternatively the AWWA standard such that affectively two options, and it's clear there are two options. I think the more

important issue is going to be we are taking one sample on a huge tank or two samples, two consecutive days. That's kind of like where I would like to get some more feedback on. I can kind of understand smaller tanks, 300 gallon tank maybe. One sample would get into a million. A little bit different animal. I'm not sure what your thoughts are on that.

JEFFREY DUPLANTIS: Correct me if I'm wrong. At the end of all this we shouldn't be referencing anything else. So we're not going to be referencing AWWA.

PATRICK KERR: Yes we are. We will still use adopted standards. We have to. We discussed that in this forum and decided that's what we want to do.

JEFFREY DUPLANTIS: If you are referencing this and right now we make them where they don't conflict and AWWA standard changes after we're finished and now it requires three then we're in conflict again.

JAKE CAUSEY: We always reference a specific year. So it changes, but the one we adopt doesn't for exactly that reason among others.

J.T. LANE: I'm just going to add this as an example. I think that as we've gone through this every time we have a meeting internally to go through all these things it reminds me of just how much easier this will be for everybody to conduct business after we're done because a lot of this wasn't really solidified in writing. And frankly from a business standpoint you want to be able to go to one place to know what all the requirements are. We have talked about that too internally about how do we memorialize (inaudible) in the sanitary code. Whether that it's stating that we adopt a standard of a certain year, or once we get those standards there's improvements we just throw that into the sanitary code as well just to make it easy. But then eventually we're going to get to a three or four ream stack of paper is the sanitary code. I understand, but I think that's also what we're trying to do in this discussion and get examples of what we're looking for as well.

JAKE CAUSEY: I guess one other thing to maybe get a little more feedback on, we're talking

about tank screens on tank overflows and just, I guess, the maintenance of those screens.

And then discussion about a flapper valve, or perhaps some other type of valve.

J.T. LANE: What section?

JAKE CAUSEY: Let's see. 707B which I think is page two. Right now it has to be a certain mesh screen, period the end. Anything you want to do above and beyond that is great, but I think some of the concern may be that during inspections there's a flapper valve, no screen and cited for not having a screen. Screens are designed to prevent a certain size thing from passing through flapper valves. We've seen in general they are not that sealed. I'm sure there are some when they are new fit tightly. Since there were some comments to that effect I guess I was just curious talking about screens coming off I think that probably has to do with what kind of screen you put on to begin with. Definitely seen a lot of different types. Just requiring the standard, I think it's a 24 mesh screen, or do we think there needs to be some other option that someone here might be familiar with that would be as protective.

RANDY HOLLIS: The one component of a tank that you can't paint is the inside of an overflow pipe. It goes in bare steel and it rusts from the day it's put in till the day it finally falls apart. What we normally see on insect screens is the rust that has come off of that pipe that's sitting on top of the insect screen if you get any flow of water in there you've got a dam and that's what usually blows out the insect screen. What I would recommend flap valves that we use really do seal tight. And the opening there is probably the same as the insect screen. Essentially quarter of an inch if it's coming from the top of the tank. What I recommend is a hinged screen like a flapper valve that would pop open in the event it becomes plugged. Cause no matter what you put on there, you're going to get rust and it's going to cause a problem.

JAKE CAUSEY: I think as long as a screen is there it can be hinged or unhinged. I don't think there would be an issue there. Are you maybe more referring to something that is not an

actual screen, just a solid piece of plate?

RANDY HOLLIS: No.

JAKE CAUSEY: No. Okay. I don't think that as long as the screen, I don't see any reason there would be any issues. The only thing I'm aware of is some people have these solid flappers and that's what I took maybe this comment to be referring to. Definitely a maintenance issue.

ROBERT BROU: If the screen is attached too securely the water builds on top of all that rust and backs up into your tank. We have actually designed ours with a screen that is designed to blow off. It's at a manned site so it's very obvious when it happens. But if it overflows and it's plugged up, which happens quite often, the few times it does, like I said it's the only part of the tank you can never do maintenance on. It's designed to blow off and our operators when they're making their rounds find it on the ground and put it back on.

RUSTY REEVES: That was one of the comments we got most from our members was because of the screen over tanks and the rusting in there. And I don't know at what point about ten years ago there was a big, I don't know if it come from the health department or tank contractors, and most all of them had a screen that would have a bolted flange that held the screen in place and a bunch of them got cut off and these flap valves got put on there. Now they figured out ways to put screens back. Much like Robby said the screens that's on there are going to blow away when that rust and stuff accumulates on that screen. That's a big problem on 30, 40 year old tanks. They look wonderful outside and inside, but that pipe is the pitfall. That's where most of them went to cutting screens off and put this flap valve.

JAKE CAUSEY: I think long term maintenance screen on a tank is going to be a challenge. I think however the water system deals with it, as long as it's screened is perfectly fine. You probably are going to have to replace your screen multiple times. Fortunately, they are typically not that expensive. But if you're not routinely checking it and we do a survey. We typically

do announce we're coming before we do. It's something you can check in advance. I think it's pretty straight forward.

RANDY HOLLIS: Under the sanitary code under storage which talks about cisterns and storage tanks it does allow located wholly or partially below ground on a storage basis. So that's in direct conflict what we're talking about today. So my question is we've been asking this since day one. When are we going to see the culmination of either chapter 12 and ten state standards into one document so that we can begin to make our final comments? We've been through six of these so far. I really don't want to go through any more of them after this meeting until we see some of the first six so we can see where are we going with this whole process. That's just my personal opinion, but I think we're getting too much information and too many comments before we actually make some decisions on the first six sessions. And I think this is a perfect example. We've got partially below ground storage tanks we're saying two feet above a 100 year flood elevation. I think we need to start pulling this together in sections before we go much further into the remaining sections.

JAKE CAUSEY: So with anything that's in part 12 that relates to anything that's specified on what we are looking at, just like disinfection of storage tanks, just like disinfection of repairs on distribution mains. I guess in my mind those conversations are taking place here and now. Something like the section you referenced which I'm not even terribly familiar with right now. But the idea is that it would be written in a way that's consistent with the discussions here unless it's something that's not part of those discussions which could be as well. But if we're talking about an AWWA standard, or disinfection of tanks and mains, or locations of tanks relative to a 100 year flood elevation I guess there's something in there that needs to be part of this conversation can do that, but I think pretty much all that is already covered in this discussion in ten state standards. So I guess that was just my thought was that by going through ten state standards we're really covering all those design aspects that are in sanitary

code are really duplicative in a lot of respects, such as water sewer main separation is one example. So what I'm seeing is those things come up in the dialogue, and they are not numerous, I don't think, really in the sanitary code. Anyway, I guess my thought is we are having those conversations, but that's a good point. I wasn't aware of that on this topic. I guess if you are talking about the actual Louisiana administrative code format ruling which we're just trying to get our bearings with the edits to ten state standards so to speak that would be used to formulate. That doesn't exist yet.

J.T. LANE: So Randy this we will commit to you for the next meeting. I'm assuming, are you looking for wholesale integration, or do you think there are specific parts we should integrate into our discussion? Just so I'm clear on that. Or is that too early to tell?

RANDY HOLLIS: I guess I'm not sure what the finished document is going to look like. The comments we've made on ten state standards, and some of them we still have to talk about because we didn't all agree on these things and we've got the sanitary code. And we're looking for one finished document that combines everything together. So we've been through six sessions of the ten state standards, but there's a lot in the sanitary code that needs to be blended in, dovetailed into the ten state standards where there may be conflicts. I guess what I'm looking for before we finish all of ten state standards can we stop and see where we are and look at maybe one or two sections to see if y'all are producing the document do we agree with the way it's going. And before you go to the effort to produce the entire document and say wait this isn't the format. And we don't understand code, we understand that. We don't write it, it is difficult. But before you go to all that trouble can we at least look at a couple sections first before we go much further?

J.T. LANE: Yes. And that goes back to trying to make it more streamlined, comments, documents to make it easier. I recognize that having to go from sanitary code to another chapter and then have to reference other documents I think it creates unnecessary steps for all

of you as you are trying to design, build and get approved from us. What we can do is re-review that and come back with our recommendation on how to best do that. And certainly what we can do as well I was trying to think of a mechanism we're six months in I would like to get everyone's pulse either at the next meeting, or we'll figure out what we can do with a surveyor, or something like that to get everyone's pulse on the committee about how things are going, how do you feel they are going. And just sort of a halfway mark and so definitely we can come back with that. And Sheree if you will make that a note on the next agenda and we'll present to you what we think as plausible. Have a discussion about that and then make a decision and move forward.

RANDY HOLLIS: I'm just one person. Other people may want to plow through all of this and then do it at once, but I think we're biting off a lot at the end of this thing by trying to go through all of it. I do agree with referencing standards AWWA and a specific standard or reference by a specific date. To try and incorporate an entire AWWA standard into this would be too bulky and you run into copyright issues. The best thing to do is reference that specific standard.

PATRICK KERR: Certain standards I think evolve for a reason. I don't know that, for example, C652 is referenced by date in the sanitary code. That's what I was just looking for. I think it's just referenced as a code, as a standard, excuse me. And I hope we can keep that, unless there's some objection that is a body we depend on to write standards. And I don't know that we need to pick a specific date. With the ten state standards we needed to because people had to design and we had to review it under the same standards, but I hope we can not pick a date. For example C652 has been under revision for a couple of years. I know they are going to promulgate a new C652. They promise by the end of the year. I can't imagine it happening, but soon. It should be an improvement. And then if you find there to be a problem with something, or the state finds that that is an objectionable change we should take

action to memorialize that in the sanitary code in my opinion.

JAKE CAUSEY: I'll mention that the state register has indicated that we can't just adopt the "latest version of a standard" just as general text such that as the standards change you then violate the administrative procedures act where you affectively change a rule without public comment and input. We do have to adopt a specific version of a standard.

J.T. LANE: Jake, anything else you want to share? Okay. So the next item number six review part eight and Robert's going to do that for us.

ROBERT BROU: I'll start by saying I apologize I do not have my point person's report in front of you. I can review the gist of it for you though. As far as the facilitator's recommendations I think it really goes hand and hand with the discussion we're having right now is what does this document need to look like. J.T. you referenced when you were talking to Randy that you wanted a streamlined document to be able to design, and build, and submit a permit, a project. I'm actually sitting on the opposite side of the table. I need to operate a facility based on this. There is a difference. The difference is design to today's standard today and moving forward, verses something changes five years from now and having to update to that if we don't have strong grandfathering provisions in this. I think that really goes to the heart of it. When I was reviewing chapter eight I kept looking at how many things were referenced by other entities that fell into their jurisdiction. You know, comfort of operators, safety, all those things really, insurance with the fire hydrants. What purpose is there for DHH to have a regulation on the number of hydrants, the size of the steamers, whether it's a four inch connection to that? It really, to me, is not the place for it. And so I was looking at really a critical eye of what in this document, cause ten state standards is still going to exist as a guidance document for design and it's going to get updated as it needs to be. There are several things in ten state standards that are going to be critical for DHH to conduct their business of making sure that there's safe water and that everybody's following at least the

minimum standard. That's how I've been looking at this document from day one. What in here has no other references? It's not in chapter 12, it's not in the ground water rule of any of the other regulations, but it's critical to y'all operation to make sure that all of us operate systems are doing the right thing. That's what I'd like to see this document become. Much more streamlined document that would take out a lot of the stuff in here that is covered by other entities, or doesn't need to be part of a regulation, needs to be part of a guidance document. With that, top five comments. I think they got hung up a lot on the six foot verses ten foot. And I thought we had clarification on that, but I got a lot of comments on the separation of water and sewer, force mains, drainage. I think we all can agree, I think DHH has agreed six feet is sufficient. It's what's in chapter 12. I think it needs to stay there. Didn't get as many on the 15 PSI verses 20 PSI. Same kind of thing, the conflict. As Jimmy had said probably the main comment I got was on grandfathering. The need for it to be at the time it was permitted going forward. Set minimum criteria, but you can't ask everybody to update for certain things. Some things I think it's going to be important that you do make people update. Going to depend on how much of an impact it is on public health. That's what I think this committee really needs to focus on. What are those things that are critical to y'all and get past a lot of this stuff really does not need to be in any kind of regulation. Same thing with minimum line size. We did have the same kind of conflicts with disinfection. The one referenced in section seven where they were saying in any event. That's an older version of 652. The newer version was updated to clarify that and said in this event. Referencing that when it failed you took repeat samples. When it passed the first time one was sufficient. DHH has been enforcing the ten state standards so it's requiring two and it makes no difference. Jake may be right. With the larger tanks maybe we do need two. We do it on water lines, we do it on everything else. AWWA 652 says one. It clearly says one. In the newer version they cleared up the language. I could go over all of the comments if you would

like. They had information about the materials and just says the standards change and that it should be this is 8.1.1.a it needs to be a design criteria because as standards change the materials change. There was a reference to materials in 8.1.1.d about the eight percent lead. That if this were to be done that they would need to take out all the service lines that are lead and they felt it was a greater risk to the public by going disturb those lines. A reference in 8.1.3 to used materials saying that you can use used materials that have been practically, restored practically to their original condition and thought that was poor terminology. Should be to the greatest degree feasible with current technology. The comment about 15 PSI verses 20. They are saying we should get more consistent with chapter 12. Ten state standards says 20 PSI minimum pressure. Chapter 12 says 15. Just to be consistent you need to change that to 15, unless y'all feel necessary to be 20?

JIMMY GUIDRY: I think 20 protects you better.

ROBERT BROU: We did have one comment about not less than 35 PSI, but that talks about operating a target range and I don't think any of that should be part of a reg. That should be what's the minimum.

J.T. LANE: Robert, can you finish first. Everybody just take notes.

ROBERT BROU: Okay. 8.2.2 the diameter: they are talking about minimum size line shall be six inches on all fire hydrants. And the comment was that not all water systems were originally designed for firefighting. That many systems had fire hydrants that were installed on smaller lines prior to being a requirement and due to a financial burden this would cause this standard should be applied to design criteria only. Had a similar one where, just from our prospective, we have hydrants on four inch lines. They have a four inch valve on them and they have two host connections. If it was applied retroactively not going out and changing all six or eight inch lines. I would be taking hydrants off and our fire departments would have a nightmare because they have existing fire hydrants that have served the community well for 60

plus years. We don't allow any new ones at that. Mandating eight inch minimum line size for some 20 plus years. But for us to have to go and retroactively change them, not going to change the lines. I couldn't afford to do it. So I would be taking out fire protection that exist today. The second comment about the same thing the minimum size line. Retroactively applying the standard would require the replacement of existing functional water mains. Would be very expensive and unless fire flow was an existing problem would result in little to no benefit. They have dead ends shall be minimized by making appropriate tie-ins whenever practical in order to provide increased reliability of service and reduce head loss. They are saying clarification of the definition of practical is needed, very subjective. That's to my point that this does not need to be a regulation. It is a good design criteria, looping your system, having adequate size lines, but it's no place for regulation for that. 8.3 valves should be located not more than 500 foot intervals in commercial districts and at not more than one block or 800 foot intervals in other districts where systems serve widely scattered customers and where future development is not expected the valve spacing should not exceed one mile. And the comment was retroactive application of this standard to our existing distribution system will be prohibitively expensive, create unnecessary opportunity of main contamination, inconvenience customers, and provide limited benefits. In some cases the construction could reduce the longevity of the existing main. 8.4.2 valves and nozzles: Fire hydrants should have a bottom valve with at least five inches. And the comment was to strike, it said, one 4 1/2 inch pumper nozzle and two 2 1/2 inch nozzles and replace that with nozzles of sufficient size and number to meet the requirements. So the local fire department's comment was that just the opposite of what I said where we have some smaller hydrants with just two host connections a lot of systems have standardized on the dual pumper nozzles with no hose connections. 8.4.3 the hydrant lead shall be a minimum of six inches in diameter. Auxiliary valves shall be installed on all hydrants. Comment was many systems have numerous fire

hydrants that were installed on smaller lines and without valves. This was an acceptable practice in the past. Due to financial burden this would cause this standard should be applied as a design criteria only. 8.4.3 hydrant leads. Auxiliary valves shall be installed, the same thing. Retro activation application of this standard would be very expensive, may result in reduced fire flow, and may require relocation of the hydrant depending on the hydrant lead length. Hydrant drains shall not be connected to or located within, and this is at ten feet and he was saying to be consistent with chapter 12 it should be reduced to six. 8.5.2c air relief valve piping. The open end of an air relief pipe from automatic valves shall be extended to at least currently read one foot. And the recommendation was to change that to two feet above 100 year flood elevation or flood of record. 8.6 valve, meter, and blow-off chambers. Currently reads wherever possible chambers, pits, or manholes containing valves, blow-offs, meters, and such appurtenances to a distribution system shall not be located in areas subject to flooding or in areas of high ground water. The comment was wherever possible is discretionary and in many areas this would be nearly impossible to achieve anyway. This should be decided by the design engineer and/or the system. 8.7.2 bedding. Water main bedding should comply with AWWA standards. In some installations rock bedding may be preferable. 8.4.7 in reference to thrust blocking. They are suggesting deleting thrust blocking all together and just having the statement read all tees, bends, plugs, and hydrants shall be provided with tie rods or joints designed to prevent movement. 8.7.7 we had talked about disinfection. Simply state, they are saying simply state design requirement. Currently reads the disinfection procedure will be discussed with reviewing authority. 8.7.7 disinfection. They are saying clarification is needed in regards to disinfection and sampling requirements. There was conflicting and confusing information between the Louisiana sanitary code, ten state standards, and AWWA standards. 8.8.2a is with the ten feet horizontally retroactive application. This standard, as well as 18 inch vertical standard, in 884 would be cost prohibited,

and in some instances may be impossible. I don't know who asked this question, but in cases where it's not practical to maintain ten foot separation reviewing authority may allow deviation on a case by case basis if supported by data from the design engineer. And the comment was is DHH considered a reviewing authority. I should have answered it yesterday, absolutely. Told we weren't supposed to answer questions. There were a couple more comments, changing the ten feet to six feet from both of those sections. Same thing with sewer force mains and sewer manholes. Change it from ten to six to be consistent. 8.9.2 underwater crossings. The comment was underwater crossings should comply with U.S. Army Corps of Engineers standards and regulations. 8.9.2b valves shall be provided at both ends of water crossings so that sections can be isolated for testing or repair. And the valve shall be easily accessible and not subject for flooding. The comment was most of our crossings have valves, but we have many that do not. In South Louisiana the point about being, about not being subject of flooding can not be accomplished. This would be very costly. 8.9.2c permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples shall be made on each side of the valve closest to the supply source. To install permanent taps for all underwater crossings would be very costly and unnecessary. Having these taps would provide no additional water quality benefits. These taps can be readily installed if needed. And then the last comment I had was just a very general comment talking about ten state standards preface language implies that the criteria it provides are recommended standards and should be used as such. Its own forward states recommended standards, the standards consisting of proven technology are intended to serve as a guide in the design and preparation of plans and specifications of public water supply systems. And the comment was the implementation of this broadly written guidance document as law without a comprehensive review by this committee could result in placing undue economic hardship on most water systems in the state. In addition, systems could be forced to conform

to standards that do not apply to our region, and in some instances contradict other regulations. Equally concerning is that many of the proposed standards were written ambiguously and use terms like consideration and provision which only adds to the uncertainty of their enforcement. That's really the bulk of the comments. I did have a couple more. One that said to add the normal working pressure in the distribution system should be approximately 60 to 80 and not less than 65. And they are saying to delete the strong language. Make us a suggestive minimum pressure. We have a minimum pressure, and again my comment is I don't think you need suggested operating pressures. That should be left up to the system to decide. You do need to set a minimum. And if you would like to change it from 15 to 20 I think we can discuss that. They had a comment about the valves. They wanted to delete the strong word that said that you shall have them at 500, 800 or one mile. And the last one was 8.7.3 cover. They wanted to delete the strong language not applicable to all systems in Louisiana. Some pipes are above ground and it states water mains shall be covered with sufficient earth or other insulation to prevent freezing. That's all I have.

JEFFREY DUPLANTIS: All right. I'll ask the first question. This is because from an engineering standpoint I don't come across this, but from the operations this sounds like it's obviously an issue about the grandfathering. When things change with DHH are y'all required to upgrade your facilities in accordance with where these changes are happening? I mean with an ADA kind of a standard if a building is not ADA compliant until you go and rehab that building you are not required to upgrade to those standards. But is that different here with the water systems?

DIRK BARRIOS: When we have our sanitary survey it depends upon the guy doing the inspection. I think anybody here who is directly involved with a water system can tell you that it's so inconsistent. Whatever it is today.

J.T. LANE: I think early on that was one of the problems, issues that we identified just like we

went through other parts of environmental health to try and bring more consistency to the way we inspect restaurants. It's the same issue here. In terms of bringing more consistency I think that in terms of what you're asking I think that's going to be how we approach that will be based on what exactly is being changed. I think that, and again, I wouldn't compare it necessarily to ADA compliance. That kind of depends on how (inaudible) an issue to public health. That's the way I would look at it.

PATRICK KERR: I don't think it's going to matter whether it was grandfathered or not. My biggest disconnect between DHH and operators has been DHH's whole belief that this ten state standards has been enforceable for a long time and because things that were built since then now don't meet it. It's the fact of evidence that it wasn't built to ten state standards at the time so what we're trying to do now is figure out a good grandfather language, but also to get this right. And actually delineate all the grandfather language in various sections of the sanitary code says that unless there's a specific impact on public health, which the public health officer is allowed to say grandfather rule doesn't apply. The grandfather rule is something we're going to probably have to spend a meeting or two working through that specific language and figuring out when it starts. Is it going to be date of promulgation? Are we going to grandfather things because we argued about this for 30 years now? I think we need to spend a lot of time on that grandfather rule. Right now the entirety of the sanitary code has a grandfather rule in chapter one, I believe. And there's another grandfather rule in chapter 12, there's another in 14. We just need to come up with one in chapter 12 which applies to us that is satisfactory to the health officer and to the operator. I hope we'll spend some time doing that. And if we could nail down the grandfather rule we could probably do away with a lot of these comments too.

JIMMY GUIDRY: Is the question of whether an older system can come up to snuff and does it really matter? Is it worth spending millions of dollars for something that's been okay for 60

years? That's a tough question because these systems are getting older and what they were approved for 60 years ago no longer applies. And how do you bring them up to snuff if you're not doing it along the way? When you replace it? When you build a new one? Well, there's not a whole lot of that going on. So literally what we've done in the code, not just for water systems, sewage, and other things is we try to get improvements done along the way, maintenance along the way, to try to make it not all encompassing. I really don't know if the heartburn, and I'm trying to get my arms around it, has evolved as a result of different enforcements, different interpretations of the code where somebody goes and does a survey and cites somebody at one place and not another. I guess some of that occurs. The more we're going to clarify things actually it's going to help, but it's also going to make it where you have no flexibility. I'm very anxious about the fact that people think it's going to be better and not necessarily so because it will be written and there won't be anybody coming along saying we can live with that. Oh, no it says right here we can not live with that. So that's why codes are written in reference to changing rules, but I'm with you. I keep hearing recommendations we got to start taking this and translating it. And we are. It's a lot harder than you think because we are reviewing what exist, reviewing what's being recommended. We're trying to figure out what makes sense at the same time our regular work goes on. Quite the task. Writing code is unbelievably difficult because we got here through a lot of years and we're going to change it. And there are some things there we don't know why they exist because they were written 20 years ago. There are some things that need to be changed and there are some things if we don't do it right we're going to mess this up, because we had something that was working. People have been healthy. This is very serious work. I'm always afraid that when we change things and we don't do it right that you are going to lose something that we've created. A lot of these things came about for reasons I don't understand because they were there for some reason and the minute you eliminate them you are going to find out why. We

are going to find out why they were there. That's what I'm afraid of. I would rather change things in increments, small increments with a lot of science and a lot of common sense as opposed to wholesale change like we are proposing. There's some stuff about the code that's worked beautifully. We shouldn't be changing it. There's some stuff that needs to be changed. That's what we're trying to figure out. When I see a lot of discussion around deletion of stuff because somebody doesn't like it, or because they don't want to do it, that's not a good enough answer for me. It's got to be because it doesn't make sense, got to be because it cost too much. It can't be just because it's an aggravation. And what I'm hearing is a lot of deletion because of an aggravation. A screen or a flapper I think we can work stuff like that out. That's not complicated. I am concerned that we are not getting, that we are not making the changes I thought this was going to bring about. I am not criticizing anybody. I want the input. I want to take the input and revisit what we're working on. And we have somebody working on this routinely. So we're going to share with you today some of our thoughts. We're going to give you feedback and want you to think about it. But I want to plant the seed is this is not just a matter of I've got an older system and I don't want to spend any money, and I don't want to have to do the right thing, because I'm not going to allow that. I would fight that tooth and nail. All these old systems just want to keep doing what they're doing. It's a boil water notice every other week y'all. I mean there are systems right now that are getting people in trouble and we are saying everything's fine. It ain't fine. There are people that are at risk every day because of water main breaks because something hasn't been maintained. And so it has to make sense. So I implore you when we start giving you feedback let's sit down and have some serious conversations about what makes sense. Because what I've seen so far and what we're writing it clarifies it a lot. I understand it more than the old code. I like it, but I'm not sure that we have captured everything and I'm not sure it's going to be better than what we had because I don't know what it's going to look like at the

end of the day. But I do like it because it's much clearer. It's much clearer that this is what we look for. This is what we expect. But nowhere in there are we saying we're grandfathering everybody in. We're not going to grandfather everybody in. Things that people can do at relatively little cost and make sense we want it done. I'm not giving in on that because an old system's got to be updated. It can't just sit there and everybody's happy. It just can't be. It's not going to work going forward. We got more people on lines. We got more people paying for water service. They expect the protection. My job is to make sure they get the protection. But I want you to know that this has been one of the hardest things. I've been doing this for 18 years. It's one of the hardest things I've ever had to do. How can it be so hard? Because it took all these years to get here and now we want to make it right and making it right is actually difficult. It's trying to figure out what makes sense. I share that with you because when you start looking at this stuff before you come back and say no, no that's not what we said, no, no we don't agree, there are reasons we put in what we put in. And I want us to have a discussion what we think and what you think because so far what I'm hearing is what we don't like. This is not what we're about. We're regulators. We're not about what you like. We're about what makes sense to protect public health. So we're not going to agree on everything. It's just not going to happen. If it does then we've not done our jobs and you've not done yours. Because if we agree then we're not able to provide and treat water and we're not able to protect the public. So we're both shooting for similar goals. None of us want people to get sick. You're trying to do it on a profit margin and I'm trying to do it on a health margin. Two different things. Anyway, as we share this information, and you're going to see some of it today, we got a lot of work to do. And going forward I want you to know that I'm taking this very seriously. And I know you are too because you are doing a lot of work. Eighteen years in writing code I've never had to sit down and write the code. I've had experts, plumbers, plumbing code. They sit at the table and they figure it out. They

know their stuff and I come behind and I have to enforce it as a state health officer. I've never had to sit at the table and write the code because I depend on people that know this much better than I do. When I finish with this drinking water I hope we like what we have because I'm going to know this code well. Hey, you're not going to be able to fool. Let me tell you something. I am learning this thing like I've never had before. But it's good. I need to know it. It is important. It is the one thing right now in St. Martin Parish people are saying they are getting cancer from their drinking water because they got notified that they had findings twice in one year on the chemicals that's in their water. And they are saying that's causing their cancer. Ten points above recommended level. People do not understand that when you're reporting that there's such a huge margin to protect public health that ten points mean nothing. Those ten points would have to be over 30 years to cause cancer. They were ten points for a few weeks and nobody understands that. And they blame all the cancer they're seeing on the water they are drinking. And I have to try to explain to them no, no it's not your water. It's that cigarette you're smoking. It's that fat food you're eating. We have the same amount of cancer in Louisiana as anywhere else in the country. We don't have more cancer. What we have is if you have cancer the more likely you die because we find it later. We die more than anywhere else because we find it later. We don't have more. Not because of their drinking water. Again, I share that with you because we're about to get, within this next month, very deep into the details of this stuff. It's hard work ahead. What we've been doing is gathering information. What we're about to do is make sense of it. That's the much harder part.

CHRIS RICHARD: Dr. Guidry, one of the problems that I think it's not that people don't want to do it because it cost money. It's a use of a limited resource. There are things that were being required to be done that don't further the protection of public health, but take funds away from things that could improve the water system. So that's where a lot of these people

are coming from.

JIMMY GUIDRY: Do they know the reason? That's the question.

CHRIS RICHARD: I'll give you an example of one. Our (inaudible) stressed concrete tanks have hydrogen overflows. They were told to go retrofit all the tanks to bring them down to the ground. In my opinion I don't think that provides the bang for the buck to protect the public on a small water system. I mean it worked fine for years, but go spend some money and retrofit. The tank manufacturer was fine with doing it, but they didn't want to have to spend the money, or to have the town spend the money. On the grandfathering I think maybe a way to approach it for everybody to consider is maybe in the code, in the sections we discuss design standards, and design standards are strictly that. They are design standards. And the design standards portion is not to be used in the sanitary survey. That's to be used in the review of plans. And then you have an operation maintenance portion of that section that is what needs to be maintained at a certain level to protect the public. Because the confusion is most of these are for new construction. And then people are concerned with if it says minimum three inch line and I have two inch lines that are working fine, why do I have to go dig them up? Maybe we can address it that way.

CHERYL SLAVANT: I want to give you an example and ask you how you are going to deal with all these operators and these different systems who absolutely refuse to comply and my sample is Doyline Louisiana which is a municipal system. The people there were getting sick and took the water sample to LSU MC and it was so high in chlorine they were actually getting poisoned when they took a shower. It turned out all they needed was a 35 dollar flow valve. The president of Webster Parish's family was running the system. It had been turned into their personal money cow. It took a lot to get that turned around and there's a lot of that going on in this state at some point or another. There's a lot of political interference between what systems, the operators, boards, all this is supposed to be doing and they are not doing it. And

they are very stubborn, and in some cases quite ugly. I have actually had to have state police guard me at one system because every time a member, and this was a system where the people actually owned the system, but they don't go to meetings so pretty soon somebody thinks they own the system and they can do whatever they want to. Have any of you ever run into that before? Yeah, you have. The thing about it is Health and Hospitals is having trouble regulating these people. In this particular system, I think it was, I can't think of the name. Chestnut-Readhimer was the system. Every time the people would try to complain about it, I won't even go how all this happened, sounds so radical, but it's true. The people who actually owned the system would actually be thrown out of the building if they even raised their hands to ask a question. The night I got there, there were some engineers there who were actually helping work on the system, since he didn't know me the president allowed me, and there was a state trooper there, I was allowed to ask a question and I asked the engineers who owned this system. You went to school, you are operators, tell these people out here who owns this system. And they finally said they own the system. And this goes on all over in the state. How is Health and Hospitals going to make all these operators and systems get straight enough to put these in place? What are you going to do about this? Is there an answer?

JIMMY GUIDRY: There is an answer and the answer is we use federal regulations, which we try to enforce and we can't do anything less than federal regulations. We can do more. We're dependent on local government to help us enforce it because they help us decide if utilities get turned on or don't get turned on. It's supposed to be all of us trying to work towards the same goal. And what you're saying is really strange because we're sitting here at a committee that has the authority to tell me what to do. A committee of folks that actually benefit from telling me what to do. How am I going to answer you that I am going to enforce something when we're writing the code that I'm going to enforce? Now I'm going to fight like

hell to make sure that I'm protected.

CHERYL SLAVANT: Something in these regulations to address those issues?

JIMMY GUIDRY: The whole intent here is to make it clear for folks so that there's not questions about what needs to be done and start getting our systems to understand the importance of this. I wouldn't want to own a system politically and make money off of it and run it the way you're talking about with the liability so high. If you don't do what you need to do people start getting sick. There is no amount of insurance that's going to cover you.

CHERYL SLAVANT: I understand that, but it's going on.

JIMMY GUIDRY: Well, I know it's going on, but I don't think it's wholesale. I know some excellent systems that do well and I know some poor systems that should have never gotten in business and our job is to find them and make sure that doesn't happen. And what we're struggling with what are the rules that protect people's health without requiring them to do things that is just spending a lot of money, you know. I mean that is the struggle. That is the huge struggle. So you may have a small system out there and politically they're making money. They're not keeping up the system. We know about it, we certainly try to do something about that. But to say that we control it all it's local government, it's state government, it's federal government trying to figure out the right mix. We can't even keep up with federal government because they keep changing the rules. And I tell you one thing we learned in medicine that applies to this when medical practices, when physicians had to start reporting their mistakes and that's shared with everybody they're less likely to start talking about what mistakes are made and how they improve. What you have right now is the requirements, the regs, the federal regs, is that you got to do certain things and have certain levels, otherwise if you don't you've got to report it to all your customers. So one day you're checking bacteria you got to go tell everybody, hey there's something wrong with the system because there was a sample that was wrong. Well, that's more likely than somebody's not

going to want a sample where they're going to get a bad result because that's not good for business to have a bad result. It hurts your industry to tell all your customers, hey something's wrong when it's temporary or it's very fixable. So what we've gone to right now is to try to regulate to the point where people are afraid to even do what they need to do because when you do it... that's the one thing in medicine for medical mistakes was that we had to agree that you weren't going to get sued if you owned up to your mistake. How else are you going to find out how to improve unless you share what's wrong? That's what I find we're at now. We're trying to figure out how to get people to do the right thing so people don't get sick. If they don't do the right thing by God they got to tell all your customers so now we have to go tell them we need more samples and what we're finding is that the samples aren't throughout the system, they're actually where they're going to get the good results. Not good. Not good. So the more I learned about drinking water the more I understand that there's potential for people to get sick. But people are living longer. People are not getting as sick as we would predict from all of this so it has to be reasonable. We can't overreact. Some people say we're overreacting about the amoeba. Chlorinating the water does amoeba. We've had three deaths in Louisiana. Nowhere else in the country have they had this many deaths from drinking water. So it's not overreacting. We can't afford to have another death. So you have to sometime use reason on what you do. But what you're sharing with us is that there are always bad actors out there and the good suffer for the bad and we want to know who the bad actors are. But if we clarify for people they can't say I didn't understand it or, but I hope they're not thinking they are going to grandfather everything they got right now. That's not what it should be cause that's not going to happen. We're not going to grandfather everything that's not up to snuff. We're going to figure out what we can and what we can't. It's got to make sense.

JAKE CAUSEY: So maybe we can talk about 20 PSI.

RANDY HOLLIS: I do have one comment. I'm sorry to go back on this. I typed in yesterday and it did not get read today so I want it in the record. On, specifically, I hate to go back to this, but under underwater crossings it says that valves should be provided on both sides of underwater crossings. I would like the state and all of us to consider an exemption for transmission mains, for transmission mains to have valves every mile or so. To put a 36 inch valve on either side of a crossing is a huge expense that is not necessary. And it's a transmission main. You don't have customers connecting to it. We can test it, so I would like an exemption in there for transmission mains, you can say 20 inches or larger, or whatever, but that was a critical thing I typed in yesterday that did not get into the record.

PATRICK KERR: Doesn't even have to go on the record, but I'd really love to see what they have to show us. We can keep talking, but we have a half an hour left. I mean if you really have some stuff you'd like to show us.

JIMMY GUIDRY: What we're going to show you is not to respond to today, come back to. We don't want you to have to give us your answer today.

J.T. LANE: What we will do we will give you a copy, email it out after the meeting. What Jake is going to do is go over what we thought were some of the big ticket items for what we included based on feedback and then what we didn't and why just to at least let you know sort of the top three to five for each category. Questions about that we can discuss that? We thought we would give you all time to review. Real quick, Jake, do you have anything you want to add?

JAKE CAUSEY: Well, yeah. I guess the main thing was that Louisiana is the only state in the country that has a 15 PSI minimum pressure for distribution systems. EPA other states, ten state standards certainly use 20 PSI. And I certainly think that it's sort of an opportune time for us to establish that as a minimum for our water systems here. And frankly what we're seeing in this amoeba response and all the activities associated with it, plan reviews, etc.

Desoto, St. Bernard chlorine burns and all that is a lot of attention needed for distribution systems and distribution system maintenance. I fully support the need to establish 20 PSI as a minimum and that be the regulation, not necessarily an operating range at all, just a minimum. But I do feel like to some extent or another information like this is what your optimal operating range should be is good information cause we see too often people who don't read the code, or don't look at (inaudible). Small systems that's their target, the minimum. So that is the benefit of having suggested operating ranges, but certainly not as any sort of actual regulation or mandatory requirement. To my knowledge all systems are currently operating at 20 PSI and above. I don't know any that are operating at pressures below that. I think that with, I guess, just knowing distribution systems, you know, there's a lot of risk there when you start talking about leakage, unaccounted for water. Talking about pressure transients and potential for contaminants to enter systems. 15 PSI isn't helping us. 20 PSI will help. Frankly, that's what we're having to look at as far as sort of comprehensive strategy addresses amoeba. Chlorine residuals are a part of that, a huge part of that, but that's not all of it. It's maintenance, and monitoring, and all those other aspects of distribution system that just like we're talking about service water treatment. It's the whole multi barrier approach. Hit it from multiple angles and your chances are better not having another infection. Minimum distribution system pressure I think we had one of those, again in Louisiana only state at 15. I'm not sure where 15 came from. I've never seen it anywhere else. But I think we should absolutely move to 20.

PATRICK KERR: I agree with you that 20 would be feasible, I just wonder if we couldn't build into the code that in a supervised situation we're allowed to take the pressure below 20 to affect repairs. My concern is raising that pressure to 20 we try to fix main breaks, most systems do now, try to fix them hot, and the difference between 15 and 20 water going into the hole is a lot. Some systems at AWWA basically just says as long as you have positive pressure

in a supervised situation you do not have to go back and do re-chlorination and sampling. You know the situation. If we have a main break and I want to take it down to just positive flow at the closest fire hydrant so I know I have positive pressure in the system. And obviously I'm not going to do it downtown where the buildings are ten stories tall. Although they should all be checked. It should not flow back into our system. But if we can build into that change to 20 some specific provisions that when supervised by a certificated operator they can take the system down and make a decision about whether other steps are necessary, chlorine, disinfection, or evening sampling. 652 is going to a point where it is done completely controlled unless you lose complete system pressure there's no requirement for sampling. That makes sense. People shouldn't have to boil their water for a day when none of us are getting positive results when we made a repair correctly. Let's just not change to 20, let's change it to 20, but give something back to the operators too.

JAKE CAUSEY: I mean on that note I can say that I think it was Mark LeChauvlier with American Water gave a presentation on that proposed revised standard to C652. With the information I was presented there, state drinking water administrator's conference, that was basically the concept that short of a system wide outage the pressure drops there's still no boil advisory required. It didn't get overwhelming support from either public health agencies. And I think that's something that there was certainly some science, and some studies, and things proposed looked at. And some of the sort of evidence proposed was how many outbreaks etc. when these things occurred. The other side of the code is how many were prevented, which can't be measured. I wouldn't be comfortable at this point, myself. I think that's something that requires a lot more discussion with EPA and other states to support allowing systems to reduce pressure below the minimum, subjectively based on how much confidence they have without issuing a boil advisory. I think that would be tough to support right now. I definitely see the change with this AWWA standard coming to some extent or

another. It's not there yet, but there's a lot of debate to be had and I'm not seeing a lot of support from states based on that. It's something to continually look at and hopefully maybe with other states we can have some more dialogue with AWWA and others on that change. I guess it would be hard for me to support that right now, but I definitely think it's worth looking at further. Definitely have a lot of dated studies that they are trying to go to. Again, other states were, you know, that's fine. Follow this industry standard for repairs, but if your pressure drops below 20, advisory sample if you want it back. That was kind of a general position I've seen, but it's new. There's a lot to weight out.

JEFFREY DUPLANTIS: I just kind of want to follow what Cheryl was talking about earlier. There's good systems out there. People who are operating good systems and there are ones that aren't and are we going to leave it up to them to police themselves? I know we had talked about getting a certified operator. Who's that overseer over the operator? Just be careful that we don't just leave these systems that are out there running the road potentially to police themselves in those situations.

PATRICK KERR: So are we going to supervise the parish?

JEFFREY DUPLANTIS: I'm not saying that, I'm just talking about dropping down below 20. How do you police that?

PATRICK KERR: I'm talking about between two valves, a repair. Today if I want to go cut a fire hydrant in, I want to cut a tee in. I can have two valves 500 feet a part. I can dig the entire hole out to make sure that nothing got into the pipe, no contamination in the pipe, I can dewater the pipe, install that appurtenance, re-pressurize the pipe, flush it and I should be able to put that back online without having to issue a boil water advisory for those customers. If a system is taking a whole system down to 20 to make the main repair you probably ought to talk to them about whether they should be in the water business or not. But if we can do controlled repairs or controlled changes to the system my fear, and the other side of this, is

issuing boil water advisory after boil water advisory I'm sorry the chicken little problem is a real problem and people aren't going to boil water. We get questions now. Do I really need to boil my water? It's really up to you, but we really think it's a good idea. I mean how else can I respond? Yes, we issued the boil water advisory because we're concerned about your health. It will be at 24 hours. Please heed the warning, but it is an advisory. Dr. Guidry could tell us to disconnect everybody from the system until it's back. If we had an acute health they'd say don't deliver water to your customers. That's a little different than boil water advisory. Jake, Dr. LeChauvlier is the point person for this, you're correct. But I don't think it was that wide open. It shouldn't be that objectionable.

JAKE CAUSEY: I know there were categories.

PATRICK KERR: There are four categories.

JAKE CAUSEY: You could go through all of them without having to issue a boil advisory except the---

PATRICK KERR: The last two. The third and fourth category, I'm sorry the third and fourth category require decontamination and sampling, but sampling doesn't necessarily say boil water advisory. You're right.

RUSTY REEVES: We're talking about two types of systems. The sad part is the system Pat's talking about with the confident people trying to do this is one thing, the systems that Ms. Slavant's talking about they doing a (inaudible) boil advisory anyway. They are just going on through the neighborhood. We are talking about two separate operations.

CHERYL SLAVANT: I get a lot of calls about boil water advisories. And what the folks don't understand is something's gone wrong before they hear about it and they been using their water in between from the time it happened till they hear about it. And they don't understand that and they get very, very angry because they hear about it after the fact. I don't know how they can know about it before the fact, but that's why they are not doing

anything about it or boiling their water because by the time they hear about it they feel like they already drank whatever's bad.

PATRICK KERR: That's not true.

CHERYL SLAVANT: Well, I'm telling you what they tell me.

PATRICK KERR: You might tell them it depends on the boil advisory. One may come out because we had a bad sample that we took four days ago. They are absolutely right. The water's been that way for at least four days, but if it's a main repair normally those boil water advisories they go knock on doors before they turn the water back on and tell people.

CHERYL SLAVANT: I've never run across that situation. The people who are calling me are angry because they got, but unless you can tell the future.

PATRICK KERR: You are right. It takes time for these samples to come back and if we get a bad water sample we may very well issue a boil water advisory. Not just a routine chloroform sample, but fecal chloroform, MCL violation we're going to issue a boil water advisory. Yes, it may have been a month when this started. That's the best we can do. We can't fix the past.

CHERYL SLAVANT: That's what I have to explain to them. They can't send you an advisory until they know there is something wrong. If they go in the mail it's two or three days later if they even open the mail and see it and then they get angry.

PATRICK KERR: Shouldn't be in the mail.

JAKE CAUSEY: Some of that might be public notices.

CHERYL SLAVANT: The situations I'm running into it's a done deal. It's fixed by the time anyone even, but anyway, I'm going to start sending y'all those calls.

J.T. LANE: All right. Jake, was there anything else you wanted to say about Robert's comments from his, anything in particular?

JAKE CAUSEY: One note I had mentioned, I guess one note I had written down which actually kind of relates to the same conversation we're talking about valves and distribution systems.

You know it was interesting that some of the comments were it's too costly to put in all these valves. I get no benefit, but yet when you have to repair a main there's a huge benefit. If it's more of a cost benefit verses a public health benefit I know there are differences there. If I recall correctly we've already covered the whole valving issue as far as not being, I guess retroactive (inaudible) space every so often. But I think it's important that people do understand the benefits. Just as Pat, said you have five customers out of water, not 500. That's the benefit. I think it's very important to continually reiterate that. I mean to me the fact that we're talking about distribution systems today and the issues we've had with the amoebas and other things. Of course, I guess, in the storage tanks those are the major issues that we were focusing on in this amoeba response. Storage tank cleaning and inspections. Frankly we're looking at we need some frequency mandated to inspect and clean storage tanks. The recommendation is once every three years. We're looking at seven to ten storage tanks as places, a habitat for these amoebas. So some frequent cleaning, inspection of these tanks will help control the presence of these amoebas if they are living in these sediments that never get removed. They just sit in tanks and sit in tanks continually receding the distribution system. Another thing is we're talking about leakage. One thing it says in here service connection should be individually metered. I know some of the comments before have been we still have maybe a handful of water systems that are not metered, community systems. This would really apply to community systems. You can't get financing today without metered service connections. Also, you can't really determine your leakage in your distribution system without metered service connections. I think those are very important points to at least mention for this dialogue that looking at your unaccounted for water, I know flow meters on wells was a question. Well, that's purpose, one of the main purposes. You have flow meters. You have metered connections. You can ascertain what kind of leakage you have in your distribution system and that leakage has a significant public health impact. I think those

are very, very important things I wanted to mention. I think I'll leave it at that. I guess the other thing, again, is asset management talking about lines older than 20 years. St. Bernard indicated their lines were over a 100 years old. Maybe some people have 100 year old lines. But that's something getting close to having to do some repairs there. I think that's all a very important part of the discussion. That's all I got on that.

J.T. LANE: So if there's no other comments or questions I guess we want to move on to item seven, old business, to have a quick discussion about parts one and two. Sheree, if you would give everyone a copy. This document represents the language for parts one and two that we've edited based on discussion and feedback from the webinars. And so at this point, I guess, Jake if you want to kind of give an overview of some of the big ticket items that you think are in it and certainly if anyone wants to have a discussion about anything Jake says, or if you've had a chance to come through this we can do that now, but we'll do a bulk discussion at our next meeting.

JAKE CAUSEY: I just made a couple of notes here. I guess, three, what I guess are called most apparent things that I think we're basically proposed to be removed or deleted to some extent. I'll just say that we disagreed with. The first meeting engineer's report on our plans review, plan submittal and specifications for permits. Frankly the content of the information being included in there. That is information that is very important for our review, as well as, frankly, the client and the water system. In a lot of our comments, repeated comments and such relate back to a lot of that same information that should be included in that engineer's report. I think that receiving that will expedite our plan review processes, rather than having so much back and forth in some of our reviews. Obviously for small projects an engineer's report would not be very long. It would probably be somewhat brief. I think having that as part of our plans review permit process for public water systems is very critical. I'm trying to recall even, especially when we started looking at if we just look at it historically switch let's say

from chlorines to chloramines. I can tell you there would be a tremendous amount of value in engineer's report from that public water system to know and be aware of monitoring and controlling things like nitrification. That should be part of that permit application. I guess just something to maybe go back, think about, look at, and have some more dialogue.

Number two was a report on technical, managerial, and financial capacity of public water supplies undergoing additions and renovations. Again, we have systems that are adding to building, installing tanks with no plans to maintain them. Why a water system would construct a tank without any plan to ever maintain the tank, to recode it, to replace it. Things like asset management plans are critical. That's why systems are faced with challenges they have today. Something fails, no money to fix it and go into beg everybody they can to give them some money. Again, it's not, I guess, the point is there's not mandatory requirements necessary as far as what the content of those things are. It's just an evaluation. Engineering evaluation of the technical, managerial, financial capacity of water systems when adding and renovating their systems. One of the examples, and I guess for everyone's benefit this is new. This is in the 2012 ten state standards. It was not in 2003, and as I recall, not in 2007. Might have been the one after that. But I will say technical, managerial, and financial capacity is something that EPA is pushing states on very heavily. It's something that ensures the successful operation of a public water system. Talking about boards that are stubborn and don't want to do the things they need to do. If they are in the planning, permit process for new infrastructure there's an evaluation of how financially feasible and what their managerial and technical capacities are to operate and maintain their system. There's a tremendous amount of value in that for public health protection. That's where that comes from. And then the last one had to do with getting back to Dirk's favorite topic, flood protection. I can't recall exactly what it was, I guess from the committee, I think it was really having it do with access roads and may be, if I'm not mistaken, ten state standards maybe set a 100 year flood

and then the comment was that most streets that we have are not, may be they are designed 25 year flood. I think maybe it was deleted and maybe what we put in was 25 year flood, not a 100 year flood. But I mean access roads, I'll say this, are critical, not just during, obviously, normal conditions, but emergency conditions. Access to get supplies, materials, vehicles, etc. there. I think they had to be protected to any flood elevation. And so I think what we just did was put in it just had to be protected the same flood elevation as the 25 year flood elevation. Same as other streets it's connected to. We can go back and double check it. I'm trying to paraphrase. What we gave to you is what's there. Then I guess some of the areas to some extent kept as it was proposed may be with a slight modification. One was the conversation we just had about disinfection procedures, or I guess new mains or repairs. Basically, what we have is what's the process in the sanitary code or C652, but however in cases where the pressure drops below 20 PSI issue boil advisory, sample, clear the line, which is standard, I guess, really practice now except it's 15 PSI. The other is what we did, I guess, C652 is not in the sanitary code at all. So it is going to be an accepted standard in lieu of what's specified in the sanitary code. Two was, I guess, was something about the purchase agreements. OPH agrees that plants need to indicate and document an adequate source of supply. Water purchase contract between PWS and/or inter municipal agreements where applicable. And I wasn't here that first meeting, but some dialogue about maybe it was more concern of actual contract documents being submitted verses just a verification that there's an adequate source of supply. I think what we're saying here is that we just stuck with the same language that was proposed, or at least very similar. So the next one it was OPH agrees we do not need to know fire code requirements. We do not need you to go to your insurance office and have them tell us what the fire code requirements are. Our concern is that we build a system to meet certain demands is capable of meeting those demands, but don't necessarily need to go tell us what flow rating has to be for a certain whatever. I think we're just saying

that we stuck with what was proposed there. And then the last one there was a lot of comments we start talking about security oh, that's covered, that's covered. Well, if it's, but it may not be covered adequately. We do have a requirement for a fence and a locked gate. But I think there's a lot more security that is needed in public water supplies today, especially those using computers and SCADA systems because they are certainly at risk. We did not specifically propose any mandatory requirements to that effect, but I think there is some language in there about vulnerability assessments. That was a one-time deal. New systems don't have to do them. If you renovate your system you don't have to redo those, but certainly being aware of those, using those as a tool designing systems. I'm not sure what should really be mandated at this point, frankly beyond a fence and a locked gate. I think with SCADA computers you obviously need virus protection at least. Some of these basic things, but I don't know, hopefully a lot of systems have that. But it's just something to think about when the word security is used. There is a lot more to it than a fence and a locked gate. So just the fact that many comments were that's covered. It's not covered to the extent that perhaps I think it should be. I think that's just a separate issue. I think those were the highlights that I had. But you all have the documents.

J.T. LANE: Any comments, questions? All right. Now we move on to the public comment period. Is there anybody in attendance today that would like to make any comment about anything we discussed? Okay.

RANDY HOLLIS: For those engineers in here that need continuing education hours just for your benefit LAPELS has agreed we will be given up to ten hours of credit for participation in this. That will be granted at the end, I presume, in August. Like we're taking a course at LSU or something. I talked to them yesterday and they agreed this was definitely worth wild and we will be given a ten hour credit. I don't know about the water, but for engineers we'll get that.

J.T. LANE: All right.

SHEREE TAILLON: Before we adjourn, so for the next session we have Rusty doing section nine and Pat doing section ten. I'm not sure, y'all had said you wanted to do it in the day time. Which yesterday we had 27 participants, previously at night we had 56 participants. Y'all make the call as to what time it is or what's more convenient with y'all, whatever. You don't have to tell me today, but just know that it is coming up and it is your turn. You pick the day and the time. So the next meeting is January 28th so we do have a lot of time between now and then and it's at 1:00.

J.T. LANE: A motion to adjourn?

CHRIS RICHARD: One more question. With what you added, what you just handed out a lot of things we discussed and agreed on were not incorporated on. What are we supposed to do with what's handed out? Are we supposed to comment and send our comments back and this committee is going discuss and vote (inaudible) and what's not? It looks like basically the same thing that we started with.

J.T. LANE: What I would do is review it and send us your comments in writing so that would certainly help us speed up any additional edits we can make and then just be ready to discuss them in the meeting.

CHRIS RICHARD: And then everybody would do that and vote at some point in time?

J.T. LANE: Right.

SHEREE TAILLON: And I'll send out an electronic version of what you received today.

PATRICK KERR: What does this have to do with our final document which is going to be chapter 12, right? I mean we're not going to have a stand alone Louisiana standard construction. How are you going to incorporate this to chapter 12? That's what we need to be doing, right?

JAKE CAUSEY: I think this was just to sort of, you know, more content rather than format.

PATRICK KERR: Work this all into chapter 12, right?

JAKE CAUSEY: Yes, somebody will. It may be more than one person. But yeah, this is for content and then code is just format.

J.T. LANE: All right. A motion to adjourn?

PATRICK KERR: Merry Christmas y'all.

J.T. LANE: All right. Y'all have a great Christmas.