

MINUTES
WATER QUALITY MANAGEMENT ADVISORY COUNCIL
October 10, 2017
Oklahoma Department of Environmental Quality
Multipurpose Room
Oklahoma City, Oklahoma

Official WQMAC

Approved at January 11, 2018 Meeting

Notice of Public Meeting – The Water Quality Management Advisory Council (WQMAC) convened for a Regular Meeting at 2:00 p.m. at the Oklahoma Department of Environmental Quality (DEQ), 707 North Robinson, Oklahoma City, Oklahoma. The meeting was held in accordance with the Open Meeting Act, with notice of the meeting given to the Secretary of State on October 13, 2016 and again August 29, 2017. The agenda was posted at DEQ twenty-four hours prior to the meeting. Mr. Duane Winegardner, Chair, called the meeting to order. Ms. Quiana Fields called roll and confirmed that a quorum was present.

MEMBERS PRESENT

Brian Duzan
 Mark Matheson
 Jon Nelson
 Jim Rodriguez
 Jeff Short
 Terry Wyatt
 Duane Winegardner

MEMBERS ABSENT

Robert Carr
 Steve Sowers
 Debbie Wells

DEQ STAFF PRESENT

Shellie Chard
 Chris Armstrong
 Hillary Young
 Mark Hildebrand
 Michelle Wynn
 Travis Couch
 Wendy Sheets
 Traci Kelly
 Lee Dooley
 David Cates
 Tory Smith
 Betsy Streuli
 Jon Roberts
 Patty Thompson
 Kelly Dixon
 Michael Moe
 Greg Carr
 Saba Tahmassebi
 Quiana Fields

OTHERS PRESENT

Lynette Wrany, Court Reporter

Approval of Minutes from the July 25, 2017 Meeting – Mr. Winegardner called for a motion to approve the Minutes of the July 25, 2017 Regular Meeting. Mr. Rodriguez moved to approve and Mr. Nelson made the second.

See transcript pages 4 – 5

Brian Duzan	Yes	Terry Wyatt	Yes
Mark Matheson	Yes	Duane Winegardner	Yes
Jon Nelson	Yes		
Jim Rodriguez	Yes		
Jeff Short	Yes		

COUNCIL MEETING SCHEDULE FOR 2018 – Mr. Winegardner called for a motion to approve the 2018 schedule as outlined in the agenda; January 11, May 1, July 31 and September 25. Mr. Matheson moved to approve and Mr. Duzan made the second.

See transcript pages 5 – 7

Brian Duzan	Yes	Terry Wyatt	Yes
Mark Matheson	Yes	Duane Winegardner	Yes
Jon Nelson	Yes		
Jim Rodriguez	Yes		
Jeff Short	Yes		

PERMANENT RULEMAKING – OAC 252:626 – PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS – Mr. Greg Carr, Chief Engineer of the WQD, stated that the Department is proposing to amend the definition for “Public Water Supply (PWS) System” to exclude certain purchase water systems that meet explicit requirements and amend the definition for “Validated dose” in order to correct a typographical error. Hearing no questions or comments by the Council or by the public, Mr. Winegardner called for a motion. Mr. Matheson moved to approve and Mr. Rodriguez made the second.

See transcript pages 7 – 11

Brian Duzan	Yes	Terry Wyatt	Yes
Mark Matheson	Yes	Duane Winegardner	Yes
Jon Nelson	Yes		
Jim Rodriguez	Yes		
Jeff Short	Yes		

PERMANENT RULEMAKING – OAC 252:631 – PUBLIC WATER SUPPLY OPERATION – Mr. Carr stated that the DEQ staff will be proposing to amend the definition for “Public Water Supply (PWS) System”; update the rule concerning the date of the incorporation by reference of certain federal regulations from July 1, 2015 to January 1, 2017, specifically allowing for newly approved alternative testing methods for contaminant listed at 40 CFR 141.21(f); clarify the reporting requirements of 40 CFR 141 and clarify that groundwater systems with certain advanced treatment processes must run a control test for “stability to calcium carbonate.” Hearing no questions or comments by the Council or by the public; Mr. Winegardner called for a motion. Mr. Nelson moved to approve and Mr. Duzan made the second.

See transcript pages 11 – 13

Brian Duzan	Yes	Terry Wyatt	Yes
Mark Matheson	Yes	Duane Winegardner	Yes
Jon Nelson	Yes		
Jim Rodriguez	Yes		
Jeff Short	Yes		

PERMANENT RULEMAKING – OAC 252:653 – AQUIFER STORAGE AND RECOVERY – Ms. Hillary Young, Engineering Manager of the LPD, stated that the Department is proposing to create a new Chapter, OAC 252:653 (Aquifer Storage and Recovery), to allow for a regulatory structure for an aquifer storage and recover (ASR) program. The purpose of the Chapter is to enable DEQ to issue permits to those who wish to undertake an ASR project. The Chapter establishes a multi-phase permitting process and requirements for the construction and operation of an ASR project. The proposed rule requires appropriate testing and modeling to ensure a project is feasible and that the aquifer is not harmed. In addition, the Chapter establishes the fees associated with ASR permitting and operations. Following

questions and comments by the Council and none by the public, Mr. Winegardner called for a motion. Ms. Wyatt moved to approve and Mr. Matheson made the second.

	<i>See transcript pages 13 - 32</i>		
Brian Duzan	Yes	Terry Wyatt	Yes
Mark Matheson	Yes	Duane Winegardner	Yes
Jon Nelson	Yes		
Jim Rodriguez	Yes		
Jeff Short	Yes		

Mr. Winegardner did Item #8 first and then went back to Item #7 on the agenda.

PERMANENT RULEMAKING – OAC 252:4 – RULES OF PRACTICE AND PROCEDURE – Ms. Young stated that the Department is proposing to create three new sections 252:4-7-79 through 252:4-7-81 for Aquifer Storage and Recovery (ASR) applications within Part 7 Water Quality Division Tiers and Timelines of Subchapter 7. New section 252-4-7-79 – Aquifer Storage and Recovery (ASR) application – Tier I, new section 252:4-7-80 – ASR applications – Tier II, and new section 252:4-7-81 – ASR applications – Tier III. The proposed rulemaking will make it possible to apply to DEQ for permits required for an ASR project. ASR is one of the tools in the portfolio of options DEQ is pursuing to address water quantity concerns across the state, especially during times of drought. Following questions and comments by the Council and none by the public, Mr. Winegardner called for a motion. Mr. Rodriguez moved to approve and Mr. Duzan made the second.

	<i>See transcript pages 32 - 36</i>		
Brian Duzan	Yes	Terry Wyatt	Yes
Mark Matheson	Yes	Duane Winegardner	Yes
Jon Nelson	Yes		
Jim Rodriguez	Yes		
Jeff Short	Yes		

DISCUSSION OF RULEMAKING FOR JANUARY 2018 WQMAC MEETING - OAC 252:628 – INDIRECT POTABLE REUSE FOR SURFACE WATER AUGMENTATION – Mr. Carr stated that the DEQ staff will be proposing a new chapter to regulate indirect potable reuse discharges to surface water bodies for the purpose of augmenting public water supplies. There were comments by the Council and none by the public.

See transcript pages 36 – 53

DIRECTOR’S REPORT – Ms. Shellie Chard, Division Director of the WQD provided an update on other division activities.

See transcript pages 53 – 60

NEW BUSINESS – None

ANNOUNCEMENTS – Mr. Winegardner mentioned that the Governor's Water Conference will be October 31 and November 1. Also, the next scheduled WQMAC meeting will be on January 11, 2018 at 2:00 p.m. in the Multi-Purpose Room, 1st floor, DEQ building.

See transcript pages 60 - 61

ADJOURNMENT - Mr. Winegardner entertained a motion to adjourn. Mr. Nelson moved to approve and Mr. Duzan made the second. The meeting was adjourned at 3:20 p.m.

Transcripts and Attendance Sheet are attached as an official part of these Minutes.

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY MANAGEMENT ADVISORY COUNCIL

REGULAR MEETING

October 10, 2017 - 2:00 p.m.

at the Multi-Purpose Room, 1st Floor DEQ Building

707 N. Robinson

Oklahoma City, Oklahoma

WORD FOR WORD REPORTING, L.L.C.

111 HARRISON AVE, SUITE 101
OKLAHOMA CITY, OKLAHOMA 73104

(405)232-9673

REPORTED BY: Jennifer Payne Kaelin, CSR

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1 COUNCIL MEMBERS PRESENT:
 2 MR. Brian Duzan
 3 Mr. Mark Matheson
 4 Mr. Jon Nelson
 5 Mr. Duane Winegardner - Chairman
 6 Mr. Jim Rodriguez
 7 Mr. Jeffrey Short, Vice Chairman
 8 Ms. Terry Wyatt
 9 COUNCIL MEMBERS ABSENT:
 10 Mr. Steve Sowers
 11 Ms. Debbie Wells
 12 ALSO PRESENT:
 13 Ms. Quiana Fields, Secretary of Board and Council
 14 Mr. Greg Carr, Water Quality Division Chief Engineer
 15 Ms. Hillary Young, Land Protection Division Chief Engineer
 16 Ms. Shellie Chard, Water Quality Division Director
 17 Mr. Saba Tahmassebi, Engineering Manager
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1 MR. JON NELSON: Here.
 2 MS. QUIANA FIELDS: Mr. Rodriguez?
 3 MR. JIM RODRIGUEZ: Here.
 4 MS. QUIANA FIELDS: Mr. Short?
 5 VICE CHAIRMAN JEFF SHORT: Here.
 6 MS. QUIANA FIELDS: Mr. Sowers is absent.
 7 Ms. Wells is absent.
 8 Ms. Wyatt?
 9 MS. TERRY WYATT: Here.
 10 MS. QUIANA FIELDS: Mr. Winegardner?
 11 CHAIRMAN DUANE WINEGARDNER: Here.
 12 MS. QUIANA FIELDS: We have a quorum.
 13 CHAIRMAN DUANE WINEGARDNER: Thank you very much.
 14 Okay. I hope that all of the members have had a chance
 15 to review the minutes from the July 25th meeting. And I
 16 will entertain a motion.
 17 MR. JIM RODRIGUEZ: So moved.
 18 CHAIRMAN DUANE WINEGARDNER: So moved.
 19 MR. JON NELSON: Seconded.
 20 CHAIRMAN DUANE WINEGARDNER: And seconded. Okay.
 21 Roll call, please.
 22 MS. QUIANA FIELDS: Mr. Duzan?
 23 MR. BRIAN DUZAN: Yes.
 24 MS. QUIANA FIELDS: Mr. Matheson?
 25 MR. MARK MATHIESON: Yes.

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1 CALL TO ORDER. 2:00 P.M.
 2 CHAIRMAN DUANE WINEGARDNER: Well, good afternoon.
 3 Just making the count around the table here, it appears that
 4 we have a quorum. I'd like to call this meeting to order.
 5 And the regular meeting -- this regular meeting of the
 6 Water Quality Management Advisory Council was called in
 7 accordance with the Open Meeting Act.
 8 Notice for this October 10, 2017, meeting was filed
 9 with the Secretary of State on October 13, 2016, and again
 10 August 29, 2017. The Agenda was duly posted at the DEQ at
 11 least 24 hours prior to the meeting.
 12 Only matters pertaining to the posted Agenda may be
 13 considered at this regular meeting. In the event that this
 14 meeting is continued or reconvened, public notice of the
 15 date, time and place of the continued meeting will be given
 16 by announcement at this meeting. Only matters appearing on
 17 the Agenda of a meeting which is continued may be discussed
 18 at the continued or reconvened meeting.
 19 May we have the roll call, please?
 20 MS. QUIANA FIELDS: Mr. Carr is absent.
 21 Mr. Duzan?
 22 MR. BRIAN DUZAN: Here.
 23 MS. QUIANA FIELDS: Mr. Matheson?
 24 MR. MARK MATHIESON: Here.
 25 MS. QUIANA FIELDS: Mr. Nelson?

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1 MS. QUIANA FIELDS: Mr. Nelson?
 2 MR. JON NELSON: Yes.
 3 MS. QUIANA FIELDS: Mr. Rodriguez?
 4 MR. JIM RODRIGUEZ: Yes.
 5 MS. QUIANA FIELDS: Mr. Short?
 6 VICE CHAIRMAN JEFF SHORT: Yes.
 7 MS. QUIANA FIELDS: Ms. Wyatt?
 8 MS. TERRY WYATT: Yes.
 9 MS. QUIANA FIELDS: Mr. Winegardner?
 10 CHAIRMAN DUANE WINEGARDNER: Yes.
 11 MS. QUIANA FIELDS: Motion passed.
 12 CHAIRMAN DUANE WINEGARDNER: Thank you very much.
 13 Okay. We have now an opportunity to discuss the
 14 Council meeting schedule for 2018, and I think Shellie is
 15 going to lead us in that.
 16 MS. SHELLIE CHARD: Okay. In front of you, you
 17 have dates that correspond as closely as possible to our
 18 normal meeting schedule. However, you will notice that the
 19 January date, as proposed, is actually Thursday,
 20 January 11th. The reason for that is the February board
 21 meeting, it is set on February 16th in order to give the
 22 staff and the court reporter and everyone enough time to do
 23 the administrative process. We try to have more than the
 24 minimum 30 days between those two. So that's why we do have
 25 a proposal for one Thursday meeting. The other three are on

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1 Tuesdays.
 2 I think Mark kind of sent out some e-mails and feelers
 3 to kind of get everybody's kind of feel for what they
 4 thought about dates, and these were the four that we came up
 5 with that are listed on your Agenda. We can look at other
 6 dates if we need to, but those were the best dates we could
 7 come up with to match the Environmental Quality Board
 8 schedule, meeting room schedule and administrative timelines
 9 for dates of publication and that sort of thing.
 10 Does anybody have any questions or proposals for
 11 changes?
 12 (No response.)
 13 CHAIRMAN DUANE WINEGARDNER: If there are no
 14 comments from the board, are there are -- are there any
 15 other concerns? Any at all? If not, I will call for a roll
 16 call.
 17 MS. QUIANA FIELDS: A motion.
 18 CHAIRMAN DUANE WINEGARDNER: A motion first of
 19 all.
 20 MR. MARK MATHIESON: I'm going to make a motion
 21 that we approve those dates.
 22 MR. BRIAN DUZAN: Second.
 23 CHAIRMAN DUANE WINEGARDNER: And a second. Okay.
 24 Roll call, please.
 25 MS. QUIANA FIELDS: Mr. Duzan?

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1 MR. BRIAN DUZAN: Yes.
 2 MS. QUIANA FIELDS: Mr. Matheson?
 3 MR. MARK MATHIESON: Yes.
 4 MS. QUIANA FIELDS: Mr. Nelson?
 5 MR. JON NELSON: Yes.
 6 MS. QUIANA FIELDS: Mr. Rodriguez?
 7 MR. JIM RODRIGUEZ: Yes.
 8 MS. QUIANA FIELDS: Mr. Short?
 9 VICE CHAIRMAN JEFF SHORT: Yes.
 10 MS. QUIANA FIELDS: Ms. Wyatt?
 11 MS. TERRY WYATT: Yes.
 12 MS. QUIANA FIELDS: Mr. Winegardner?
 13 CHAIRMAN DUANE WINEGARDNER: Yes.
 14 MS. QUIANA FIELDS: Motion passed.
 15 CHAIRMAN DUANE WINEGARDNER: Okay. Very good.
 16 Now we have before us -- oh, before we go too much
 17 further, when we get down to -- I would like to reverse
 18 items seven and eight when we get that far along. I would
 19 like to do eight before seven.
 20 Okay. Now, going back to number five, Permanent
 21 Rulemaking for Public Water Supply Construction Standards.
 22 Greg Carr is going to --
 23 MR. GREG CARR: Yes, sir. All right. Hello.
 24 Thank you, sir. I appreciate the opportunity to speak with
 25 the Council. My name is Greg Carr. I'm the Water Quality

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1 Division Chief Engineer. The first thing we'll start with
 2 today is we're proposing a new definition for Public Water
 3 Supply System. If you turn to page -- let's see. Looks
 4 like the middle of Page 3. And this is for 252 626, Public
 5 Water Supply Construction Standards. That's where I'm
 6 starting with. And you can see the additional parts are
 7 underlined.
 8 Essentially, we're excluding certain purchase water
 9 systems, specifically manufactured home communities, mobile
 10 home parks, RV parks and correctional facilities. And note
 11 that these do not have to provide treatment. They do not
 12 resell water, also. And they must be constructed,
 13 maintained and operated under an approved plumbing code and
 14 purchase water from a permitted water system. And at least
 15 initially, also they need to be in compliance with the Safe
 16 Drinking Water Act, so we're not just using this to make
 17 things go away.
 18 This is an effort to apply the rule equally and
 19 equivalently to things such as apartment complexes to make
 20 us more -- more even across the scale. And we've also -- we
 21 discussed this about two months ago with EPA. They concur
 22 that it meets with their rules.
 23 And just as another note, we expect the fees on this,
 24 between the -- between our PWS fees and lab analyses and
 25 probably a proportional lowering of the PWSS Grant, we would

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1 probably would see a lowering of about \$243,000 per year.
 2 But we also expect the workload to decrease greatly in an
 3 essentially proportional amount.
 4 Should I keep going with the rest, or do you want to
 5 discuss that one?
 6 CHAIRMAN DUANE WINEGARDNER: No. Let's -- does
 7 anyone have any questions or --
 8 (No response.)
 9 MR. GREG CARR: All right. Fantastic.
 10 CHAIRMAN DUANE WINEGARDNER: Go ahead.
 11 MR. GREG CARR: All right. Secondly, also near
 12 the bottom of Page 5 in the same Section on 626, we are
 13 rejoining the -- we are removing the redundant word "means."
 14 You can see it's been crossed out.
 15 And then moving to Chapter 631, looking at Page 2 now.
 16 MS. SHELLIE CHARD: Greg, need to vote on that.
 17 MR. GREG CARR: I'm sorry?
 18 MS. SHELLIE CHARD: Before you move on, the
 19 Council needs to take action on this chapter.
 20 MR. GREG CARR: Okay.
 21 MR. MARK MATHIESON: Well, I've read through those
 22 pretty extensively and I make a motion that we approve them
 23 as written.
 24 MR. JIM RODRIGUEZ: Second.
 25 CHAIRMAN DUANE WINEGARDNER: Okay. Is there any

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1 discussion from the board members?
 2 (No response.)
 3 CHAIRMAN DUANE WINEGARDNER: Personally, I think
 4 this is a very good idea to clarify this.
 5 Are there any comments from the public?
 6 (No response.)
 7 CHAIRMAN DUANE WINEGARDNER: Okay. Hearing
 8 none --
 9 MR. GREG CARR: Fantastic.
 10 CHAIRMAN DUANE WINEGARDNER: -- then let's
 11 proceed.
 12 MR. GREG CARR: Thank you, sir.
 13 Moving on to chapters --
 14 MS. SHELLIE CHARD: Hold up, hold up.
 15 MS. QUIANA FIELDS: I have -- we need a roll call
 16 vote.
 17 MR. GREG CARR: Oh, so eager.
 18 MS. QUIANA FIELDS: Mr. Duzan?
 19 MR. BRIAN DUZAN: Yes.
 20 MS. QUIANA FIELDS: Mr. Matheson?
 21 MR. MARK MATHESON: Yes.
 22 MS. QUIANA FIELDS: Mr. Nelson?
 23 MR. JON NELSON: Yes.
 24 MS. QUIANA FIELDS: Mr. Rodriguez?
 25 MR. JIM RODRIGUEZ: Yes.

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1 MS. QUIANA FIELDS: Mr. Short?
 2 VICE CHAIRMAN JEFF SHORT: Yes.
 3 MS. QUIANA FIELDS: Ms. Wyatt?
 4 MS. TERRY WYATT: Yes.
 5 MS. QUIANA FIELDS: Mr. Winegardner?
 6 CHAIRMAN DUANE WINEGARDNER: Yes.
 7 MS. QUIANA FIELDS: Motion passed.
 8 CHAIRMAN DUANE WINEGARDNER: Thank you.
 9 Okay. Lead us on through 631.
 10 MR. GREG CARR: 631, yes, sir. So this is a
 11 Public Water Supply operation so we're looking at Page 2.
 12 Let's see here. Make sure I'm at the right spot. And you
 13 can see near the top of Page 2 we're just changing the
 14 Public Water Supply system definition to make it consistent
 15 with -- as we previously discussed.
 16 At the bottom of Page 2, we're changing the date of
 17 incorporation by a reference with certain federal rules.
 18 We're bringing that up to spec with January 1st, 2017.
 19 You'll see the old date was July 1st, 2015.
 20 Let's see. We also have -- and then specifically
 21 that -- that will actually allow some alternative testing
 22 methods for coliforms. It's part of the new CFR.
 23 And then also we have near page -- on Page 3, near the
 24 middle, we've added the word "reporting" as there were some
 25 additional reporting requirements that have been added to

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1 40 CFR 141.
 2 And then Page 4, in the middle -- close to the middle,
 3 we added "Stability to calcium carbonate." And that was
 4 just omitted before. It just hung at "and" previously.
 5 That is all.
 6 CHAIRMAN DUANE WINEGARDNER: Okay. Discussion?
 7 Any comments from the board?
 8 (No response.)
 9 CHAIRMAN DUANE WINEGARDNER: Any comments from the
 10 public on this?
 11 (No response.)
 12 MR. JON NELSON: Move approval.
 13 MR. BRIAN DUZAN: Second.
 14 CHAIRMAN DUANE WINEGARDNER: Moved and seconded.
 15 Okay.
 16 MS. QUIANA FIELDS: Mr. Duzan?
 17 MR. BRIAN DUZAN: Yes.
 18 MS. QUIANA FIELDS: Mr. Matheson?
 19 MR. MARK MATHESON: Yes.
 20 MS. QUIANA FIELDS: Mr. Nelson?
 21 MR. JON NELSON: Yes.
 22 MS. QUIANA FIELDS: Mr. Rodriguez?
 23 MR. JIM RODRIGUEZ: Yes.
 24 MS. QUIANA FIELDS: Mr. Short?
 25 VICE CHAIRMAN JEFF SHORT: Yes.

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1 MS. QUIANA FIELDS: Ms. Wyatt?
 2 MS. TERRY WYATT: Yes.
 3 MS. QUIANA FIELDS: Mr. Winegardner?
 4 CHAIRMAN DUANE WINEGARDNER: Yes.
 5 MS. QUIANA FIELDS: Motion passed.
 6 CHAIRMAN DUANE WINEGARDNER: Thank you.
 7 MR. GREG CARR: Thank you.
 8 CHAIRMAN DUANE WINEGARDNER: Okay. Now, let's
 9 tackle number eight, Permanent Rulemaking, Aquifer Storage
 10 and Recovery.
 11 MS. HILLARY YOUNG: I'm Hillary Young, our Chief
 12 Engineer of the Land Protection Division, and I'll be
 13 presenting Chapter 653, Aquifer Store and Recovery, for your
 14 vote.
 15 DEQ has created a new chapter 653, Aquifer Storage and
 16 Recovery to allow for a regulatory structure for an aquifer
 17 storage and recovery program. The proposed rules will
 18 enable DEQ to issue permits to those who wish to undertake
 19 an ASR project.
 20 The proposed rules establish a multi-phase permitting
 21 process, requirements for the construction and operation of
 22 an ASR project and appropriate testing and modeling to
 23 ensure a project is feasible and that the aquifer is not
 24 harmed.
 25 As you may recall from the last Council meeting,

<p style="text-align: right;">Page 14</p> <p>1 Chapter 653 consists of six subchapters. They are General 2 Provisions, Raw Water and Aquifer Characterization, ASR 3 Treatment Plant Construction, ASR Water Delivery 4 Construction, Aquifer Storage and Recovery Operations and 5 Cost Estimates and Financial Assurance. 6 Now, I'd like to give you a brief overview of how an 7 ASR project will proceed under these rules. So that if we 8 have an applicant that wants to come in and put in an ASR 9 facility, this is what they would do under these rules. 10 First of all, they need to put together a statement of 11 interest, which is just a general discussion of the planned 12 ASR project to include such information as location, source 13 of the raw water; what's in the area, such as springs and 14 rivers; legal access to the property, any water rights. And 15 then they're required to have an initial meeting with DEQ. 16 This is to discuss the project and evaluate the project's 17 viability to ensure if there's an red flags or any project 18 stoppers at the beginning, that we identify them upfront. 19 This is also the beginning of the DEQ and the applicant 20 working together, and this relationship will continue 21 throughout the permitting process so that we have a smooth 22 transition through the entire process. 23 The next thing that the applicant would need to do is a 24 raw water and aquifer characterization. So they would need 25 to submit a plan to DEQ to evaluate the raw water. You</p>	<p style="text-align: right;">Page 16</p> <p>1 the way that they had assumed it would operate when they 2 designed it. 3 The applicant will take this information, from testing 4 the ASR facility as constructed, and use it to submit an 5 operating permit application. The application will include 6 such things as operating, maintenance and monitoring and 7 reporting requirements, as well as contingency plans. Also 8 needed is for the facility to establish financial assurance 9 for closure prior to facility operation. 10 And then issuance of the operating permit will include 11 specific conditions for operating -- operation and 12 monitoring of the facility. 13 Now, DEQ has not received any formal comments on these 14 rules. However, we did receive feedback at the last Council 15 meeting, and as a result -- and at the public meetings. We 16 had three public meetings, as well -- and public meetings. 17 And as a result, DEQ made some minor changes and 18 clarifications since the last Council meeting. 19 No substantial changes were made. The more noteworthy 20 changes include the addition of the definition of "aquifer," 21 which states "for the purposes of this Chapter, means a 22 subsurface water-bearing zone limited in extent by the area 23 of hydrologic effect associated with the ASR project." 24 We also included an additional exclusion to the 25 definition of "Aquifer Storage and Recovery." And it</p>
<p style="text-align: right;">Page 15</p> <p>1 know, where is the raw water coming from, what kind of 2 constituents are in it, and also evaluate the aquifer and 3 the geology. Again, what kind of constituents are in the 4 aquifer, how quickly does the groundwater move, what about 5 the aquifer media, that type of information. 6 So once the plan is approved, the applicant will 7 proceed with their characterization. And then once that -- 8 they get the information that they need, then they will 9 prepare a report and they will take that information to 10 determine whether or not they need an ASR water treatment 11 plant. So depending on the raw water source and the 12 aquifer, the characteristics of the aquifer, they will make 13 a determination on whether the water needs to be treated 14 prior to delivering to the aquifer. And if so, they need to 15 submit an application for an ASR treatment plant 16 construction permit. 17 And the applicant will also need to take that 18 information and submit an application for an ASR water 19 delivery mechanism construction permit. So this would be 20 for the recharged wells, infiltration basin or other water 21 delivery mechanism. 22 After the construction permit is evaluated and issued, 23 they will -- the applicant would construct the water 24 delivery, the ASR facility and run tests. So they will do 25 pilot testing to ensure the facility is going to operate in</p>	<p style="text-align: right;">Page 17</p> <p>1 exclusively states that ASR activities do not include 2 groundwater recharge or augmentation from nonpoint source, 3 runoff or stormwater discharge under the jurisdiction of the 4 Department of AG. 5 And this would include runoff from such things as 6 agricultural crop production, agricultural services, 7 livestock production, feed yards, livestock markets and 8 animal waste. 9 We also specifically stated that ASR does not 10 constitute water reuse, and this is to eliminate any 11 confusion between the ASR rules and the water reuse rules. 12 So if you're doing an ASR project, you just look at the ASR 13 rules. 14 We also included the definition of "Stored Water" -- 15 added the definition of "Stored Water" to say that it means 16 that -- "it is water in an aquifer that has been delivered 17 pursuant to the ASR project." So this way it's distinct 18 from the water that's currently in the aquifer, so you have 19 the stored water that's delivered and then water in the 20 aquifer. 21 We also added 653-1-10, which is notifications. And as 22 part of the permitting process, the applicant has to notify, 23 by certified mail, all persons who own the land or reside on 24 the land that directly overlies any part of the aquifer. 25 Additionally, the applicant has to notify oil and natural</p>

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1 gas associations that represent mineral rights owners.
 2 And finally, the other noteworthy addition was in
 3 subchapter five, 65J-5-4, we added an operator certification
 4 requirement for the ASR treatment plant.
 5 Okay. Are there any questions?
 6 MR. JON NELSON: Hillary, all landowners above the
 7 entire aquifer?
 8 MS. HILLARY YOUNG: Aquifer as its defined in our
 9 rules, which would --
 10 MR. JON NELSON: Okay.
 11 MS. HILLARY YOUNG: -- which would mean the
 12 subsurface water-bearing zone limited in extent by the area
 13 of hydrologic effect. And as you'll recall, the area of
 14 hydrologic effect is also defined. And it means "the area
 15 determined by the projected extent of the underground stored
 16 water as calculated by using site-specific hydrogeologic
 17 information, and as influenced by the specific design and
 18 anticipated operation." So it would be any area that's
 19 affected by the project, so it wouldn't just be the -- an
 20 infinite aquifer, just any area that's affected by the
 21 project.
 22 MR. JON NELSON: As vetted by DEQ?
 23 MS. HILLARY YOUNG: Right.
 24 MR. JON NELSON: Okay. I'm still a little
 25 confused as to how -- I guess, stored water, the water that

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1 they will store in the aquifer, is -- they put it in the
 2 aquifers to use, right?
 3 MS. HILLARY YOUNG: Right.
 4 MR. JON NELSON: So there's no water rights issues
 5 that OWRB is concerned about, or is it clearcut?
 6 MS. HILLARY YOUNG: Well, what will happen is that
 7 when they approach DEQ, first of all, we will involve the
 8 Water Board in our initial meeting. And also, the Water
 9 Board requires an ASR, a water plan to -- to look at water
 10 rights.
 11 MR. SABA TAHMASSEBI: Excuse me. You want me
 12 to --
 13 Actually, the last year, the Legislature
 14 Senate Bill 1219 was passed that paved the way for OWRB to
 15 issue water rights permits for ASR projects. Part of the
 16 reason we included a separate definition for stored water
 17 was to alleviate any future confusion that might arise from
 18 this. That Senate Bill 1219 and Water Board right now is
 19 developing rules for how they're going to issue permits for
 20 water rights for ASR.
 21 But then a prerequisite to those water rights permits
 22 is a permit from DEQ, which is what Hillary is talking
 23 about. So once an applicant wants to do ASR, it's so
 24 crucial that they meet with both DEQ and Water Board at the
 25 same time so that there's no duplication of effort and

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1 everybody is on board.
 2 Procedurally, they would get a permit from DEQ. After
 3 they get the permit from DEQ, then they get a permit from
 4 the Water Board for water rights.
 5 MR. JON NELSON: Okay. So there is a procedure
 6 they'll have to go through to reconcile that?
 7 MR. SABA TAHMASSEBI: Correct.
 8 MR. JON NELSON: Okay.
 9 MR. SABA TAHMASSEBI: And that's -- that's spelled
 10 out in Senate Bill 1219 last year.
 11 MR. JON NELSON: Okay. Hillary, is there a
 12 required pilot test on every one of these?
 13 MS. HILLARY YOUNG: Yes.
 14 MR. JON NELSON: Okay. And they'll have to have
 15 some kind of an interim permit to do that or --
 16 MS. HILLARY YOUNG: The pilot testing and facility
 17 construction will be part of the construction permit.
 18 MR. JON NELSON: Oh, it would be? Okay.
 19 MS. HILLARY YOUNG: Right.
 20 MR. JON NELSON: All right. Lastly -- and I hate
 21 to -- I don't want to get in the way.
 22 Lastly, I'm -- it seems like the -- the water quality
 23 requirements, that will be -- will have to be met to do this
 24 are rather loose at this point. They're really -- I mean,
 25 it's really up -- just up to DEQ to decide based on the --

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1 what their --
 2 MR. MARK MATHESON: Quality of the aquifers.
 3 MR. JON NELSON: Yeah.
 4 MR. MARK MATHESON: Yeah.
 5 MR. JON NELSON: I mean, are there no prohibitions
 6 on certain parameters or constituents, or is it just subject
 7 to DEQ approval --
 8 MS. HILLARY YOUNG: Well --
 9 MR. JON NELSON: -- based on the water aquifer?
 10 MS. HILLARY YOUNG: It will be based on water
 11 quality standards that were passed by the Water Board.
 12 MR. JON NELSON: Okay.
 13 MS. HILLARY YOUNG: And, of course, you know, I --
 14 how the water -- the water that's delivered, we will be
 15 looking at the aquifer, the receiving aquifer, to determine
 16 how that water needs to be treated. Because we don't want
 17 to have any kind of issues with the aquifer based on any of
 18 these activities.
 19 MR. JON NELSON: Okay. So it's not just a water
 20 quality standard, it's also how the reclaimed water and
 21 stored water will interact with the current water?
 22 MS. HILLARY YOUNG: Right.
 23 MR. JON NELSON: Because there's some complex --
 24 MS. HILLARY YOUNG: Right. Because you don't --
 25 you know, if you -- if you deliver water and, for instance,

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1 the aquifer media has arsenic and you – we want to be
2 careful not to release arsenic –
3 MR. JON NELSON: Right.
4 MS. HILLARY YOUNG: – into the groundwater.
5 MR. JON NELSON: Yeah.
6 MS. HILLARY YOUNG: So things like that will be
7 evaluated.
8 MR. JON NELSON: Okay. So there's not really any
9 standard – I mean, there's so many possibilities there, you
10 really can't almost set a standard. It's going to have to
11 be on a case-by-case basis.
12 MS. HILLARY YOUNG: That's right. It will be
13 case-by-case.
14 MR. JON NELSON: But there's no – that
15 negative effect will be allowed, and that's basically a
16 standard.
17 MS. HILLARY YOUNG: Right.
18 MR. JON NELSON: Okay.
19 MR. SABA TAHMASSEBI: Yes. Actually, the – the
20 standard part, as you're talking about, is addressed by the
21 Water Board rules that were passed last year. And I guess
22 they just became effective or they're about to become
23 effective. And then Water Board, at the same time, is
24 involved in other rulemaking for ASR, which I assume will be
25 implementation. That effort and our effort will be moving

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1 in parallel.
2 So the standard part, we are not addressing that in
3 this rulemaking. This is what the Water Board has done.
4 What we're doing here is limited to what Hillary is talking
5 about. This is the scope of this.
6 MR. JON NELSON: Okay. I just -- we can really
7 get in trouble with this if it's not watched very closely.
8 I mean, chemically and from -- a number of ways, and I just
9 am concerned. This seems -- still seems to be rather loose
10 in that regard. I mean, I'm not sure there's even a
11 standard in here that talks about qualifications of the --
12 of the person that's doing the evaluation for the people who
13 want to do the ASR. I -- whoever does that needs to know
14 what they're doing.
15 Your arsenic example was a good one. Right?
16 MS. HILLARY YOUNG: Right. And here at DEQ, the
17 people evaluating would be geologists and engineers, and
18 it -- you know, there would be a team of people looking at
19 it, as well as Water Quality on the water treatment plant
20 portion of it to ensure that the facility operates in a way
21 that is safe and would not endanger our drinking water
22 aquifers.
23 Because you're exactly right. We don't want to -- we
24 don't want to do anything that's going to jeopardize an
25 aquifer that you can drink straight out of.

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1 MR. JON NELSON: Right.
2 MS. HILLARY YOUNG: So that's why, you know, we
3 have three permits here that the applicant has to go
4 through. It's going to be -- it's a lengthy process to
5 review. And all of that is with the idea that we want to
6 protect the aquifers and ensure that this is done in the
7 safest way possible.
8 MR. SABA TAHMASSEBI: Jon, may I also add --
9 Hillary, yes.
10 You see, I understand your point that the rules don't
11 have a lot of requirements and meat in them, and they --
12 MR. JON NELSON: I'm just not used to that.
13 MR. SABA TAHMASSEBI: Yes, yes. Well, actually,
14 to me -- to me, that is one of the strengths of the -- of
15 the rule. Because we could start from vacuum and come up
16 with great detailed requirements that we're generating in
17 vacuum and take our time, several years, to write the rules
18 and pass them and find out that they may not work.
19 But here, what we've done, is a step-wise process.
20 First we have requirements for the characterization of the
21 water that is to be delivered. If it's river water, you
22 need to look at different time periods, look at the episodic
23 events that might affect the quality of the water and all of
24 that.
25 Once that is -- that is characterized, then you

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1 characterize the water in the aquifer. And then to know to
2 what level that water -- delivered water needs to be
3 treated, then you go and do -- you do treatment of the
4 water.
5 So are our rules thin? Yes, they are.
6 But do we have experience in characterizing water?
7 Yes, we do. We have a ton of experience.
8 Do we have experience in design and permitting of
9 drinking water plants or wastewater plants? Yes, we have a
10 lot of experience in that. So we are relying on all of that
11 to get that aspect of it done.
12 So when the water is treated to the level that it needs
13 to get treated, then what's going to happen to the aquifer?
14 The solution is going to be studied. Like Hillary --
15 Hillary's example with arsenic. How is this? There's going
16 to be modeling, there's going to a pilot testing to see how
17 that water interacts with the aquifer media.
18 Even after you do that, there's going to be monitoring.
19 There's going to be monitoring. And this is all spelled out
20 in the rules. And then -- and then what if the
21 concentration of a certain constituent starts to increase?
22 Then there are alert triggers that says, "Hey, you -- you
23 hit an alert trigger. You're going to stop the injection.
24 You're going to look into it."
25 And then after all of this, if there is an adverse to

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1 an aquifer, then you have financial assurance for corrective
2 action for folks to clean it up. So when you look at the
3 process from the beginning to the end, it's a very robust
4 process. But then the details are not always there, so we
5 understand that.

6 In order to alleviate that, what we did is that we
7 sponsored legislation, this past legislative session, and we
8 passed -- we sponsored a bill that put in place a system for
9 a limited scale ASR pilot projects to be permitted by DEQ.
10 That law passed, and it doesn't require any regulations, so
11 we didn't come through you-all. But we did come up with a
12 set of requirements for people to follow in order to get the
13 permits for that.

14 And we had our work group that is -- consists of
15 several State agencies, national experts on ASR and USGS and
16 OGS and GWPC and Oklahoma Legislature and other folks that
17 reviewed and commented on that. And then that is on our
18 webpage now for folks who -- and for DEQ's sake.

19 If we don't know the answers to all of these parts that
20 you're talking about, then you do these pilots to try to get
21 the answers.

22 MR. JON NELSON: Yeah, I -- and I understand that,
23 and I -- I agree with the need for pilot. But I'm really
24 talking more about pre-pilot when they're starting to
25 propose the quality of the water that they're going to

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1 inject. And it seems like I would -- and you might consider
2 this

3 But I would feel a whole lot better if you require
4 bench-scale testing to establish that level of quality
5 before you move into the pilot. And I don't know if that's
6 in there or if it's something you feel like is necessary.
7 But I -- I'm just concerned a bit about how that's going to
8 be evaluated and vetted before you start trying to do --
9 spend a lot of money with even a pilot test.

10 MR. SABA TAHMASSEBI: You mean like a bench scale
11 prior to treatment of the raw water?

12 MR. JON NELSON: Uh-huh.

13 MR. SABA TAHMASSEBI: Well, that would be part of
14 the -- to me, that would be part of the raw water
15 construction --

16 MR. JON NELSON: At the --

17 MR. SABA TAHMASSEBI: -- which is not spelled out.

18 MR. JON NELSON: At DEQ's discretion?

19 MR. SABA TAHMASSEBI: Yes.

20 MR. JON NELSON: And what I'm saying is I'm not so
21 sure it shouldn't be spelled out. I mean, there's some --
22 there's a lot of complex chemical reactions that could take
23 place and do a lot of bad things. I mean, there's so many,
24 you can't -- you can't put them in the regs today; there's
25 too many.

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1 MR. SABA TAHMASSEBI: Right.

2 MR. JON NELSON: There's too many possibilities.
3 But you can at least make sure that they're doing what they
4 need to do upfront in the regulations to be absolutely sure
5 we're not going in some direction we don't want to go. So
6 I'm just concerned about it being loose to that degree, and
7 I think they are things you could do to close it up, but...

8 MR. SABA TAHMASSEBI: So it would make you feel
9 better if on the chapter that talks about treatment of the
10 raw water, for there to be a requirement for bench-scale
11 testing to make sure that the treatment facility is capable
12 of treating the water to the level that it needs to be
13 treated?

14 MR. JON NELSON: Yeah. And you're not getting any
15 unintended consequences that you can see. Because you can
16 predict what's going to happen or you can predict the
17 problem. You can predict the arsenic problem, but there may
18 be other things that happen that you don't predict.

19 MR. SABA TAHMASSEBI: At the aquifer for the --
20 are you talking about raw water or are you talking about --

21 MR. JON NELSON: The raw -- the raw water
22 interaction with the aquifer.

23 MR. SABA TAHMASSEBI: Oh, well, that's -- there's
24 a pilot testing for that.

25 MR. JON NELSON: Yeah. But I'm saying I think you

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1 need to step that up a level and make sure, before you do
2 the pilot testing, that you know what you're getting into
3 before you -- you need -- you need that information, to me,
4 to do the pilot testing properly.

5 MR. SABA TAHMASSEBI: Right. What if -- what if
6 we address that by committing to writing a guidance for
7 pilot testing, and we can share that with you.

8 MR. JON NELSON: Yeah. Maybe it's not -- maybe
9 this isn't the best place for it, but I --

10 MR. SABA TAHMASSEBI: Yeah.

11 MR. JON NELSON: -- I think some procedures of
12 that nature would certainly make me feel better about it.

13 MS. TERRY WYATT: Can I say something?

14 MR. SABA TAHMASSEBI: Yeah.

15 MS. TERRY WYATT: I --

16 MR. SABA TAHMASSEBI: I think -- Shellie and I
17 just talked and I think that we will make a commitment to
18 provide some guidance on the pilot testing. I think that's
19 a good comment.

20 CHAIRMAN DUANE WINEGARDNER: You had a question?

21 MS. TERRY WYATT: Okay. My question is: Isn't
22 that why we have the employees that are specialized in all
23 of this, to judge these pilot programs with what they think
24 is already there instead of going in and putting more rules
25 for them to go by, that use their knowledge, that they're

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1 not going to have a pilot testing program that they have any
2 questions on?"

3 MS. HILLARY YOUNG: Well, I think the rules are
4 like they are to -- to be flexible and to be able to have
5 different types of, you know, water sources and depending on
6 where the facility would be located. And while, yes, we
7 have -- the people that we have, have expertise on this and
8 have expertise in a lot of areas in geology, as far as
9 engineering and construction of something that would be
10 similar to this.

11 But ultimately, the reason why the rules are flexible
12 is just so that we don't pigeonhole ourselves into something
13 and then somebody wants to come in and do something that's
14 completely out of -- that's not allowed by rules, then
15 that's why they're as flexible as they are.

16 MS. TERRY WYATT: I agree.

17 MR. JON NELSON: And I'm comfortable today that
18 DEQ has the staff to handle this. But the direction that
19 this legislature is going, I'm not sure you will have
20 tomorrow

21 (Laughter)

22 MS. TERRY WYATT: Point taken.

23 CHAIRMAN DUANE WINEGARDNER: Yeah. Well, that's
24 all right.

25 Okay. Are there any other comments or questions from

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1 the Board?"

2 (No response.)

3 CHAIRMAN DUANE WINEGARDNER: How about from the
4 public, are there any comments or questions?"

5 (No response.)

6 CHAIRMAN DUANE WINEGARDNER: Okay. Well, then do
7 you wish to offer an amendment?"

8 MR. JON NELSON: No, I'm satisfied.

9 CHAIRMAN DUANE WINEGARDNER: Okay. You're
10 satisfied. All right. Then I will call for a motion.

11 MS. TERRY WYATT: I make a motion we approve.

12 CHAIRMAN DUANE WINEGARDNER: Motion to approve.

13 MR. MARK MATHESON: And I'll second it.

14 CHAIRMAN DUANE WINEGARDNER: I have a second.
15 Okay

16 MS. QUIANA FIELDS: Mr. Duzan?"

17 MR. BRIAN DUZAN: Yes.

18 MS. QUIANA FIELDS: Mr. Matheson?"

19 MR. MARK MATHESON: Yes.

20 MS. QUIANA FIELDS: Mr. Nelson?"

21 MR. JON NELSON: Yes.

22 MS. QUIANA FIELDS: Mr. Rodriguez?"

23 MR. JIM RODRIGUEZ: Yes.

24 MS. QUIANA FIELDS: Mr. Short?"

25 VICE CHAIRMAN JEFF SHORT: Yes.

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1 MS. QUIANA FIELDS: Ms. Wyatt?"

2 MS. TERRY WYATT: Yes.

3 MS. QUIANA FIELDS: Mr. Winegardner?"

4 CHAIRMAN DUANE WINEGARDNER: Yes.

5 MS. QUIANA FIELDS: Motion passed.

6 CHAIRMAN DUANE WINEGARDNER: Okay. With that, now
7 let's go back to item number seven, which is the Rules of
8 Practice to accomplish 653.

9 MS. HILLARY YOUNG: I am now presenting changes to
10 Chapter 4, Rules of Practice and Procedure for your vote.
11 This rulemaking is to create three new sections, 252-4-7-79
12 through 81 for Aquifer Storage and Recovery applications
13 within Part 7 Water Quality Division Tiers and Timelines of
14 Subchapter 7.

15 The proposed rulemaking will make it possible to apply
16 to DEQ for permits required for an ASR project. DEQ has not
17 received any formal comments on these rules.

18 Now, as you can see, these rules specify which process
19 specific permitting actions fall under of the three tiers.
20 So the Tier I mainly have modifications. And then under
21 Tier II, you'll find ASR treatment plant construction
22 permit. That would be a Tier II process. And then for the
23 ASR water delivery construction permit and the ASR operating
24 permit, those are both Tier III permits.

25 Are there any questions?"

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1 CHAIRMAN DUANE WINEGARDNER: Questions, comments?"

2 (No response.)

3 CHAIRMAN DUANE WINEGARDNER: I think part of this
4 addresses some of your concerns because we have the tiers.
5 And if there's a question, you're probably going to bump it
6 to the next tier.

7 MS. HILLARY YOUNG: Well, the tiers are set up for
8 public participation. So with each tier, there's an
9 increased level of public participation. Tier I doesn't
10 have any public participation.

11 Tier II, you know, you have the Notice of Filing and
12 then the publication of the draft permit where the public
13 has the opportunity to comment or request a public meeting.

14 And then for Tier III, we have the Tier II
15 requirements. And on top of that, when you do -- when a
16 Notice of Filing is published, the public has the
17 opportunity to request a process meeting. And that's where
18 DEQ would go out and explain our permitting process to the
19 public, because they -- they don't always know how that --
20 how that runs, and tell them where it is they can insert
21 themselves into the permitting process.

22 And, then of course, we have the publication of the
23 draft permit and the opportunity to comment and request a
24 meeting.

25 And then the Tier III also has the additional

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1 publication of a proposal permit and the opportunity for the
2 public to request an administrative hearing. And if one is
3 granted, they would go before an administrative law judge
4 and the law judge would make a decision. And then
5 ultimately the final decision would be made by the executive
6 director of DEQ.

7 CHAIRMAN DUANE WINEGARDNER: Are there questions
8 or comments?

9 VICE CHAIRMAN JEFF SHORT: What is the rationale
10 for putting the construction of a treatment plant as a
11 Tier II versus the construction of the – or the water
12 delivery construction permit and the operations permit as
13 Tier III?

14 MS. HILLARY YOUNG: We were trying to be
15 consistent with the current water quality rules. I believe
16 that they are Tier II applications.

17 And the reason why we have Tier IIIs for the water
18 delivery construction permit, the operation permits kind of
19 goes back to some of your comments. And that's to ensure
20 that the public has every opportunity to become involved in
21 this process.

22 MR. JON NELSON: But they can plug in before the
23 construction permit is issued? There is a means to do that?

24 MS. HILLARY YOUNG: Yes.

25 MR. JON NELSON: That's important, as well, before

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1 the money is spent.

2 MS. HILLARY YOUNG: Yes. A Tier II still would
3 have a public notice of a draft permit, so they have – the
4 public would have the opportunity to comment and to request
5 a public meeting.

6 MR. JON NELSON: Yeah. In fact, they'd have a
7 couple of opportunities because they have to do the pilot
8 first and then the construction later, so there's actually a
9 process there where they have quite a few opportunities to
10 plug in, correct?

11 MS. HILLARY YOUNG: For –

12 MR. JON NELSON: Or no, the pilot is actually part
13 of the construction, isn't it?

14 MS. HILLARY YOUNG: Right.

15 MR. JON NELSON: Yeah. I'm sorry I'm – that's
16 right.

17 MS. HILLARY YOUNG: Right.

18 CHAIRMAN DUANE WINEGARDNER: Okay. Other
19 questions from the board?

20 (No response.)

21 CHAIRMAN DUANE WINEGARDNER: Questions from the
22 public?

23 (No response.)

24 CHAIRMAN DUANE WINEGARDNER: Okay. Well, I'll
25 entertain a motion.

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1 MR. JIM RODRIGUEZ: So move.

2 CHAIRMAN DUANE WINEGARDNER: So moved.

3 MR. BRIAN DUZAN: Second.

4 CHAIRMAN DUANE WINEGARDNER: I have a second.

5 MS. QUIANA FIELDS: Mr. Duzan?

6 MR. BRIAN DUZAN: Yes.

7 MS. QUIANA FIELDS: Mr. Matheson?

8 MR. MARK MATHESON: Yes.

9 MS. QUIANA FIELDS: Mr. Nelson?

10 MR. JON NELSON: Yes.

11 MS. QUIANA FIELDS: Mr. Rodriguez?

12 MR. JIM RODRIGUEZ: Yes.

13 MS. QUIANA FIELDS: Mr. Short?

14 VICE CHAIRMAN JEFF SHORT: Yes.

15 MS. QUIANA FIELDS: Ms. Wyatt?

16 MS. TERRY WYATT: Yes.

17 MS. QUIANA FIELDS: Mr. Winegardner?

18 CHAIRMAN DUANE WINEGARDNER: Yes.

19 MS. QUIANA FIELDS: Motion passed.

20 CHAIRMAN DUANE WINEGARDNER: Thank you very much.

21 MS. HILLARY YOUNG: Thank you.

22 CHAIRMAN DUANE WINEGARDNER: Okay. Now, Greg,
23 would you like to get back there and talk to us a little bit
24 about Indirect Potable Reuse for Surface Water?

25 MR. GREG CARR: Yes, sir. And I've got a short

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1 presentation. It's only about ten slides that I'll walk
2 through right quick. I think we've made some room over
3 there.

4 (Council members moved to view presentation.)

5 MR. GREG CARR: Let me see if I can make this
6 thing work here. Excellent.

7 All right. This is – please note that these draft
8 rules are on DEQ's website. They're on the Water Quality
9 and Management Advisory page under the water quality. If
10 anybody would like any help finding that, let me know and I
11 can help you after the presentation.

12 This is a Review of Draft Chapter 628, Indirect
13 Potable Reuse Regulations for Surface Water Augmentation.
14 And, again, my name is Greg Carr. I'm the Water Quality
15 Division Chief Engineer.

16 The definition of IPR, and this included in our
17 regulations, "the planned water reuse of treated wastewater
18 discharged to a surface waterbody for the purpose of
19 augmenting a lake serving as the source for a public water
20 supply."

21 And not so much through ASR, but the Indirect Potable
22 Reuse IPR standards were not drafted by DEQ alone. This
23 was – there was a Water Use Committee, and then one of the
24 subcommittees for that was a Water Quality Standards
25 subcommittee that consisted of DEQ, the Oklahoma Water

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1 Resources Board, some various municipalities, some of our
2 larger cities; national technical experts from Alan Plummer
3 Associates, Incorporated, Black & Veatch, Carollo Engineers
4 and Garver Engineers. And I'll give a special recognition
5 to Michael Graves. He chaired the Water Quality Standards
6 subcommittee and was a large driving force.
7 Let's see. So my main concern is develop protective
8 discharge and waterbody criteria for IPR. We looked at
9 things such as pathogens, primary drinking water standards
10 and secondary drinking water standards. Constituents of
11 emerging concern, nutrients and then also conventional
12 pollutants.
13 So, for example, for pathogens, this is a disinfection
14 requirement. We're looking at 5, 5, 3, 3 and it's for
15 viruses, that's for bacteria. And then the 3, 3 pertains to
16 Cryptosporidium and Giardia. And as a note -- I mean,
17 chlorine will cover most of these. That's probably the most
18 cost-effective method. Cryptosporidium is a different
19 animal. At that point, we're probably looking for ozone,
20 something of that nature.
21 General benchmarks for five-day carbonaceous biological
22 oxygen demand, total suspended solids and turbidity, we're
23 requiring meeting the Chapter 627, water reuse requirements
24 for Category 2. We're also -- and that's for end-of-pipe.
25 So we are -- we do have a distinction here between

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1 end-of-pipe monitoring and also a waterbody monitoring.
2 Waterbody monitoring is something new for us, but we
3 have a large concern for build-up over time and also harmful
4 Algal blooms, HAB. You'll hear me refer to that several
5 times.
6 And then the CBOD5 requirements, less than 5 milligrams
7 entered daily; TSS, total suspended solids, less than five;
8 turbidity less than 2 NTU. And TOC is something we track as
9 a -- more of a performance measure and it's also fairly
10 inexpensive to track.
11 For nutrients, we're looking at a total nitrogen limit,
12 end-of-pipe for 8 milligrams per liter monthly, 12 daily
13 max. Total phosphorus we're looking at 0.2 milligrams per
14 liter monthly and 0.3 daily. And then the goal is to
15 prevent -- the goal is to protect beneficial uses and we're
16 really concerned again about harmful algal blooms. And then
17 we were monitoring the waterbody for nutrients, algal
18 biomass and dissolved oxygen.
19 For primary benchmarks, I'd like to mention at the end
20 of -- we have included -- in your binders, we have included
21 a copy of Chapter 628, the draft. And at the very end of it
22 is Appendix A, which includes all of our benchmarks, the
23 general, the conservative, additional. It's all listed in
24 there.
25 And then for the primaries, we will monitor essentially

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1 as established as present at the end-of-pipe and waterbody
2 as well. And that's -- I'll go into the waterbody a little
3 bit here at the end.
4 For Additional Conservative Parameters, we're looking
5 at things like total suspended solids, we're looking at
6 chloride, we're looking at sulfate. For end-of-pipe, the
7 goal for TDS is to control accumulation. For the waterbody,
8 we're looking not to exceed the greater of either 700
9 milligrams per liter or two standard deviations above
10 baseline TDS level.
11 And as was mentioned with the ACR -- or ASR, there's
12 been a long and continuous coordination, especially with the
13 Oklahoma Water Resources Board. So when you're talking
14 about an SWS, like a sensitive water supply or sources for
15 public water supplies, there's been a restriction in what we
16 can do with those lakes. So they've developed the SWS-r
17 designation for our water reuse, which allows us some
18 flexibility on this.
19 CECs, constituents of Emerging Concern, known by
20 several names, also Contaminates of Emerging Concern. We've
21 gone with constituents. These are not regulated materials,
22 but -- or items, but we know that they do -- many of them
23 have health risks associates with them. They are ()
24 1,4-Dioxane your nitrosamines, there's a long list.
25 So what we're looking for, at this time at least, is an

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1 overall reduction of CECs in the line. There are some
2 processes, especially advanced oxidation processes that
3 actually create CECs. So right now, we're just looking to
4 mostly see those reduced.
5 And then the waterbody, we're doing the same. We
6 still -- you'll see, at the end of the presentation, one of
7 the things we're still working on is our waterbody
8 monitoring plan. There's a lot of unknowns there. We've
9 never really -- the Water Board has their BUMP program and
10 they monitor waterbodies. We don't normally do that. About
11 the closest we've come is in our drinking water program, we
12 do some source water monitoring for Cryptosporidium, but
13 this will be -- this will be some new territory for us and
14 quite a bit of expense.
15 Under our Considerations for in-lake monitoring, which
16 is basically IPR receiving waterbody monitoring, we're going
17 to require an initial pre-IPR baseline characterization
18 sampling plan for a minimum of one year. And we'll look at
19 spatial monitoring requirements, temporal, seasonal,
20 collection method. This could run into a considerable
21 expense. But again, the main goal on this is to protect
22 public health and safety. And the most immediate concern is
23 harmful algal blooms.
24 And then from the baseline characterization sampling
25 plan, we will develop a waterbody assembly and monitoring

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1 plan.
2 So these are the initial steps. We've got the
3 regulations here. We still have outstanding items that the
4 Water Reuse subcommittee has recognized. I believe that
5 list right now is at 22 items and we're forming additional
6 subcommittees to keep working on those. And that's -- some
7 examples. Like mixing zone policy, we still have SOPs to
8 work out. We're still working on our list of CECs, because
9 that is essentially a moving target. There's new chemicals
10 popping up all the time.
11 And then also when we talk about CECs, we're also
12 trying to -- there's only so many labs that can sample a lot
13 of the CECs that we're looking at. So we're also looking --
14 and it's a long list. I've seen lists that people are
15 monitoring up to 400 constituents long. So this could run
16 into considerable expense. What we're trying to do is
17 establish some surrogates for basically classes of CECs to
18 make it more cost-effective.
19 We have our IPR guidance documents that we're still
20 working on. And a lot of that we'll be addressing waterbody
21 monitoring in the plans. Monitoring and being aware of our
22 waterbodies. Since a lot of the IPRs will be taking place
23 in urban areas, due to that's where the need really is from,
24 then diligent monitoring is very necessary.
25 Public education and building community stakeholders.

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1 IPR, along with -- Indirect Potable Reuse along with Direct
2 Potable Reuse is something that we have to sell the public
3 on and actually the community, so that is something we are
4 working on.
5 And then next year, we will start our Direct Potable
6 Reuse regulations, get with our subcommittee to draft those.
7 Any questions?
8 Yes, ma'am.
9 MS. TERRY WYATT: With the budget constraints that
10 we're under right now, where do you propose this money to
11 come from?
12 MR. GREG CARR: Right now we have the staff on
13 hand if we don't see a lot of these. We have a water reuse
14 section in water quality that is unmanned, we've made space
15 for it. Right now, we've just -- we just have to establish
16 priority, sort of like you do in triage for surgery and for
17 wounded. And we decided, "What's more important?"
18 So we have the personnel to support this if we don't
19 start seeing a lot. If we do, and I'll go ahead and point
20 it out now. You'll see in our fee section, for Indirect
21 Potable Reuse, we're trying to -- we've basically done some
22 calculations through spreadsheets and we're trying to
23 recover those costs. And the municipalities and our
24 consulting engineers have agreed with what we've put in
25 there. But there are some -- there are some substantial

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1 numbers in there. But we're trying to recoup our costs on
2 that basically. Not making any money, but just recoup our
3 cost because this will -- it already has been a huge expense
4 for us.
5 We've delayed a lot of our projects in other areas
6 because we've been addressing this. It's taken a huge time
7 load, but it's -- it's very important. IPR and DPR, I
8 believe, are necessarily the future and they have to be
9 protected.
10 Because harmful algal blooms, for example, can put a
11 lake out of action if you're talking cyanotoxins, if it's
12 a -- if it's an actual harmful algal bloom, so these are
13 things we're addressing.
14 And our lab is currently working on analytical and
15 monitoring techniques perhaps, and our DWSRF program has
16 been helping them somewhat with that funding. So we have
17 some flexibility. Some of the -- our DWSRF program is --
18 it's based partly on a grant that we get from the EPA, from
19 the federal government, but it also is a loan program that
20 receives interest and it does make some money that we can
21 use for other resources, but just a little bit. Don't get
22 me wrong.
23 Does that help?
24 MS. TERRY WYATT: Thank you.
25 CHAIRMAN DUANE WINEGARDNER: Question.

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1 MR. GREG CARR: Yes, sir.
2 CHAIRMAN DUANE WINEGARDNER: One of the next steps
3 is public education. And I realize that a lot of these
4 things are going on concurrently to a certain extent. But
5 we need to have a very serious plan for public education
6 because there's -- there's a lot of work to do.
7 MR. GREG CARR: Yes, sir. Especially with DPR,
8 Direct Potable Reuse, which is essentially toilet-to-tap,
9 and I think we'll see that sooner than later.
10 MS. SHELLIE CHARD: Stop saying that.
11 MR. GREG CARR: I'm sorry. I've been told not to
12 say that, so please forgive me.
13 (Laughter)
14 MR. GREG CARR: But, I mean, that's an important
15 resource. There's one operated in Big Spring, Texas. And
16 then I think Wichita had one that they used, which they're
17 converting to Indirect Potable Reuse. But we do have to
18 convince the public that it's in their best interest. But,
19 I mean, at the same time that we convince them that it's in
20 their best interest, we have to start looking at the
21 watershed and watch what we do to the watershed.
22 And I believe Sabo would like to say something.
23 MR. SABA TAHMASSEBI: I know a work group is
24 working on that aspect of it.
25 MR. GREG CARR: A work group is working on that.

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1 We're also relying heavily on our municipality partners that
2 intend to do this. It's in their best interest to convince
3 their people, their customers that this is in their best
4 interest. And a lot of times it just comes down to money.
5 But there's a -- sometimes there's an anger, denial and
6 acceptance process to go through, and we have to bridge the
7 topic and then just kind of wade into it and be patient.
8 But we're trying to start this early. We don't have
9 anyone proposing to do this yet. We've got several
10 municipalities that are discussing the possibility, which is
11 why we're moving forward with our rules. But we don't have
12 any type of submittal.
13 And just a note, even without these rules, even without
14 Indirect Potable Reuse -- Indirect Potable Reuse rules or
15 Direct Potable Reuse rules, if someone submits a plan
16 design -- you know, plans and specifications for a project,
17 we will still look at it, we will still review it. And if
18 it's -- if it's appropriate, we will approve it.
19 So we have a clause essentially in our rules called
20 variance process. And if it's -- if we can show and
21 demonstrate that it's -- that it's good for public health
22 and it's safe, then we will move forward with it. So even
23 without this, we would still have the opportunity for IPR
24 and DPR. This just gives guidelines and some direction.
25 And, Shellie, we're not voting on this one, we're

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1 just -- this is just a review. And then everybody needs
2 substantial time to look at this. And you can, obviously,
3 call us and ask questions, and we encourage questions
4 because this is new territory for us, too, and we're --
5 MR. SABA TAHMASSEBI: Yeah. Like as Greg said, we
6 are hoping to have a final vote on this in January. And
7 we -- our staff has worked tirelessly this past several
8 months working on ASR and IPR, that these are two tools in
9 our toolbox that are going to be very necessary for our
10 state in case a drought comes back again. We need to
11 have -- we need to have the tools in place to mitigate the
12 impact of drought, and these two pieces of law -- of
13 rulemaking are a major step -- okay.
14 MS. SHELLIE CHARD: They can't hear you.
15 MR. SABA TAHMASSEBI: Okay. Are a major step in
16 that -- in that regard.
17 So the rules, like Greg said, they are on our webpage.
18 So I encourage the Council members and the public to take a
19 look at them. And please let Greg know if you have any
20 concerns or comments, and hopefully we will get to address
21 them before January so we'll -- we'll have a smooth sailing
22 through approving of these rules.
23 I have to also say that personally, I am very proud of
24 the document that we have generated. There are some
25 regulatory innovations here that no one in the nation has

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1 attempted. We are not only having requirements for testing
2 and for using modeling, things like that, that we normally
3 do, we also have what we call a four-box model. And the
4 fourth box is actual measurements in the lake. And if the
5 concentrations of certain constituents increase, there's
6 going to be consequences in the permit itself. So the
7 permit is going to change as a result of what you see in the
8 lake. And this is something that nobody else has
9 contemplated. And because of that, I'm very proud of DEQ's
10 staff for coming up with these type of innovations.
11 Yes, sir.
12 MR. BRIAN DUZAN: I would assume that --
13 MS. SHELLIE CHARD: I'm sorry, the -- at the risk
14 of telling the Council what to do, your Council secretary
15 and court reporter need you guys to speak into the
16 microphones. They can't get it all recorded.
17 (Council moved back to their seats.)
18 MR. BRIAN DUZAN: Just making sure I haven't been
19 towed from across the street yet.
20 (Laughter.)
21 MR. BRIAN DUZAN: I would assume that the
22 municipality would bear the full brunt of all the testing
23 charges and the monitoring.
24 MR. GREG CARR: Yes, sir.
25 MR. BRIAN DUZAN: So this isn't going to be an

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1 inexpensive --
2 MR. GREG CARR: No, it is not. We've -- the Water
3 Board has -- they've developed some rough numbers that I've
4 seen, but, I mean, it's -- it's rough. But it's -- it's not
5 cheap -- it's not a cheap process, no. But neither is, you
6 know, losing the use of your lake, so...
7 MR. JON NELSON: Greg, is there any -- I'm sure
8 there's been a lot of discussion, but any direction that the
9 group is moving towards these corrective action plans for
10 CECs? Are we talking about best available technology or
11 just best practices, or how -- how do you --
12 MR. GREG CARR: Since we're not --
13 MR. JON NELSON -- deal with that situation?
14 MR. GREG CARR: And since CECs are not regulated
15 that puts us in a fairly --
16 MR. JON NELSON: Yeah.
17 MR. GREG CARR: -- delicate territory. And these
18 rules are not technology-based. It's performance-based, so
19 if you can meet these requirements --
20 MR. JON NELSON: Yeah, you're --
21 MR. GREG CARR: -- the benchmarks, then you can do
22 it as you please, subject to approval.
23 MR. JON NELSON: Right. But what it said is if
24 you don't have a -- like a measurable reduction or
25 appropriate reduction --

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1 MR. GREG CARR: Uh-huh.
2 MR. JON NELSON: -- then corrective action has to
3 be taken and --
4 MR. GREG CARR: We have not defined that.
5 MR. JON NELSON: Okay.
6 MR. GREG CARR: So, I mean, corrective action
7 would be basically solve the problem and make it -- but this
8 is still new territory for us.
9 MR. JON NELSON: Right.
10 MR. GREG CARR: We still haven't even -- we
11 haven't settled on our list of CECs. And then we've seen
12 some proposals. This is still fairly new for everybody.
13 I went to Chicago last week at a WEFTEC conference and
14 there were a lot of water reuse presentations there like
15 Hampton Roads Sanitation District and some -- so it -- this
16 is a common problem for everyone. And there's not a general
17 agreement on what a good list of CECs is, unless it's a
18 super extensive list.
19 (Mr. Carr conferred.)
20 MR. GREG CARR: Okay. So Mike pointed out on
21 Page 24, under CECs -- and I'd also like to note that for
22 all of these chapters -- so I was responsible for drafting
23 the permitting chapter in each of our group managers for --
24 Water Quality actually was responsible for drafting a
25 permitting chapter, in addition to Karen Steel, which is not

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1 a group manager, but she drafted the waterbody monitoring
2 chapter, which is Chapter 11 -- Subchapter 11.
3 Then Mike pointed out, so when we have statistically
4 significant accumulation for CECs at any monitoring site in
5 a waterbody -- and that's another thing we have to decide is
6 what water monitoring sites there are. A lot of the -- one
7 of the things we look at is the Beneficial Use Monitoring
8 Plan that the -- program that the Water Board has. That's a
9 long-term trend monitoring program.
10 So it's not exactly what we're after. We're after
11 closer to a realtime. We've even discussed the time -- the
12 use monitoring buoys. I know the Utah Lake, they use some
13 monitoring buoys for some of this stuff, for their water
14 reuse and for some HAB monitoring so they can try to catch
15 that before it happens.
16 So as Mike pointed out, there's investigative
17 implications for public health and environment submit funds
18 to DEQ. So increase -- increase into pipe and/or waterbody
19 monitoring frequency.
20 And as Saba discussed, we have some -- it hasn't been
21 worked out yet, but we have some trigger levels, which we
22 sort of affectionately refer to as green light, yellow
23 light, red light. So green light means operations as
24 normal. There will be a trigger level at which it's yellow
25 light, and so you may have to increase monitoring, you may

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1 have to reduce your flow. But it just depends. We'll have
2 to analyze that as applicable. And then the red light would
3 be when you hit the benchmark and you have to stop. But
4 there will be a yellow light, a trigger light at which we
5 say, "You need to slow down whatever you're doing or monitor
6 more frequently."
7 MR. JON NELSON: Are those standards that -- I
8 know you're talking about something in the waterbody. What
9 about end-of-pipe.
10 MR. GREG CARR: Yes, sir.
11 MR. JON NELSON: That, too?
12 MR. GREG CARR: End-of-pipe. End-of-pipe is
13 fairly easy to monitor, it's just right there. But the --
14 so when we're talking about waterbody, it's like -- I mean,
15 we have to understand the flows in the lake, the
16 relationship between the discharge of the wastewater
17 treatment plant and the intake of the surface water, you
18 know, treatment -- or drinking water plant. I mean, what
19 depths are we talking about, you know, and how often. You
20 know, "Does this need to be a realtime monitor? Do we want
21 somebody to go out there in a boat all the time?" That's
22 probably not practical.
23 So we're probably talking about needing at least one or
24 two buoys. It just depends on the lake that we're talking
25 about. And some of it will be the same thing probably. But

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1 it just depends on the frequency
2 I don't mean to sound vague, but it will -- it will --
3 I do. But we're still working that out.
4 MR. JON NELSON: I have to be.
5 MR. GREG CARR: Still a topic of discussion and it
6 will be lake-specific.
7 MR. JON NELSON: Yeah.
8 MR. GREG CARR: And it may depend on the treatment
9 train that they choose and where they discharge.
10 CHAIRMAN DUANE WINEGARDNER: Other questions?
11 (No response.)
12 CHAIRMAN DUANE WINEGARDNER: Other comments by the
13 public?
14 (No response.)
15 CHAIRMAN DUANE WINEGARDNER: Well, thank you very
16 much.
17 MR. GREG CARR: Thank you, sir. I appreciate it.
18 And I'm sure we'll discuss this some more.
19 (Laughter)
20 CHAIRMAN DUANE WINEGARDNER: Yeah.
21 Shellie, would you like to bring us up to date?
22 MS. SHELLIE CHARD: Sure. I've got three kind of
23 broad topics for you today. The first one is probably the
24 most convoluted and complex, but the easiest to relay to
25 you, and that is budget. We do have a special session of

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1 the legislature that is ongoing. We don't have a whole lot
2 of indication of what they're talking about, so we don't
3 know what that's going to look like. That could have very
4 little impact on us or it could have a very measured impact.
5 It just depends on what decisions that they make as far as
6 increasing revenue versus cuts and how those get
7 distributed.

8 We're trying to be smart making decisions spending
9 money in case we do have additional cuts. We're just kind
10 of in a wait-and-see game and we're trying to get done all
11 of our critical tasks as best we can.

12 The federal budget is probably equally as murky with
13 the President's budget, the Senate's budget, the House's
14 budget and they, at some point either come to an agreement
15 and pass a budget, or they don't and end we up with a
16 continuing resolution.

17 They did pass a budget last year, so they do have the
18 option of continuing on a continuing resolution path. Right
19 now the federal government is operating on a continued
20 resolution through December, early December, so there will
21 be some action between now and then either to pass a new
22 budget or to continue on for another few months.

23 There were a lot of proposed cuts in the President's
24 budget. We know key House and Senate members have put back
25 in their proposed budgets some of the programs that were

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1 zeroed out, that include some of the very specific programs
2 such as Chesapeake Bay, Great Lakes Initiative. Those got
3 put back in. The U.S.- Mexico Wastewater program remains
4 zeroed. The Beach Monitoring Program was funded again.

5 On the SRF funding the State Revolving Fund loan and
6 grant program for both Clean Water Act and Safe Drinking
7 Water Act, those have been restored to current year funding.
8 The administration is very focused on infrastructure and
9 water and wastewater are really being highlighted and not
10 just roads and bridges, which is kind of nice to see. But
11 you never know until Congress votes and the President acts,
12 so we're kind of just waiting to see what happens there.

13 We are seeing some more of the EPA political appointees
14 named. Not seeing a whole lot of action on some of them at
15 this point. But we do have a nominee that has been named
16 for the Office of Water -- the Assistant Administrator for
17 Office of Water. That is David Ross. He has a background
18 in the State's Attorney General Office in Wyoming and later
19 in Wisconsin, has a lot of similar thought processes or
20 ideas as the Administrator, Oklahoma's former Attorney
21 General, Scott Pruitt. They worked on some issues together
22 during both of their tenures with the State AG's offices.

23 He has been nominated. His confirmation hearings have
24 been scheduled and postponed a couple of times as Congress
25 and the Senate were taking up other issues instead of

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1 appointees.

2 We do have a political deputy named for Office of Water
3 and that is Lee Forsgren. I met him last week. He's been
4 on the job seven, eight, ten days now. He is listening to
5 some of his staff. He has some very specific ideas in mind
6 for the Office of Water, some things that we have heard from
7 Administrator Pruitt as far as rules of law, pushing things
8 down to the state, sort of local level. Kind of yet to be
9 seen what ideas or specific projects or rules he has in
10 mind. Like I said, he hasn't been on the job too long, so I
11 suspect we'll be hearing more sooner rather than later.

12 Mike Shapiro, who has been the career deputy in the
13 Office of Water is still in that position and likely will
14 stay in that at least for another year or so until he
15 retires.

16 We have a new Director of the Office of Science and
17 Technology. That is not a political appointee. That's
18 actually a career hire for the agency. Deborah Nagle, she
19 comes out of the permitting program, and before that was on
20 the military side of the Corp of Engineers. She entered
21 West Point at 17 years old, graduated from West Point, then
22 headed up several areas in the Corp of Engineers before
23 retiring as Colonel and going to EPA.

24 She spent most of her career with EPA in the permitting
25 branch, so dealing with the implementation of the Water

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1 Quality Standards and implementing some of the decisions
2 made by the Office of Science and Technology. So I think
3 that's really a good move.

4 We've had several conversations over the years of we
5 get these standards, we get these scientific decisions while
6 valid, the actual implementation becomes incredibly costly
7 and incredibly difficult. So she's very open to looking at
8 what implementation actually means rather than just setting
9 standards. So I think that's going to turn out to be a very
10 positive move in seeing, you know, what comes out of OST.

11 Then we also have a nominee for Office of Compliance
12 Enforcement. Susan Bodine, who has spent time on the Hill
13 in both the House and the Senate committees, most recently
14 Senate Public Works and Environment as their general
15 counsel. She also spent some time in private practice in a
16 couple of big law firms. She has cleared committee but has
17 not had hearings scheduled before the full Senate.

18 If anybody is going to get confirmed, one would think,
19 you know, she was a likely person to be confirmed having
20 worked with so many members of Congress and is very well
21 respected, but we'll see what happens with that since
22 there's been no movement for a while.

23 My last issue I wanted to talk about is produced water.
24 Part of the drought resiliency and looking at, you know,
25 what are some alternative sources of water. In order to

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1 move Oklahoma toward our 2060 goal of no more freshwater in
 2 2060 than in 2010. There have been a lot of things
 3 happening on that front. One of the big ones between the
 4 Corporation Commission and DEQ, we do have an MOU that it's
 5 already been signed by one party and we hope to have it
 6 signed by the -- I dare say end of the day, but I'll go with
 7 end of the week, you know, in case something unforeseen
 8 happens that would allow DEQ and the Corporation Commission
 9 to work together in order to permit and allow some produced
 10 water discharges, get that permitting through the State
 11 rather than everything having to go through EPA. That's
 12 been a big issue.

13 We had the statute in place, after this last session,
 14 and now we're, you know, working out the administrative
 15 details on how to make that work. Once we have all of the
 16 State paperwork done, then we'll start looking at providing
 17 additional information to the Environmental Protection
 18 Agency in order to update our delegation agreement to allow
 19 for DEQ to issue some of those permits.

20 Also, all of you are very familiar with Mike Paque,
 21 that he was with us on this Council for a long time before
 22 moving to the Environmental Quality Board. As the Executive
 23 Director of the Groundwater Protection Council, he, in
 24 working with his Board of Directors, has put together a
 25 group that is preparing for about an 18- to 24-month long

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1 produced water beneficial use study. It will be looking at
 2 current uses of produced water, what research is needed to
 3 increase produced water usage and to expand from more of the
 4 traditional oil-and-gas-related uses into agriculture or
 5 industrial uses and potentially, down the road, drinking
 6 water uses.

7 In working with Groundwater Protection Council on that
 8 issue, I've had the opportunity to hear Oklahoma's Secretary
 9 of Energy and Environment speak many times about two very
 10 key points that I decided I would file away and I was going
 11 to borrow from him. And one is, "We live in a part of the
 12 country where drought never goes away. It merely gets
 13 interrupted. We declare it's over, the graphs and the
 14 charts tell us it's over, but hang around a few days, weeks,
 15 months, it's coming back. So we have to be proactive and
 16 not just think, okay, it rained, we're good, let's move on."
 17 And I think that philosophy has a lot to do with our moving
 18 forward with the Aquifer Storage Recovery and Indirect
 19 Potable Reuse, that we have to be prepared so that we don't
 20 have systems running out of drinking water.

21 Sometimes it's merely as easy as trading freshwater for
 22 treated, reused water. Sometimes it is actually going as
 23 far as treating the wastewater, from another process, to
 24 drinking water standards. So that's something you're going
 25 to continue to hear a lot about.

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1 The other classic Secretary Teague's statement is, "You
 2 know, it's a 10-year problem or it's a 20-year problem. But
 3 if we don't start now, in 10 years, it's still a 10-year
 4 problem." So we're trying to get out ahead of some of these
 5 issues. And hopefully the next time we find ourselves with
 6 a significant drought, we will be so far down the road that
 7 we will, you know, not feel the impacts as dramatically as
 8 we did where we had drinking water systems down to their
 9 last 30 or 45 days of drinking water before we were
 10 fortunate enough to get rain.

11 So those are the big things going on. I guess I will
 12 stop talking and let you guys play 20 questions.

13 CHAIRMAN DUANE WINEGARDNER: Any questions for
 14 Shellee?

15 (No response.)

16 CHAIRMAN DUANE WINEGARDNER: Well, I have no new
 17 business to propose.

18 Does anyone have any new business to propose?

19 (No response.)

20 CHAIRMAN DUANE WINEGARDNER: I do have one
 21 announcement. I wanted to remind everyone of the Governor's
 22 Water Conference, which is coming up October 31st and
 23 November 1st. I've gone the last, I don't know, six, seven
 24 years, whatever it's been, a long time in a row, and I found
 25 it to be very enlightening. They have good speakers. You

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1 get good insight into what's going on in a lot of research
 2 projects that are focused on the topics that we work with.

3 Next scheduled meeting then will be in January. And I
 4 would -- if there's no other business, I will entertain a
 5 motion for adjournment.

6 MR. JON NELSON: I'll move.

7 MR. BRIAN DUZAN: Second.

8 CHAIRMAN DUANE WINEGARDNER: And seconded.

9 MS. QUIANA FIELDS: Mr. Duzan?

10 MR. BRIAN DUZAN: Yes.

11 MS. QUIANA FIELDS: Mr. Matheson?

12 MR. MARK MATHIESON: Yes.

13 MS. QUIANA FIELDS: Mr. Nelson?

14 MR. JON NELSON: Yes.

15 MS. QUIANA FIELDS: Mr. Rodriguez?

16 MR. JIM RODRIGUEZ: Yes.

17 MS. QUIANA FIELDS: Mr. Short?

18 VICE CHAIRMAN JEFF SHORT: Yes.

19 MS. QUIANA FIELDS: Ms. Wyatt?

20 MS. TERRY WYATT: Yes.

21 MS. QUIANA FIELDS: Mr. Winegardner?

22 CHAIRMAN DUANE WINEGARDNER: Yes.

23 MS. QUIANA FIELDS: Motion passed.

24 CHAIRMAN DUANE WINEGARDNER: Thank you very much.

25 MEETING ADJOURNED 3:20 P.M.

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1	CERTIFICATION
2	I, Jennifer Payne Kaclin, a Certified Shorthand
3	Reporter within and for the State of Oklahoma, do hereby
4	certify that I was present at the Water Quality Management
5	Advisory Council Meeting had October 10, 2017; that I
6	recorded in stenotype notes all of said proceedings; and
7	that I thereafter transcribed my notes so taken and reduced
8	same to typewritten form; and that foregoing transcript of
9	proceedings is full, true, correct and complete, to the best
10	of my skill and ability, along with corrections made by the
11	Department of Environmental Quality's staff.
12	I further certify that I am not an attorney for
13	nor relative of any of said parties or otherwise interested
14	in the outcome or event of said action.
15	
16	IN WITNESS WHEREOF, I have hereunto set my hand
17	and affixed my official seal this 13th day of October, 2017.
18	
19	
20	_____ Jennifer Payne Kaclin, CSR#1748 Official Court Reporter
21	
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13 nor relative of any of said parties or otherwise interested
14 in the outcome or event of said action.

15
16 IN WITNESS WHEREOF, I have hereunto set my hand
17 and affixed my official seal this 13th day of October, 2017.

18
19 

20 Jennifer R. Payne Kaelin, CSR#1748
21 Expires December 31, 2017

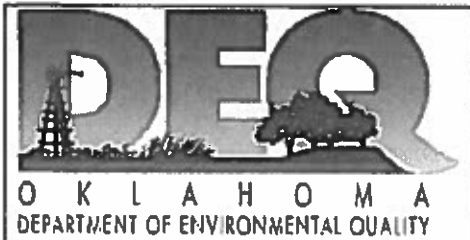


Jennifer R. Payne
State of Oklahoma
Certified Shorthand Reporter

CSR # 1748

My Certificate Expires

10-31-17



**WATER QUALITY MANAGEMENT
ADVISORY COUNCIL**

Attendance Record

October 10, 2017

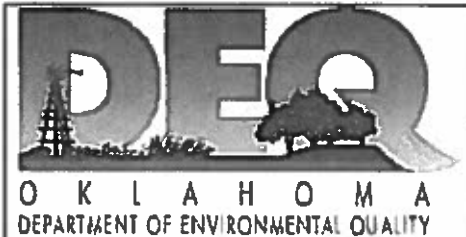
**Department of Environmental Quality
Oklahoma City, Oklahoma**

CHECK BOX TO COMMENT

NAME and/or AFFILIATION

Address and/or Phone and/or E-Mail

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Traci Kelly	DEQ
Travis Couch	DEQ
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Lee Daalen	DEQ
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Brian Duran	GCI
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