

Water Committee Meeting

July 23, 2014

J.T. LANE: Good afternoon. We're going to get started. Sheree, please call the roll.

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

J.T. LANE: All right, welcome. I hope everybody is able to get some vacation in this summer, so much extra time for the work for the committee you're on. Item number 3 on the agenda, we included the approval of the minutes again because we realized at the time Pat Kerr was the last to arrive at that meeting and he constituted a quorum. We approved the minutes before he actually arrived and we were one short. We want to do everything right, so we're going to do another motion to approve the May minutes. You all had them in your email. And so with that does anybody have any questions about that? A motion to approve the May minutes? May minutes are approved. And then June minutes were sent to you in the email. Anybody have any questions about those? All right. You have a motion to approve the June minutes, Dirk, seconded by Ben. Thank you. With that we'll move into the old business. We compiled the subcommittee reports for part 6. Compiled everything and analyzed it and printed out for you the email documents that show side by side comparisons, marked up versions for part 6, and showing the changes that we suggested made after we analyzed the recommendations and had discussions about this from the subcommittee report in an earlier meeting. And so I think what we're going to do, just as we did for the previous part 8 that we approved last meeting, is go through the side by side comparison, which is this document here, to guide the discussion. Of course we do have a copy of the actual text of the part 6 that is marked up as well. With that I'm going to turn it over to Jake and Caryn who will sort of walk us through each

one so as we go through each subcommittee recommendation in order let's have some discussion about each one. If you guys have any questions, or concur, or don't concur, have questions you want to make, or some amendments to some of the language let's do that now. With that, if no one has any questions I'll turn it over.

JAKE CAUSEY: I'll go through we reviewed the subcommittee report comments and had incorporated them, I'll just say we did our best to incorporate them, part 6 language. And so I guess looking at it the document that has the comments on the right hand side, I think it's probably going to be the better document to use for this because some of our comments are there, more of our comments are there. I'll go through them, and frankly it's been quite a while since we put this together. I'm going to try to recall some of the discussion we had then, but I think it's all fairly plainly written in the right hand margin. I think the first comment we had was that under 6.0 general where it said pumping facilities shall be designed to maintain the sanitary quality of water pumped. Subsurface pits or pump rooms and inaccessible installation should be avoided. No pumping station shall be subject to flooding, unless critical components are protected from damage or contamination by inundation. And so our concern with that is we would kind of look at it in full context of we have a pumping station, this essentially says the pumping station, the room, building, area can be completely flooded and inundated that's okay as long as the electrical equipment and the motors effectively are not. I believe that pumping stations need to be accessible during a 100 year flood event and if the room itself is flooded I wouldn't consider that very accessible. If you needed to change out a piece of equipment it's very hard to do that especially if you're working on electrical standing in 2 feet of water. Perhaps there was some misunderstanding as well, but I guess that's our interpretation of that comment. I think that last sentence is very problematic. I can't recall who, may be all had been involved and/or commented on that, but that was the first item.

DIRK BARRIOS: I have a question. You're qualifying that with a 100 year flood event. In your statement, may be not in writing, Southeast Louisiana, a 100 year flood event. New construction, yea you make

sure elevation meets whatever is required. Existing facilities? In some cases you're not going to be able to do that unless you make some kind of a buffer. What you're going to end up doing is limit all these water systems. And even in the northern part of the state a 100 year flood event, come on man. That's an extreme. And so basically you're not going to be able to do any kind of expansion or any kind of changes to your pumping facilities unless you can meet a 100 year flood event. Jake, I live in Southeast Louisiana, extreme Southeast Louisiana, and when you say those types of words I know what you're saying. That means that I have to build stuff plus 11, plus 14 every location. And even that in some cases is not going to be high enough.

JAKE CAUSEY: It does use the words not subject to flooding from, protected from, I believe there's a lot of ways--

DIRK BARRIOS: But the thing about it is a general flood from like a rain or normal type of situation is one thing, but when you say a 100 year flood event you're talking about, in a lot of cases, a big storm, a big storm. And to design everything you have in a water system to meet a 100 year flood event and be able to afford it because people are going to live out there regardless. You have to be able to provide them whatever they need to have drinking water. The federal government is putting enough rules as it is. Why do we want to get involved, and I thought it was for the quality of drinking water we're here for. And here we are again back with design and trying to tell them a 100 year flood event, again, I've been arguing about this since day one. I think in some cases it may be warranted, but I think we need to sit down and look where we're at. We're Louisiana. We live on the gulf coast. And I think that you have to keep in mind that this 100 year flood event when you use those types of terms it puts people that live in that part of the country like we do at a disadvantage, makes it not affordable.

JOSEPH YOUNG: Could a compromise be keeping that statement in there as far as the critical components, part of the controls and motors keeping that above and letting the rest of the station--

DIRK BARRIOS: I don't have a problem when you say flooding. When you had storms in the area we had

to make improvements. We made sure all electrical, all pumps are above what was determined as the high point in that area, any issue at all. And I'm just going to use an example: I live in the 10th ward in Lafourche Parish. We have a 16 foot elevated rain levee all around the area, 16 foot in the southern part, 13 foot in the northern part. Every booster station we have, which is quite a few, is a linear system. Definitely doesn't meet a 100 year flood criteria. Probably not one of them in our parish probably meets a 100 year flood. All I'm trying to say is that flood events, in general, yeah we don't want our pumps to flood, we don't want electric motors or anything electric to be in the water. We want to make sure and we do do that. Again, and I know I am coming back and harping on a 100 year flood event. That is a critical thing for people in Louisiana in general. I don't believe most of the engineers would tell you, and the others even in their areas, a 100 year flood event is pretty high elevation.

JAKE CAUSEY: Certainly that is a moving target over the years and when something is built to a 100 year flood to date that elevation changes 10 years from now it doesn't mean everybody is going to go raise everything back up. It's based on the time when it was built, so that's always in place. And we are talking about new construction. We're not talking about going and lifting all of the existing facilities. And generally speaking, yes we do build water system facilities, treatment plants, storage tanks, water wells, all these facilities so they are protected from the 100 year flood. They can operate during a 100 year flood event, but again that is new construction and just because a 100 year flood changes at some point in the future doesn't mean you have to go elevate existing facilities.

DIRK BARRIOS: And I understand what you're saying, but nowhere in here does it say strictly for new design, could be used for the sanitary code. And believe me, you have guys out there if it doesn't say can't be used for the sanitary code they're going to write us up when they do sanitary surveys. The distinction needs to be made with this type of stuff. Everybody is going to get written up.

JAKE CAUSEY: I believe this needs some work, but I think it needs to say something more indifferent than what specifically was proposed is all.

CHRIS RICHARD: It also says shall be designed and the way I take that is that's not going to be used on a sanitary survey on an existing facility. Anywhere in the code when we're dealing with something that says shall be designed for plan review, is that correct? So we have it covered for existing.

JAKE CAUSEY: Again, like the 100 year flood elevation wasn't specified, a lot of things that weren't specified in the section.

CHRIS RICHARD: On the next section they talk about the 100 year flood.

JAKE CAUSEY: You're right. That's just a general.

J.T. LANE: Are we going to come back with a recommendation to revise the language?

JAKE CAUSEY: We can certainly do that, yeah.

J.T. LANE: Anything specific that you think we should definitely include?

JAKE CAUSEY: I think Chris' point, the 100 year- that specific language is addressed later in the same document. I guess we were going to really cover that point.

J.T. LANE: I think this is simpler if we have to reference the rules let's do that because I think the side by side is good and orderly.

JAKE CAUSEY: For that particular section 6.0 general the last sentence needs to be deleted, no pumping station shall be subject to flooding. That probably needs to be shall be protected from flooding as specified below or something like that.

DIRK BARRIOS: If you're in a flood protection district like you have levees that can serve as being protected from flood.

JAKE CAUSEY: It's absolutely part of the equation by all means. You can be inside a levee and still flood. You have to evaluate that too. A levee does provide flood protection as part of the equation.

DIRK BARRIOS: Quite a few people that live in those areas.

JAKE CAUSEY: There are many ways that you can protect facilities, absolutely, I would agree with that.

CHRIS RICHARD: We have to decide on that language.

JAKE CAUSEY: That would be helpful.

JEFFREY DUPLANTIS: The way this is set up now we're saying the pumping station shall not be subject to flooding and when you get to the site protection that first sentence has been edited to say the station's critical components cause it's getting away from that it's okay for the station to be flooded, it's just not okay for the electrical main components to be under water at any time. So if we're going to modify this one are we going to want to change that first sentence as well?

JAKE CAUSEY: We have a comment there that says same as above. It's the same issues on both sections. The 6.1 the site protection is more specific. Just to delete that and say the station shall be ABC as provided. Or if there's some alternate language on some of those that's fine, but I think that's the general.

CHRIS RICHARD: May be part of the problem is pump station is a broad term. A lot of components that can be subject to flooding that have no impact on quality, maintenance, or operation of the pump station, pretty broad. I guess when they added the components as a way to say that some flooring, some other areas, parking, the pump station components cannot go under water, but continue operating sanitary features is what they are trying to specify.

JEFFREY DUPLANTIS: Some stations can go under water and if your critical components are above it's still going to be working. A 100 year flood I don't see many people running out to the site to go and do maintenance on it.

JAKE CAUSEY: If it stops working and people don't have water.

DIRK BARRIOS: No one is going to be there.

JAKE CAUSEY: I wouldn't agree with that. In some areas I would agree with that.

DIRK BARRIOS: In the rural areas they are not going to be there, if they are, sitting on top of their roof.

JAKE CAUSEY: Not everywhere. This is statewide.

DIRK BARRIOS: I said the majority. You live in Baton Rouge.

JAKE CAUSEY: I don't live in Baton Rouge.

DIRK BARRIOS: Big city environment, Baton Rouge, New Orleans, Shreveport, Lafayette. A lot of us live

in rural America. Rural America doesn't have 50 story buildings. We might have a two, three story. Those are usually hospitals. If they haven't moved they are on their roof, believe me. They are not building any higher than we are. Again, I know I am beating a dead horse, but that 100 year flood elevation and plus 3 on top of that I think you're strapping rural water systems' hands together and saying unless you can come up with 300, 400,000 dollar booster stations rather than a 150,000 booster, I can't build it cause you can't get the elevation. I'm not saying that money ought to trump water quality, it shouldn't, but there's a fine line there. And we don't look at that fine line. We're just looking at we're going through it and it's going to cost you an extra million dollars. I made a comment a while back about you're taking an finite amount of money and instead of us being able to do four or five projects, do one project maybe cause we are not going to be able to afford it because we're putting so much restriction on the construction which a lot of times does not affect water quality and you're killing us. Again, I'm looking from the managerial side. That's my job. I have an engineering degree, but I work for a water system, I'm a manager. I know the money. Y'all do not take this into consideration when y'all make these decisions time and time again. I have to, that's my job. I have to argue with the Chris Richards, with DHH. You're just tying my hands. You're making it to where expansion or improvements in the rural water systems because of where we're at we're being penalized. Again, probably said it a half a dozen times and I'll probably say it at least that many times as we go on. I just think you need to be a little fair when you talk about elevation of certain components in the system. Yes we need to protect, but we're not defining it. You just said you consider the levees and all this other stuff, but we're not defining none of that right here. Basically come back in the next cycle and we say a 100 foot flood, 3 foot above the 100 foot. In Thibodeaux that's probably plus 14, natural ground might be plus 8.

JAKE CAUSEY: My point is that we would need information and data. You can talk and talk and talk, but it's just--

DIRK BARRIOS: But if you don't put it in writing to cover it we need to have something in there that

gives us-- my design engineer, let's say I hired Chris or Jimmy, any one of them, and it's not in writing so we're trying to build a pump station in Lockport. I put elevation plus 6. I have to be at plus 14 because I have to be 3 foot above. But if it's in a levee system, you follow what I'm saying, would that be considered? If it's not written down in here then it won't be considered.

JAKE CAUSEY: Depending on what is written, the way things are worded that dictates what's considered.

I absolutely agree it should be considered that any flood protection that is in place is absolutely a critical part of the equation.

DIRK BARRIOS: And I'm going to give you an example. I live in the 10th ward, we don't have Corps approved levees anymore. They changed the design after Katrina and after that we didn't meet the requirements. We're the only levee system in entire South Louisiana that I'm aware of that hasn't flooded in any of the major storms, yet we can't get Corps approval.

J.T. LANE: Come up with some of the requirements, some of the criteria in there and then say for others some language that would say demonstrated, some of this to get that flexibility will have to be negotiated in the plan review process too.

DIRK BARRIOS: Am I just taking it too far? May be I am, I have a tendency to do that. You have to have something in writing that at least gives them, Caryn, if it's not written down Caryn says it doesn't say I can use this as a criteria and she can only go by the guidelines that are given to her. If we don't give her any kind of guidelines--

J.T. LANE: I agree.

CHRIS RICHARD: To answer Dirk on the FEMA maps for the flood zones, if you are protected by a levee then it doesn't show you in a 100 year flood zone because you're protected. It says this area is protected from 100 year flood.

DIRK BARRIOS: Not in the 10th ward because they are not recognized. But again, we've never flooded in a major storm. The millions of dollars that are going into the state to make improvements in the levee system they are not in Lafourche and Terrebonne Parish. They're in Orleans and Jefferson

Parish. We don't get a penny.

CHRIS RICHARD: Another issue with FEMA that required levee certification and unless they change it no engineer's going to certify levees. There won't be any certified levees unless they change it you'll be in a 100 year flood. Nobody is going to put their stamp on that.

JOSEPH YOUNG: You have a problem with the way it's written right now what's in the language?

DIRK BARRIOS: The critical component. I don't have a problem with critical component being protected. I have a problem with the rest of the stuff where it goes and says the 100 year flood elevation and 3 foot above right below it.

JEFFREY DUPLANTIS: Jumping to 6.1.1 site protection that's in 10 state standards. So that's a design requirement per 10 states. So we are looking at again the point of all this was to take what we felt needed to be in the state water code out of the 10 state standards which we feel is the design criteria. And so that's why the board or the committee recommended putting this in there. Now again, we added the critical components. The critical components can be 3 foot above. The critical components need to be accessible. That's why that sentence was put in there and that's why this was left as it is.

DIRK BARRIOS: Still doesn't take into consideration any kind of additional flood protection, again if you're in a levee system. It doesn't. Use a hypothetical, 10th ward, levees are all built to at least plus 13 and I know that because they're being constructed right now and they have a few little gaps, but once they fix it at least plus 13. Let's just say, for instance, that the elevation of a 100 year flood stage or at part of the parish is plus 13 so if I build a pump station inside it, wouldn't the levees constitute the plus 13? Again, I'm just asking. I am going to build my pump stations at plus 13 and most of that area of the parish you are looking at plus 3, plus 4 elevation which means my pump station is 10 foot in the air or more.

JEFFREY DUPLANTIS: They have ones here in East Baton Rouge that are up on--

DIRK BARRIOS: I have some higher than that, but they're outside of the levee system.

JOSEPH YOUNG: Your argument is your levee system, you're saying that would be your protection.

DIRK BARRIOS: The 100 year flood stage, period, because that's a moving target. We've all admitted it's a moving target.

JOSEPH YOUNG: What if we say the 100 year flood elevation or highest recorded?

DIRK BARRIOS: That could be worse.

JEFFREY DUPLANTIS: That's 6.1.1 A.

DIRK BARRIOS: Like what happened in New Orleans.

JEFFREY DUPLANTIS: Exactly why this is set up that if one of the levees breaches and that's no longer your 100 year flood, you're not at 13 anymore.

DIRK BARRIOS: But we're not going to consider anything other than just the station itself is what I'm asking.

JEFFREY DUPLANTIS: I think that's what this implies.

CHRIS RICHARD: The first section is very broad. We're still talking on the general section, it is very broad. My interpretation if it says protected from flooding it doesn't say how. If you're within a levee system then you're protecting that levee from flooding. That's part of protecting your station. If you are behind a levee you don't have to build it higher, you're relying on that levee. And everybody that's in it if your levee fails then you don't have to provide water anyway.

DAVID CONSTANT: Is it understood then to assume the levee is going to hold and build the station based on that reference because if the levee fails all bets are off anyway.

CHRIS RICHARD: You're not providing water to anybody anyway because they're under water.

JEFFREY DUPLANTIS: 6.1.1 A that's not exactly what it says.

CHRIS RICHARD: You have to say protected by the 100 year flood.

DIRK BARRIOS: I believe the only levees in the whole state that's protected except for maybe the Mississippi River around New Orleans, Jefferson and maybe St. Charles. Most of the others they don't have the money.

CHRIS RICHARD: Before like Martin City we had it all to a 100 year flood, but they added storm surge.

DAVID CONSTANT: On 6.0 probably not the right word, but no pumping station shall be subject to open flooding or, I don't know the right word, unless blah, blah, blah. Trying to put the levee component in this, levees closed, no levee it's open, I don't know what the right word is.

JAKE CAUSEY: I'd say I think we got the gist of it. I guess in 6.1.1 A I think where the levee protection would come into play, the language. 6.0 general just has to be reworded to accommodate what's provided in 6.1.1 A. And what I think is implied by no station shall be subject to flooding is again you can install a pump station in an area that will never ever flood in a 100 year flood event, but if you build a bowl around it it doesn't matter how high it is. The point is the site is graded away from and doesn't retain water within and effectively flood the station, I think is the general meaning. 6.1.1 A is talking about protection from 100 year flood elevations. We can make it to clearly say that. So 6.1.1 A says elevated to a minimum of 3 foot above 100 year flood elevation or 3 feet above the highest recorded flood elevation, whichever is higher, or protected to such elevations. I think protected to such elevations would be a levee system.

CHRIS RICHARD: The 3 foot in 10 states that's kind of higher than almost everything else that we design to. It's usually 1 foot, I think 3 foot is a bit excessive. A rare event you want to put something 3 feet higher than that. And also the highest flood event when you get into a storm surge strike that. If you have a once in a lifetime flood it's recorded you have to build it above that. I think it's safe at the 100 year and leave it alone. My recommendation is 1 foot above the 100 year flood elevation.

JAKE CAUSEY: And that's only for the electrical equipment and the pumps?

JEFFREY DUPLANTIS: We didn't want to specify, just say the critical components. Depends on what's critical and didn't want to specify here as to what those critical ones necessarily were.

J.T. LANE: Run into issues on survey. Either there's some definition or we revise the process to state what those are.

JAKE CAUSEY: I'm good with the 1 foot and I think generally speaking, and probably what will typically

happen, maybe not necessarily in Lafourche, a lot of other places the slab of the pump station will be built to 1 foot above the 100 year flood elevation and everything just goes up from there. It may be situations where those extra 2 or 3 feet become expensive for some reason and would require consideration. Generally what I think we would be seeing from designs and that's why we were talking about the station and probably, basically means the slab, everything is built up on such that during a 100 year flood event you need to get into the station, you need to reset a switch, change a fuse, change a pump, do some kind of maintenance work that you're actually able to do it. Critical components is there.

JEFFREY DUPLANTIS: And that was the point of critical components. They need to be accessible so that if you do have to go in there you're not going to go during a 100 year flood and swapping out a pump during a 100 year flood.

JAKE CAUSEY: They do. We've had major, major responses occur during major flooding events.

JEFFREY DUPLANTIS: You can't take into account that, I mean Hurricane Katrina you're not running out and starting to change out pumps and stuff. It's understood you're in an emergency situation and you're not going to be going and doing routine maintenance during that type of event. Outside of that event, yeah you want it to be accessible, but during a storm event you want the control panels and things to work that normally should work. That's what was the intent of this. Yeah, a water pump can go underwater and still operate as long as control panels and stuff are not under water.

JAKE CAUSEY: Depending on what kind of pump you have. Most of them are electrical, not submersible pumps. They would not operate underwater.

JOSEPH YOUNG: Changing it from 3 foot to 1 foot and leaving the critical components in there and put it at 1 foot above.

CHRIS RICHARD: Now there is a variance waiver in certain situations, a process that we're going to have as well if you have a situation where yours is prohibitive or doesn't make any sense to do that because of your levees or what not that you have to go through that process. Nothing that's in here

can't be requested for.

JAKE CAUSEY: Frankly in part 1 of the sanitary code there's general variances.

DIRK BARRIOS: A lot of the rural areas don't have control in construction like we have a lot of control as a parish, Terrebonne does, you have to get permits to do everything. Part of the permit process you have to have a flood elevation. You have to meet certain requirements. If you can get that permit shouldn't that be part of it, if you can't get the permit to meet the requirements. If they can't give you a permit they're subjecting the parish to losing FEMA monies or whatever, any kind of federal funds due to flooding issues. They have to meet certain requirements. Where applicable, I understand. I realize a lot of places they are not governed that tightly. In areas where there are couldn't we make an exception, not really an exception, you have to meet the local requirements?

JEFFREY DUPLANTIS: Looking at 6.1.1 A if we revise the language to say elevated to a minimum 1 foot above the 100 year flood elevation or protected to such elevations. Going back to what Dirk is talking about let's say the 100 year elevation is 12 and his levee is at 13. That's covered by that second part of that sentence, or protected by such elevations. So the critical components or pump stations could be at elevation 1 inside the levee system because I'm protected up to 1 foot above because of my levees, correct?

JAKE CAUSEY: I'll say generally speaking except that there is rainfall within the levee system. It may not be 1, it's going to have to be something that's protected from the flooding that occurs within the levee system. It may be 2 or 3, but that's another factor.

JEFFREY DUPLANTIS: It won't have to be built to 13 because it's protected by 13 so it could be wherever.

JAKE CAUSEY: Exactly.

JEFFREY DUPLANTIS: Dirk, are you okay with that? If your levees are protected?

DIRK BARRIOS: Am I the only one from South Louisiana?

JAKE CAUSEY: The next question was, and I think that's what Chris was getting to, who says what the levee is protected to? And maybe that's where Dirk was getting at, not certified by FEMA so the

project comes in and says that levee system protects to 13 feet, that's great, where is that documented, demonstrated, or recorded that that's what it is? And maybe in a lot of cases that exists.

CHRIS RICHARD: There's Corps levees and then a lot of the levees aren't certified by the Corps. There is no certification process. FEMA is relying on the levee systems to have engineers certify and that's not happening until they change their wording. Once they do they'll be able to certify the levee is designed to protect to elevation X and everything within pumping stations will also have to be certified to get the water out of the levee system.

JAKE CAUSEY: In Dirk's case make sure you can certify your levee protects it to 13 feet if you can get somebody to do that.

JEFFREY DUPLANTIS: Who's going to tell if you have a 105 year flood?

J.T. LANE: Let's not go there. Why don't we take that language, and probably Dirk since you have a special situation, we can maybe have a conversation. I jotted down maybe some other criteria we could include, expand upon the process and sort of qualify a little bit as something that we would consider formally. Is that cool?

DIRK BARRIOS: Sounds good.

RUSTY REEVES: We may ought to consult with the designers and the engineers and contractors of the Atlanta Falcons new football stadium. Did y'all see it on the news yesterday morning? Parking lot flooded and it's not even complete. I'm trying to take the heat off my padna here. It's not just Southeast Louisiana that's going to flood. Something we need to look at across the whole state as well. As our areas grow and develop unfortunately some of our developers don't look at what they're doing downstream from us and put some of our existing systems into a flood bowl.

J.T. LANE: Yes my neighbors had (inaudible) backyard, now it's coming into mine. I get it. We'll take a look at that and bring some language to talk about that next time. So that pretty much covers 6.0 to 6.1.1. I think we're on subcommittee recommendation.

JAKE CAUSEY: So 6.2, again we have separate comments on some of the alphabetical items therein.

And I don't know if some of this was concern or confusion about what constituted a pumping station, but generally these requirements are in place to insure the reliabilities, sustainability of pumping stations. For example, B durable construction, fire and weather resistant, outward opening doors. The door part I don't think is the most critical, but durable construction, fire and weather resistant I would say fairly important.

JEFFREY DUPLANTIS: The way this was evaluated and looked at was if it was a shall we looked at it and said is that a design criteria, or is that a water quality criteria. And only the things we felt were water quality were the ones that we didn't delete out of here to be brought into the water code. We looked at that and said that's all design, all design criteria so when I'm designing I'm looking at 10 state standards and I'm going through the design and I need to have durable construction, I need to have fire and weather resistant, etc. etc., but that doesn't necessarily need to be in the water code.

JAKE CAUSEY: I would disagree with that. I don't know if that's what we're trying to accomplish.

J.T. LANE: This is what we want to put in the code so we don't have to refer to 10 state standards unless you want to for recommendations. The point of this, once we do this, the language we adopted last time would be assumed into the code so A it's going to be streamlined for everyone. You're going to have it in the code there, one place to go, so we're not saying in the code refer to 10 state standards. Again, as we have discussed were recommendations. If you choose to exceed that, that's great. The language is going to go into the sanitary code.

CHRIS RICHARD: There will be no more reference to 10 state standards as a review. This is going to be used to review plans from now on. They're not going to look at 10 state standards so when you look at 10 state standards if you think it's important in design as a shall it needs to be in the code because although you can use 10 state standards, it's not going to be enforceable in the plan review process by DHH.

JEFFREY DUPLANTIS: I apologize, you're correct. That if it was a shall and we felt that it needed to be a

requirement in the sanitary code we brought it in. This we didn't feel it needed to be a shall, if you think it needs to be a shall...

J.T. LANE: Let's talk about that.

JAKE CAUSEY: I think we only highlighted certain numbers. It was B, D, E, and F. So B was just the general construction of the building. It's not going to fall over tomorrow, very general statements. D was have underground structure waterproofed. That prevents seepage of basically saturated groundwater into the pumping station. I think that's pretty straightforward. E have all floors drained in such a manner that the quality of potable water will not be endangered. F was provide a suitable outlet for drainage without allowing discharge across the floor, including pumping glands, vacuum, air relief valves, etc. It was just about maintaining that. 6.2.1, I guess a lot of this 6.2.1, 6.2.2, 6.2.3...

J.T. LANE: Do we want to take the first part first or are they interrelated?

JAKE CAUSEY: I have different comments so we'll do them one at a time. 6.2.1 is the suction well and basically that is the pipe if you will that the pump is typically located within for say an intake pump, or perhaps even a high service pump pumping out of a clear well. The pipe itself would be considered a suction well. That's what these things pertain to. I think they're generally critical.

J.T. LANE: So let's say 6.2 first of the first section. You guys recommended B, D, E, and F to remain. So why don't we start there.

DIRK BARRIOS: On B it says during construction fire and weather resistant and with outward opening doors. Outward opening doors I understand needs to be in a building, but a lot of pumping stations are not in buildings. Not always in buildings.

JAKE CAUSEY: So my comment was that I don't have the greatest concern in the world about how the doors open. I think that's typically a general escape thing. We can delete that, but you're talking about...

DIRK BARRIOS: Our water pumps are on reservoirs at both of our plants are completely out in the open. We don't have any problems.

JAKE CAUSEY: This is not saying they have to be.

DIRK BARRIOS: I can only assume.

JAKE CAUSEY: If you have a building this is how it would be. Doesn't say you have to build a building to put this in there.

JOSEPH YOUNG: So y'all recommend keeping B, D, E and F and deleting A and C.

DIRK BARRIOS: If a building is being constructed or if a building is used you should have outward opening doors.

CHRIS RICHARD: Just scratch outward opening doors.

JAKE CAUSEY: Yeah, just scratch doors. 6.2.1 it's specific to the suction well which is I would say fairly a very specific thing. I don't know if there were any real concerns about the specific requirements, seems like pretty standard. Those make sense. Like you have two intake pumps, each pump has its own suction well. The redundancy in all that is satisfied.

CHRIS RICHARD: If you have a ground storage tank where you have ten pumps that pull water out the ground storage tank and it's a steel tank, very difficult to slope a floor to clean a steel ground storage tank. Is that a suction well?

JAKE CAUSEY: That's not what I envisioned. The only two scenarios that I can see is intake pumps and like pumping out of a clear well. Pumping out of ground storage it's above not below.

CHRIS RICHARD: Yeah, but we use them for high service pumps in some situations.

JAKE CAUSEY: Yeah, some of the service plants, the high service pumps when they're pumping from below.

DIRK BARRIOS: If you're going to allow that, cause again we're going to be putting it in the code, almost have to have an exception or something where you can grant someone that is reviewing the plans to allow them to have an exception. I'm only looking at it from both sides. Again, someone sitting on DHH's side without having the ability to make that exception may come back and say Chris you have to do this.

JAKE CAUSEY: I don't think we're talking about exceptions, just talking about what a suction well is. A suction well is basically where you're pumping from.

DIRK BARRIOS: Then define that.

CHRIS RICHARD: Define suction well up front.

J.T. LANE: We will define suction well and keep the section, keep 6.2.1 and define what a suction well is.

JAKE CAUSEY: 6.2.2 equipment servicing. Pump station shall be provided with certain facilities for equipment servicing and certainly not as important and necessary that those types of facilities be in place. Change pumps, motors, things that are needed to keep the water flowing. Doesn't make any specific recommendations here, just that I think what they have is good, but if it needs to be modified in some way we can look at that. I think wholesale deletion is a lot. Like A says crane ways, hoist beams, eyebolts, or other adequate facilities for servicing or removal of pumps, motors, or other heavy equipment. Openings in floors, roofs, or whatever else needed for removal of heavy or bulky equipment. Convenient tool board or other facilities as needed for proper maintenance of equipment. I think A and B are pretty straight forward. Leaves it open-ended on how you do it, just the fact that you have to have some ability to do that.

CHRIS RICHARD: They had a lot of people contract out with small systems so they won't own any of the cranes or anything like that.

JOSEPH YOUNG: Should A be rewritten like Chris said, you don't actually have equipment there, but you have the ability to bring somebody in and have access. This is written where you have to have the equipment there on site.

JAKE CAUSEY: I guess my thought was there's some scenarios where, and may be there's not, but that equipment is located in places where you can't get equipment in to move them. You have to actually build something in that can move it out. If you have a pump motor at a well site you don't have to have a crane hoist over it. You're obviously going to drop a truck in and pull it. Got to get back in the section we're talking about a pump station specifically. We're not talking about wells or other things.

I agree, I think some of these pump stations you can't drop equipment in so you might have to have something built. Either way is fine with me as long as it can be moved is the whole point in service.

RUSTY REEVES: A lot of small ones have a motor lift where they lift the motor out of the car that they just roll off to the side to get it out the door or some of them even have a roof that lifts off the building where they can access it with a crane from the outside.

JAKE CAUSEY: I think it's very generic because even it says eyebolts, crane ways, hoist beams, or just some way to connect to this thing. It doesn't say you have to have this or we have to have this, it just says you have to have something and here's some examples. We can certainly extend it to say or contracts with equipment companies or something like that. Again, it doesn't say you have to have any one of these specifically. Just says you have to have something.

JEFFREY DUPLANTIS: Start A with adequate facilities.

CHRIS RICHARD: Or means. That way means covers contracts.

JAKE CAUSEY: Adequate facilities or means for servicing or removal of pumps, meters, or other heavy equipment.

JEFFREY DUPLANTIS: And then take out B.

JAKE CAUSEY: You could, but I'll say this, it helps to have examples. Cause B doesn't require anything additional, I agree, but what happens when you read it it makes you think about certain aspects. It doesn't require anything additional. It helps to say those things.

J.T. LANE: So why don't we say as part of A, for example, some of these things and then where applicable. Theoretically it should be caught in plan review and inspection on what was approved.

DIRK BARRIOS: Is this going to be design only or design and sanitary survey. Everything you're talking about?

CHRIS RICHARD: Most of them say shall be design and this is servicing so it's really design for servicing I think is the intent, but it's not what it says.

JAKE CAUSEY: I think C is general. C, I'm good if we need to delete C that's fine, just says facilities as

needed for proper maintenance equipment which is very, very general. Be hard to figure out what that even means. But I think if we just do A and B. A like we rewrote it and B as is and delete C.

J.T. LANE: Any other comments?

DIRK BARRIOS: The only comment I had was the question I asked is it going to be used for strictly design or design and sanitary survey. And the reason is because it's not specifying existing facilities. Come back and a lot of these existing facilities may not meet requirements. I'm only bringing that up because the way I handle mine. I think that's the way I handle mine, I say design and/or sanitary or not sanitary survey. And the question that I always thought, correct me if I'm wrong Chris, we were supposed to determine if it was going to be strictly design and if it was going to be sanitary survey or not.

J.T. LANE: That's getting into the timing of it and grandfathering I'm assuming. Again, the way it's supposed to work, plan review once approved by the department should then, once that's done, then we should base the sanitary survey based on what the department itself approved.

DIRK BARRIOS: The reason why we're here today is because of sanitary surveys and I just want to make sure we keep that part of it as a very focal part of what we're doing because if it wouldn't be for sanitary surveys none of us would be here today.

J.T. LANE: This is designed to help ameliorate that concern because that's exactly what was happening in the feedback I got. Am I off track?

CHRIS RICHARD: And I think most of them they are prefaced by saying design. If you read design as a heading for a section then it's not part of sanitary survey, it's plan review.

DIRK BARRIOS: That's your interpretation.

CHRIS RICHARD: It says design.

DIRK BARRIOS: My whole part is general design. Why should we worry about sanitary survey, but we have. I'm just asking the question to make sure we keep this as part of what we need to keep in mind.

CHRIS RICHARD: To your initial question it just says equipment servicing where as the other thing said pump stations shall be designed above this, shall be designed this way. This just says equipment servicing.

JEFFREY DUPLANTIS: Can you change that intro sentence instead of saying pump stations shall be provided with, can you say pump stations shall be designed with?

JAKE CAUSEY: My general appreciation had been that so we're just looking at this like writing for new construction and then this grandfathering subcommittee was going to look at what's going to apply to existing and what's going to apply to new. Every sentence in here isn't trying to be written to say if it's going to apply to design, or survey, or existing, or you get two years, or whatever the case might be at the end of the day. I think generally from what we've seen everybody's writing this as new construction and then grandfathering committee etc. will have some discussion and talk about what is going to apply to existing or what have you.

CHRIS RICHARD: Some of the ones in treatment, I didn't finish the report yet, but there were certain things like filters should be designed with (inaudible) to prevent water from (inaudible) into the filter. That would be a design, but that's something that should be done regardless of when the plant was built. It's not hard to do and it's not expensive to do, but it protects the water quality. That wasn't specified as being part of design. The approach I was going to if it says design it's plan review and if it doesn't specify it in that section then it's a general requirement for water plants to protect the sanitary quality of the water. Grandfathering is going to get really hard to do if you have to do every little thing, every option that could possibly exist in the state.

J.T LANE: For 6.2.2 we're going to rewrite A and keep B. 6.2.3.

JAKE CAUSEY: 6.2.3 talks about stairways and ladders shall be provided between all floors, and in pits, or compartments which must be entered shall conform to the requirements of the building codes, shall be provided with adequate safety equipment. I'll just say our general comment is that you certainly need to have proper access to all the components within a pumping station, safety related

requirements for buildings codes, whatever is applicable. I don't think we need anything specific to that. Probably just A where it says stairways and ladders shall be provided between all floors and in pits and compartments which must be entered may be just constructed in accordance with state code. I think stairways and ladders between different floors.

CHRIS RICHARD: We made a practice years ago of not putting stairs or ladders in vessels because it's more of a safety hazard and the owner agreed and so if they need to get in something they bring a means to get in there. You're going to put ladders in there and lime softening, a clarifier, and you go back later and that clarifier is covered with lime. Or algae, sedimentation base, he's going to fall and hurt himself because the ladder has been sitting in that water and has growth on it or lime. Just have a clean ladder that you insert on an as needed basis.

JAKE CAUSEY: The context right here is a pumping station only and so we get pumping stations where they have the pumps are, I don't know if you call it a pit, it's not full of water. It's dry, there's drainage. Frankly needs to be a stairwell down there. We're not talking about inside clarifiers, inside water filled vessels or any of that kind of stuff.

CHRIS RICHARD: It says between all floors and in pits or compartments which must be entered. We have an area where we're talking about cleaning clear wells or cleaning pumping station suction.

DIRK BARRIOS: Pumping stations.

CHRIS RICHARD: But we did talk earlier about having sloped floors with the suction well for instance. We're talking about cleaning a suction well, you're going to get in it to clean it. I'm saying don't require a ladder in that suction well.

JAKE CAUSEY: I agree. I didn't read that as the intent here, but certainly the language could be revised. Hey, we're going to go look at the pumps oh, there's no way to get down there except some rusty ladder on the back of a guy's truck.

JEFFREY DUPLANTIS: We've changed the thing on manholes, sewer manholes, you don't put steps because of access kids can pop the top and climb down in there. And they don't last. The same thing

with this, you want somebody to be able to get in and climb down if they're not toting a ladder on the back of a truck?

JAKE CAUSEY: I guess pumping stations exist at treatment plants and absolutely need stairwells, some permanent structure to get from floor A to floor B for surveys as well as any other thing. You shouldn't have to go find something to get there. Some of the pumping stations there's a lot of ways to construct pumping stations. Some of them the pumps could be down in a dry pit that you should have access to. That's all I read into this is talking about pumping stations only.

CHRIS RICHARD: The suction side of the pumping station that we talked about earlier about maintenance I wouldn't put one there. That's not something you routinely go in or at a sanitary survey, but they do need to access it for maintenance. And when they do then they can bring other means instead of having something sitting in the water that's slippery.

JAKE CAUSEY: I guess when I read which must be entered I guess we could say that for routine maintenance or something.

RUSTY REEVES: I think that Jake's talking about something that's accessible on a daily basis, but what you're talking about is on an as needed basis.

JAKE CAUSEY: Right. So what we would do is keep A and I guess maybe B rewrite B shall conform to state building code requirements period. But A we could add something on the end that says ladders are not required.

JOSEPH YOUNG: Something to where the ladders stay wet than you don't put a ladder. To kind of go back to what Chris and what Jeff was saying a recommendation on 6.2 where it says pump stations may be added in the design of pump stations. And I know it says it in the 6.0 general paragraph, but it's repeating it to where when we have this grandfather clause if we have that then we know it's in design we don't have to go back and retrofit your stations.

JAKE CAUSEY: I think the issue is when you start getting into individual A, B, C, D, E for example E all floors drained in a manner the quality of potable water will not be in danger so what happens is

people modify their designs and then it's like that's a sanitary survey issue. Especially when you start doing however many pages it's going to be equally confusing what's done, what's surveyed, what was permitted this way except slightly modified and not in original condition, not a survey. I guess that's all going to get very mixed up very quickly.

JOSEPH YOUNG: Isn't this for design of pump stations?

CARYN BENJAMIN: Design, operation, and maintenance.

JAKE CAUSEY: That was the original conversation about the grandfather clause was this like what's new, what's needed, and then this grandfather committee talk about (inaudible). That's the general appreciation that I've had, subject to change.

CHRIS RICHARD: What are you going to put for B?

JAKE CAUSEY: I was just going to say shall conform to state building code requirements.

CHRIS RICHARD: Could you say applicable codes because some states have some, local jurisdictions have some, OSHA as well.

JAKE CAUSEY: Yeah, that's fine. 6.3 was the next section. At least two pumping units shall be provided with any pump out of service remaining pump or pumps. And then I guess it was inserted or the distribution system shall be capable of supplying the maximum demand of the system. I think the more we read it the more it seemed to be contradictory in a sense cause the first sentence says at least two pumping units shall be provided.

JEFFREY DUPLANTIS: The point of that was that, forget about the first sentence, at least two pumping units shall be provided for pumps, but then it talks about with any pump out of service the remaining pump or the pump or distribution system so if you have a pump out either that one pump has to keep up, or the distribution system within that area can keep up maintaining the flow. That you have an above ground storage tank that provides enough pressure to maintain the adequate pressures through the system that was what the committee came back is that I may have one pump working, or I may have no pumps working, but the distribution system itself keeps that flow appropriate.

That's why we added or distribution system cause apparently in some systems that is applicable.

JAKE CAUSEY: For how long?

JEFFREY DUPLANTIS: We're not talking about for how long. Well, actually where did we talk about for how long?

CHRIS RICHARD: If you elevate a tank you're counting on that to provide your distribution pressure, may be a day. To Jake's question if you rely on an elevated tank to supply that pressure you have a finite amount of time to get that pump back in service.

JEFFREY DUPLANTIS: I wish Randy was here, because he was the one who brought this up. The point of this was that in some situations they have you've got this one pump working or it's on a manifold system and you have booster pumps and those other pumps within the distribution area, let's say you're trying to maintain a minimum of 20, but normally you got like 60 so 1 booster station goes down, a pump station goes down may drop down to 40, but you still maintain the minimum because of the other pumps in the distribution system. You could have zero pumps in this particular station, but because of the other pumps in the system you're maintaining the minimum flows and pressures.

JAKE CAUSEY: I'm following what you're saying, I'm trying to understand how that's relevant or applies here when you're designing these pumps. It says at least two pumping units shall be provided so you build a pumping station no matter what you have to include two. And so the pumps have to be designed such that with any pump out of service the remaining pump or pumps, if there's more than two, or the distribution system.

JEFFREY DUPLANTIS: If you're going to model and you're putting in this and the model shows that you have a certain pressure within the distribution system and then if you pull one of these pumps out and that pump can't keep up with the rest the distribution system, helps it keep up, then you're fine. Or if two pumps go out and you've maybe three pumps and two of them go out, but your distribution system still can maintain the pressure that you need that's adequate.

JAKE CAUSEY: I guess the contradicting part for me, require two pumps, but we're saying we don't have

to have any if the distribution system, the language is very...

CHRIS RICHARD: I guess the only situation I can see that happening normally put a pump station in have two pumps and each one can handle the service on their own. The only time that what Jeff's saying would happen is when you design your lift station, or pumping station you design it to where in order to meet peak flow you need more than one pump. That's the only time it's going to happen. You got two pumps and each one can handle peak flow by itself. If you're designing it to where both of them have to operate then you have that situation.

JEFFREY DUPLANTIS: If one happens to go down during that period the distribution system could maintain.

JAKE CAUSEY: And in that scenario the distribution can maintain indefinitely, cause I know that some people have said well I got 48 hours of storage. Is that what they mean, or they mean as in A have ample capacity supply to peak demand against the required distribution pressure without dangerous overloading. There's a lot of different conditions when they say can meet, can meet what for how long? The distribution system.

JEFFREY DUPLANTIS: Again, I think this first paragraph with that scenario has to meet A, B, C, and D.

JAKE CAUSEY: All right. I'll just say I'm not really following the scenario like we're talking about two pumps, but the pumps--

JEFFREY DUPLANTIS: Well, in a pump station, pumps, you don't want to design a pump station with one pump. So you're saying you want at least two pumping units. You could have three, you could have four, you could have five. You want to have at least two so that's the standard thing. The next sentence which has nothing to do with the first sentence in the second sentence with any pump out of service the remaining pump or pumps, if you had two it's a pump, if it's three it's pumps, or the distribution system can be capable of A, B, C, D.

JAKE CAUSEY: I guess I'm trying to figure out why is the distribution system relevant if we're just talking about pumps?

JEFFREY DUPLANTIS: I think this was because of the whole thing trying to maintain that if I had a certain demand that one of them couldn't keep up with peak for whatever reason that distribution system would serve to help the other pumps within the system.

JAKE CAUSEY: Only when they failed or just, I guess that's what I'm kind of getting at. You wouldn't put the pumps in there if they're not needed. You want two pumps so you always have a backup. And so we're saying or the distribution system so meaning you could just stop using the pump station all together.

JEFFREY DUPLANTIS: No, that's not the intent.

CHRIS RICHARD: I think the intent of the statement originally is that two pumps is basically giving you guidance on designing the size of the pump. And so if you have ten pumps on the capacity, if you only have two typically that one pump handles your design flow and the other is redundant. If you have a redundant system if you take a pump out of service you meet the demand with one. If you take that sentence out what you're saying is you're taking that guidance away on the size of the pump. You could say I meet peak flow with both pumps running together, that's the only way I can meet it so if I lose one than I can't meet it without help from outside.

CARYN BENJAMIN: By adding that in you are actually allowing them to not have to put in two pumps that meet peak.

CHRIS RICHARD: Individually. That's what I'm understanding.

JEFFREY DUPLANTIS: Randy had a scenario that they had a situation where you have this system that's a pump system that's maintaining the pressures and if this pump station goes down, I don't know if it was meant the size of the pumps, that definitely wasn't the intent to size them down, but that if a station lost power and it's completely out may be that needs to be changed, not the remaining pumps with a station out of service, something like that.

JAKE CAUSEY: I think that would get back to backup power, not how many pumps you have. I think that's why we said I think it's good like it was originally written. If the concern is more about power

loss or something else and we rely on the distribution system rather than a generator, or something like that then maybe that's what we're trying to get at.

JEFFREY DUPLANTIS: No, I think what this was trying to do if a station went down you were still able to maintain services to the customers. That you weren't having to wait for somebody to go and bring a portable generator out there, that by stating this you still maintain that minimum level of demand for the system- if you needed it.

CARYN BENJAMIN: This is for the design of the pump size, not for backup power.

JEFFREY DUPLANTIS: It may be more appropriate somewhere else.

J.T. LANE: We may need to revisit this until we get Randy's situation, scenario.

JEFFREY DUPLANTIS: Can we just table this one for now?

DIRK BARRIOS: You can definitely have a pump station go out and still be able, I'm going to use our particular situation, a linear system, and the only thing we do is we might take a 40 pound pressure increase to 65, 70 pounds. But if that pump station goes out, and I think that might be what Jeff is trying to say, I can still maintain my 40 pounds, at least 30 pounds in the area and I can prove that then the station goes down I don't have to immediately take care of that situation now. I do know that if it goes on and on for days and days it may become a problem. Now if it's strictly for design it just depends upon how you look at it. That might be what Randy was talking about.

JEFFREY DUPLANTIS: Move from design over to the emergency power.

(council speaking simultaneously)

CHRIS RICHARD: This is talking about the design of the individual pump station, not the distribution system. You use your whole system to determine what that pump station needs to provide and you're providing it based on these other pump stations being there. Once you determine what that pump station needs to be designed for then you do your pumps to where one can handle the service by itself so you can do exactly what you're saying if you're counting on other pump stations cause that came in the early design of your pump station what its capabilities were. Now you're into the

nuts of we have this pump station itself and so now we have a pump station each pump needs to be able to handle the load on its own.

JAKE CAUSEY: The distribution system language inserted in there just seems to jumble it all up.

J.T. LANE: So what we'll do is maybe follow with Randy and see if there's something else we should bring back up. Otherwise if everyone seems comfortable with the way it was, absent that, if we get something important back we will.

RUSTY REEVES: I'm good, I think it can wait.

JAKE CAUSEY: The next section was 6.3.2 pump priming. Prime water must not be of lesser sanitary quality than that of the water main pump. Means shall be provided preventing backpressure, back siphonage, backflow when an air operated ejector is used the screened intake shall draw clean air from a point at least 10 feet above the ground or other source of possible contamination unless the air is filtered by an apparatus approved by the reviewing authority. Vacuum priming may be used. That whole section was struck.

J.T. LANE: This is number 11. For 6.3.2 we recommend putting in the sanitary code. Any comments on that?

JAKE CAUSEY: 6.4.3 is the next section, inline booster pumps. It just says in addition to the other requirements of this section inline booster pumps shall be accessible for servicing and repairs. Let me back up. So this comment that we have is on 6.4. It's 6.4, 6.4.1, 6.4.2, 6.4.3. Booster pumps shall be located or controlled such that they will not produce negative pressure, so this is just all these design elements associated with the booster pumps themselves. Duplicate pumps, metering, accessibility, shutoffs. I think all pretty standard.

DIRK BARRIOS: Meter, why do we want to put meters on all booster pumps?

JAKE CAUSEY: To measure the amount of water.

DIRK BARRIOS: I can do the same thing by reading the meters that the customers have on the system.

JAKE CAUSEY: Minus the leaks?

DIRK BARRIOS: I can take care of that.

JAKE CAUSEY: I'm just saying that's the purpose is that you measure the water pumps.

DIRK BARRIOS: But it has nothing to do with water quality to begin with.

JAKE CAUSEY: No, it does. Say you have a flow rate indicator and a totalizer. And you know if your pump is pumping the same capacity.

DIRK BARRIOS: My customer's going to tell me that, the pressure's going to tell me that.

JAKE CAUSEY: You don't want to wait for that.

DIRK BARRIOS: If I can't keep the water in the tanks I know I'm not getting, I mean there's a lot of different ways, you're just increasing the cost of construction again. That's all you're doing. You're talking about 10 inch, 12 inch, some people have 36 inch waterlines, I have to put a meter for a 36 inch waterline?

JAKE CAUSEY: Talking on a booster pump, not the main.

DIRK BARRIOS: Still talking about big meters.

J.T. LANE: There's a cost of doing--

DIRK BARRIOS: We're here about water quality. He's talking about other things. This is not water quality, it's a meter. I have other ways of metering my water in my system.

J.T. LANE: Can you explain this first and then we continue?

JAKE CAUSEY: Yeah, so we measure water pump, measure water build, you look at water lost, help detect leaks and obviously you have excessive leakage that's a water quality issue. Flow meters, totalizer meters (inaudible) is typically most all of your pumps in a water system.

CHRIS RICHARD: First of all booster pump stations are typically inside the system so you already have a meter when it leaves the plant and where you sell the water. You can use that for leak detection. Some booster pump stations aren't online all the time. There's a bypass that they only come online when water pressure is needed. So you have a meter that is going to be used occasionally, not even going through that area because sometimes it's going to pass by the tank and booster pump station

unmetered. I don't see the point of having a meter on a pump station that you're not metering all the water flowing through it anyway.

JAKE CAUSEY: That may be the case at times if that pump station is out of service for some particular reason. I'm assuming that would be an exception and not the rule, but I know that again, the meter's flow rates and totalizers are used for maintenance of the equipment so that you don't wait until it fails, you actually look at it, you log it, graph it, those sorts of things, as well as measuring water loss.

CHRIS RICHARD: What I'm talking about is you have a pump station where you have a line and you have a check valve and when the pressure drops it's automated to boost the pressure on an as needed basis. And so the pump station it's just not running because the pressure is being able to provide the same. Certain times during the summer, during a fire, the pressure drops, pump station comes on, it's not back fed, point being a lot of times you're passing water through the area unmetered. It's not going to help you with losses. On a booster pump station you have meters on each end.

J.T. LANE: So the point was we have other mechanisms to detect the leaks. Anything you want to add to that?

JAKE CAUSEY: Again, frankly my view is that we're pumping water in a water system we're metering it. We're knowing what's going on.

JEFFREY DUPLANTIS: But you're not necessarily doing it through a booster. You're still flowing here and then it's not going through that booster station. Like Chris is saying, at some point in time it's going to go and it will shut off and then may be a couple days all of a sudden it comes back on so what's the point of metering it at that point when you may have meters at some other points that are actually measuring continuous flow?

JAKE CAUSEY: I'll be happy to further investigate those things and bring back additional information if there's any relevant. Frankly, I just viewed it as a fundamental basic requirement associated with pumping water in a water system, but certainly we can go research it further based on feedback that we got here. Present more information if it seems relevant or necessary to do so.

J.T. LANE: So when we come back we'll either have more to talk about or concur basically. So for the others we've included another thing we thought the section was needed. May or may not come out. Were there any other concerns with adding anything else back? So then we'll add back 6.4 A, B, C, D, E. 6.4.1 and then for 6.4 metering we'll come back with more information to discuss or concur if we find in our research it's not necessary and 6.4.3 we're good with that.

JAKE CAUSEY: 6.4.4 we just had the note that the individual residential booster stations were addressed in part 8 so this just seemed redundant. It probably makes more sense in part 8 distribution system than here so we'll just leave it in part 8 and strike it here. 6.5 automatic remote control stations.

J.T. LANE: So everybody is good with 6.4.4? Okay.

JAKE CAUSEY: I think the concern was the second sentence in 6.5 all remote control stations shall be electrically operated and controlled and shall have signaling apparatus of proven performance. Again, I presume that most of these are designed so that if there is a pump failure or something there's a signal sent. Different signals can be sent different ways, doesn't matter which, just something.

CHRIS RICHARD: That's just a remote control station and that means controlled by some central part not acting alone as a remote station that's totally independent with its own PLC. This is something that is controlled from a central location.

JAKE CAUSEY: Right. I think that's not talking about like at a treatment plant, or something that's manned. Would be something effectively unmanned, not manually operated.

CHRIS RICHARD: You have automatic pump stations that can have their own PLC or own controller that are not remote controlled. They are operated in the building based on those local conditions and monitor the pressure of the tank level, but not remote controlled by some other location.

JAKE CAUSEY: They're automatic though. Automatic and remote controlled.

CHRIS RICHARD: But the sentence just says all remote controlled stations.

JEFFREY DUPLANTIS: Delete the first sentence and modify the second sentence. Talking about two

different types of stations.

JAKE CAUSEY: Would it make sense to keep the first sentence and make it a shall? Just say automatic stations shall be provided with an automatic signaling apparatus which will report when the station is out of service. All remote controlled stations shall be electrically operated and controlled and shall have a signaling apparatus. Seems like we can almost put it in one sentence.

JEFFREY DUPLANTIS: It's slightly different. Just change the should to shall. The second sentence move to whatever the recommended.

JAKE CAUSEY: The second sentence we're just going to leave as is.

JIMMY HAGAN: We're talking about automatic pump stations going forward does that mean that every new booster pump station that's installed in the system should essentially have a SCADA system even if the rest of the system has no SCADA?

JAKE CAUSEY: I don't think SCADA, it says automatic signaling apparatus and so I don't equate that to only SCADA. I think there are other mechanisms that can send a page or text message.

JEFFREY DUPLANTIS: Automatic signaling. That could be a light that's flashing.

CHRIS RICHARD: It could be an auto-dialer at a pump station, you don't have to communicate with the plant. Somehow let somebody know.

JEFFREY DUPLANTIS: An automatic signal if it stops a light starts flashing, that's a signal.

JAKE CAUSEY: Well it does say which will report when the station is out of service. It says will report when the station is out of service, I don't know if a light will report.

JEFFREY DUPLANTIS: Define report.

JAKE CAUSEY: It's well defined. I think most people are just going to put in the least expensive auto-dialer. I don't know how much those cost, pretty cheap. We have telemetry on sewer lift stations, all the same technology. Doesn't have to be a SCADA system.

JAKE CAUSEY: The second sentence stays as is.

JEFFREY DUPLANTIS: The only thing in the first is change the shall.

JAKE CAUSEY: The next section was 6.6, 6.6.1, 6.6.2. Talking about valves and piping, isolation valves, check valves, I think it's very straight forward.

J.T. LANE: So we recommended to add 6.6.1 and 6.6.2 to the sanitary code. Does anyone want to comment on that, any objections?

JEFFREY DUPLANTIS: I did three months ago, but I don't remember why now. I'll have to go back and look at notes.

JAKE CAUSEY: 6.6.4 is the water seals. Water seals shall not be supplied with water of lesser sanitary quality than water being pumped. Where pumps are sealed with potable water and are pumping water with lesser quality then the seal shall be provided with a backflow preventer or an air gap basically. And then where they use air gap just specifies the size of the air gap. Yeah, you could just put in a backflow preventer. That's where you're putting potable water that's pumping water that's not potable so that's cross connection. If you're putting water in a pump that's pumping potable water you have to use at least potable water.

JOSEPH YOUNG: 6.6.3 C says shall have recording gauges in the larger station.

JAKE CAUSEY: Well I guess in here the station itself would have a flow meter, a totalizing meter, but each pump itself would not have to have individual flow meters. I didn't realize 6.6.3 was still there. But to your question- understand recording gauges, but trying to understand larger station.

CHRIS RICHARD: It's also under each pump. A recording gauge at larger station, a recording gauge at each pump.

DIRK BARRIOS: I can see the gauges but, (inaudible).

JAKE CAUSEY: That's for the station. I would agree that having it on the station and on each pump individually may be a little bit of an overkill. I guess frankly talking earlier I was thinking the station as a whole, not individual pumps. I didn't realize the station as a whole was addressed here. When it says in the larger station, frankly I don't know what the distinction is there. I understand recording gauges, but I don't understand what's larger station.

DIRK BARRIOS: What about the meters?

JAKE CAUSEY: I guess that's one we'll come back to. I thought C was more related to pressure than flow.

When it said recording gauges is that pressure, I was reading that thinking about recording pressure.

CHRIS RICHARD: Each pump, that's what it says.

BEN BRIDGES: Why would you want to record pressure on each pump?

JAKE CAUSEY: That's what the compound gauge and pressure gauge is for so you can observe that and I

guess you would record it so that if an event happens you know what transpired. I think for the stations--

BEN BRIDGES: We lost pressure.

JAKE CAUSEY: Frankly I think pressure monitoring recording generally in distribution systems is a

fantastic thing. Each pump verses the station as a whole, I think the station as a whole is perfectly fine as far as recording, but observing pressure you would definitely want a compound gauge and pressure gauge at each pump. Just recording the pressure at the station itself would make sense.

CHRIS RICHARD: Scratch C and D, it doesn't affect all of that. It has to do with recording.

JAKE CAUSEY: D on the flow meters is part of the whole, we'll look into this whole flow meter discussion.

CHRIS RICHARD: The next sentence talks about the station, but this is under each pump. Scratch C and D.

JAKE CAUSEY: Oh, yeah. I'm sorry, I follow you now. Those other items talk about in context of the station, not each pump. Alright 6.6.7.

CHRIS RICHARD: 6.6.5.

JAKE CAUSEY: I guess we didn't have any comments on that. I think we made changes based on what was in the subcommittee report, but we certainly had some discussion I think on the same topic today.

CHRIS RICHARD: Provision shall be made to prevent energizing the motor in the event of a backspin

cycle. We put in a reverse ratchet on motors so we don't have to worry about backspin. I don't need to provide any electrical provisions to permit energizing the motor in case of a backspin cause I can't have a backspin.

JAKE CAUSEY: A mechanical provision that prevents energizing the motor, okay, you're saying in the event of backspin what you're doing is preventing a backspin. I'm following you.

BEN BRIDGES: We put electric timers once they trip out they won't come back on until one minute, two minutes, whatever, but you put a ratchet.

JAKE CAUSEY: Can you write that sentence to include that and email it to us.

CHRIS RICHARD: Ratchets that fit on the motor when it stops it can't spin backwards.

JAKE CAUSEY: We can definitely include that. Chris is going to email that. 6.6.7 water pre-lubrication.

When automatic pre-lubrication of pump bearings is necessary and an auxiliary power supply is provided design shall assure that pre-lubrication is provided when auxiliary power is in use or that bearings can be lubricated manually before the pump is started. Backup power pre-lube or have some mechanism to I guess sort of manually do it. To look at the standby power in the subcommittee report, to insure continuous service when the primary power has been interrupted, a power supply shall be provided from a standby or auxiliary source. And then this was what was added by the subcommittee, to maintain minimum 20 PSI pressure throughout the system based on system average hourly demand during peak annual day. That was a healthy discussion we had in the full committee two months ago. I think that was also added back to the point if you can meet the 20 PSI average demand peak day criteria without a backup generator, without that pump station being in service. And then the last 6.6.8 says all lubricants have to meet NSF. We added 6.6.7 and 6.6.8.

J.T. LANE: Any other questions about part 6? Anything that wasn't provided that you had an issue that you wanted to discuss that was outside of subcommittee recommendations, anything else in part 6 y'all want to talk about? All right, so what we'll do is do our homework, make the edits we all discussed today, and bring back something on metering and if not otherwise we'll go with that

change. Hopefully we'll be bringing back actual text that we can sign off on at the next meeting. Alright, on to new business. Keith wasn't able to make the meeting today so we're going to move on to part 2 for the subcommittee report. Turn it over to Dirk.

DIRK BARRIOS: We had our subcommittee back in April and Chris and Keith were both members. Sidney Becnel, Don Denova, Craig Gautreaux, Mike Sobert and Steven Davis were there. The overview of the meeting discussion remained discussion points whether or not the standard applied to the sanitary survey or design, and whether or not shoulds are to be put into code. What occupied a lot of the time was whether or not DHH should get involved in areas where there are other agencies that have jurisdiction over a product, construction, etc. Standby power. Laboratory facilities and testing equipment. Piping color code. And whether or not systems should be allowed to follow AWWA standards for disinfection new and/or existing systems for construction and/or repairs. Top 10 recommendations were building layout. Design shall provide for adequate ventilation, adequate lighting, adequate heating, adequate drainage, dehumidification equipment if necessary, accessibility of equipment for operation, servicing, and removal, flexibility of operation, operator safety, convenience of operation, chemical storage of the feed equipment in a separate room to reduce hazards and dust problems. Committee said use as a design standard for a new system and not for the sanitary code and there are other areas where regulating/governing authorities should have jurisdiction over like safety, chemical storage, and feed equipment in separate rooms. You want to have comments as we go? Y'all want to stop at each one and make comments, no just go through it? 2.5 electrical controls, main switch gear electrical controls shall be located above grade in areas not subject to flooding. All electrical work shall conform to the requirements of the National Electrical Code or to relevant state and/are local codes. Again, committee said to use a design standard for a new system and not for sanitary survey. To be handled by regulating authority in permitting of construction. Standby power. Dedicated standby power shall be required and we scratched out the reviewing authority and included state health officer so

that water may be treated and/or pumped to the distribution system during power outages to meet the average day demand. Alternatives to dedicated standby power will be considered by the state health officer with proper justification. Committee recommended alternatives to standby power should be allowed. Some systems contract with companies that provide generators when needed. Use as a design standard for new systems and for sanitary survey. The next part was about carbon monoxide detectors are recommended, should be installed when fuel-fired generators are housed. Use as a design standard for new systems and for sanitary survey. Next page we have laboratory facilities. Where laboratories are provided each public water system shall have equipment, we scratched out its own, and facilities for the routine daily laboratory testing necessary to ensure proper operation of the water supply system. Laboratory equipment selection shall be based on the characteristics of the raw water source and complexity of the treatment process involved the contaminants or analytes for which monitoring is required or desired and the particular laboratory methodology and minimum accuracy required to be performed for such contaminants or analytes. Laboratory test kits which simplify procedures for making one or more tests may be acceptable. An operator or chemist qualified to perform the necessary laboratory tests is essential. Other than those analytes allowed to be analyzed in a DHH-OPH approved chemical laboratory/drinking water see chapter 15 of this part. Analysis conducted to determine compliance for drinking water regulations shall be instead of must be performed in an appropriate DHH-OPH certified or U.S. Environmental Protection Agency in accordance with, we struck out all of that and put requirements of this part. Persons designing and equipping laboratory facilities should confer instead of shall with the reviewing authority. Scratched out DHH-OPH before beginning the preparation of plans or the purchase of equipment. Methods for verifying adequate quality assurances and for routine calibration of equipment shall be provided. Says right here we recommended some systems contract out their operation and maintenance to other companies so they should not have to have laboratories. The smaller systems I believe a lot of them do this and we discussed that in the

committee. And use as a design standard for new systems and for sanitary survey. 2.8.1 testing equipment. As a minimum the following laboratory equipment shall be provided. Part A was scratched out completely. And a lot of this, Keith or myself I think were the only two, DHH had already made comments so a lot of the comments or some of the stuff that's changed in here is stuff that DHH already had done. Surface water, systems or groundwater under the direct influence of surface water systems, this is what DHH added, shall have a nephelometric, and I pronounced that right, turbidimeter meeting the requirements approved, throughout the approved turbidity methods of chapter 11 of this part. Each surface water treatment plant or groundwater that includes surface water plant. Utilizing flocculation and sedimentation including those which lime soften shall have a pH meter, jar test equipment, and titration equipment for both hardness and alkalinity. C each ion-exchanging softening plant and lime softening plant treating only groundwater shall have a pH meter and titration equipment for both hardness alkalinity. D each iron and/or manganese removal plant shall have test equipment capable of accurately measuring iron to a minimum of 0.1 milligrams per liter and/or test equipment capable of accurately measuring manganese to a minimum of 0.05 milligrams per liter. E public water systems which chlorinate shall have test equipment for determining both free and total chlorine residual by applicable methods listed in table 1 of 1105.c of this part. F if a public water system adjusts its fluoride level equipment shall be provided for measuring the quantity of fluoride in the water. Such equipment shall be subject to the approval of DHH-OPH. G public water systems which feed poly and/or orthophosphates shall have test equipment capable of accurately measuring phosphates from 0.1 to 20 milligrams per liter. These last two items are H public water systems that use chlorine dioxide shall have an amperometric titrator with platinum-platinum electrodes capable of measuring chlorite to a minimum accuracy of plus or minus 0.05 milligrams per liter. And I surface water systems, GWUDISW systems, and any groundwater system required to or choosing to achieve a minimum CT value residual disinfectant concentration contact time when the pipe, vessel, etc. is in operational at or before the first

customer shall have a method of measuring water temperature using a thermometer or thermocouple with a minimum accuracy of plus or minus .05 degrees Celsius. The comment was to use as a design standard for new systems and sanitary survey. 2.9 monitoring equipment. Water treatment plants shall be provided with equipment including recorders where applicable to monitor the water as follows. Part A was completely struck out. B becomes A and plants treating groundwater using iron removal and/or ion exchange softening shall instead of should have the capability to monitor and record free chlorine residual. And B ion exchange plants for nitrate removal shall instead of should continuously monitor and record the treated water nitrate levels. To use as a design standard for new systems and for sanitary survey is the recommendation. Next item 2.14 piping color code. To facilitate the identification of above ground piping in treatment plants and pumping stations of a water supply system the following color scheme shall be utilized. I'm not going to read every one of them. The only thing that was added on this was reclaimed water and it was purple. I think we had the argument what is the difference between purple and I forget the other color, lilac, and I had put violet. Things that were added- in lieu of the color coding of pipes as described above all pipes may be painted similar colors as long as each and every pipe is banded and labeled at 5 foot intervals with the name of the liquid or gas clearly displayed on the pipe, arrows indicating the direction of flow should be included in this labeling or other method approved by the state health officer. The next item was completely eliminated and the recommendation from the committee was to use as a design standard for a new system and for sanitary survey. 2.15 disinfection. All wells, pipes, tanks, and equipment which can convey or store potable water shall be disinfected in accordance with current AWWA procedures. Plans or specifications shall outline the procedure and include the disinfectant dosage, contact time, and method of testing the results of the procedures. What was added, use of AWWA standards C651 disinfecting water main. C652 disinfecting of water storage facilities. C653 disinfection of water treatment plants, and C654 disinfection of wells. Basically we feel it's all covered in here and to use as a design standard for the

sanitary survey.

CHRIS RICHARD: I have one question. It says plans specification outline the procedure to include dosage.

If you specify a standard and alternates we don't necessarily, like on disinfection of a tank, AWWA methods to disinfect a tank and we tell them you can use this method or this method. We want the best price for our clients that we can get and let the contractor do it. We can't put the dosage. We don't know what it's going to be.

DIRK BARRIOS: Doesn't AWWA give you all, and I think that's why we had listed them in there and we were going to use that this is what we will use, I think, use AWWA standards rather than...

CHRIS RICHARD: The first paragraph says put it on plan specifications and I'm saying if you say AWWA that should cover it.

DIRK BARRIOS: I think we discussed it and you had told me to look into it and I went through them all and looks like it's acceptable to the committee use these standards you've everything covered.

JAKE CAUSEY: So what I read from that sentence specifically says plans or specifications shall outline the procedure and include disinfectant dosage, contact time, and method of testing, the results of the procedures. What I get from the sentence is that plan specifications aren't just going to say AWWA C651 period the end. They're going to outline the procedure, include disinfectant dosage, contact time, and method of testing, the results of the procedure. It's going to spell out exactly everything that has to be done, not just going to reference a standard and allow a contractor, may be they do a good job, to go find the standard and actually do it in accordance, to interpret that standard, to do it properly, the expectation is the plans specification would spell it out.

CHRIS RICHARD: On a tank there's several methods that are acceptable, there's a few in there. We leave it open for which one they want to use to disinfect that tank. It's difficult if you're doing that and you want the best price. You got to pass a bacti. You're not putting it in service till you approve it anyway.

DIRK BARRIOS: Could we list all the ones--

CHRIS RICHARD: List each dosage of each thing?

JAKE CAUSEY: A or B or C. We'll do it this way this time, this testing, or this way.

BEN BRIDGES: That's already listed in the standard, it gives you the three options and the dose range.

DIRK BARRIOS: We copied straight out this thing.

BEN BRIDGES: Just reiterate it again from his point.

JAKE CAUSEY: If you want to give them options you can just lay out all these options, but you're going to have to specify the procedure, the dosage, the contact time, and method.

DIRK BARRIOS: Correct me if I'm wrong, isn't that specified?

CHRIS RICHARD: Yes. If I say C651 if I say what method for a tank for instance then you're saying I got to go and take a standard, open it and repeat what's in the standard in my plan specifications even though (inaudible).

JAKE CAUSEY: Just one or the other. Typically you put it in the specs rather than put it on the plans. But yeah, that's what I'm reading that to say.

CHRIS RICHARD: Why is that necessary for me to review what's in the standard that's already there?

JAKE CAUSEY: You're not going to be the one in the field doing it right? You're saying is that you're relying on the contractors to know the standard and follow one of those.

CHRIS RICHARD: In many instances I give them the copy of the standard if they ask for it. The fallback is they have to pass the bacti test. I'm just saying you're repeating something that's already in the standard.

JAKE CAUSEY: I'll just say this, if it's typically not laid out in the plan and spec black and white there's a lot of things that happen. I wouldn't want to rely just on a bacti sample. I would want to know that all of these procedures were followed properly and I had a bacti sample. Otherwise we'd just pull a bacti and if it didn't pass then we'd go back and disinfect. We want to know that all those things were followed. What I've seen with contractors if you spell it out in the spec book that's a better scenario than relying on them to go find it themselves. I don't know if some utilities are able to

dictate which contractor they use, or they just go to the low bidder and you don't know what their work history is. To me that's a big question mark unknown about that contractor who's doing that work, etc. I think that one small extra step is beneficial.

CHRIS RICHARD: But again, using your argument that the contractor's relying on him to read the standard, the standard is more than dosage and contact time. Isn't it a procedure for achieving the disinfection and those are just part it? We're telling them to follow a procedure and we're giving them some information cause we don't think he'll follow the procedure.

JAKE CAUSEY: It does say that outline the procedure, so all of that you would copy and paste right into the specs effectively. It's just like adopting 10 state standards verses writing it in the sanitary code.

BEN BRIDGES: I do agree with what you're saying, spelling out exactly what's to be done, there's less chance of screw up because not many contractors that I know know how to do this without finding the operator or in our case they come find us, how do we do this. It is a little extra work, but it may be beneficial in that point where you don't have the guess work. Where maybe what nanometer do you torque this particular pump, that may be a little overkill, but this may be beneficial.

CHRIS RICHARD: And that's fine. Go in the field and how many times are you going to find a set of specs on a construction site? Number one the guy's doing a job, that's number one. Number two I've educated many contactors on how to assemble pipe. You'd be surprised at how many don't know there's a line you're supposed to stop and not push it all the way through that the owner gets split pipe later.

BEN BRIDGES: So put it in there, spell it out.

DIRK BARRIOS: Next is 2.19 security. Security measures including, but not limited to the requirements of 315 A and 327.A.13 of this part, shall be installed and instituted as required by the reviewing authority. Other appropriate design measures to help ensure the security of water system facilities shall be incorporated. Such measures, as a minimum, shall include means to lock all exterior doorways, windows, gates, and other entrances to the source, production, treatment, pumping, and

water storage facilities. Other measures may include, took out fencing because fencing is already I think somewhere else, signage, close circuit monitoring, real-time water quality monitoring and intrusion alarms, as well as safety measures to prevent tampering with any electronic, computer, or other automated system which may operate or assist in the operation of the water system. Use as a design standard for a new system and for sanitary survey. Added for design of new facilities, I believe this is all DHH stuff. Says additional information/suggestion concerning security on June 12, 2002 federal public health security bio-terrorism preparedness and response act of 2002 title IV. Section 401 as amended. I'm not going to read the whole thing. If you have any comments later on we can go through it. Says use as a design standard for a new system and not for sanitary survey. Next 2.20 flood protection. The first part was completely removed and to be determined by the regulating or governing authority, that was the recommendation. This is 2.0 general, that part was completely removed. 2.1 design basis. Water system includes water source and treatment facilities shall be designed for maximum day demand at the design year. To use this as a design standard for a new system and not for sanitary survey. 2.2 plant layout. Design shall consider functional aspects of the plant layout, provisions for future plant expansion, provisions for expansion of the plant waste treatment and disposal facilities, access roads, site grading, site drainage, walks, driveways, chemical delivery. Use as a design standard for a new system and not for sanitary survey. 2.4 location of structures. The appropriate regulating authority must be consulted regarding any structure which is so located that normal or flood stream flows may be impeded. Use as a designed standard for new systems and not for sanitary survey. 2.7 shop space and storage. 2.8.2 physical facilities. Says where laboratory facilities are provided each public water system shall have sufficient bench space, adequate ventilation, adequate lighting, storage room, laboratory sink, and auxiliary facilities shall be provided. Air conditioning may be necessary. Use as a design standard for a new system and for sanitary survey. 2.10 sample taps shall be provided so that water samples can be obtained from each water source and from appropriate locations in each unit of operation of treatment and from the

finished water. Taps shall be consistent with sampling needs and shall not be petcock type. Taps used for obtaining samples for bacteriological analysis shall be of the smooth-nosed type without exterior or interior threads and shall not be of the mixing type, and shall not have a screen, aerator, or other such appurtenance. Use as a design standard for new systems and for sanitary survey. 2.11 water facility supply. Water treatment plant's service connection line and the finished water sample tap line shall both be supplied from a source of finished water at a point where all chemicals have been thoroughly mixed and the required disinfectant contact time has been achieved. See section 4.4.2. Please note in some cases the take-off point of the water treatment plant's service connection line and the finished water sample tap line may be downstream of the plant itself, but at or before the first customer. There shall be no cross-connections between water treatment plant's service connection line or the finished water sample tap line and any piping, troughs, tanks, or other treatment units containing wastewater, treatment chemicals, raw or partially treated water. Use as a design standard for new systems and for sanitary survey. Wall castings we struck 2.12. 2.13 flow measurements. All public water systems shall have an acceptable means of measuring flow from each source, the wash-water, the recycled water, any blended water of different quality. Use as a design standard for new systems and not for sanitary survey. 2.16 operation and maintenance manual. An operation and maintenance manual including a parts list and parts order form, operator safety procedures, and an operational trouble-shooting section shall be supplied to the water supply system as part of any proprietary unit installed in the facility. Use as a designed standard for new systems and not for sanitary survey. 2.17 operator instruction, provisions shall be made for operator instruction at the start-up of a plant or pumping station. Use as a design standard for new systems and not for sanitary survey. 2.18 safety. That was struck out. It says the recommendation is to be determined by the regulating or governing authority. 2.21 chemicals and water contact materials. That was struck out and it's handled in chapter 5. 2.22 other considerations. Other consideration must be given to the design requirements of other federal, state, and local regulatory agencies for

items such as energy efficiency, water conservation, environmental impact, safety requirements, special designs for the handicapped, plumbing and electrical codes, construction in the flood plain etc. Use as a design standard for new systems and not for sanitary survey. In the policy statements on the pre-engineered water treatment plants, use as a guide for design. Policy statement on automated/unattended operation of subsurface water treatment plants, use as a guide for design. In policy statement on infrastructure security for public water supplies use as guide for design. That's all I have.

J.T. LANE: That was very good, very thorough. Anyone have any immediate thoughts or questions, reactions to what Dirk just presented or we'll start crafting the next report for part 2. Anything in particular y'all want us to look at? All right, I guess at this point so we will take this part 2 back. Part 1 we'll cover at the next meeting. At this point I'll open it up to the floor to see if anybody has any comments they would look to make.

RENEE ROBERTS: I talked to Senator Donahue yesterday. Evidently the home builders and developers in St. Tammany have raised questions about secondary wells and why they are still being required. I told him I would bring this subject up. He's not happy, which doesn't make us happy. He called Secretary Kliebert. And I hope y'all have talked since yesterday afternoon, but what he raised the question on is did this committee recommend or accept the fact that in five to seven years everybody will be having secondary wells? I don't know the answer, I couldn't give him the answer. I asked him to call Jake because Jake you know about this stuff more than I do. And I'm sorry, but I didn't know what else to do. I really want us to try and figure this out because I don't want to have to go back and do what we had to do last year. I know we had legislation language, we had amendment stuff that would have nailed DHH to the wall and we didn't go with that language and we pulled back and we made great compromises at the end that last day. I think we both gave and ended up as a better bill than what we had initially done, but I think we need to open a conversation with Senator Donahue. And I don't know if that means all of us asking him to come to one of these

meetings or do that. I think that would be a great idea, but I just thought I would give y'all a heads up and find out what we can do. I think he also talked to Greg and I'd just like to go ahead and dodge this bullet before it gets too far down the road.

GREG GORDON: The only thing that I told him so everyone would know that's in part 3 the subcommittee that I deal with, I chair, and Rusty and I we met today. We just wrapped up and I told him that we were at that process. I don't know where the whole seven year thing came in either. That might be some kind of confusion from people, but I did let him know that the subcommittee reports out about two sources. It's going to be something that's going to be thrown out to the full committee to figure out if two sources is a good thing to have. If in the future, some redundancy I think everybody here obviously feels that redundancy is important so people have water either through emergency interconnection or some other kind of engineered standard, tanks with pumps that can fill up so you don't have to do a full secondary well. I think really the reason behind him calling one was I think not just the HBA people, the folks that he met with are also with the state HBA. There's a concern amongst all them as to where this is going because it's going to cost them money in the long run. They would like to start to know where this ball may land because home building development is starting to pick up throughout the country. It's picking up in many places throughout the state and they are starting to, that's a big investment for them thinking about developing properties. Even if it is I have a public water system that's fairly sizable, but it's only on one well and I need you to actually develop this well as the secondary source so I can tie into my system so I can actually take your development in. I guess the idea is that they are looking for even if it's information as we start doing this or some kind of fact sheet as to maybe where the committee stands on some of the major decisions that may affect development and the cost of development, where that stands and where it may end up in the future, where we're going in terms of timing. That's the general thing that I got from him. I agree with Renee, the other thing is I think that what's also going on is some of them can read act 292 and they go to the regional offices and they're still told you need a

secondary well site they're like well I read this and I don't know if it necessarily says that right now. Why am I being told that when I take my plans and specifications to a regional office and that's what I'm told. So I think that's their confusion. Not casting aspersions or anything like that, just trying to relay. I told him he had to understand too we're in this every day, we're doing a lot of this work, we're dealing with this all the time. You have some folks out there who this is going to affect, but who only see act 292 or maybe see one thing on the website and aren't really informed as to what's going on. Every time there's confusion and perceptions that come with confusion it can cause problems.

J.T. LANE: Renee, I did talk to the secretary about it a few days ago, if not last week. I relayed to her that we actually had discussed a few of these issues that were going to be, we thought were going to linger until the committee promulgated rules and we did have a discussion about this early on as I recall, I did a quick review of the minutes, that we agreed that, again secondary sources may be good going forward. And so this is all dealing with plan review, Jake jump in if you need to, so these are for new plans and that was what we as a committee endorsed last year. Will that be up for discussion again when part 3 is addressed, sure. But we had previously done that and could go in the discussion with grandfather clause so that is again why I think those constituents or systems either were confused or upset. I think the thing is that we have talked about a lot of issues that may be on the side for previous systems and things that are not going to apply retroactively. And there are going to be things that everyone has agreed are good practice that we're going to apply going forward. I do respect the fact that there is investment that has to be made and it does cost money and someone has to pay for it. Try to find that right balance and be transparent about it, but ultimately there is a decision that has to be made as a taxpayer how much safety do I need, and frankly had a lot of issues we discussed today, what is going to lead to a health or safety issue verses what may be more of a customer service issue. This also I think when we started last year one thing that we tried to do because I think everyone for all intents and purposes operationally we're redoing

the code. The big question we tackled in the first two meetings was what do we do until then. We even drafted a recommended internal transition rules that we were going to follow in terms of sanitary survey. I had a staff meeting with, Jake and I had a staff meeting with all of engineering staff statewide to discuss that interim approach and I believe it did include for plan reviews secondary wells would be required. And that was again based on after we reviewed it with the committee.

RENEE ROBERTS: Do you think we can maybe send that interim, what you're sending to your regional areas send that to him and to maybe some of those committee members? The more information we can get out there the more we can do some communication I think the less problems. You're right; people are not going to be happy no matter what we do. Even if we told them they didn't have to do something they'd still, somebody else would be unhappy. What y'all are doing is not being transmitted over there and I think if you did that that might help out. That's what I told him, I know they're working on it, they really are. It can't be done in a day. This is a massive thing that y'all are doing.

GREG GORDON: The other thing too I would say just to add to that, the interim conditions, we looked at it one time. We never really got into a knee deep debate about it. The committee never really kind of picked through every one of them. They kind of went forward and I'm personally okay with that. I think the one thing from a legal prospective we may need to worry about if some HBA attorney or somebody picks up those interim deficiencies and says some of them may fly in the face of act 292. How is the department actually defining act 292--

J.T. LANE: I understand that.

GREG GORDON: That's a position for y'all to understand cause I've been in government for 19 years and sometimes you feel like this is the right thing to do, but you have the letter of the law, but you know you're going to end up somewhere that may end up that way and have this interim gray area and you're stuck and that's really tough. That issue is sitting in the gap there.

J.T. LANE: And I think what's really important is that everyone understands, everyone in this room, it's

the gray area that's tough for everybody. DHH is not trying to be difficult about it. I think the second or third meeting I invited Steve Russo our executive council to come in and discuss this and where we were and the legal interpretation of it and we stayed in touch with David, he's at all of our meetings. I share the feeling of uncertainty and we're all trying to do our best. Need to check in and see how it's going. Renee, I agree we probably need to get more information out there and communicate and let them know where we are. I've responded, do y'all want to add anything? We'll follow up with you.

RENEE ROBERTS: A status report.

J.T. LANE: He could come to this meeting. Give him an update on the progress we made thus far. We can maybe address it with the committee.

GREG GORDON: I think that's all they really need.

J.T. LANE: Anybody else have anything else? We have our next meeting August 19th. Please put that on your calendar. September 23rd, 22nd in October. I just wanted to add too I know we all have extremely busy schedules. I noticed that we had 11 or 12 people here when we started and people have to leave and I get it, but then we're almost down to right at the number we need to have a quorum. I would hate for us to go through two hours of work and if we have to take a vote not be able to do that because we fall to eight. Please be cognizant of that. Make sure we can get it done. I don't know if we want to add more meetings to this. Just be aware of that. If there's anything we can do to either look at new dates or pole everybody to move the schedule around if there's going to be a lot of people out just let us know what we can do, be flexible on that. With that, any other comments or questions? Do I have a motion to adjourn? Jeff Duplantis and Dirk Barrios.