

Water Meeting

January 20th, 2015

JIMMY GUIDRY: J.T. is feeling ill this morning. The good news is I got to be out of here by 11:30. We won't go till 12. I have to go present on the flu to the International Facility Management Association. If we could go ahead and get started. Certainly welcome again to our committee meeting. We're getting a lot of work done. As we look at the agenda we have quite a few things that once we get done today we'll have a few more boxes checked off. We're getting very close to finishing up a lot of the work we've set out to do. With that said we'll go ahead and start by seeing if we need time to review the minutes and see if we have approval of the minutes as written. Do I hear a motion or do you need a few minutes?

RANDY HOLLIS: I move that we approve the minutes.

JIMMY HAGAN: Second.

JIMMY GUIDRY: Good, the minutes have been approved as written. New business, we'll turn to Randy for part 5.

SHEREE TAILLON: Can we just do the roll call so we have that on the minutes. Dirk Barrios, Vern Breland (absent), Ben Bridges, Robert Brou, Jeffrey Duplantis (absent), Greg Gordon, Jimmy, Hagan, Randy Hollis, Patrick Kerr (absent), J.T. Lane (absent), Rick Nowlin, Rusty Reeves, Chris Richard, Keith Shackelford, Cheryl Slavant (absent), Joe Young (absent), and David Constant (absent).

JIMMY GUIDRY: Now I'll turn it over back to Randy for part 5.

RANDY HOLLIS: Thank you. This is chemical application part 5. If I had waited a few more weeks you'd thought we would have held these meetings immediately, but this was almost a year ago that we held the webinar and the subcommittee meetings.

Robert Brou and I both attended all of those meetings. We received comments from five different entities, Dow Chemical Corporation, Lafourche Parish Water District 1, L.P. Gas Commission, Sewage Water Board of New Orleans, St. Charles Parish DPW. Just a basic overview of part 5. A lot of comments received from specifically Dow Chemical and their concern about the application of 10 state standards to their manufacturing facility. They make chlorine and they feel like since they make chlorine and manufacture it that trying to apply the regulations to their chlorine system is not practical and we agree with that. Doesn't make sense. And so they've asked for an exemption from 10 state standards for their chlorine manufacturing facility which we believe is pertinent for approval. Much discussion about the storage of pressurized chemicals inside buildings. There are federal requirements. The L.P. Gas Commission was there about prohibiting the storage of specifically anhydrous ammonia inside buildings. So we have federal requirements that prohibits that, and yet then we have 10 state standards as you read through them would imply that. So we have federal regulation verses 10 state standards and the disparity between the two. And we pretty much resolved it for the large bulk storage tanks to be outside, but protected from sunlight. Comments received from DHH were that 150 pound cylinders should still be installed inside enclosures because of some federal pamphlets or guidelines that came down. And so that was still left unresolved about 150 pound cylinders that we need to discuss as a committee. And then discussion about secondary containment. Lastly, chemical scrubbers and should we require chemical scrubbers or is that up to the local entity or local municipality about chemical scrubbers in the area where chlorine may be stored. The three top subcommittee recommendations about commercial manufacturers of potable water chemicals. I kind of paraphrased this into what they would like is where the

chemicals produced by the manufacturer are also utilized to the manufacturing plant for treatment of potable drinking water, shall be exempt from all requirements for storage of the specific chemicals produced and utilized by that manufacturer as required by these regulations. If you manufacture chlorine it's in your plant, you bring the piping over to your water treatment then storage would not be applicable. If you're using a polymer or something else in my opinion that you don't manufacture and that's used in your water treatment plant process for potable water then I think the storage requirements would apply. It's only those chemicals that you are manufacturing that would be exempt. The second thing, enclosed storage of bulk chemicals including chlorine and ammonia should not be required. It's our recommendation. Certainly protected from sunlight, but not enclosed inside a building. L.P. Gas Commission on this particular thing stated they would, and the fire department, they would much prefer to handle a leak of a chlorine cylinder or ammonia tank outside than inside an enclosed building. And also federal regulations that apply to that they state you should not be storing inside an enclosed building. And finally, day tanks should be optional as deemed necessary by the owner. 10 state standards in some applications is antiquated and we don't believe day tanks are really necessary for every chemical that you're feeding. If we get into page 2 of this you'll see the comments from Dow Chemical there. That's the first thing in general where Dow has provided a lengthy, but very good explanation of why they believe that they should be exempt from requirements for storing things inside, for storage of chemicals. Although Dow has certainly got OSHA, PSM, RMP requirements a lot of municipalities have RMP as well if you store over 2500 pounds of chlorine. The key to this, in our opinion, is they are a manufacturer and you can't expect them to go all the way back into the manufacturing plant and comply. Under 5.0 general at the

bottom we change the introductory paragraph of the entire section to state, this is our recommendation, chemicals applied to treat potable drinking water shall meet NSF 60 requirements as verified by an ANSI accredited testing agency. On page 3 you'll see that I have highlighted where shall is in the regulations and this is because we're talking about things that are mandatory and so we agree with these on 5.01, 02, and 03 on the shalls. On G at the bottom of the page we think there was a typographical error when 10 state standards was written. The word when should be changed to then. On page 4, and you'll see comments and analysis as we go through. Some people have requested that you delete certain paragraphs as we go through. Because some of these are not shalls, but some of them are. We felt go ahead and leave them in. For example, on the top of page 4 H gravity may be used where practical. That's an option so we don't feel like we need to take that out. 5.1.1 feeder redundancy. We suggested taking out the last sentence where the reviewing authority may require more than one be installed. It already indicates that you should have redundancy, the standby unit so we felt we should take that out.

KEITH SHACKELFORD: Excuse me Randy, if we have a comment do you want us to wait to the end and go back?

RANDY HOLLIS: Might be better so we can go through this quicker. Just make a note of that. Or would y'all prefer to cover it as we go through? Under B of that 5.1.1 says spare parts shall be available on site for all feeders and chemical booster pumps to replace parts which are subject to wear and damage. Our suggested language on that is spare parts shall be available on site for each type of feeder and chemical booster pump. If you've got four feeders there we don't feel like you should be required to have four sets of spare parts for everyone. We think one set of spare parts for one of the feeders is adequate so that's why that minor change is made

there. You could interpret it I guess either way. We're trying to get literal here and say we want one set of spare parts for one type of feeder. On page 5 B chemical feed rates shall be proportional to the flow stream being dosed. Some flow rates are constant or fairly constant such as those from a waterwell pumping to an aerator that just don't vary. And so the suggested language for B is chemical feed rates shall be proportional to the flow stream being dosed unless the flow stream is constant then manual dosage of the chemical shall be deemed acceptable. We'll go on down through to page 6, just highlighted the shalls there and the weighing scales. One of the comments received was why do we have to have weighing scales if (inaudible) cylinders or 150 pound cylinders are simply our backup supply or secondary source. So while we do agree that weighing, methods of weighing should be applicable for chemicals being applied if it is a backup or secondary source we feel like you do not have to have them on the secondary source. Under 5.1.3 dry chemical feeders. There's a minor change there. Completely enclose chemicals to prevent emission of dust to the operating room. We felt the word reduced would be better because you can't be absolute in preventing every bit of dust so we changed that to reduced. Some comments received on 5.1.4 A positive displacement type pumps. Says shall not be used to feed chemical slurries. We feel like positive displacement pumps have come a long way and that they can be used for chemical slurries if applicable to what you're pumping such as lime or powdered activated carbon. Under C below there on page 6 you'll see calibration tubes or mass flow monitors should be provided. That is a should. We changed that to say devices utilized to measure feed rates in the pumped liquid shall be designed to handle the liquid being measured. That allows the engineer to select the device he feels like is best for that liquid being handled rather than trying to dictate either calibration tube or mass flow monitoring. On

page 7 this section is crossed connection control. We agree with this in that it requires separate feeders for chemical feed systems when you're feeding both unfiltered and filtered water locations such as a raw water and a finished feed. So that's what this really does is dictate they should be separate feeders and not one that simply splits off to go to raw and verses post. How does this affect you? If you've got chlorine and you're feeding both pre and post that means you need separate chlorinators. You can't simply have a flow split screen that would go to the pre and the post from one feeder. Might want to think about that. Over on page 8 storage of chemicals. This is the part that 10 state standards says you shall have at least 30 days of chemical supply on hand. When we discussed this, sodium hypochlorite is a perfect example that should not be stored for 30 days in the heat of the summer or you'll start losing the strength of it and you'll also create disinfection by-products within the sodium hypochlorite as it degrades. So a lot of discussion about how long should you have a chemical supply available for you. Should it be, and then part of this section also if you'll look down at 4 a minimum storage volume of 1.5 truckloads where purchase is by truckload lots. If you don't use a truckload but once a year why do you have 1.5 truckloads. This is not up to date. After much discussion what should be required Dow Chemical responded after a lengthy dissertation why not merge them together and put 15 days chemical supply. Well, that may not be applicable so what we tried to do in this on page 9 the suggested language is what we did I kind of tied this back into the discussion last week or last month, excuse me, about generation and what is the demand for generation. We came up with maximum average day demand. This is suggested language, a minimum of seven days of chemical supply shall be on site at all times that will allow the facility to satisfy a maximum average day demand for all seven days. Additional

supply chemicals that will not degrade is recommended. So the minimum is a seven day max day average that will allow the plant to continue to operate for seven days under those conditions. If you want to store more than recommended that's fine. Page 9 liquid level indicators. That's a requirement of 10 state standards that you have a liquid level indicator. We would prefer under suggested language to simply have a means to determine a volume of tank retained in the storage tank. Load cells will do much better than just a liquid level indicator. We want to use load cells on a tank, it's extremely accurate. And you don't have the problem if it's a site glass or something else. Opaque so you can see through it. Bulk storage tanks over on page 10. B, and this is I guess nitpicky here, it says means to assure continuity of chemical supply while servicing a liquid storage tank shall be provided. In other words, if you've got a single vent storage tank you're taking it out of service for servicing, repairs. What do you do about your chemical supply? And so there was some suggestions that came in on this. The suggested language in blue there, a means to assure continuity of chemicals to treat the water to comply with primary drinking water standards shall be provided while servicing a liquid storage tank. Leave it up to the operators and the owner to determine how much chemical you need on standby and in a temporary situation to meet your primary drinking water standards while you're servicing your main storage tank. On the bottom of page 10 you'll see where we've adding in under suggested language under bulk liquid storage tanks that on access openings that are bolted or gasketed manways are acceptable in addition to simply curved and fitted openings. Under page 11 H minor change there under 10 state standards requires a valved drain on liquid storage tanks. One of the comments received was you may not want a drain at the bottom of the tank so leave that as a should to allow that option up to the engineer and the owner in lieu of requiring a

valve drain on the bottom. Day tanks under the bottom of page 11. 10 state standards requires day tanks. And if you're feeding from anything larger than a 55 gallon drum. We felt like day tanks are optional according to the design engineer and the owner and let them decide if they want to feed from a day tank or directly from bulk storage tank. And that's what that language allows for at the bottom of page 11 is the day tank should be considered for bulk storage tanks. On page 12 under B about the top third of the page what we did there is say that day tanks if installed shall meet the following requirements. If you're going to install a day tank you deem it necessary then here's where all of the requirements would come in for day tanks. And you'll see some minor tweaking there, such as under E if you've got a motor-driven transfer pump in lieu of a liquid level limit switch other means to prevent an overflow shall be provided. Just a means to prevent an overflow. On fluoride saturators what you do there is use a liquid level switch that comes over, that isolates the feed line on the water. You can use load cells. There are other ways that you can do to prevent an overflow rather than simply (inaudible). Under H at the bottom of page 12 filling of day tanks shall not be automated and it allows unless authorized by the reviewing agency. Some discussion on this in that if you have a redundancy of controls for filling a day tank then that would be acceptable in lieu of having to make it a manual process every time, turning valves. And so redundancy would be in series. Either one of the controls fails you could not fill it automatically. Both of those would have to be permissive in order to allow the day tank to be filled. Page 13 under handling 5.1.13 exhaust fans and dust filters. 10 state standards states which put the storage hoppers or bins under negative pressure. We felt like that was excessive and removed that from it, from that requirement. Certainly provide exhaust fans and dust filters, but not have that requirement of a negative pressure

for fear that someone's going to come out and say put a gauge on here and prove it to me. Under page 14, and here's the first indication you get where rooms are optional. Under page 14 under ventilation 5.3.1 where they talk about storage rooms special provisions shall be made for ventilation of chlorine feed and storage rooms. We added the language in here if rooms are provided as deemed necessary by the owner of the facility. This follows through with allowing the engineer and the owner to dictate if they want to put chlorine, or ammonia, or other chemicals inside a room then this allows them to do it at their choosing. A lot of discussion in italics here under 5.3.2 respiratory protection. This is an interesting discussion and probably mostly comes from the industrial plants, however some of the larger treatment plants may have this problem as well. 10 state standards wants at least compressed air respiratory equipment with a 30 minute capacity. And then the last sentence is the one that's a catch all, it shall be compatible with or exactly the same as units used by the fire department responsible for the plant. Well, some water systems have a 60 minute capacity. They have respirators that are far superior to those of local fire departments. The problem is they are not compatible with the local fire department. So are we going to make them require equipment that is compatible to the local fire department when their units they consider to be superior and have a longer air supply of 60 minutes as opposed to 30. We didn't provide any language on that. I thought that was something we needed to discuss as far as should be compatible with the local fire department. 15 a lot of comments, but no suggested language there. Over on 16, page 16 is where we get into chlorine gas. 10 state standards states chlorinators shall be housed in a room separate from but adjacent to the chlorine storage room. Here we see the language shall be housed in a room. And so the suggested language on page 17 is in blue at the top. If feed and storage facilities

are located out of doors per decision made by the owner thus should be covered for protection from sunlight and shall be provided with means to heat the equipment to ensure proper operation. That allows them to be placed out of doors if the owner elects to do so. Then the second paragraph of that is if feed and storage facilities are located indoors per a decision made by the owner the following will apply. And so we allow the option there. If the owner in discussion with the engineer wants to place the facilities outside that's acceptable as long as they are protected from sunlight. If they deem it necessary to place them inside, let's say you're in a residential area and they want chlorine inside with a scrubber, then all this would apply. And what you'll see is the blue language throughout that if storage rooms are provided instead of making it mandatory it allows the option. On page 18 number 11 at the top. Provisions must be made to chemically neutralize chlorine gas where feed or storage is located near residential or developed areas in the event of any measured chlorine release. Well, that's subjective there as to what's considered residential and what's considered developed. There's no specific hard criteria. And so it's a mandatory must, but then it's subjective. So we changed it to provisions instead of must should be made to chemically neutralized chlorine gas. So again, that decision would be made locally by the most knowledgeable people on site as to whether they should dictate whether they should have scrubbers or not. Item G that was taken out because all chlorine gas feed lines located outside the chlorinator or storage rooms shall be installed in air tight conduit pipe. That's requiring secondary containment in our opinions. All gas lines are using vacuum feed now and so if you have a leak it's a vacuum, it's not pressurized so that takes out the requirement of mandatorily having a secondary containment system on the gas feed. Again, below there number 4 under H is where we made it instead of rooms this is for the full and

empty chlorine gas cylinders. We revised that to say stored in a locked and secure position separate from ammonia storage instead of requiring it to be in a room. Page 19 at the bottom under number 2 is where we take out and shall be vented to the outside of the building because if these containers are going to be outside they will simply be located, we want them located out of the direct sunlight. The same thing under 20 at the top. And then on page number 20 number 3 wherever reasonably feasible, stored sodium hypochlorite shall be pumped undiluted to the point of addition. Where dilution is unavoidable deionized or softened water should be used. We took out the word unavoidable and put in utilized because sodium hypochlorite is being studied more and more now and if you dilute it to 6 percent or less the degradation of sodium hypochlorite drops dramatically. And so dilution in many places is actually encouraged. So we felt like instead of making it negative and unavoidable we thought it would be better to phrase that to say where dilution is utilized deionized or softened water should be used. There is a problem when using hard water or water that has metals in it because that will also accelerate the degradation of sodium hypochlorite. We took out requirements as you can see below on number 4. Spill absorbent shall be stored on site. Sufficient amount, not sure how much that is. We took out something that was unknown. And then also reusable sodium hypochlorite storage containers shall be reserved for use with sodium hypochlorite only. We agree with that, but we don't agree with the comment that they shall not be rinsed out or otherwise exposed to internal contamination. If you have bulk storage sodium hypochlorite on site where you're receiving shipments your bulk storage tanks on site you should use all of it and they should be rinsed before you receive another load. So we're not necessarily in agreement that they should never be rinsed out. Some changes on bottom of 20 on B feeders. We took

out the requirement for positive displacement pumps. There are other methods to feed sodium hypochlorite so as long as the wetted surfaces are compatible with sodium hypochlorite we felt like we did not have to require positive displacement pumps. On page 21 which is ammonium hydroxide, aqua ammonia we took out enclosed for both the pumps and the storage tanks. Under 21 A, boy this is really getting technical here, corrosion resistant, closed and it says unpressurized tank shall be used for bulk liquid storage and day tanks, vented through inert liquid traps to a high point outside. Technically if you have an inert liquid trap and it's 6 inches that is a pressurized tank. So that is really technical, but we felt like take out unpressurized and allow pressurized because when you have an inert liquid trap, which is water, that's the vapor on top of it has to go through that to get outside. It's going to have to be a couple of inches of water, 6 inches or whatever to get out, so it is technically a pressurized vessel. We took out the requirement under as you can see below, and this is for aqua ammonia E 1 and 2. We're not sure that anyone down here even considers refrigeration or other means of external cooling of tanks. And so we took out both of those requirements feeling that they were not necessary in this area. D at the bottom see if a room is constructed making it optional. Under page 22 there are many systems that feed directly from bulk tanks and not from a day tank. We felt like you should be able to feed from aqua ammonia directly from your bulk storage tank if you want to so we took out the requirement for a day tank. Anhydrous ammonia on page 22 A this is where much discussion on this. 10 state standards requires anhydrous ammonia and storage feed systems shall be enclosed and separate from other work areas. L.P. Gas Commission states you can not put a pressurized liquid or gas such as anhydrous ammonia inside a building and so we see some conflict there between federal requirements they are stating verses the 10

state standards. So we felt that it's best to take that requirement out and not require them to be enclosed and inside a building. Again, with pressurized ammonia feed lines that is requiring conduit pipes, that's requiring secondary containment anywhere from ammonia feed system to where it's being fed. This appeared to be a mistake under C. I believe that's correct that the exhaust for the ammonia should be at floor level and not at an elevated exhaust if a room is constructed. On page 23 you'll see under I--

ROBERT BROU: That is wrong.

RANDY HOLLIS: That's incorrect, it should be elevated?

ROBERT BROU: Ammonia goes up. I don't know why we changed that, but that is wrong.

RANDY HOLLIS: Under page 23 I again, instead of consideration shall be given to the provision of an emergency gas scrubber we changed it to consideration should be given. And I think that's it. So a lot of discussion on this section. Appreciate Robbie being there and also DHH and their comments as well as everything from the entities that did respond. I think a representative for Dow Chemical is here. He's been waiting for months and months when we're going to bring this up. Will Nimber and I think Will the time for you to respond is in the public comment section. When we get to that point, if you don't fall asleep, if you'd like to respond.

JIMMY GUIDRY: Thanks Randy. At this point we'll go ahead and see if there's any discussion on any of the points that Randy brought up. Starting I guess with you since you brought up the first one.

KEITH SHACKELFORD: Thank you Dr. Guidry. Going back to page 4 paragraph 5.0.4 chemical information that's to be provided sometimes, and it's been a while since I've worked with a plant design, but you may not have these values till after the plant is

ready to go online and the owner is purchasing those chemicals. So requiring some of these things at this point maybe just some minor tweaking of this. You can project what chemicals you're anticipating using and dosages or a range of dosages you think you may be using, but I think this is a little bit too specific in some aspects. Just food for thought.

RANDY HOLLIS: Let me respond to one thing. The one thing I left out as I was going through under that section Keith is on page 4 is we did add in there the MSDS sheet which now I think is changing to MSD, they're dropping the S, for the chemical to be used. I think that's good at this point in the design to have an MSDS sheet even though you're not knowing what company you're buying it from you can get an MSDS at least on sodium hypochlorite so that the design engineer at the state understands here's the MSDS that talks about safety and everything else. I would suspect this is just in general during design. Here's the chemical we're going to use and here are the specifications for it.

KEITH SHACKELFORD: All right. On page 8 down at the bottom talking about the volume of the bulk storage tanks and what's the reasoning for the 1.5 truckloads. Maybe you don't need 1.5, but it seems prudent to me that you want some volume in excess of one full truckload so that you can be operating while you have a load in transit and not be depending on in time delivery because for any number of reasons that delivery might be delayed a day and you run out.

RANDY HOLLIS: Okay.

BEN BRIDGES: Also, the water systems that we deal with most of them don't want to store 30, 40,000 dollars of extra product on site. That becomes a financial burden to them. And I do agree there have been many occasions where we've gone to the day of or within a day of running out because the original tank was sized too small mainly

because it might have been retrofitted to an existing building that was there and it was the only thing that would fit in. I would like verbiage that would give us some minimum guidelines whether it's 7 days, maybe not a full truckload or 30 days, but some more than just 7 days so we don't run down to the wire every time. But on the other side there could be some very costly chemicals that they don't want to foot the bill for to have 30 days worth of supply.

KEITH SHACKELFORD: I agree. That's why I said 1.5 times may be excessive, but I believe there needs to be some reserve there to handle variances in delivery time. That's all I have.

ROBERT BROU: In the very beginning we talked about the discussion that even though you wouldn't put all the chemicals in a building we would talk about protecting them from direct sunlight. Where aqua ammonia did call for protection from the elements there is no such requirement for anhydrous ammonia at all in 10 state standards, nothing for sunlight. The reason for direct protection from sunlight at the (inaudible) is the fusible plug. You don't have a fusible plug on an ammonia tank that are designed to be outside. They are designed to be the container.

RANDY HOLLIS: Are you asking that requirement to cover anhydrous ammonia be removed?

ROBERT BROU: Correct. And the wording in 10 state standards, the way we left it, was that you protect it from the elements which could be rain, could be cold, could be direct sunlight, but there's nothing in the way we've got it written for anhydrous at all. If you leave it as it is now and ignore that first statement that they're all going to be covered there is no requirement for a cover.

RANDY HOLLIS: What paragraph, what page?

ROBERT BROU: I first was referring to your initial comments just in general. Talked

about protecting it from sunlight. But on page 22 starting at 5.4.5.3 through the end of that section which is midway through page 23 read every one of those points and there is no requirement for protection from sunlight or from the elements. So if we leave it as is just wanted to clarify it does not require protection from sunlight.

RANDY HOLLIS: Okay. I'm trying to understand your comment here. Do you feel like we should have the requirement to protect it from direct sunlight?

ROBERT BROU: No, I do not. The tanks are designed to be exposed to the elements.

And we can get some more clarification from L.P. Gas, but they're designed to be self contained. They are the storage unit. No fusible plug so they don't overheat in direct sunlight. I think it needs to stand as is, but just clarification that it does not need to be covered.

JIMMY GUIDRY: The only question I have in regards to that is it was stated there's a federal requirement and so even federal requirement and 10 state standards don't agree state rules and state law cannot supersede federal requirements.

ROBERT BROU: There's a federal requirement that it's covered?

JIMMY GUIDRY: That's what was said.

RANDY HOLLIS: The federal requirement which is that it cannot be enclosed.

JAKE CAUSEY: I would like to see that federal requirement. We've read their rules, they adopt a particular standard as a state regulation, but to my knowledge it is not a federal requirement period. I know they did just issue a permit to St. Bernard to store anhydrous ammonia inside a building. So I know that not only is that not a federal requirement they limit I guess the size of the tanks they were storing in a building because of proximity to a school, et cetera, but they have permitted the storage of anhydrous ammonia inside a building as well, a standard they adopted. Specifically says should only be permitted in buildings designed for that purpose. And

we have several anhydrous ammonia tanks that are stored inside buildings for water systems.

ROBERT BROU: The way we've got it written currently, or proposing to write it, still does allow for a room. Jake is correct, you can put it in a room under certain conditions. The main discussion was should it be required. I think the way we have it written is good. That's not required, but it also does not have a requirement to have it covered is the way we have it written currently.

RANDY HOLLIS: I think the delineation there is I think they stipulated bulk storage cannot be inside, but there is a requirement for certain size for day tanks inside. That was my understanding on anhydrous ammonia.

ROBERT BROU: I don't believe that's correct. You can do bulk storage under certain conditions. You have to meet a whole lot of criteria. They don't recommend it, but they do allow it.

RANDY HOLLIS: Well, I disagree with you, but I'll find out.

ROBERT BROU: All right. Back to page 7 25 we can move on. Just a point of clarification you were saying under the proposed language for D at the bottom of the page, page 7, you had mentioned that you would have to have separate feeds for filtered and unfiltered water. That is only in the absence of other cross connection control measures. I just wanted to clarify that the way we had it written. On page 10 the proposed language, just a comment. And I agree with you, you were saying we were getting very technical. The main purpose that I remember from that discussion of adding a primary drinking water standard into the language is that a lot of these chemicals are not required to produce water to the drinking water standards. So if you had hydro activated carbon not required to meet your standards you could take that tank offline and not have a secondary means. That was the discussion we had.

That some of these chemicals are not necessarily required and produce better water and still meet all the drinking water standards.

RANDY HOLLIS: And I think in addition to that something like chloride you're taking that out that's not primary drinking water standard. The sequestering agent is not iron and manganese and so yes, I agree.

JAKE CAUSEY: I have one comment on that. I know for some systems we have permits for them to feed carbon. Seasonably or intermittently or what have you based on need, but other chemicals, I would say other than that most permits are feeding a chemical continuous. I have a concern try to basically tell systems they can turn chemicals off without permits. Turn chemicals off that absolutely affects the quality of the water. Any changes that these systems do with chemicals, stopping a chemical affects water quality so typically we require permits to discontinue the use of a chemical unless there is maybe in a sense a standing permit for what have you that is used seasonally. But we would not want to see chemicals just turned off to service a tank under normal operating conditions. My only concern is that might get into violating some of these permitting requirements. It's something we can look at, maybe come back with a recommendation.

ROBERT BROU: Perhaps we can generate a list of (inaudible). I don't know why you would be concerned with that, but I do understand if you stop feeding polymer for a while at a surface water plant you're not going to meet regulations.

BEN BRIDGES: Potassium permanganate, something like that.

JAKE CAUSEY: I guess just relate it back if we can to the permit. Feed for permanganate seasonably, basically a permit that says you feed permanganate seasonably. Something to that effect.

BEN BRIDGES: Or feed a filtrate during certain times of the year if you need a filtrate

and that's case by case basis and as needed.

JAKE CAUSEY: That would be part of a permit. As needed based on what criteria? We would want to know they're making an intelligent decision on what is being fed, and what is not, and how, and that they are monitoring it. All that is part of the permit requirement.

RANDY HOLLIS: One example, fluoride. You have to have both the permissive from your motor control center and from a flowmeter to feed fluoride. Both of them have to be permissive. We got hit by lightning at one of our plants we lost all the flowmeters. And so we can not verify the flow. Consequently we could not feed fluoride. We wrote DHH and said we're not going to feed fluoride until we get the flowmeters fixed and they were fine with that. Just a notification that we were shutting off fluoride.

ROBERT BROU: That's all the comments I had.

DIRK BARRIOS: On page 2, something we talked about before. Where it talks about accreditation just for clarification. We just bid out some chemicals recently. We look for the NSF certification sometimes the facility is NSF certified, I'm not sure if I understand the whole thing. Listing on the chemicals they have. The confusion comes in how to be able to put a spec together to cover what we're requiring because I think three or four issues in here we talked about ANSI and/or NSF certification. We talked about this before, UL certification in there. I don't know it, I'm asking. Is this covering all that?

JAKE CAUSEY: It does, but we may get some more specific language that helps clarify like you say because the product has to be listed by an ANSI accredited certified agency to the NSF 60 standard. Other agencies besides NSF are approved by ANSI to list products to that standard. It does get a little bit wordy, to be quite honest.

DIRK BARRIOS: And the biggest problem is when you spec it you spec it out wrong. That facility might have a chemical that meets that requirement, but because you spec it out, wasn't clear on what you did the way state law reads you have to go as it's written. Makes a whole lot of confusion. Just trying to be sure. At least three or four different times it's mentioned in this document. I know what it is, just to understand that when you do it that we can make sure different facilities meet the requirement and the requirement is understood by everyone.

JAKE CAUSEY: Maybe in this case it would be good to use more specific language rather than just ANSI/NSF 60 to kind of say product listed as meeting NSF standard 60 by ANSI accredited third party agency. That nails it down if you use that exact language.

RANDY HOLLIS: Dirk, let me ask this question. A perfect example I guess in our industry is polymers. You'll have these little independent guys out here that buy polymers from big manufacturers and they bring it in and then they'll blend it and do other things to it. Do they get NSF certification, that little blender for that product or--

DIRK BARRIOS: If we state in our specification that it has to be NSF approved or however we word it now we use UL in our spec they have to provide us with a document stating that they have that approvable.

BEN BRIDGES: Every product is NSF approved. You have a zinc orthophosphate blend it's a 5:1, 3:1 both have to be. You can't grandfather in zinc and say okay I got all my zinc products are good, you can take any variation of that. Each one specific has to have NSF stamp and accreditation. Which is, in our opinion, a racket cause it cost us several hundred dollars per label, but each one if you change it one iota it all has to be accredited to that blend.

RANDY HOLLIS: So that little blender has to get an accredited testing agency to give you a certification that this product as blended and produced by us, not the big company

we bought it from, but by us meets NSF 60?

BEN BRIDGES: If he changes or modifies his own recipe than he would have to do so.

Unless you just buy bulk and repackage it using the same product you can get the parent company, you still have to pay for it, but you've got to be NSF registered per product. And if you're making it then you definitely have to be.

RANDY HOLLIS: But the blender can get a testing agency to test it and give you proof.

BEN BRIDGES: Right. There is more than just one NSF, NSF is just a company. There are other companies that can give you accreditation for this process, or this tank, or vessel, whatever, not just NSF. That's kind of a misnomer that you have to use NSF. There are other companies that are equal to NSF.

JAKE CAUSEY: The standard, NSF 60 standard is the standard that NSF or other companies can list product.

RANDY HOLLIS: Well, is this a mistake the way it's written to say it shall meet NSF 60 requirements as verified by an ANSI accredited testing agency? Should it be shall meet NSF 60 standards? Standards a better word than requirements for that chemical?

BEN BRIDGES: I don't know.

JAKE CAUSEY: I think we had some similar language we used in the plumbing code for other products. It's a similar process.

RANDY HOLLIS: Make it parameters or something.

BEN BRIDGES: I think standards may be a better word.

DIRK BARRIOS: On page 10, just more of a of clarification. 5.1.10 bulk liquid storage tanks. It sounds like it's talking about solution tanks. Says right here continuous agitation shall be provided to maintain slurries in suspension. You don't agitate a polymer.

ROBERT BROU: I would think it only applies when it is a slurry.

RANDY HOLLIS: But Dirk there are a number of polymers that you have to keep it agitated to make sure it stays (inaudible). Some you don't, some you actually do in the tanks. Alum some you don't, but if you've got let's say a lime, hydrated lime mixture you have to maintain in suspension.

BEN BRIDGES: That would be a slurry though. You'd feed it as a slurry or liquid calcium hydroxide or anything like that you would, or potassium permanganate something like that. Some of the stuff Dirk's talking about you wouldn't have to.

DIRK BARRIOS: What I'm trying to say it's not necessary for every chemical.

RANDY HOLLIS: Sounds like we need to add to that sentence and say continuous agitation shall be provided to maintain slurries in suspension if required to maintain a homogeneous solution.

DIRK BARRIOS: Chlorine scrubbers, we use chlorine scrubbers recommended basically keep it in enclosed room and the vents everything else defeat the purpose. You have a leak with a chlorine scrubber you're trying to contain the leak. That's basically what we have. It defeats the purpose of what you're trying to do. Where it talks about ventilation, operator safety, and chlorine rooms on page 14. Use of scrubbers, the scrubbers gives you that adequate protection and if you do have a leak it can contain the largest tank that you have on site. In our case a 2 ton cylinder again.

ROBERT BROU: We do have verbiage on page 18 for cylinders.

DIRK BARRIOS: Again, just saying certain ventilation.

JAKE CAUSEY: I would think if you had an owner operator go into the room you would need the ability to turn the fan and ventilate the room before he goes in.

DIRK BARRIOS: Our guys go in a room they're supposed to have a respirator. I know they made us remove the little vent fans because it was interfering with the

operation. We do have vents on the top part of the building.

RANDY HOLLIS: Dirk, I guess and we sat down with the safety expert on this and went through OSHA and everything else on chlorine rooms are they confined spaces or not. The requirement was if you have engineering controls in place, ventilation, and chlorine monitoring they are not a enclosed space, confined space because then it's meant for normal occupancy. So if you follow standard ventilation and you change out the air six times per minute, or hour, minute while it's occupied then you can stay in the room without the hoods and everything else on. The intent though is a lot of chlorine scrubbers will tell you don't run them on a normal day because things in the atmosphere will consume that caustic and you're going to burn out your caustic a lot quicker if you run them all the time as far as scrubbers. So they don't recommend unless you have a chlorine leak. And the way you do that is put a chlorine monitor on the floor that detects chlorine and shuts off the ventilation and turns on scrubbers automatically. Then you're only using the scrubber when you have a chlorine leak.

DIRK BARRIOS: I would have to check and see exactly how ours is set up.

JAKE CAUSEY: The switch for the ventilation is outside the room. It doesn't run continuously. The guy goes in the room, he turns it on, walks out, he turns it off. If there's a leak the ventilation fan shouldn't be running at that point in time. I guess are you just saying the fan itself or just the open vent to the atmosphere?

DIRK BARRIOS: I believe they told us to remove the fan. Again, I'd have to check and be sure. I don't believe we have floor vent fan anymore.

RANDY HOLLIS: Well, then you definitely have a confined space because you don't have engineering controls in place. Nobody can go in that room unless you meet full confined space requirements.

DIRK BARRIOS: Another comment on day tanks. There are some chemicals that they

don't recommend when you put in day tanks, acids. Sulfuric acid and (inaudible). Neither one of those chemicals are recommended you put in day tanks. Just adding extra acids very, very volatile and you put in the day tanks you are asking for problems. We're the ones that made the comment about the 30 minute and 60 minute respirator. We upgraded our suits for our guys. I think it's class A suits. The thing about it is a half an hour worth of air is not enough when we get the suit do what they have to do and get out. We went to the 60 minute. The fire department don't know anything. We're all volunteers where we're at. There's no big fire department. Those guys are not trained, don't know anything about chlorine. We don't want them there. Our guys are our first responders. If we have problems with what's going on we contact the state and the state comes in. The only thing we want the volunteer fire department help control people on the outside. Making us have the same type of systems they have kind of defeats the purpose of what we are trying to do. We're trying to better our equipment to give us more time to handle our problems. But they only have 30 minute bottles. I know cause they bought them from us.

JAKE CAUSEY: What are some of the differences other than just the capacity?

DIRK BARRIOS: It just gives you more time.

JAKE CAUSEY: No, other differences besides capacity.

DIRK BARRIOS: The connections aren't the same. I thought the connections would be the same, but when we bought bottles we had to buy new mask and everything. All the equipment that went with it had to be replaced. Couldn't use the old mask with the new bottles. I don't know why.

JIMMY GUIDRY: If I could, we deal with this for the protection you wear for Ebola. You have a company that makes a (inaudible) which is no exposure and you're breathing

the air and it only uses a certain battery. They come out with new ones and the old battery doesn't fit. I think they are asking to have redundancy with your fire departments to have more equipment that works, that is compatible. But I agree with you, if you have something that's better, that's more protection I vouch for that. I think the compatibility has to do if you're going to buy together, I don't know if you put in here needs to be compatible you might have to have more redundancy, might have to have more suits. I wouldn't want a fireman who doesn't routinely do this work to go into a chlorine chamber. Doesn't make any sense. I don't know that language needs to stay in there.

JAKE CAUSEY: As long as the system has equipment at least 30 minute capacity.

ROBERT BROU: I have one more comment on that. Recently LDEQ and USEPA have recommended that we get rid of all of our SCBAs because we have contracts as responders with Chemtrec. We have (inaudible) next door, we have Dow, they are the ones who come respond to any chlorine leaks we have. With our risk management program with USEPA we state that they are our first responders. We had in there language that we had all our own SCBAs, that we would do what was necessary to minimize any leak if it had it. They told me change that, take it out, and lose the SCBAs because they said with minimal training for our operators that we were endangering people more by having them on site with untrained, won't say untrained because we did provide training, but minimally trained, minimally experienced people instead of dealing with the people who are contracting with us who deal with it on a daily basis. Because they deal with all the different chemical treatment plants. We do still have escape masks, we still have all our repair kits for both tongue cylinders and the 150s, but we do not have SCBAs anymore. So we're going to need a requirement. I'm going to have to go back and re-buy them, explain

to LDEQ and USEPA that I'm being mandated to have that. Definitely in conflict with our RMP regulations.

RANDY HOLLIS: Could you not under this paragraph on 14 5.3.2 where it says that you should have respiratory equipment and shall be stored at a convenient heated location, but not inside any room where chlorine is used or stored. Could you not respond that the location of these is Dow Chemical next door and not on your facility so you could comply with this?

ROBERT BROU: I would rather clarification though.

JAKE CAUSEY: On that note, what we've done currently is we've had water systems say our location is at the fire department and we've said that's not sufficient. We have not accepted that. If the intent is to do that then I think you need to change this language and say something about contracts in place, can respond within X number of hours. Definitely need some specific language about that in here if that's the intent.

RICK NOWLIN: On that same point before all this discussion I was just thinking we could just put a period after the word capacity, forget the whole compatibility thing. I have 11 different fire departments in my parish and that would be a real problem. I may be the only one with this question, probably am, on page 9 under 5.1.9.a.1 we talk about the maximum average day demand for all seven days. I think we talked a little bit on this subject last meeting, but would someone give me an easy definition of maximum average day demand?

RANDY HOLLIS: What we talked on generation last time was that it was the maximum month flow divided by the days of that month. So you take the maximum for the year divided by the number of days in that month and that gives you the average day. That was considered a max day.

JAKE CAUSEY: Might make that a definition in the code.

RANDY HOLLIS: I guess it needs to say to satisfy a maximum month average day demand. Put in the word month.

JIMMY HAGAN: My question was on page 2 general. And I'm a little surprised that I may be the only one thinking this way as well. The proposal to strike out effectively who regulates what chemicals can be put into drinking water, am I misinterpreting that? By deleting that we're saying that the system itself is supposed to regulate what goes into their water. And the reason I say that is there's a lot of large water systems on this board. I represent the other end of the spectrum, the small guys. And my experience has been they will put just about anything in water if they read it on the internet, or a buddy tells them, or they pick it up at the golf course, whatever it is they do if it sounds like a good idea they will probably try it. If it's on the internet it must be true, right.

ROBERT BROU: We did add the language written in the next paragraph that says who's certified.

JIMMY HAGAN: Right, but you're also talking about individuals, while they may be certified, don't really understand all of that. And they're not going to understand it. And maybe it's a challenge to write one set of regulations that covers New Orleans and one that covers whatever the smallest Powhatan or some little bitty water system. But our personal experience has been that if they can put it in there and it sounds like a good idea then they do. They are not going to worry about some NSF, I mean if Dirk is kind of wondering what constitutes NSF certification then somebody with a whole lot less knowledge base and experience is not going to understand that at all.

RANDY HOLLIS: That's an excellent point. I guess we just assumed nobody would treat

something unless DHH approved it. I think you bring up an excellent point. It was never intended to bypass DHH on that. I think you bring up a really good point. I think we need to state in there that verified by an ANSI accredited testing agency and as approved in advance by Department of Health and Hospitals.

ROBERT BROU: Do we put DHH or state health officer?

RANDY HOLLIS: State health officer.

JIMMY GUIDRY: Any other discussion before I turn it over to the public?

JAKE CAUSEY: Yeah, I got two questions. And certainly we'll kind of mull all of this over, but one big issue I think is with respect to day tanks. So day tanks are intended to provide overfeed protection. If we have no requirement for day tanks we are eliminating overfeed protection and I haven't heard of anything proposed to provide that same level of overfeed protection in the day tank. I know when we had this discussion a year or so ago we had proposed to not require day tanks in cases where an equivalent level of, let's see, I'll read this right here. We said 10 state standards requires a day tank be provided where bulk storage of liquid chemical is provided. Exception is required for new and existing systems under the following conditions, except in the case of chloride. And then basically it says so chloride always requires a day tank and then when approved alternative means to provide chemical protection or provides at least same level of protection as day tank in addition to the requirements of section 5.5 which is siphon control which is a standard requirement. It has to be something above and beyond that. Or where chemicals are fed directly from shipping containers no larger than 55 gallons. Fifty-five gallon drum or smaller you don't need a day tank, you can feed from that. So one major concern that I've heard is we don't need day tanks, we don't need to provide any overfeed protection. That's going to be a big issue for us.

RANDY HOLLIS: Let me ask a question Jake. How does a day tank prevent overfeed?

JAKE CAUSEY: The quantity that can be feed.

RANDY HOLLIS: Yeah, but if you have chemical feed pumps and they go haywire you can pump out a 24 hour tank in one hour. You've had an overfeed. A day tank doesn't necessarily prevent an overfeed like you're thinking.

JAKE CAUSEY: It limits the amount of overfeed that you can provide to one days worth of chemical verses seven days or more.

RANDY HOLLIS: I think with telemetry in or controls you can prohibit that. I would hate to see us prohibit day tanks when there's a way to control that feed. If you get a small feed LMI feed pump on an aqua ammonia tank it's got a certain capacity it has to pump against pressure. It's not going to pump much more than what you set it for. I don't think day tanks are necessarily the answer to prevent an overflow.

JAKE CAUSEY: I think what it says is if you don't want to provide a day tank then you have to provide some other means that provides the same level of overfeed protection. That wasn't proposed at all. At least not that I saw. That was the language we had before so if there is specific examples I think those would be good to include, otherwise just saying at least the same level of protection I guess as a day tank. That would be sufficient for us. And one other comment was on, this may be something that might apply to some of the others. I think this was a common change on several of them. What I'm looking at is on page 9 of 25. The bottom of the page says suggested language number one. Have a means to determine the volume of liquid contained in the storage tank. I guess what I was thinking about is maybe we include have a means to readily determine volume. I could probably take out a tape measure and spend an hour calculating volume, but in theory that's a means but that's not adequate. We would want a means to, if you talk about load cells that

would have a readout you can readily see how much is in there or a liquid level indicator readily tell you how much is in there. Some of these 9 of 25 might just use the word readily in some of these cases. It only takes a minute to look at something and tell. You don't have to spend.

RANDY HOLLIS: I think if the storage tank is marked in graduations and tells you 100 gallons, 200, 300 gallons that would be acceptable because you can read off the bat approximately 150 gallons.

BEN BRIDGES: Unless it's a bleach tank that's black and you need an outside indicator.

JAKE CAUSEY: Anything you can visibly look at and tell would satisfy that. That's all I got for now.

JIMMY GUIDRY: Any other comments from the group before I ask for public input?

Open it up to the floor. Anyone wants to make comments about this part? Please identify yourself for the record.

WILL NIMBER: Will Nimber, regulatory affairs leader for Dow Chemical. Just wanted to first thank y'all for the opportunity to comment. As many of y'all know Dow Chemical is the world's largest manufacturer of chlorine. We don't sell in this space so this is not a business opportunity for us by any means. But we certainly know how to handle chlorine. We've been making chlorine for over a 100 years. We make over a 100 million pounds of it a day. A million pounds a day. Have been doing that again for 100 years, over 50 years here in Louisiana. So we think we know how to manage chlorine. It appears, at least what Randy was suggesting, that manufacturing facility be exempted is my understanding that that is agreement from the committee?

RANDY HOLLIS: That's being proposed. We will actually meet and vote on these. DHH will make their side by side then this committee will discuss it and then we will vote on that after that.

WILL NIMBLE: I guess if manufacturing facilities aren't exempted I would say that each one of these comments becomes even more important because all of the nuances from the comments even on safety to the storage facilities all that is extremely important and our comments reflect that. I would ask that certainly that that goes through and then if that doesn't for manufacturers, maybe consider broadening it from industrial standpoint by SIC code, whatever it may be, so in the event that a company no longer manufactures chlorine, but does do potable water. Certainly their facilities are operating at very different standards than the typical potable water facility from a health and safety prospect. For example, we have the latest and greatest technology for the most part. Local facilities, Powhatan Water System may not have that. And they certainly don't need to. But we currently operate with maybe a different standard than a lot of the local water systems would. I would just encourage y'all to, if that doesn't come to fruition from an exemption for manufacturers, consider at least exempting industrial facilities that are subject to RMP and PSM that way it still leaves the local water systems in tact as subject to these standards. And then finally I would agree with the comment about the safety. I think that you mentioned earlier if Dow is responding, for example, to a local facility in a mutual aid type of agreement we're going to utilize what we consider to be most affective technology from an emergency response standpoint. We keep up with that, we have facilities all over the world so we're always watching that. Our system may be very different than what a local public system might be. And it's almost impossible to implement that we would have to continue to manage that with the local water systems or they would have to manage with us. Similarly with us managing it with a local fire department. In particular when we provide our own emergency response at many of our facilities. With that being said I appreciate the opportunity to comment.

RANDY HOLLIS: The word, the beginning word on this under the recommendation where it says commercial manufacturers the word commercial was chosen very carefully because we didn't want to say industrial manufacturers because if someone produced chlorine within their plant and only used it within their plant and they're not selling it commercially we don't want them to be exempt in my opinion. If it's someone commercially and they are selling it outside in bulk like y'all, then to me that would exempt it. We don't want some industry saying now we've got our own little chlorine thing so we're therefore exempt. Does that make sense?

WILL NIMBLE: And I agree with that. I think of situations where, for example, if a company manufactured chlorine and then elected to sell those assets and then say it's an industrial park situation where company A owns and manufactures the chlorine, company B buys the chlorine and uses it for potable water. Well now company B, even though they used to be part of company A has an entire new set of requirements when nothing changed. They're still getting their chlorine from company A. Company B is providing backup. I know this is probably getting confusing. But that was the reason to put the industrial. If you even did it by SIC code where it's a paper mill or a petro chemical facility, or refiner that way exempts all of those facilities. Still leaves the potable water producers that do that to make money I guess, or the local public systems, those are still pulled into the role, but the industrial facilities that may or may not change how they are operated have been exempted. That's kind of preferred if you could pick one way, that way it's just not the manufacturerers.

JIMMY GUIDRY: Any other comments from the public? No. Okay, the only thing I would say to that discussion, Jake help me here, chlorination of drinking water we've certainly been in our emergency rule have some exemptions as to who gets

exempted, who has a variance. I don't know if we start out at the beginning of this part saying there is an exemption. I don't like starting out by saying there's an exemption to the rule. Maybe at the end, maybe somewhere in the rule. And it is going to be dicey because if it looks like it's just Dow getting an exemption. We already know what the other companies say. We need to think about how we put this in the rule.

JAKE CAUSEY: I think I kind of see what Randy was getting at as far as commercial.

There's a growing trend public water supplies even generating chlorine on site. So they can become a manufacturer themselves. And then all of a sudden should they be exempt from storage, et cetera. And that's not the same situation where we're talking about Dow. Those are still two very different things. We'll read through it carefully. And I don't think all industrial facilities handle chlorine routinely. I think some industrial facilities, frankly, would be kind of like a public water system when it comes to chlorine. They don't manufacture it and don't handle it routinely. We kind of know exactly what we're trying to target and just to make sure how can we accomplish that.

RANDY HOLLIS: For example, Dow has hundreds of thousands of chlorine stored on site in the manufacturing process. We don't need to come with our regulations and say guys you need to enclose this, you need scrubbers, and all this stuff at all for something like that. That's why they're such an exemption. And so they pipe it from their process straight to water treatment. Will, you had one more comment?

WILL NIMBLE: Just see if y'all knew or at least as you go through the process of reviewing this to understand how many facilities this would really exempt. In the chemical industry I'm only aware of about three. Us and few other facilities. So there's really not very many people that you're going to be exempting. You would

want to craft it, obviously, in such a way that if something changes in the future, a company sells an asset as we talked about, that it doesn't rope them in. I think maybe SIC code or other ways that way the local water systems that maybe started making their own chlorine they're still subject, but the folks that are just industrial users are exempted.

ROBERT BROU: A suggestion to that may be that you spell out some basic criteria. But if we're only dealing with that many make it as basically a permit that you exempt a facility. That way you'd get a chance to review it to make sure it's still the same. You're not talking about a lot. Wouldn't be a big burden to y'all, but then it makes everybody in there, unless they are permitted, an exemption.

JAKE CAUSEY: Depends on how Dow might feel about that.

WILL NIMBLE: Certainly we don't want to do permits when they are not necessary. But at the end of the day if you're going to make industrial facilities spend millions of dollars that's unnecessary, that's silly. We would obviously prefer the most cost effective option.

RANDY HOLLIS: I think the most difficult thing is what really Will brought up and that is if you've got one company that's manufacturing it and they're running the chlorine over to three different facilities adjacent to them cause they manufacture it and it was piped over and then they do this with every chemical. And now all of a sudden they sell off those assets. And so now what do we do with those three adjacent facilities that have been using chlorine from that main facility for 50 years and now they are no longer part of that main plant do they now fall under these regulations? How are we going to handle that? Because now you're talking about major changes to facilities that have operated perfectly for 50 years and the changing ownership now is the only thing that's happened.

JAKE CAUSEY: Changing ownership can have a significant impact on who's operating it, do they know what to do, do they have the same response plan, do they have a response plan. There's a lot of things that that change in ownership impacts that would definitely call into question should they still have that exemption or not.

RANDY HOLLIS: I agree. This is just a question how we are going to address that?

RUSTY REEVES: The original comment here says manufacturer of potable water chemicals. So when that asset sells off they're no longer part of the manufacturing process. Poundage per day, or whatever, say a hundred million pounds a day of chlorine y'all produce. Set a poundage of a million pounds a day. They ain't going to be but a handful of people fits that.

SIDNEY BECNEL: Does Dow produce at all his sites producing chlorine?

WILL NIMBLE: Only one site in Louisiana.

SIDNEY BECNEL: But you would want it to apply?

WILL NIMBLE: I'm just thinking for the future if assets were sold then again if we sell our chlorine plant, for example, then we're required to go and implement all this stuff at our water distribution facility. We're still buying chlorine likely from the new owner and we haven't changed anything, everything else is just secondary. I still think an industrial facility we don't have the same risk that the local public water system in a neighborhood would have because we have emergency response, we have people on shift 24/7, we have the best of the best or most effective technology with respect to detection of chlorine. We know when a leak occurs and we fix it right away.

JAKE CAUSEY: I agree, but I wouldn't apply that for all industrial facilities. I wouldn't go that far with it because they don't all use chlorine to handle it you know as long as you guys, et cetera.

WILL NIMBLE: I think the key is if it's an industrial facility that's subject, again you define

industrial to be petro chem refiners, et cetera, but industrial facility that is subject to OSHA, PSM, RMP that immediately protects the public from everything. All those plans are in place. All the things that we are discussing today, the respiratory protection, it's almost all irrelevant against OSHA, PSM and EPA, RMP kind of cover that. They are exempted. It doesn't pull in facilities that have small 25 pounds of chlorine, whatever. They're not in RMP. I think if you can do it that way kind of takes away the manufacturing and the who's selling what and changing assets. Still going to be a very limited number of facilities. Probably less than ten in the state if I had to guess. Certainly willing to help y'all figure that out if we can provide assistance.

SIDNEY BECNEL: Maybe there's a list of those companies that are required to have this EPA, whatever the regulatory authority is. Is there a specific list, like ten plants?

JAKE CAUSEY: A lot of plants, just not all public water systems.

WILL NIMBLE: A lot of facilities subject to risk management plans. Y'all can probably find that easier than we could. I'm only aware of three in the petro chemical space.

ROBERT BROU: If you have more than a ton of chlorine on site you're subject to RMP. You can't link it strictly to that.

JAKE CAUSEY: We'll look at it.

JIMMY GUIDRY: Let's go ahead and take a five minute bathroom break and then we'll come back and get the word done.

I guess we still have a quorum if we go to voting. At this point we're at old business would be to look at part 2 and part 3 for final approval. So hopefully some of this, a lot of this has been done already, especially part 2 won't take us very long. Jake, if you could tell us what changes were added to part 2 at this point and vote on it.

JAKE CAUSEY: I think there was just a couple of clean up things in part 2 that we did last meeting. I think really the only outstanding piece was the language I think Chris had

worked on for electric controls. Maybe Chris can cover that.

CHRIS RICHARD: There was some concern about the existing systems that don't meet the NEC requirements, but they are perfectly safe and functional. Didn't want to make the plants have to go do it so what we came up with electrical equipment and electrical instrumentation and controls shall be located above grade, in areas not subject to flooding or protect from damage due to water inundation. The design of all electrical work for new facilities or modifications to existing facilities shall conform to the requirements of the applicable codes adopted under the authority of act 12 of the 2005 first extraordinary session and any applicable local codes which may have stricter requirements. Existing electrical and controls at facilities that do not create an unsafe condition and do not reduce the reliability of the equipment or cause failure to the system components may remain.

ROBERT BROU: Would that take out that DS from underneath it?

CHRIS RICHARD: It would cover both.

JIMMY GUIDRY: Everybody okay with those changes? Do I hear a motion that we accept part 2 as written?

CHRIS RICHARD: I make a motion.

JIMMY GUIDRY: Keith seconds. Anybody oppose? Okay, part 2 has been accepted. Now to part 3. It's nice when you get a part done. Part 3, Jake if you could update us on where we're at with that one.

JAKE CAUSEY: Discussed part 3 at our last meeting. I'll quickly go over those changes. I don't remember any real specific issues, but this is the clean cut version with all of that.

CHRIS RICHARD: Is the bold language something that was added? The all cap, subcommittee members thought this section should not be enforced on sanitary

surveys and should be discussed in the to be developed grandfather clause. DHH representatives thought this language should be enforced in the sanitary surveys. Sounds like there's still a conflict.

JAKE CAUSEY: I mean it's referring to what specifically, just H above or?

ROBERT BROU: I think it was there last time we discussed it.

GREG GORDON: Since I dealt with the subcommittee, and I wasn't at the last meeting, but these are number of sources and such they are things that have been, were issues in the past, issues when we started this whole process. And considering various sections of the to be developed grandfather clause could affect that. We just wanted to make sure because I think one thing that subcommittees were concerned about was that if you pass something all of a sudden you now make these, all of us have to be aware that they're going to be on the next sanitary survey. And so we wanted to make sure that didn't happen and so far as those issues you know that we're going to be developing a grandfather clause that's going to kind of be addressing various issues, regulatory and sanitary survey issues at existing facilities. Chris brought this up at one of the committee meetings is that now all of a sudden you're going to have all these new things you're going to have to be a part of at this sanitary survey. You're going to have this long list of failures the first time the sanitary survey is conducted. We didn't want that to happen knowing that there are things like number of sources and existing systems so that was a note that I put in there. I didn't know they were going to keep that. But I think maybe it's to address any concern that committee members may have thinking well now I have to have two sources, I thought we were talking about a grandfather clause for various issues.

JAKE CAUSEY: I think the intent was to approve the document as is and I think that was a note on the subcommittee report that we just left as this may be something the

grandfather subcommittee may want to review. I think we were going to move forward with this part as is and then if there's some grandfathering or something I think we just left a note in there. I guess I can read back through the changes that were incorporated from the last meeting. So 3.0 general was just rewritten as proposed at the last meeting. I don't remember any specific comments on that. Surface water we had added a similar language from the sanitary code. That was pretty much it on page 1. I think on page 2 we just added salt water, wedges, section G at the top. Page 3 was the nuisance plant or animal control section was modified consistent with what was presented in the last meeting. And then on page 4 3.2 groundwater we added springs which is presented. 3.2.1.2 number of sources, that language that was discussed at the last meeting was incorporated. Standby power 3.2.1.3 on page 5 we included the same language that was proposed at the last meeting. Says provided by any community water supply and any non-community water supply serving a hospital. There's a hen in there. That would be a hen. At the bottom of page 5 under quality talking about the GWUDISW systems. We had that language. Page 6 DHH-OPH certified drinking water laboratory. At the bottom of page 6 well location, included that language subject to flooding, graded and drained as to facilitate removal of surface water. Distance from sewers. So we had you can see on page 7 some of the language at the end of page 6 and 7 was the insert from the sanitary code part 12 just basically relocate it here. This is what it specifically relates to, just retained everything as it was. And then bottom of page 7 3.2.3.2 continued sanitary protection about the 50 foot radius of ownership within 100 foot radius of control which can be achieved through ownership, zoning, easements, leasing, or other means, et cetera. Page 8 under general well consideration. Basically added the adoption by reference basically to LAC title 56 part 1. We really put in title

56 reference instead of Louisiana Waterwell Rules and Regulations cause that rule doesn't exist. I don't know it will come back around again. Basically title 56 part 1. Using that terminology instead of Louisiana Waterwell Regulations. Then on page 9 of 17 section 3.2.4.7 upper terminal well construction. We put in the 100 year flood. Think we stuck with the 2 feet above 100 year flood or 2 feet above ground surface. That's for the casing.

RANDY HOLLIS: So if it's not in a flood plain you're saying 12 inch. If it's in a flood plain area then 2 feet above the highest flood elevation or 2 feet above ground surface. If we're not in a flood plain 12 inches is still okay.

JAKE CAUSEY: And then C in that same section we added the 100 year flood for the pumphouse floor.

CHRIS RICHARD: On the one that says at least 2 feet above the highest flood level which may have occurred in a 100 year period to me that's not the same as 100 year flood elevation. You can have a 500 year flood that occurs in a 100 year period.

JAKE CAUSEY: It will say 100 year flood elevation. Instead of the highest flood level may have occurred at 100 we'll just say above the 100 year flood elevation. Which is what it says in C. And then on page 10 well abandonment. Actually I think we put in what we had in part 12 there relative to title 56. So this was one point of discussion 3.2.5.2. Remember the plumbness and alignment requirements discussion. So we have the AWWA A100 standard listed there. And we did look at that standard and it does have plumbness and alignment requirements in that standard for waterwell construction. So basically I guess really those standards aren't as, more specific to the type of pump that you're going to put in the casing and that's why there was the discussion about the engineer you know may accept anything that's not within the specs. What it said we adopt A100 says test method and allowable tolerance shall be

clearly stated in the specifications for the well construction. And then C if it doesn't meet those requirements that are specified by the engineer it says that he may accept them if it doesn't interfere with installation or operation of the pump or uniform placement of grout or affect long term integrity. And really if you read the standard it's based on what type of pump, line shaft pumps, vertical, submersible pumps, other things and it's a pretty tight window. Really when I read that in context with the A100 standard read it made a lot more sense to be quite honest. Because those tolerances would be different and it really affects the long term stuff. I think more with line shaft pumps than anything. I think it's okay as it is. Deleted the other sections. Page 14 to 17, some changes. Sections D,E, and F we copied over from chapter 3 and part 12 and I actually see one typo there. F says 10 year period and it says highest flood level which may have occurred in a 10 year period. Which I guess is where that language comes from part 12, that's how it said it. We'll just change it to say 100 year flood elevation. So we make that one change in F on page 14. Then also on page 16, 17 section 3.2.7.6 casing vent. Note that same change cause it says highest level occurred in a 100 year period.

DIRK BARRIOS: We only have 16 pages.

CARYN BENJAMIN: He's reading from a highlighted version.

JAKE CAUSEY: Sorry, I didn't realize that. Section 3.2.7.6.a. That's part 3. So we just noted those three changes to 100 year flood elevation.

GREG GORDON: I just had one question. So on page 7 of 16 where you have the distance in feet you said about control by zoning or ownership. And so the one thing I just want to try to make sure cause I know I think you and I have talked, and I know there's a water system in our area that's having an issue with it is that they were able to secure a 100 feet for their secondary well site, but the property next to it which

they couldn't get because, quite frankly it's in a crappy area, succession, nobody knows who owns what, but it actually under St. Tammany Parish's comprehensive rezoning it has a zoning classification that was given to it that would allow a house or even somebody to put a mechanical treatment plant there or an ATU. I'm assuming you're thinking mechanical treatment sewage for a house or even if they built sizable four houses with one 2500 gallon plant or something like that. That well though would still be allowed to be placed within that?

JAKE CAUSEY: Ask the question one more time.

GREG GORDON: You said when you say control by zoning that's a pretty difficult question because you can get people if you're putting a secondary source for your water system you're like hey I found four acres or whatever and I'm putting it out there I found a piece of property and it's within 100 feet away from any existing source that's out there. However, the zoning for those pieces of property could allow somebody to let's say subdivide something into four lots and put a 3500 gallon treatment plant there. Or for Habitat for Humanity to build three or four houses there and put their little plant up or something like that. That's the confusion I know one of our water systems is having cause I think the engineer's, not held it up, kind of is like well somebody right on the other side of you can actually do something.

JAKE CAUSEY: You don't own a 100 feet?

GREG GORDON: They own the 100 feet, it's the zoning outside of that 100 feet.

JAKE CAUSEY: Outside the 100 feet the zoning is just between that 50 foot and 100 foot radius. When you're outside of that 100 foot radius it's slightly less of a concern. If you're going to install a hazardous waste landfill 101 feet away you might need to be concerned. But a mechanical like you're talking about.

GREG GORDON: All right, thank you.

ROBERT BROU: And if you build it before they do they have to go to DHH for a permit for that plant.

JIMMY GUIDRY: Actually they probably get that from DEQ, a waste fill.

JAKE CAUSEY: Yeah, I'm just saying it's not that we're not concerned about anything that's built outside the 100 foot, but those things aren't really specified.

GREG GORDON: Unless you actually had it was sized enough and you had your plans through DHH, but your permit went through DEQ but on your plan you may not be showing the existing usages around you or properly turning in a proper survey. Sometimes the surveyor won't catch things, or if it's behind a row of trees they won't bother to get around, or find a locked gate and they'll say they tried and say designation or whatever it is unknown with a line to it.

JIMMY GUIDRY: Anymore discussion on part 3? Do I hear a motion that we accept it with the changes?

GREG GORDON: I make a motion.

CHRIS RICHARD: Seconded.

JIMMY GUIDRY: Any oppose? We got another round of applause. All right, do I hear a motion that we adjourn?

GREG GORDON: I make a motion.

JIMMY GUIDRY: All right. Thank you. I told y'all we would be on time and thank God you did. Y'all have a good day. And we're really ramping up to get as much of this done as we can so we can show the legislature we've accomplished a lot this past year.