# In The Matter Of: <br> DNREC - Allen Harim 

## Hearing

August 21, 2019

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DEPARTMENT OF NATURAL RESOURCES \& ENVIRONMENTAL CONTROL

## OF THE STATE OF DELAWARE

RE: Public Hearing: Allen Harim On-Site ) Wastewater Treatment and Disposal ) System Permit Application and Artesian ) Wastewater Management Spray Irrigation ) Permit Application
.. .. .. .. .. ..
Mariner Middle School 16391 Harbeson Road Milton, Delaware 19968

Wednesday, August 21, 2019 6:11 p.m.

BEFORE: Lisa Vest, Hearing Officer
-- Transcript of Proceedings --

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TABLE OF CONTENTS
Page
Introduction by Ms. Vest ..... 4
Presentation by the Division:
Derrick Caruthers ..... 17
John Rebar ..... 33
Presentation by the Applicant:Daniel Konstanski, P.E.38
Public Speakers:
Keith Steck ..... 52
George Terrell ..... 56
James Yelenozsey ..... 59
Anthony Scarpa ..... 61
Lew Podolske ..... 64
Andrea Green ..... 67
Shelly Cohen ..... 71
Tom DiOrio ..... 76
Ken Haynes ..... 80
Joanna Haynes ..... 81
Dr. Mohammed Akhter ..... 82
Lou Col'on ..... 85
Maria Payan ..... 88
Conclusory Remarks by Ms. Vest. ..... 92
Certificate of Reporter ..... 95

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## INDEX TO EXHIBITS

Department's Exhibits:
Allen Harim Application:
1 - Permit Application . . . . . . . . . . . . 34
2 - Draft Permit . . . . . . . . . . . . . . . 34
3 - PowerPoint Presentation . . . . . . . . . . 34
4 - Legal Notice. . . . . . . . . . . . . . . . 34
5 - Regulations Governing the Design, . . . . . 34 Installation and Operation of On-Site Wastewater Treatment and Disposal Systems

Artesian Application:
1 - Permit Application . . . . . . . . . . . . 36
2 - Draft Permit . . . . . . . . . . . . . . . 36
3 - PowerPoint Presentation . . . . . . . . . . 36
4 - Copies of all comment received to date . . 36
5 - Regulations Governing the Design, . . . . . 36 Installation and Operation of On-Site Wastewater Treatment and Disposal Systems

Applicants' Exhibits:
1 - Joint Allen Harim/Artesian Presentation

Written Comments (Exhibits) Received at the time of Public Hearing:
Green Exhibit 1
DiOrio Exhibit 1
Col'on Exhibit 1
Scarpa Exhibits 1 and 2

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MS. VEST: Can everybody hear me? UNIDENTIFIED SPEAKER: No.

MS. VEST: Okay. The time is approximately 6:04 p.m. on Wednesday, September 21, 2019 -- or I'm sorry, August 21, 2019.

Thank you, guys, for coming out. I apologize for the uncomfortable seating. I did not know that there were going to actually be cafeteria tables here. Note to self for any further hearings.

But I appreciate everybody taking time to come out of their schedules to be here.

If anyone, by any chance, missed the sign-in sheets that we have in the back, I would encourage you guys to please sign in.

There is a place provided to indicate whether you wish to speak tonight. Even if you do not wish to speak, we would still like to have an accurate count of who attended the hearings.

So if you have not already done so, please try to do that before you leave.

We are here this evening to provide a formal platform for DNREC to receive public comment on two permit applications that are currently pending before the Department at this time.

There has been a little bit of confusion with this, so $I$ want to make it clear.

We are dealing with both of these permit applications tonight, but they are two separate applicants.

The first one is a permit application filed by Allen Harim Foods for an operations permit for an on-site wastewater treatment and disposal system to treat poultry processing wastewater at the Allen Harim Harbeson processing facility.

The second one is Artesian Wastewater Management Inc. has applied for a spraying irrigation operations permit to receive that treated wastewater effluent for storage in a synthetically lined lagoon and disposal via spray irrigation at the Artesian Northern Sussex Regional Water Reclamation

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Facility.
For those of you that may not know me, my name is Lisa Vest, and Secretary Garvin has appointed me to serve as the hearing officer for tonight's proceedings.

At the conclusion of these introductory remarks, I will be turning the hearing over to Department staff, who will be making a formal presentation to try to help everybody understand the scope of tonight's hearing, which, of course, are two pending permit applications that $I$ have previously mentioned.

There is also going to be a brief presentation tonight given on behalf of the applicants. Following all of those presentations, we will then open the floor to accept comment for the record from those here who have indicated a desire to do so.

The order of commenters will be taken directly from the sign-in sheets. So, again, please feel free to grab a seat and sign in if you have not already done so.

With regard to the comments wishing

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to be offered tonight, there are, as is the case with all of our hearings, formal protocols which must be adhered to for this evening.

Before I proceed further with reviewing these protocols, I do need to address a matter that was brought to the Department's attention concerning what was actually noticed for tonight's hearing.

In the notice that hit the paper, the Department indicated that both the permit application materials and the proposed draft permits would be available for review online.

Unfortunately, however, the
Department made that statement prematurely, as these draft permits were in the process of being completed at the time that the notice ran in the paper.

Now, pursuant to Delaware Law, the Department is only required to provide notice of the permit application. It does not technically require the notice of the draft permit. We do that for the public's behalf and convenience.

Some permitting programs do require it, such as the NPDES ones. These operational and construction permits do not.

Nevertheless, we wanted to get that up as soon as we could. And in the spirit of transparency and pursuant to the notice that we put out there, we did get them done, they are up online, and I absolutely encourage the public to go online and check them out.

I also want to make sure that everyone understands that just because that we now have draft permits up, it is not indicative of any decision being made in this matter.

The only thing that the draft permit does is give an example of what such a permit would look like if the Secretary ultimately decides to give it.

They are not in operation for this process right now. Draft permits have no value other than informational for you guys to understand what one might look like should the Secretary approve it.

And, of course, Secretary Garvin is

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the one that makes these decisions. There is no decision that's been made already. Just because we have draft permits, it doesn't mean that that's what's going to happen.

And Secretary Garvin is only going make a decision once all the comment comes in.

To that end, and to further accommodate the public's interest in reviewing all these materials, and to make sure that you guys have an opportunity to go online and look at them, I have made a decision to extend the hearing comment period for a full 30 days from tonight.

I typically have the draft permits going up online. It's a standard 15-day notice. So there is nobody that's going to be shortened of a time period to be able to review it and provide comments. So we are going to keep that open.

And comment will be received
through close of business on Friday,
September $20 t h$.
The hearing record being open will

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also ensure that those who possibly couldn't attend tonight's hearing will also be able to provide written comment for the record during that 30 -day time period.

Also, there may be those of you that have come prepared to offer comment tonight, and after you hear the presentations and hear other comments, you may want to add to your comments. You can completely do that if you wish.

Maybe you didn't think you wanted to offer comment, and after you hear everything, you do want to offer comment.

So, by all means, leaving the hearing record open through September $20 t h$ will ensure that no one was prevented in any manner from offering comment and that the public was given ample opportunity to provide comment for inclusion into the record.

That being said, there are some protocols that I am going to go through briefly prior to the beginning of these presentations.

Consistent with all public hearings

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held by DNREC, all comment must be limited solely to the subject matter of tonight's hearing, which again is the pending application submitted to the Department by both Allen Harim and Artesian in this matter.

Pursuant to those subject matters, all comments pertinent to these permits will be incorporated into the formal hearing record being generated and will be considered by Secretary Garvin prior to his making a decision in this matter.

As is DNREC's policy at all formal hearings such as this, each person wishing to offer comment tonight is asked to do so in as precise a manner as possible.

In order to treat everyone equally
tonight, each person will be granted a total of three minutes of time in which to comment.

To facilitate that protocol and again to ensure fairness, there will be a visual timer that we will put up behind me. It will be on the screen. It will help everyone be aware of how much time is remaining while they are making their

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comment.
Please be mindful that if you have already submitted written comment, either by e-mail or tonight, that information is automatically in the hearing record.

Keeping in mind that there are probably a lot of people that want to offer comment, if you have already provided comment in writing, there is no need to do it again tonight. It's already in the record.

If you have prepared written
comments with you tonight, I would ask that you present the same to me when you have been recognized as the next commenter. I will mark the same. It will become a part -- it will be an actual exhibit that will get attached to the record. And then you can -the three-minute timer will start, and you can briefly summa -- summ -- you can briefly summarize what your comments are. It's been a long day.

The three-minute time allotment for each person wishing to offer comment will be enforced for tonight's proceeding. There is

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no yielding of time from one commenter to another, again to ensure fairness and equality for each person offering comment. Consistent with DNREC's policy at all of its public hearings and pursuant to current Delaware Law, all persons wishing to offer comment tonight must be physically present in order to be recognized.

If there are commenters who are present here tonight and wish to offer other people's comments into the record, they may do so, provided that the person whose comments are being entered is fully identified, again for the benefit of the record.

In that instance, the speaker who
is offering someone else's comments still only gets three minutes total. No one will be granted an additional three minutes for their own views after verbally entering remarks of someone else.

There is only one authen -- authen
-- (laughter) -- there is only one record of tonight's proceedings, and it is the official
court reporter's verbatim transcript which is being prepared tonight.

She can only hear and accurately
transcribe one voice at a time. In order to ensure accuracy of her transcript and to be mindful of all the other protocols associated with tonight, I would ask that no one please speak while another person is speaking, and do not call out from the audience for any reason.

If there are members of the news media present tonight, you are certainly not prohibited from audio or visual recording of these proceedings.

We do ask that any equipment that's
used is done in a way that it's unobtrusive and does not interfere with the ability of others to see and hear what is being said.

Whether listening or speaking, we do ask that everyone here today be respectful and considerate of all comment offered tonight, even though some comment may, in fact, differ in opinion from your own.

Additionally, I would also ask that
all cell phones be either muted or turned off for the duration of these proceedings.

Again, the statutory purpose of tonight's hearing is to allow citizens to provide comment for the record on these pending permit applications from both Allen Harim and Artesian.

A record consisting of the transcript of verbal comments given tonight, all written comments received through September 20th, all exhibits, and the Hearing Officer's Report will all be turned in and reviewed by Secretary Garvin.

The Secretary will ultimately issue an order following that review process. The order will contain his decision on these applications and the reasons therefore.

Myself and other DNREC staff members who are present tonight are here to help facilitate the receipt of comment but not to participate in the proceedings. There is no Q and A session permitted during the course of our formal hearings.

Again, it is important to note that
no decision has been made by the Department, nor will any decision be made tonight with regard to these permit applications.

The hearing record being generated in this matter will, once again, remain open for an additional 30 days.

Comment may be submitted through a comment forum link on the hearing page, via email to DNREC hearing comments at delaware.gov, or via the U.S. mail to me at the address that's indicated on the hearing page and the public notice.

If you don't have that, please come up to me after the hearing. I can give you a business card.

It should be noted that written
comments to DNREC may not be submitted through social media platforms such as Twitter, Facebook, You Tube, or text messaging.

That being said, I am going to turn
the floor over to Department staff, who I
believe will begin their presentations.
MR. DIORIO: I have a question on
point of information.
MS. VEST: Yes.
MR. DIORIO: Is it three minutes
per permit, or three minutes total?
MS. VEST: No, no. It's three
minutes per person that wishes to offer comment.

MR. DIORIO: Per permit hearing?
MS. VEST: Just in general.
MR. DIORIO: In general?
MS. VEST: In general. Yes.
MR. CARUTHERS: Good evening,
everyone. My name is Derrick Caruthers. I'm with DNREC's Groundwater Section, Groundwater Discharge Section.

I am here to talk about the operation permit application for the Allen Harim site.

The facility is a poultry processing facility which offers an on-site wastewater treatment system.

The wastewater treatment system consists of screening, grit removal, dissolving air flotation device, anoxic
biological nutrient removal, basins, aeration cells, flocculation tank, clarifiers.

So, basically, it's taking out the big chunks, treating after that, and then disinfecting in the end with the chlorination and dechlorination.

Incorporated into this design is the ability to divert anything that is deemed off-spec. So anything that is -- that the Department will not allow to get sent to ANSRWRF will be diverted to a different portion of the treatment plant so that it has to get treated again.

And that's pretty much what those last two points say.

This is a site map of the Allen
Harim site. It's about a quarter of a mile south of the 5-9 intersection in Harbeson.

Probably, most of you probably can't see it. But there is four monitoring wells that are around the lagoons up there. And I think they are kind of important just to mention. You will see why in a second. But I just wanted to let you know that there
are some monitoring wells out there.
So there is going to be influent limitations. That's these limitations on what's coming into the plant from the poultry processing facility.

There will be a daily average influent flow from the facility that's not allowed to exceed 2 million gallons per day.

There is a maximum influent flow from an off-site facility, the Pinnacle Processing facility, and that's at 40,000 gallons per day.

And the same for the Dagsboro Hatchery is also at 40,000 gallons per day.

The effluent limitations that are in the permit, or would be in the permit, that's going to be what the limitations are once the wastewater has come into the treatment facility, been treated, and ready to be sent to ANSRWRF.

The average effluent flow shall not exceed 1.5 million gallons per day, averaged over a seven-day period, and it can't exceed 2 million gallons per day.

So we can't send any more out than 1.5 over seven days and not two in one day.

The total nitrogen concentration
can't exceed 30 milligrams per day, so 30 milligrams per liter on a daily average.

And the total nitrogen
concentration can't exceed 45 milligrams per day just for that day.

So the 30 milligrams is an average.
The 45 is for that day.
The total residual chlorine can't be less than one, but then it also can't be more than four. So that's to ensure we are getting the proper level of disinfection to make sure that any of the bad bugs that are in the wastewater are killed prior to them getting sent to the ANSRWRF site.

And the same for the fecal
coliform. It can't exceed 20 colonies per 100 milligrams -- 100 milliliters -- at anytime. So that's the same thing. The fecal coliforms are the same as the bad bugs, the bad bacteria. We are making sure that it's at an acceptable level.

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There is additional effluent limitations. The pH has to be between 5.5 and nine.

Turbidity can't exceed five.
The BOD and the TSS are at ten.
The chloride concentration of the effluent has to be less than 250. And the sodium has to be less than 210.

Those are some -- I guess they are pretty much standard effluent limitations for the type of wastewater that is used for spray irrigation.

So, again, just to make sure that what we are putting down on cross is safe for the environment.

This is a list of the influent and effluent monitoring requirements that would be incorporated into the operation permit.

There is monitoring frequency and both for influent and effluent. So there is a fairly extensive amount of parameters that would be required to be monitored.

And that goes as far as twice a month, three times per week, quarterly,

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continuous. There is plenty of different frequencies.

They also, for this particular site, have required or supposed to require monitoring for process controls during the actual treatment.

So when the wastewater is getting treated into the plant, it's also going to get tested. Anything from outside of the parameter is going to get diverted back to the head of the plant so that it has to get retreated.

So these are the parameters that will be monitoring more closely than the previous parameters to make sure that we can require diversion prior to it leaving the Allen Harim site and going to the ANSRWRF site.

Those four monitoring wells that I
had tried to show you before, those four monitoring wells will be monitored for these parameters to make sure that we don't have anything that might try to leave those lagoons that they were surround -- that they

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were around, so ...
And those are monitored quarterly, as well. So we're also trying to make sure that everything is on the Allen Harim site that's supposed to be on that site.

And the key permit requirements, they have to, obviously, be compliant with the effluent limits that are specified in the permit.

We have got diversion of off-spec wastewater, temporary storage, and additional treatment, the monitoring and recording that they will have to send on a regular basis to us.

We will use that to evaluate wastewater treatment efficiency and determine if compliance is an issue and incorporate that into the permit conditions.

And the facility is definitely going to be regularly inspected by the Department, at a very minimum on an annual basis, but, more than likely, more than annual.

There is also a requirement for the
permittee to have a Delaware license certified operator for the wastewater treatment plant.

There is an old lagoon cleanout requirements that will be incorporated into the operation permit to make sure that they are following that.

It's typical that they have to have proper sludge disposal.

They will also have to have implementation and maintenance of the stormwater plan to control stormwater runoff at the site.

And these permits will expire, and the permittee will regularly have to apply for a permit renewal.

And that's everything I have for the Allen Harim side.

I will turn it over to John Rebar, the program manager.

MR. REBAR: Good evening,
everybody. So my name is John Rebar. I'm the program manager for the Groundwater Large Systems Section.

I am going to discuss the spray
irrigation operation permit application for -- that was submitted by the Artesian Waste Management Company. And it's for the Artesian Northern Sussex Regional Water Recharge Facility, also called ANSRWRF.

Um, so they have -- so Artesian
Wastewater Management has submitted an application to do spray irrigation operations.

Um, they are going to receive treated wastewater effluent from Allen Harim's wastewater treatment plant.

They are going to store it in a synthetically lined lagoon. And then they are going to dispose it via spray irrigation.

And the design average daily flow is 1.5 MGD, or a million gallons per day. And the peak flow is going to be about 2 million gallons per day.

So the facility is designed to uti -- reuti -- utilize reclaimed wastewater for irrigation.

It's going to be sprayed on

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privately owned agricultural land that is under a lease held by Artesian.

Um, the proposed, um, irrigation sites are going to include both wooded and agricultural fields. They are going to, um, be utilized in both current and future phases.

And so by the future phases, will
be about 17 -- well, a little over 1,700 acres of land.

The current permit that is being applied for is only for what are called Fields $F$ and G. And then there is a phased plan to incorporate Fields D and E at a future time.

These sites have been permanently placed in agricultural -- in an agricultural preservation easement by the Delaware Agricultural Lands Preservation Foundation.

So the effluent has been received at the Allen Harim site. A high level of treatment is going to meet what our regs call the unlimited public access criteria.

The nitrogen will be controlled via
polishing by crop uptake per our regulations.
And it's also important to note
that the Artesian facility also has capability for disinfecting the stored wastewater if additional treatment is required for the spray irrigation.

So this is a site map of the area. The one thing I wanted to note on these is the -- it will show up in a second -- is the number of monitoring wells, piezometers, lysimeters, and surface water monitoring locations that we have established throughout the site.

So we have a strong level of monitoring that ensures the groundwater is protected.

So the unlimited public access means that all the wastewater has to go through a biologically -- a biological treatment process.

It has to be filtered. It has to be disinfected. And it has to meet certain parameters.

In this case the BOD5 has to be

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10 milligrams per liter.
Fecal Coliform can be no more than 20 colonies per minimal.

Suspended solids needs to be 10 milligrams per liter.

And turbidity has to be -- which turbidity is a measurement of how clear the water is -- has to be 5 NTUs.

So our regulations -- our
regulations require the facility to achieve an annual -- an average annual concentration of 10 milligrams per liter of particulate underneath the spray fields, as verified by the in-field monitoring, all those monitoring wells that we showed you earlier.

The pertic -- the pertico -- now I
can't speak. (Laughter) The percolate total
nitrogen -- excuse me (taking a drink of water) -- is estimated monthly using a nitrogen balance spreadsheet, which we have on our website, and it uses various measures to calculate what that particulate is on a monthly basis.

Um, the whole design of this
facility is so that the total nitrogen concentration for the facility results in this 10 milligrams per liter.

And that's taking into effect the number of acres, the application rate, the types of crops and fertilizers uses, et cetera.

So, in order to reach that ten, the facility is designated -- it's been designed to produce an effluent of 30 milligrams per liter.

We are going to have certain parameters in any kind of draft permit that will give us additional control if it's over 30.

So they would have to do additional sampling. Potentially, they would have to look into some engineering solutions, and potentially redesign the system if they were not able to achieve that 30 .

The reason why the 30 is important is because all the different crops -whoops -- all the different crops have different nitrogen loading limits associated

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with them. So the farming fields are going to be planted with a wide variety of barley, soybeans, cover crops, et cetera, and that is going to help take up the nitrogen.

And so, because certain crops have a certain nitrogen uptake, you can do some calculations based on the application rate to how much water you actually send out to the fields. And so we have calculations in the permit that will indicate how much water can actually go out into each field.

So, as I said, what's going to
happen is Allen Harim is going to treat the wastewater. They are going to send it to the ANSRWRF facility.

Normally, in order to dispose
properly of all that wastewater or the wastewater to all the fields that ANSRWRF has, normally you would only require 65.2 million gallons of storage.

This facility has a 90-million
gallon -- a 90-million gallon capacity. This
excess capacity is intended for the phase two
expansion. There's additional fields, as I

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had mentioned. But it also can be used in the case of an emergency.

And it's important to note that we are permitting -- we're currently proposing to permit two fields. One of those fields alone is sufficient to achieve the average daily design flow and total storage of the irrigation.

So they have doubled up a number of parameters.

So this means that it was designed at a conservative maximum disposal rate of 1.65. The on-site regulations will allow up to 2.5. So they have actually proposed a more conservative disposal rate.

There is the opportunity, should they need it, to seek separate, seek additional permissions to spray, but they are not allowed to go over that 2.5.

So just like how the Allen Harim permit had a bunch of sampling requirements, this permit will also have sampling requirements.

And they are at different

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frequencies and different types of sampling. Some of them are grabbed. Some of them are composite, which means it's a sample taken over time.

Their storage: The storage lagoon has an extra 15 days of storage. An additional three feet of storage -- freeboard that can be utilized for emergency situations.

Um, if off-spec wastewater -- um, so there is, obviously, there is a diversion training at the Allen Harim facility. If something were to happen and off-spec wastewater did reach the ANSRWRF facility, um, we have a number of different contingencies that could be utilized, including temporary suspended spray operations, because they have this additional um, time and freeboard. Um, you can do additional monitoring. And then, um, there is also the possibility of bringing in -well, they already have chlorination. There is also the possibility of additional treatment, as well.

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So the phase one construction currently has more than the minimum required land for spray disposal at the design flow rate.

Um, there is 110 additional acres to provide some flexibility within operations. Um, and if additional challenges arise, additional fields can be brought into operational use.

So, with that, I'm going to end my presentation. Did we want to do the hearing exhibits before?

MS. VEST: Yes. If you have exhibits, go ahead and put them in.

MR. REBAR: All right. Daniel, if
you could leave that up for a few minutes.
I'll do Allen Harim first.
Okay. So I have the Allen Harim application for the operational permit.

And there is a series of documents that make up this packet. Do you want me to --

MS. VEST: That's fine.
MR. REBAR: Okay.

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MS. VEST: Are they all posted on the website?

MR. REBAR: They are all posted on the website.
(Handing packet to Ms. Vest)
MR. REBAR: And then $I$ have an
additional -- two more exhibits for Allen
Harim. I have the draft permit. (Handing)
And the Power Point presentation. (Handing)
MS. VEST: Does that conclude the Department's exhibits for Allen Harim?

MR. REBAR: It does.
MS. VEST: Okay. Let the record reflect that the Expandex file filled with the Allen Harim application documents, all of which are posted as of right now on the hearing website, that will be exhibit -Department Exhibit Allen Harim 1.

A copy of the draft permit will be Department Allen Harim Exhibit 2.

And a copy of the Power Point that was presented just now will be Department Allen Harim Exhibit Number 3.

MR. REBAR: Oh, I do have one

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additional -- it's actually within that expanded file.

MS. VEST: Okay.
MR. REBAR: It is the legal notice for tonight's hearing.

MS. VEST: Okay. The record so reflects.

MR. REBAR: Thank you.
MS. VEST: Continue.
MR. REBAR: I have another
application for -- or another series of exhibits.

I have the application for the Artesian's ANSRWRF facility.

Again, it includes a wide variety of documents, um, that make up the package. These documents are also on the website. And the hearing public notice is also in this file, as well.

MS. VEST: Okay.
MR. REBAR: I have three more
exhibits.
MS. VEST: Okay.
MR. REBAR: I have a file of all of

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the public comments received to date on both the Allen Harim and ANSRWRF applications.

MS. VEST: Okay.
MR. REBAR: I have the draft permit
for the ANSRWRF facility.
MS. VEST: Okay.
MR. REBAR: And I have the Power
Point presentation for the spray operation application.

And I have one other additional. MS. VEST: Okay.

MR. REBAR: Within the Allen Harim
application packet was the -- is a copy of the Regulations Governing the Design, Installation, and Operation of On-Site Wastewater Treatment and Disposal Systems. They are our regs that we utilize to development our permits.

MS. VEST: Okay. Fair enough. Let
the record reflect, just for clarification, that when these get posted, we will have a summary sheet up there, so it will be easy for people to navigate and see that.

Again, there are three exhibits
identified for Allen Harim received by the Department with the addition of a legal notice exhibit as well as a copy of the regs which govern that permit.

MR. REBAR: Correct.
MS. VEST: With regard to Artesian,
there is the permit application, itself, the draft permit, the Power Point associated with it, and your public comments folder containing all public comment contained to date.

MR. REBAR: Correct.
MS. VEST: All right. And, again, we will have some sort of summary sheet -- I will see to that -- so it will be easy to navigate for those that want to look at it online.

Does that conclude the Department's presentation at this time?

MR. REBAR: It does.
MS. VEST: Thank you. At this
point I would ask the applicants to offer their presentation for the record. I believe it's going to be a joint presentation.

MR. KONSTANSKI: Good evening, everybody. Good evening, everybody. My name is Daniel Konstanski, and I am the engineer of record for the ANSRWRF project.

So staff did a great job of covering all the different pieces, both in terms of monitoring and some of the corrective actions.

What I would like to do is briefly take a couple of minutes to go through how it all kind of works together and how it is fitting together.
(One of the applicants said something to the speaker.)

Yeah. I introduced myself first. Along with me -- I am going to be the only speaker tonight to try to save on time. But here we do have Dave Spacht and Rodney Wyatt. Dave is the president of Artesian Wastewater who is going to be running the ANSRWRF facility.

And then we also have Tracy Allen from Allen Harim, who is in charge of their operations at their wastewater treatment

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plant.
And Rodney is our Director of
Operational Compliance.
So, starting at Allen Harim, staff already showed you a version of this. What I would like to point out, so we have the wastewater treatment plant, which is the entire back side of the complex here.

So we have got the poultry production here. And then there is where Allen Harim has already spent around $\$ 30$ million upgrading the plants.

And what we have installed, as part of the staff was mentioning some of the metering and monitoring that goes on, we have a metering and monitoring of the building that is installed directly downstream of the treatment plant discharge.

So this monitoring is going on as soon as the effluent comes off of the wastewater treatment plant.

And staff mentioned, although I want to paint the broad picture of how all of these work together.

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So we are calling them our four prongs of monitoring. So we have the monitoring program, and then we have corrective action.

So the monitoring program consists of four parts.

There is the continuous monitoring of what we are calling the indicator constituents.

There is the direct monitoring of the regulating constituents.

And those first two are going to occur at Allen Harim. Those are what are going on in that metering and monitoring building.

Then those are followed up by two more at the ANSRWRF facility once the flow reaches it.

The first is, again, a second direct measurement of regulated constituents. And then, finally, a fourth and final check of the effluent once it is out in the field below the root zone.

So, as John mentioned, the effluent
is being sent in the concentration that there is still the useful nutrients for the plants. That's part of the environmental benefits of ANSRWRF, that we are taking something that is currently lost to the stream and using it as a benefit for the agricultural community. But, obviously, we want to make sure that those plants are doing what they are supposed to do, so there is a final check in the field, both in the area of the woods, the timberland, as well as the cropland.

And then staff already did a great job of covering the limits, the unlimited public access in terms of concentrations that we'll be held to. So these are the same-name constituents that they mentioned, so I will move on, as those were already covered in detail.

So, going through these real
quickly in some detail.
Prong one is the continuous
monitoring of indicators at Allen Harim. A lot of these constituents can't be directly measured on a continuous basis, things like

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nitrogen or BOD. Those are tests that have to be sent to a lab, and that requires a certain amount of time for them to come back.

So what we did was we took several indicators that we are using as -- these are things that would also show fluctuations in the event that some of those things that aren't directly regulated are having an issue.

So these serve as an early warning system, if you will, of something going wrong in the effluent.

And it's something we can monitor continuously. It's tied into both Allen Harim's. It's called their skatus system, which is what allows them to monitor all different probes, as well as Artesian's, so this is something we monitor jointly.

Then, as was mentioned by staff,
from two direct measurement of all those regulated constituents, they showed you the schedules of all the different things that have to be monitored and the frequency that those have to be monitored at.

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And a lot of those -- we call this the inside of that metering and monitoring building. I mentioned so you can see we prop the pipes up out of the ground. We have got the monitoring and sample ports where samples can be pulled.

And an important thing to note about this is this is what's called a composite sample. So it's not just a quick snapshot. It's something that we take little samples all throughout the day, aggregate them together so that you get a picture of what's happening over the course of the entire -- so you don't miss something if you happen to pull it at the right time. Once it leaves the Allen Harim site, it arrives, after an eight-mile pipeline, up at the ANSRWRF facility. This is the 90-million-gallon unit staff mentioned.

It comes in on the inlet side here, and it's eventually pulled out over here at our pump station. This is where we have the second set of direct measurements where we
are pulling samples there, as well, in a very similar way to how we were doing it at Allen Harim.

So those will be taken again per the schedule that staff laid out.

And it's important to note all of these direct measurements, both the ones being taken at Allen Harim and the ones being taken at ANSRWRF, they are sent to an independent, third-party EPA certified lab.

So this is not results that we're doing ourselves. We get the results independently of one another, so the lab will send them, both Allen's and Artesian's. But that is not something that we are doing ourselves. Those are sent to a third party.

And then, finally, we have out in
the fields. So we have an array, as John
showed you in his map -- and $I$ have a very
similar one -- we have got an array of installations out there.

As you can see here, these are directly in the field measuring exactly what is making it the past the root zone beneath
the plants.

So this is the lysimeter here. We also have monitoring wells and piezometers.

And this is a very similar map to what he had. Our dots are a little bigger, so maybe you can see it a little bit easier.

As you can see, this is Field G here, and this is Field $F$ up here.

So there are installations in the fields, in the timberland, and also at the edges so we can see what's migrating off the site.

There are over 30 monitoring wells across the complex, as well as additional lysimeters and piezometers throughout.

So, again, as John mentioned, monitoring is great. But what are you going to do if there is an issue? What corrective actions do we have?

First and foremost, as he mentioned, diversion, the 10 million-gallon lagoon at Allen Harim. You see here. So this, again, this is the outside of that metering and monitoring building that we

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mentioned.
You see over here, there is this pipeline that ties into that complex of pipes that I showed you earlier.

That's the diversion pipe. So there is a single valve in there. If there is a problem that comes back with one of the continuous monitors or something that comes back from one of those EPA labs, you throw that one valve. It immediately puts it right into here. This is an old picture of the lagoon. It's going to be empty, obviously, by the time that we start running it.

And the metering and monitoring building right here, right out into there.

And, as you can see, the plant here is fairly large. This is not a small system that they have.

And so there are a lot of options for while that water is being held and put into that diversion lagoon, to make operational changes and corrections within the plant.

And then, once it reaches ANSRWRF

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again -- John did a great job of covering these -- we have the ability to cease spraying.

And we have right now, again, as he said, we have a 90-million-gallon lagoon with only 67-million gallons required.

And that's what the plan is for that. At additional capacity, it can be allocated to other customers.

However, there is a minimum amount at the top, the top 3 feet of the lagoon, that is always available. It's about -- it's millions of gallons that will always be available to hold excess water in the event that we need to cease spraying.

And then we also have the
additional fields that he mentioned. So, right now, Field $F$ is completely above and beyond what we anticipate is going to be needed based on the uptake levels of the crops.

> So that is completely additional
fields that we can bring online so that if, in the event that, say, nitrogen does come at
a higher concentration than the plant can uptake, what we can do is we can spread it out across more land, and then it loads the plants at the correct rate.

And then, finally, we do have the ability to do temporary treatment.

First and foremost, we have the ability to chlorinate. We do know that we need to disinfect the water.

And we also have the ability, if needed, there is portable treatment that protects the filtration, biological treatment, things of that nature, that we have the ability to hook up on the back side of the lagoon before the effluent is sent out to the fields, if need be.

And just a brief word on the daily operations that's being proposed in this O\&M manual.

So what $I$ want to stress here is this is not a static operation. Our operators who are going to be running this facility day in and day out, we have developed a whole suite of tools and
different items for them to use, that each day it's going to be a matter of taking into account what are the real-world conditions today? What has been the rainfall? Where are we at in the growth cycle?

This isn't a turn it on, leave it, and forget it. This is an actively managed facility making sure that we are constantly adjusting for the real-world conditions out in the fields and the cropland so that we don't overload it.

And, ultimately, this is where we will end up. We have got over 13 miles of infrastructure that we have put in, a combination of solid sets -- I can think of those as kind of glorified yard sprinklers. They stand about yay high. They throw the water a little further than in your yard -in the woods. And then using the center-pivot irrigators out in the fields.

Records of all of that is going to be kept, submitted to DNREC, will be
available to the public for anyone who wishes
to review them. And this equipment will be
inspected on a regular basis, making sure that we are not, you know, don't have any broken pipes anywhere or anything of that nature.

We got a brand new Kubota for the operators. They are very excited about it.

And that is what we have.
So, again, it's just all working together in this partnership between us and Allen Harim with these four prongs with the way that we are monitoring it and then these corrective actions that we have available.

So thank you very much for your time. I appreciate everyone coming out. And I will turn it back over to staff.

MS. VEST: Does the applicant have any exhibits that they wish to provide?

MR. KONSTANSKI: We will provide this Power Point presentation.

MS. VEST: Okay.
MR. KONSTANSKI: I don't have it printed out for you, but we will get it to you.

MS. VEST: Okay. If you can get
that to me tomorrow just by e-mail --
MR. KONSTANSKI: Not a problem.
MS. VEST: -- and I will get it on the web.

MR. KONSTANSKI: Easily done.
MS. VEST: Okay.
MR. KONSTANSKI: Oh, and the video
that was -- we also have a video that just kind of summarizes some of what $I$ just said here for people to watch, if they like, as well.

MS. VEST: As soon as you get that to us, I will make sure that that gets up on the web.

MR. KONSTANSKI: We will send it to you.

MS. VEST: Thank you.
As $I$ said before, $I$ now have all the sheets from the sign-in from the back of the table.

I am just going to go in no particular order, just in the order by which people signed up.

But, again, $I$ can't stress enough,
there is a lot of detailed information that was just presented.

By all means, take advantage of the website that's dedicated to this hearing, go look at it, print it out, review it.

I know my eyes are too bad, if $I$ was sitting in the back, I wouldn't have been able to tell half of that.

But, by all means, take the time, check it out. And all comment that comes in bears the same weight, whether it's in this folder already having been received by the Department, whether it comes in to me over the next 30 days in an e-mail or through the comment forum, or in the mail, or if it's offered verbally tonight.

It all bears the same weight, as long as it comes in before close of business on September $20 t h$.

So take advantage of it. Check it
out. And while we are, because of time restraints and location, limited to three minutes per speaker tonight, you are unlimited in the amount of documents and

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comments that you can provide to me. So take advantage of it.

First up, in no particular order, Mr. Keith Steck.

MR. STECK: Thank you. My name is
Keith Steck. I live in the Town of Milton.
Thank you for the opportunity to comment on this. I appreciate the fact we are going to have 30 more days to review the draft permits. I will submit written comments regarding that.

The first thing I would like to say is I have not seen or heard addressed to date, and $I$ do not believe in documents tonight, there is a critical operational question:

What happens when the Artesian
lagoon reaches full capacity and the conditions do not pass drain or the lagoon cannot otherwise accept Harim wastewater due to lagoon constraints?

I think that's an important
question I think a lot of people have been asking, but there isn't an answer.

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There are other questions. One question is do not -- do operational plans require Harim Harbeson to stop sending water to the Artesian lagoon and discharge wastewater into -- back into the Beaver Dam Creek in any circumstances? And what are those circumstances?

Um, equally important is the public to have access to certain documents that I do not believe that we had access to. One of these is a letter that Harim was writing to Artesian regarding their agreements for this functioning. This document was required as part of the instructions for the Artesian pipeline construction application.

The other documents are Artesian's amended design and development report in 2017. That's really critical, because it tells what's supposed to be done, this back and forth between DNREC and Artesian of what they wanted them to do.

Another question or another document $I$ think that needs to be developed or included and hasn't been that $I$ can find

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is a document that specifically talks about the physical connection between the Harbeson facility and the two, two pipelines to Artesian, one pipeline to the wastewater treatment facility behind Meadows at Beaver Creek, and then, of course, a pipeline going to the Artesian facility north of here.

So I believe that there is some reference to that in some of these documents, but there is not documents getting to the details of it.

Another issue is contingency plans.
I believe that there is a need for a very detailed contingency plan, not just saying severe weather or that -- or rain has developed, but in case of an accident, a vehicle striking the building, some other situation like that. That's not addressed.

And I have not completed review of the Artesian plan, but $I$ do note they have a much more in-depth and detailed contingency plan.

I will be submitting comments, and I will yield the rest of my time.

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MS. VEST: Thank you, Mr. Steck.
We are having a bit of
technological difficulty back there.
MR. REBAR: Do you have a stopwatch? (Laughter)

MS. VEST: I started mine on my phone. Are we going to forego the visual? Can we get it up and running?

MR. REBAR: For right now.
MS. VEST: Okay. Keep trying. We will keep track of it. Okay. Thank you, Mr. Steck, for your comments. Next up, G. U. Terrell, I believe.

MR. TERRELL: Yeah, good evening my name is George Terrell. I live on Highway 30. And I also -- my property has the Ingram Branch between 16 and 9, that section of the Ingram Branch.

The pipeline is just across the street from my house. And my question about it is that the idea of testing for the effluents and everything and the levels of toxins or whatever is in it, but I'm concerned a little bit about the volume, like
the amount that's, you know, that's delivered from the plant is the amount that's getting delivered at the lagoon.

Because we know that they had several blowouts and failures in the pipeline during the testing procedures, and my stream turned dark black, like something came up out of the bed of the stream during one of the pumpings of whatever the effluent was they were testing the pipeline with.

We saw several excavations when
they were getting the pipeline back up.
I would like some reassurance that the pipeline is going to be secure from Point A to Point B. It's not just what's being delivered and sprayed down there; it's what's being put into the ground between the two points, which is approximately 9 miles.

And everyone who lives along there has well water.

And, plus, we have a very pretty
stream of wetlands that we are trying to keep as pristine as possible.

So, you know, how they are going to

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test continuous movement of water from Point A to Point $B$ is going to be up to them.

I'm actually a merchant seaman that worked in the petroleum industry, so we worked with volumes of liquid all the time. And the delivery from Point $A$ to Point $B$ is very important.

And pipelines -- this is going to go back to the idea of petroleum -- pipelines are notorious for leaking more so than the delivery from ships and barges and vice versa. So a lot can be lost before anybody notices it by the sheer volume that is in the pipeline.

So I guess my point is that I would like a retesting or a continuous testing and monitoring of the volume and whether or not there is any pressure of volume loss during the transport of liquid from Point A to Point B.

And how they are going to do that is going to be an engineering issue, but it's something that $I$ think is very important to be considered, considering the fact that they
did have several places where they did excavations, but apparently they had several blowouts during the original testings.

And that's really my point right there. So I will yield whatever time I have left to whoever else wants to talk.

MS. VEST: Thank you, sir.
MR. TERRELL: Thank you.
MS. VEST: I apologize right off the bat if $I$ get this name wrong. James and possibly Giordina Yelenozsey.

Okay. I apologize. And I should say, while James is coming up, if any of you have any kind of disability or it hurts to get up -- and I know these are not the nicest tables that we have got here -- by all means, just let us know, and I will have Theresa bring the mike to you guys. So I apologize.

MR. YELENOZSEY: I'm James
Yelenozsey. I live in Milton.
Milton does not need the state's chicken dumping grounds. I worked in a water treatment plant that kept primary, secondary, tertiary treatment, too.

I don't see any advantage to

Artesian spreading partially treated chicken waste on farmers' property.

We don't need any smells in our draining water, especially the plans to be amended for the future to include all of Allen Harim plants, the sludge.

Everything looks great on paper, but I don't think anyone has seen anything work perfectly.

I don't think DNREC would even allow such a drastic change of plans without getting approval of residents who haven't had no say. The lagoon has been forced on Milton by DNREC and corporate.

With the companies seeking
approval, I would vehemently oppose any approval, because $I$ do not want any chemicals, including EHS chemicals, to be stored on site, permanent or temporary. I do not want any chemicals, including extremely hazardous substance chemicals to be pumped in.

I know you can't guarantee that the
permit will be in compliance, fines levied by DNREC for noncompliance. It's really a joke out of it, actually there's expenses.
(Applause)
MS. VEST: Thank you, sir. Anthony and Susan Scarpa.

MR. SCARPA: Thank you. My name is Anthony Scarpa, and I am one of the cofounders of Keep Our Wells Clean.

I have a housekeeping matter that I would like to ask DNREC. On October 30th of 2018, the Secretary of DNREC entered into a conciliation order by consent with Allen Harim imposing a $\$ 300,000$ fine plus $\$ 7,888$ to cover DNREC's abatement expenses.

The fine was for NPDES permit violations at the Harbeson/Dagsboro Allen Harim facilities.

Allen Harim was supposed to pay $\$ 150,000$ plus the $\$ 7,888$ of fine within 30 days. And within 60 days -- and this is an agreement that was signed by the president of Allen Harim, Joe Moran.

Within 60 days of the order, Allen

Harim was supposed to enter into an agreement to fund a \$150,000 environmental improvement project with the Nature Conservancy related to improving water quality by limiting agricultural runoff and groundwater transfer into the Broadkill River watershed.

Attached to my comments is an e-mail chain with John Hinkson, Department of Communications Coordinator for the Nature Conservancy in Delaware, confirming that Allen Harim has not given any money or entered into any agreement with the Conservancy as ordered by the Secretary of DNREC.

I would like to find out whether or not this $\$ 300,000$ fine was ever paid. Because, if it has not been paid, Allen Harim should not be here tonight, and DNREC should not be addressing their application for an operating permit.

If you have an outstanding fine to the State of Delaware, then this should disqualify Allen Harim for even consideration in this matter at this point.

Also, on public hearing page notice date, time, and location, Allen Harim is applying for an operations permit for on-site wastewater treatment and disposal system to treat up to 4 million gallons a day of poultry processing wastewater.

Just below that, Artesian, in their permit, is asking for the disposal permission for 1.5 to 2 million gallons per day of chicken wastewater.

Why would Allen Harim be seeking a permit to treat 4 million gallons if you only have disposal capacity for two?

Further, Allen Harim's treatment system operations and maintenance plan was compiled but not submitted to DNREC until July 24, 2019, only one week before the public announcement was put online.

Did DNREC engineers even have an opportunity to review it?

Further, the final design of the wastewater treatment system upgrade and expansion phase two by Reed Engineering on November 23, 2015, almost four years ago, was

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included in the application, but it was abandoned in 2016 by Allen Harim. Why is it even in the application?

I have many more comments which I will submit in writing.

MS. VEST: Thank you, Mr. Scarpa. (Applause)

MS. VEST: Daniel Konstanski?
MR. KONSTANSKI: That was me that already spoke.

MS. VEST: Oh, I knew that.
MR. KONSTANSKI: Just signing in
like you told me. Following the rules.
MS. VEST: It's been that kind of day, folks. Jeff Horn.

MR. HORN: I waive my comments.
MS. VEST: Okay. Thank you. Lew and Donna? (Laughter) Can $I$ get away with not trying to butcher your last name?

MR. PODOLSKE: Sure.
MS. VEST: Thank you.
MR. PODOLSKE: Hi. I'm Lew
Podolske.
MS. VEST: That's it. (Laughter)

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MR. PODOLSKE: I'm a homeowner in the Millsboro Possum Point area.

I just have a couple comments. First, one of the classic definitions of insanity is doing the same thing over and over and over again and expecting a different result. (Loud applause and whistling)

In the Millsboro area, we have the Allen Harim Pinnacle plant, which is a Brownfield site, officially called a Brownfield site because of the use of wastewater irrigation systems by the prior owner, Smith.

In Millsboro, as you must all be aware, we also have Mountaire, which for something like 20 years has violated its permits about spray irrigation of wastewater, leading to huge pollution problems, including medical problems for some of the neighbors in that area.

So why do we continue to allow these companies to put in systems that depend on that technology where, if everything goes perfectly, as one of the earlier speakers

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mentioned, we will get the balance of the absolute maximum allowable pollutant?

And when was the last thing human beings did that ever worked perfectly with no problems?

So we know that, you know, rain can cause problems with runoff, freezing weather can cause problems with runoff.

Their system design seems like it's really pushing the envelope. And, yet, we are supposed to expect that everything will go well and will work perfectly.

The other thing I am concerned about, of course, is that it's again more of a corporate bait and switch.

The Allen Harim plant at Pinnacle
was supposed to be developing a
state-of-the-art wastewater treatment system
on site so that all of the water that was used in that facility would be clean and would not have to go anywhere.

Instead, they got an agreement to
temporarily truck things for treatment at
Harbeson. And now we can see that that's

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supposed to become a permanent fixture with trucks of wastewater going up and down the roads, including past schools, over bridges with environmentally sensitive areas.

And I also find it hard to believe that that whole processing system that they have going at the Allen Harim plant is only going to produce 40,000 gallons per day.

That really stretches stability.
So I think, you know, we would like to see them put in place the state-of-the-art facility they were supposed to put in place, the same as to, I believe in Harbeson, where they had committed to a state-of-the-art facility which they are now not going to build, and instead we are going to go and use the same technology that has failed repeatedly throughout Delmarva. Thank you. (Loud applause)

MS. VEST: Andrea Green?
MS. GREEN: I have comments with respect to both of the permit applications that I will hand up to be entered into the record.

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MS. VEST: Sure. Sure.
MS. GREEN: My name is Andrea
Green. I live in Milton, a resident of this area for about seven years at this point.

Again, along with Mr. Scarpa, founded Keep Our Wells Clean, as the community group concerned about the environmental hazards in our area, and particularly the wastewater issues.

And I am rather disappointed that we only have a total of three minutes with respect to two separate applications, two separate permit applications, giving us a minute and a half for each of these applications.

However, I have a couple of
important points $I$ would like to raise.
First of all, with respect to the Artesian permit application, the application is not consistent with the conditional use that was granted by Sussex County. That's Sussex County Ordinance 1923, which specifically states in one particular respect, "Irrigation rates are to be
determined by crop utilization and uptake limits, not by wastewater disposal needs."

That is not what's in this permit application. And, in other words, the permit application is in violation of the conditional use that was granted by the County.

Additionally, there is nothing in the application that shows us what the actual agreement is between Artesian and either the owner of the land or the farmer.

Where is that agreement? What does it say? Who has control? When can spraying be done? Are they saying that spraying can be done when crops aren't in the field?

Without seeing that, we have no
idea whether this is actually a viable system.

Additionally, Sussex County
Ordinance Number 1922, which approved the land that Artesian is using, was approved for a sanitary waste facility. That's for public sewers, sewers for homes in the area. It was to be public in nature, and that was the

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specific condition in the conditional use. This is an industrial use, not for homeowners in the area. It is not public in nature.

Additionally, both DNREC and Artesian made misrepresentations, based on my reading of their applications, to the Environmental Appeals Board in a prior hearing that Keep Our Wells Clean had recently.

They specifically stated -- and I have the testimony attached to my comments -that they would not accept non-compliant wastewater.

That's clear -- they are clearly
going to get non-compliant wastewater, because the testing doesn't come back, and millions of gallons of water, potentially non-compliant wastewater, will have flowed through that pipeline.

Additionally, it says that the diversion -- one of the counsel specifically indicated, "The diversion lagoon will exist before an operational permit is granted."

If you read the documents, there is no diversion lagoon in existence at this point.

And, in fact, the documentation indicates that DNREC contacted Allen Harim and indicated that they had questions and problems with respect to the proposal regarding the diversion lagoon and wanted to know why it won't be ready until June of 2021 .

So I have lots of other comments, but apparently my time has expired. Thank you.

MS. VEST: Thank you, Ms. Green. (Loud applause)

MS. VEST: Shelly Cohen.
MS. COHEN: I also live in Milton, but $I$ live within the town. So, I'm concerned, even though $I$ don't have a private well, I'm concerned this is actually pretty close to where I live.

And a lot of other people have, you know, have that concern, too, that this is people all connected. This is going into the
groundwater, the aquifer we all share.
And we do have huge concerns.
I just want to get my notes up.
Excuse me.
So some of my comments border on
what some of the other people said.
But I also have this concern --
some people touched base on this -- it seems like these business entities, these operations are either being fuzzed -- where does one begin, and where does one end?

Why are we having two hearings at the same time for supposedly two different business operations?

Why are the names changing all the time?

The Allen Harim facility in
Harbeson is only supposed to be processing wastewater for the chicken -- processing wastewater that develops at the facility. They are not supposed to be taking on wastewater from the old Pinnacle site or from the Hatchery.

Those are different types of waste.

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It also includes human waste from the employees.

So now it's all going to go into one big, toxic soup. And is the treatment standard -- I mean, are they even going to keep the treatment standard that they have now?

To me, that's unclear. I know you
flashed some stuff up there, but those numbers seem to be pretty high.

And I'm not a scientist, so I
just -- but I looked at lab reports from private wells, and that seems to be kind of out of bounds.

And how can we go with this old, this archaic idea that the land will purify all this toxic mess that we are throwing into it?

It just doesn't make sense.
And I find it really scary. And
then when you talk about the different entities and the different names and how it's
all melding together and everything, it's
like, well, if you cause a problem, who has

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that -- who has the liability? Who do you go see?

I know that was put to you once at a couple of those Artesian meetings when you were on Route 1. And you said, "Well, we know where you are at." But that didn't really answer the question.

Who holds the liability if somebody
has a health problem, if something else happens, if somebody starts having one miscarriage after another, if they can't -if they have a private well and they can no longer use their water, where once they could?

I mean, where does that financial and the liability issues, who do you go to?

And other people -- it's the country, and this is like one big operation. This water is flowing from Allen Harim to the Artesian site.

And it's like, well, without looking at that agreement between these companies, these three companies -- I imagine it's three; maybe it's more -- well, you
don't know. There, you know, there should be a definite differentiation somewhere along the line. (Bell ringing)

Am I done?
MS. VEST: You are done. I
apologize. I wasn't trying to do that to you. My phone has a mind of its own.

MS. COHEN: So I'm concerned about the liability.

And then to backtrack for a second, this project should never have been in this area.

What makes -- what was the
rationale from having one company's wastewater, that they should have been responsible for it in handling and making their proper investments to clean it up, what made them think it was a good idea to now pass it through 9 miles of pipeline, spraying all these fields?

And pretty much you're covering -I don't know what the square miles are, but about 14 miles of area.

MS. VEST: Ms. Cohen, time is up.

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MS. COHEN: Okay.
MS. VEST: I have to be fair. I'm sorry.

MS. COHEN: Sure.
(Loud applause)
MS. VEST: Tom DiOrio?
MR. DIORIO: Thank you. My name is Tom DiOrio. And I used to be a resident of the Town of Milton several years ago. And now I live outside the town -- county limits -- and $I$ have a private well.

I have a four-page letter which I would like to submit into the record. And I will just do some highlighting of the information here.

It's estimated by Federal and State authorities that 92 percent of the water in the State of Delaware is polluted by nitrates, bacteria, algae, chemicals, pesticides.

And the cause of most of these
result from corporate chemical and agricultural land-related pollution. As citizens, we are advised against swimming in

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our lakes, rivers, and bays.
We are cautioned about eating the fish caught in our waters in many cases, or not to drink the water in our wells and, in some cases, in our towns.

This project is flawed, and I think the permitting process is flawed.

The project does nothing to lessen water and well pollution. It only adds to it. Because it's a known fact that the majority of private wells in this area are already contaminated with high levels of nitrates.

And the answer to the present contamination is not to add any additional contamination to it.

Thirty parts per million. EDA says
10 parts is a maximum. My well, without any treatment, is already over 15. I have a treatment system on it.

So you are adding, no matter how much you add to it, even if it's only five parts per million, you are adding additional pollutants. This is not going to do anything
but raise the contamination level.
And the fact that you cannot
guarantee that 100 percent of the nitrates sprayed on the soils would be taken up by crops that are only grown four to five months of the year. Give me a break.

Adjacent to this project is an already known pollutant where this Artesian system is, Clean Delaware, which sprays human sewage, minimally treated, on the site.

This site is adjacent to the Russell Collins community in Milton, whose wells have recorded excessive nitrate levels, some as high as 90 parts per million. The guideline is 9. That's 10. So it's at 90.

The State of Delaware is one of three states that $I$ am aware of that allows, still allows this type of sewage disposal, one and three. Okay?

This processing is flawed because the well -- the residential wells survey that they use for this permit was dated back in 2009. That's ten years old. There are many more new homes in this area since this

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project was built.
There have been no hydraulic studies or made public that would demonstrate the impact this facility would have with the aquifers.

MS. VEST: Mr. DiOrio.
MR. DIORIO: Time up?
MS. VEST: Yes.
MR. DIORIO: I was just getting
started.
(Laughter -- loud applause)
MS. VEST: Just as a little
housekeeping thing, I want to make sure everybody knows, those that have been providing written comments, they will go up just along with everything else.

For the record, Ms. Green's statements are being marked as -- and documents are being marked as Green Exhibit 1. They will go up.

And Mr. DiOrio's documentation will also go up identified as DiOrio Exhibit 1.

MR. DIORIO: Okay. Thank you.
MS. VEST: Thank you. Ken and

Joanne Haynes, you had a question mark. Did you want to or?

MS. HAYNES: Oh, yeah.
(Laughter in audience)
MS. HAYNES: Hello. My name is
Kenny Haynes. I'm from Millsboro.
And I see everybody here is old enough to remember Rocky and Bullwinkle, (Laughter) Sherman, Peabody, and the Wayback Machine.

Let me go in the Wayback Machine back to June 10 of 2013.

We met in the Millsboro Fire Hall when Allen Harim had just bought the Pinnacle Plant.

And along with the owners of Harim was the agricultural secretary at that time, Mr. Key. He had an amazing claim, and he said they are going to build a state-of-the-art water system that we can drink the water. And I accused him of having a bottle of hoochie. (Laughter)

But nothing ever happened with the state-of-the-art system.

Then a few years ago, I was at the Wayback meeting when Harbeson Harim -- or, yeah, Harbeson Harim got the 11 and a half million dollars to build, again, a state-of-the-art water system. Nothing happened.

Now it's supposed to be up here. Well, excuse me for a minute.
(Pulling up pant legs to knee high) (Laughter)

I'm done. It's just getting a little deep up here. Sorry.
(Laughter and loud applause)
MS. VEST: Mrs. Haynes, did you wish to speak?

MRS. HAYNES: Yes.
I'm going to stand right here.
Well, here we go again. Allen
Harim. I have asked you the first time I met yous, don't go in the old Vlasic building. You did.

We haven't been happy with you at all in any of your decisions, in any of them.

We have been told that we complain
too much. But we live right there.
We smell everything.
The river, you can't crab, can't fish.

I don't even get my grandchildren in the damn water anymore, because it's filthy. It's the worst part of the Indian River.

Now, I wonder if any of you people live right in Millsboro. I bet you you don't. I would call you a fool.

This is wrong. Delaware is for
(inaudible) Start worrying about the people. (Loud applause)

MS. VEST: Thank you, Mrs. Haynes. Mohammed Akhter? Octer?

DR. AKHTER: Good evening. My name is Mohammed Akhter. I'm a medical doctor with a public health degree from Johns Hopkins.

I had the good fortune to serve as director of health for state of Missouri and also for Washington, D.C.

And I also serve on the Washington,

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D.C.'s Water and Sewer Authority, so I know something about these matters.

My concern is about the health of this community. I live in Sussex County.

This kind of project would not be considered without having a health impact study done of the surrounding communities. (Loud applause)

Lower Delaware, you know, we aren't doing it.

A health impact study is very
important to do, because no matter how good the engineering work is, no matter how good the people are, accidents do happen.

And when they do happen, it damages the environment and health of the people.

If you have a baseline that you can measure what the impact is, you can not only treat the people, but you can also compensate them for the damage that's done to their property, their home values, and so on and so forth.

My second point, as we know it, is
that history tells me, informs me, our recent
history, that when a leak takes place and contaminate the drinking water in the big cities like Washington, D.C., Wisconsin, or now cancers, newer, more recently, newspaper provide front-page stories. Everybody runs around, fixes the problem.

When the same thing happens in a small, little town such as us, nobody cares. MS. PAYAN: That's right. DR. AKHTER: If we get violations and contamination of water, the stories appear in the local papers, but they disappear in a couple of days.

But the contaminated water that people drink can remain in the system for years to come and manifest itself in the form of cancer and heart disease.

Do you think there is any surprise that in two Zip Codes, Zip Code 19966, which is Millsboro, and in Zip Code number 19939, Dagsboro, has the highest rate of cancer and heart disease in the State of Delaware?

MS. PAYAN: Yes.
DR. AKHTER: It didn't happen by

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accident. It happened because the things are contaminated, we are all living and drinking contaminated water, vegetables and food that's grown in contaminated water.

And we need to fix this problem. And, finally, the last point $I$ want to make is it's 2019. We can't apply Nineteenth Century solutions. (Loud applause during comment - cuts out speaker) Have to manage to doing the business that will not only enhance the industry -- we love the industry. Okay? They should prosper. But also protect the health of our people.

Thank you so very much.
(Loud applause and whistling)
MS. VEST: Lou and Ellie Col'on? I apologize if $I$ got the name wrong.

MR. COL'ON: I would like to submit
a letter to the editor that $I$ wrote to the Cape Gazette. It only made it to the website.

Good evening, everyone. I live in
Milton. Along with myself and Ellen, we're on the Milton Sustainability Committee.

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Everything that $I$ wanted to ask or comment on was addressed tonight.

Um, one question is I would like to
know where DNREC's legal counsel was when
they were reviewing applications.
If Sussex County's use says one
thing, but the applications say something else, where was legal counsel? Where were their heads? I would really like to know.

Most of the commenters made
reference to -- I have to take my glasses off to read -- impact studies. Where are they?

Was there an air quality, a flora, a fauna, a real estate values, air quality, traffic studies?

The doctor mentioned health
studies. Things that, you know, we take for granted, were never touched.

I'm new to the area, but $I$ have learned a lot in the last year.

Clean Delaware was mentioned. A 31 -day permit issued in 1986 never enforced? They are still operating?

You know, the other thing, as a

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special projects manager under (inaudible) part of my job is to seek out the alternatives.

What alternatives were sought for this?

You can take waste and make energy.
Where is the think hole? Everything that's happening flies in the face of everything that we are doing. We are fighting ghosts.

We are supposed to be sustainable.
What I see you guys proposing is not sustainable.

It just takes one accident.
The waters are already ruined in
this area. You mentioned regulating constituents. What is that? Define that.

What happens when capacity is
reached? That was another question.
I mentioned the discrepancies between the county -- the conditional use of the two permits.

Oh, the 90-million-gallon capacity.
Define emergency, and define
process.

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I think those have all been touched on, but there is no real definition that $I$ have heard.

That's pretty much it. You know, if you go into the Cape Gazette, you can Google my name, Lou Col'on, $\mathrm{C}-\mathrm{O}-\mathrm{L}-\mathrm{O}-\mathrm{N}$, and read the letter that $I$ wrote.

Because there is money in treated waste that could be turned into energy. Your sludge could be pelletized.

You know, I wrote a letter that most entrepreneurs would jump on. Nothing was done.

Thank you.
(Loud applause)
MS. VEST: Thank you, Mr. Col'on.
And, again, for recordkeeping purposes, the copy of his article provided to me just now is marked as Col'on Exhibit 1.

Maria Payan?
UNIDENTIFIED SPEAKER: Go ahead,
Marie!
MS. PAYAN: Thank you. Thank you
for the opportunity to comment.

The first thing a lot of us touched on, but $I$ want to reiterate, spray field waste is not new state-of-the-art technology.

This is old technology. It is a cheap way of getting rid of the waste at the expense of all of our health and water. (Applause)

Our geology here is sand with a higher water table, easily prone to contamination and transport, as Lou made the point.

So Vlasic site, you can't use the fields there. The Hatchery site, those fields are done. Mountaire, those fields are done.

Oh, I was at a meeting this morning, because as much as $I$ heard what was going to get done if something went wrong, I have people that don't have water still today.

So be careful with their promises, because it doesn't happen.

The ten -- it's going to lead at
30 milligrams per liter from Harim. And

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the -- it's going to go in the fields at 9.9 if everything goes correctly.

Ten is the regulatory limit of the Safe Drinking Water Act set many, many years ago. It is not a no-adverse affect level for health.

More recent studies have found increased risks of birth defects at much lower levels. As a matter of fact, at five.

Not only that. Cancer, Blue Baby Syndrome, gastric cancer, thyroid cancer, bladder cancer, ovarian cancer, non-Hodgkin's lymphoma.

The proposed wastewater system irrigation will permanently threaten the residential drinking water.

They were talking about the wells contaminated here by (inaudible) 68 percent. 45 of 66 wells. And some of the limits go, I believe, up to 53, five times the limit.

The area of soils are unsuitable for any of this spray irrigation.

The water table is shallow,
9.2 feet below ground surface. Soil modeling

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evidenced seasonal soil saturation documented at 3.2 feet below ground surface.

A 2008 soil investigation within Field G -- 2008 -- documented 36 of 80 , or 45 percent of the soil borings, with saturation at 5 feet below the ground surface or less.

In other words, 86.25 percent of the soils documented are in inadequate for such water filtration and treatment.

Artesian's own consultants have concluded that several areas of concern exist in Field G, including close depressions in fields and woods and areas of ponding along Route 16, Saw Mill Road, south of G130 and G137, shallow features within Field G, avoid the triangular area. Really?

MS. VEST: Ms. Payan.
MS. PAYAN: Yes?
MS. VEST: Your time is up. I'm sorry.

MS. PAYAN: Oh, time is up.
MS. VEST: Do you have any
documents that you wish to --

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MS. PAYAN: No. I am going to look at what went up today, and I will be providing them.

MS. VEST: Okay. Thank you. (Loud applause)

MS. VEST: I have now gone through all of the sign-in sheets.

And, again, I just want to assure you that every comment that comes in, it all bears the same weight.

And while we are limited to time restraints here, there is absolutely no limit to what you can submit.

If you spoke tonight and want to submit, that's fine. If you want to submit three sets of stuff, that's fine.

If you haven't already made a point of looking at that link or at the hearing page that we have -- is there any way that we can put that last slide back up, so if people want to take a picture of that link with their tablet or with their phone, they have got it?

I also have my business cards up
here. If anybody has any problem or wants to provide me with their e-mail address or
e-mail me over the next few days and say, "I can't find the link," by all means, $I$ will make sure that you can find it.

There is a vast amount of
information up there.
MR. HORN: Madam Chairman?
MS. VEST: Yes.
MR. HORN: A question about
housekeeping. I waived my three minutes.
Can I assign that to someone else?
MS. VEST: No. No.
But there is a vast amount of information up here. Please take advantage of it. Review it.

And all comment bears the same weight, again, whether it was offered here tonight verbally or anything else, or anything like that.

I want to thank everybody for
coming out. I know the tables were kind of
uncomfortable. I do apologize.
Again, come see me if you need a

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business card. Thank you, everybody, for attending. This meeting is adjourned.
(Concluded at 7:37 p.m.)

## CERTIFICATE

I, Lorena J. Hartnett, a Notary Public and Registered Professional Reporter, do hereby certify that the foregoing is an accurate and complete transcription of the proceeding held at the time and place stated herein, and that the said proceeding was recorded by me and then reduced to typewriting under my direction, and constitutes a true record of the testimony given by said witnesses.

I further certify that $I$ am not a relative, employee, or attorney of any of the parties or a relative or employee of either counsel, and that $I$ am in no way interested directly or indirectly in this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office on this 26th day of August 2019.


Lorena J. Hartnett Registered Professional Reporter

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|  |  |  | August 21, 2019 |
| :---: | :---: | :---: | :---: |
| \$ | 83:14 | 13:19 16:6 21:1 | 13:2,14 15:3,24 16:5 |
|  | accommodate (1) | 23:11 27:5 29:14,16 | 18:13 21:13 35:15 |
| \$150,000 (2) | 9:9 | 30:24 31:18 32:7,18, | 36:24 37:13 40:19 |
|  | account (1) | 20,23 33:5,7,8 34:7 | 44:4 45:16,23 47:1,4 |
| 61:20 62:2 | 49:3 | 35:1 36:10 45:14 47:8, | 50:8 51:24 65:6 66:14 |
| \$30 (1) | accuracy (1) | $17,2277: 15,23$ | 68:5 81:4,18 88:17 |
| 39:12 | 14:5 | Additionally (5) | $92: 893: 18,24$ |
| \$300,000 (2) | accurate (1) | 14:24 69:8,19 70:5, | against (1) |
| 61:14 62:16 | 4:21 | 21 | $76: 24$ |
| \$7,888 (2) | accurately (1) | address (3) | aggregate (1) |
| 61:14,20 | $14: 3$ | $7: 7 \text { 16:11 93:2 }$ | $43: 11$ |
| A | accused (1) | addressed (3) | ago (4) |
|  | 80:21 | 53:13 55:18 86:2 | 63:24 76:9 81:1 |
| abandoned (1) | achieve (3) | addressing (1) | 90:5 |
| 64:2 | 28:10 29:20 31:6 | 62:19 | agreement (7) |
| abatement (1) | acres (3) | adds (1) | 61:22 62:1,12 |
| 61:15 | 26:10 29:5 33:5 | 77:9 | 66:22 69:10,12 74:22 |
| ability (7) | across (3) | adhered (1) | agreements (1) |
| 14:17 18:8 47:2 | 45:14 48:3 56:19 | 7:3 | 54:12 |
| 48:6,8,10,14 | Act (1) | Adjacent (2) | agricultural (9) |
| able (4) | 90:4 | 78:7,11 | 26:1,5,17,17,19 |
| 9:18 10:2 29:20 | action (1) | adjourned (1) | 41:6 62:5 76:23 80:17 |
| 52:8 | 40:4 | 94:2 | ahead (2) |
| above (1) | actions (3) | adjusting (1) | 33:14 88:21 |
| 47:18 | 38:8 45:19 50:12 | 49:9 | air (3) |
| absolute (1) | actively (1) | advantage (5) | 17:24 86:13,14 |
| 66:2 | 49:7 | 52:3,20 53:2 60:1 | Akhter (5) |
| absolutely (2) | actual (3) | 93:15 | 82:16,17,18 84:10, |
| 8:8 92:12 | 12:16 22:6 69:9 | advised (1) | $24$ |
| accept (3) | actually (10) | 76:24 | algae (1) |
| 6:18 53:20 70:13 | 4:10 7:9 30:8,11 | aeration (1) | 76:19 |
| acceptable (1) | 31:14 35:1 58:3 61:3 | 18:1 | Allen (58) |
| 20:24 | 69:17 71:20 | affect (1) | 5:13,16 11:5 15:6 |
| access (5) | add (3) | 90:5 | 17:17 18:16 22:17 |
| 26:23 27:17 41:14 | 10:8 77:15,22 | after (7) | 23:4 24:18 25:12 |
| 54:9,10 | adding (2) | 10:7,12 13:20 | 26:21 30:13 31:20 |
| accident (3) | 77:21,23 | 16:14 18:4 43:17 | 32:12 33:17,18 34:7, |
| 55:16 85:1 87:13 | addition (1) | 74:11 | 11,15,18,20,23 36:2, |
| accidents (1) | 37:2 | again (31) | 12 37:1 38:22,23 39:4, |
|  | additional (25) | 6:22 11:3,20 12:9 | 11 40:13 41:22 42:14 |


| 43:16 44:2,8 45:22 | 32:21,23 35:17,18 | answer (3) | 5:13 7:12,21 11:4 |
| :---: | :---: | :---: | :---: |
| 50:10 60:7 61:13,17, | 38:22 42:6 45:3,10 | 53:24 74:7 77:14 | 17:17 25:2,9 29:5 |
| 19,23,24 62:11,17,23 | 47:16 48:10 51:8 | Anthony (2) | 30:7 33:19 34:15 |
| 63:2,11,14 64:2 65:9 | 56:16 63:1 65:15 67:5 | 61:5,8 | 35:11,13 36:9,13 37:7 |
| 66:16 67:7 71:5 72:17 | 71:17 72:7 73:1 79:22 | anticipate (1) | 54:15 62:19 64:1,3 |
| 74:19 80:14 81:18 | 82:23,24 83:19 85:13 | 47:19 | 68:19,19 69:4,5,9 |
| Allen's (1) | 92:24 | anybody (2) | applications (14) |
| 44:14 | alternatives (2) | 58:12 93:1 | 5:3,10 6:12 15:6,17 |
| allocated (1) | 87:3,4 | anymore (1) | 16:3 36:2 67:22 68:12, |
| 47:9 | although (1) | 82:6 | 13,15 70:7 86:5,7 |
| allotment (1) | 39:22 | anyone (3) | applied (2) |
| 12:22 | always (2) | 4:15 49:23 60:9 | 5:19 26:12 |
| allow (5) | 47:12,13 | anything (9) | apply (2) |
| 15:4 18:10 31:13 | amazing (1) | 18:8,9 22:9,23 50:3 | 24:15 85:7 |
| 60:12 65:21 | 80:18 | 60:9 77:24 93:19,20 | applying (1) |
| allowable (1) | amended (2) | anytime (1) | 63:3 |
| 66:2 | 54:17 60:6 | 20:21 | appointed (1) |
| allowed (2) | amount (8) | anywhere (2) | 6:4 |
| 19:8 31:19 | 21:21 42:3 47:10 | 50:3 66:21 | appreciate (3) |
| allows (3) | 52:24 57:1,2 93:6,14 | apologize (7) | 4:12 50:14 53:8 |
| 42:16 78:17,18 | ample (1) | 4:8 59:9,12,18 75:6 | approval (3) |
| almost (1) | 10:18 | 85:17 93:23 | 60:13,17,18 |
| 63:24 | Andrea (2) | apparently (2) | approve (1) |
| alone (1) | 67:20 68:2 | 59:2 71:12 | 8:23 |
| 31:6 | announcement (1) | Appeals (1) | approved (2) |
| Along (8) | 63:18 | 70:8 | 69:20,21 |
| 38:16 57:19 68:5 | annual (4) | appear (1) | approximately (2) |
| 75:2 79:16 80:16 | 23:21,23 28:11,11 | 84:12 | 4:4 57:18 |
| 85:23 91:14 | another (10) | Applause (15) | aquifer (1) |
| already (18) | 13:2 14:8 35:10,11 | 61:4 64:7 65:7 | 72:1 |
| 4:23 6:23 9:2 12:3, | 44:13 54:22,22 55:12 | 67:19 71:15 76:5 | aquifers (1) |
| 8,10 32:22 39:5,11 | 74:11 87:18 | 79:11 81:13 82:14 | 79:5 |
| 41:12,17 52:12 64:10 | anoxic (1) | 83:8 85:8,15 88:15 | archaic (1) |
| 77:12,19 78:8 87:14 | 17:24 | 89:7 92:5 | 73:16 |
| 92:17 | ANSRWRF (18) | applicant (1) | area (17) |
| also (42) | 18:11 19:20 20:17 | 50:16 | 27:7 41:10 65:2,8, |
| 6:14 8:10 10:1,2,5 | 22:17 25:6 30:15,18 | applicants (4) | 20 68:4,8 69:23 70:3 |
| 14:24 19:14 20:12 | 32:14 35:14 36:2,5 | 5:11 6:16 37:22 | 75:12,23 77:11 78:24 |
| 22:3,8 23:3,24 24:10 | 38:4,20 40:17 41:4 | 38:13 | 86:19 87:15 90:21 |
| 25:6 27:2,3 31:1,22 | 43:18 44:9 46:24 | application (25) | 91:17 |



| bet (1) | 5:97:11 11:5 15:6 | building (7) | cannot (2) |
| :---: | :---: | :---: | :---: |
| 82:10 | 21:20 26:4,6 36:1 | 39:16 40:15 43:3 | 53:20 78:2 |
| between (9) | 38:6 41:10 42:14 44:7, | 45:24 46:15 55:17 | capability (1) |
| 21:2 50:9 54:20 | 14 67:22 70:5 | 81:20 | 27:4 |
| 55:2 56:17 57:17 | bottle (1) | built (1) | capacity (7) |
| 69:10 74:22 87:20 | 80:22 | 79:1 | 30:22,23 47:8 |
| beyond (1) | bought (1) | Bullwinkle (1) | 53:18 63:13 87:17,22 |
| 47:19 | 80:14 | 80:8 | Cape (2) |
| big (4) | bounds (1) | bunch (1) | 85:20 88:5 |
| 18:4 73:4 74:18 | 73:14 | 31:21 | card (2) |
| 84:2 | Branch (2) | business (8) | 16:15 94:1 |
| bigger (1) | 56:17,18 | 9:22 16:15 52:18 | cards (1) |
| 45:5 | brand (1) | 72:9,14 85:10 92:24 | 92:24 |
| biological (3) | 50:5 | 94:1 | careful (1) |
| 18:1 27:19 48:12 | break (1) | butcher (1) | 89:21 |
| biologically (1) | 78:6 | 64:19 | cares (1) |
| 27:19 | bridges (1) | C | 84:8 |
| birth (1) | 67:3 |  | CARUTHERS (2) |
| 90:8 | brief (2) | cafeteria (1) | 17:12,13 |
| bit (4) | 6:14 48:17 |  | case (4) |
| 5:6 45:6 56:2,24 | briefly (4) | 4:10 | 7:2 27:24 31:2 |
| black (1) | 10:22 12:19,19 38:9 | calculate (1) | 55:16 |
| 57:7 | bring (2) | 28:22 | cases (2) |
| bladder (1) | 47:23 59:18 | calculations (2) | 77:3,5 |
| 90:12 | bringing (1) | 30:7,9 | caught (1) |
| blowouts (2) | 32:21 | call (4) | 77:3 |
| 57:5 59:3 | broad (1) | 14:9 26:22 43:1 | cause (4) |
| Blue (1) | 39:23 | 82:11 | 66:7,8 73:24 76:21 |
| 90:10 | Broadkill (1) | called (5) | cautioned (1) |
| Board (1) | 62:6 | 25:6 26:12 42:15 | 77:2 |
| 70:8 | broken (1) | 43:8 65:10 | cease (2) |
| BOD (2) | 50:3 | calling (2) | 47:2,15 |
| 21:5 42:1 | brought (2) | 40:1,8 | cell (1) |
| BOD5 (1) | 7:7 33:8 | came (1) | 15:1 |
| 27:24 | Brownfield (2) | 57:7 | cells (1) |
| border (1) | 65:10,11 | cancer (7) | 18:2 |
| $72: 5$ | bugs (2) | 84:17,21 90:10,11, | center-pivot (1) |
| borings (1) | 20:15,22 | 11,12,12 | 49:20 |
| 91:5 | build (3) | cancers (1) | Century (1) |
| both (15) | 67:16 80:19 81:4 | 84:4 | 85:8 |


| certain (6) | chlorinate (1) | cofounders (1) | 12:14 13:1 |
| :---: | :---: | :---: | :---: |
| 27:22 29:12 30:5,6 | 48:8 | 61:9 | commenters (3) |
| 42:3 54:9 | chlorination (2) | Cohen (6) | 6:20 13:9 86:10 |
| certainly (1) | 18:5 32:22 | 71:16,17 75:8,24 | comments (29) |
| 14:12 | chlorine (1) | 76:1,4 | 6:24 9:19 10:8,9 |
| certified (2) | 20:11 | coliform (2) | 11:7 12:12,20 13:11, |
| 24:2 44:10 | chunks (1) | 20:19 28:2 | 13,17 15:9,10 16:9,17 |
| cetera (2) | 18:4 | coliforms (1) | 36:1 37:9 53:1,11 |
| 29:7 30:3 | circumstances (2) | 20:22 | 55:23 56:12 62:7 64:4, |
| chain (1) | 54:6,7 | Collins (1) | 16 65:3 67:21 70:12 |
| 62:8 | cities (1) | 78:12 | 71:11 72:5 79:15 |
| Chairman (1) | 84:3 | Col'on (5) | committed (1) |
| 93:8 | citizens (2) | 85:16,18 88:6,16,19 | 67:14 |
| challenges (1) | 15:4 76:24 | C-O-L-O-N (1) | Committee (1) |
| 33:7 | claim (1) | 88:6 | 85:24 |
| chance (1) | 80:18 | colonies (2) | Communications (1) |
| 4:15 | clarification (1) | 20:19 28:3 | 62:9 |
| change (1) | 36:20 | combination (1) | communities (1) |
| 60:12 | clarifiers (1) | 49:15 | 83:7 |
| changes (1) | 18:2 | come (9) | community (4) |
| 46:22 | classic (1) | 4:13 10:6 16:13 | 41:668:7 78:12 |
| changing (1) | 65:4 | 19:18 42:3 47:24 | 83:4 |
| 72:15 | Clean (7) | 70:17 84:16 93:24 | companies (4) |
| charge (1) | 61:9 66:20 68:6 | comes (9) | 60:16 65:22 74:23, |
| 38:23 | 70:9 75:17 78:9 86:21 | 9:6 39:20 43:21 | 23 |
| cheap (1) | cleanout (1) | 46:7,8 52:10,13,18 | Company (1) |
| 89:5 | 24:4 | 92:9 | 25:4 |
| check (5) | clear (3) | coming (5) | company's (1) |
| 8:9 40:21 41:9 | 5:8 28:7 70:15 | 4:7 19:4 50:14 | 75:14 |
| 52:10,20 | clearly (1) | 59:13 93:22 | compensate (1) |
| chemical (1) | 70:15 | comment (37) | 83:19 |
| 76:22 | close (4) | 5:3 6:18 9:6,13,21 | compiled (1) |
| chemicals (5) | 9:22 52:18 71:21 | 10:3,6,12,13,17,19 | 63:16 |
| 60:19,19,21,22 | 91:13 | 11:1,14,18 12:1,3,8,8, | complain (1) |
| 76:19 | closely (1) | 23 13:3,7 14:21,22 | 81:24 |
| chicken (4) | 22:14 | 15:5,20 16:7,8 17:7 | completed (2) |
| 59:22 60:2 63:10 | Code (2) | 37:10 52:10,15 53:8 | 7:17 55:19 |
| 72:19 | 84:19,20 | 85:9 86:2 88:24 92:9 | completely (3) |
| chloride (1) | Codes (1) | 93:17 | 10:9 47:18,22 |
| 21:6 | 84:19 | commenter (2) | complex (3) |


| 39:8 45:14 46:3 | 5:7 | contained (1) | corrections (1) |
| :---: | :---: | :---: | :---: |
| compliance (3) | connected (1) | 37:10 | 46:22 |
| 23:17 39:3 61:1 | 71:24 | containing (1) | corrective (4) |
| compliant (1) | connection (1) | 37:10 | 38:8 40:4 45:18 |
| 23:7 | 55:2 | contaminate (1) | 50:12 |
| composite (2) | consent (1) | 84:2 | correctly (1) |
| 32:3 43:9 | 61:13 | contaminated (6) | 90:2 |
| concentration (7) | Conservancy (3) | 77:12 84:14 85:2,3, | could (6) |
| 20:3,7 21:6 28:11 | 62:3,10,13 | 4 90:18 | 8:5 32:16 33:16 |
| 29:2 41:1 48:1 | conservative (2) | contamination (5) | 74:14 88:9,10 |
| concentrations (1) | 31:12,15 | 77:15,16 78:1 | couldn't (1) |
| 41:14 | considerate (1) | 84:11 89:10 | 10:1 |
| concern (4) | 14:21 | contingencies (1) | counsel (3) |
| 71:23 72:7 83:3 | consideration (1) | 32:16 | 70:22 86:4,8 |
| 91:12 | 62:23 | contingency (3) | count (1) |
| concerned (6) | considered (3) | 55:12,14,21 | 4:21 |
| 56:24 66:13 68:7 | 11:958:24 83:6 | Continue (2) | country (1) |
| 71:19,20 75:8 | considering (1) | 35:9 65:21 | 74:18 |
| concerning (1) | 58:24 | continuous (7) | County (7) |
| 7:8 | Consistent (3) | 22:1 40:7 41:21,24 | 68:21,22 69:7,19 |
| concerns (1) | 10:24 13:4 68:20 | 46:8 58:1,16 | 76:10 83:4 87:20 |
| 72:2 | consisting (1) | continuously (1) | County's (1) |
| conciliation (1) | 15:8 | 42:14 | 86:6 |
| 61:13 | consists (2) | control (3) | couple (5) |
| conclude (2) | 17:23 40:5 | 24:12 29:14 69:13 | 38:10 65:3 68:16 |
| 34:10 37:18 | constantly (1) | controlled (1) | 74:4 84:13 |
| concluded (2) | 49:8 | 26:24 | course (6) |
| 91:12 94:3 | constituents (7) | controls (1) | 6:11 8:24 15:23 |
| conclusion (1) | 40:9,11,20 41:16, | 22:5 | 43:13 55:6 66:14 |
| 6:6 | 23 42:21 87:16 | convenience (1) | court (1) |
| condition (1) | constraints (1) | 7:24 | 14:1 |
| 70:1 | 53:21 | Coordinator (1) | cover (2) |
| conditional (4) | construction (3) | 62:9 | 30:3 61:15 |
| 68:20 69:6 70:1 | 8:3 33:1 54:15 | copy (5) | covered (1) |
| 87:20 | consultants (1) | 34:19,21 36:13 | 41:17 |
| conditions (4) | 91:11 | 37:3 88:18 | covering (4) |
| 23:18 49:3,9 53:19 | contacted (1) | corporate (3) | 38:6 41:13 47:1 |
| confirming (1) | 71:5 | 60:15 66:15 76:22 | 75:21 |
| 62:10 | contain (1) | Correct (3) | crab (1) |
| confusion (1) | 15:16 | 37:5,12 48:4 | 82:3 |



| 38:6 42:17,22 49:1 | 18:5 27:4 | 16 55:9,10 71:1 79:19 | duration (1) |
| :---: | :---: | :---: | :---: |
| 65:6 72:13,24 73:21, | disinfection (1) | 91:24 | 15:2 |
| 22 | 20:14 | dollars (1) | during (8) |
| differentiation (1) | disposal (12) | 81:4 | 10:3 15:22 22:5 |
| 75:2 | 5:15,23 24:9 31:12, | done (17) | 57:6,8 58:18 59:3 85:9 |
| difficulty (1) | 15 33:3 36:16 63:4,8, | 4:23 6:23 8:7 14:16 |  |
| 56:3 | 13 69:2 78:18 | 51:5 54:19 69:14,15 | E |
| DIORIO (12) | dispose (2) | 75:4,5 81:11 83:7,20 |  |
| 16:24 17:3,8,10 | 25:16 30:16 | 88:13 89:14,15,18 | each (7) |
| 76:6,7,8 79:6,7,9,22, | disqualify (1) | Donna (1) | 11:13,17 12:23 |
| $23$ | 62:23 | 64:18 | 13:3 30:11 49:1 68:14 |
| DiOrio's (1) | dissolving (1) | dots (1) | earlier (3) |
| 79:21 | 17:24 | 45:5 | 28:15 46:4 65:24 |
| direct (5) | diversion (10) | doubled (1) | early (1) |
| 40:10,20 42:20 | 22:16 23:10 32:11 | 31:9 | 42:10 |
| 43:24 44:7 | 45:21 46:5,21 70:22, | down (3) | easement (1) |
| directly (5) | 23 71:2,8 | 21:14 57:16 67:2 | 26:18 |
| 6:21 39:17 41:23 | divert (1) | downstream (1) | easier (1) |
| 42:8 44:23 | 18:8 | 39:17 | 45:6 |
| Director (2) | diverted (2) | DR (3) | Easily (2) |
| 39:2 82:22 | 18:11 22:10 | 82:17 84:10,24 | 51:5 89:9 |
| disability (1) | DNREC (18) | draft (14) | easy (2) |
| 59:14 | 5:2 11:1 15:18 16:9, | 7:12,16,22 8:12,15, | 36:22 37:15 |
| disappear (1) | 17 49:22 54:20 60:11, | 20 9:3,15 29:13 34:8, | eating (1) |
| 84:13 | 15 61:2,11,12 62:14, | 19 36:4 37:8 53:10 | 77:2 |
| disappointed (1) | 18 63:16,19 70:5 71:5 | drain (1) | EDA (1) |
| 68:10 | DNREC's (5) | 53:19 | 77:17 |
| Discharge (3) | 11:12 13:4 17:14 | draining (1) | edges (1) |
| 17:15 39:18 54:4 | 61:15 86:4 | 60:5 | 45:11 |
| discrepancies (1) | doctor (2) | drastic (1) | editor (1) |
| 87:19 | 82:18 86:16 | 60:12 | 85:19 |
| discuss (1) | document (3) | drink (4) | effect (1) |
| 25:1 | 54:13,23 55:1 | 28:18 77:4 80:21 | 29:4 |
| disease (2) | documentation (2) | 84:15 | efficiency (1) |
| 84:17,22 | 71:479:21 | drinking (4) | 23:16 |
| disinfect (1) | documented (3) | 84:2 85:2 90:4,16 | effluent (18) |
| 48:9 | 91:1,4,9 | due (1) | 5:21 19:15,21 21:1, |
| disinfected (1) | documents (13) | 53:20 | 7,10,17,20 23:8 25:12 |
| 27:22 | 33:20 34:15 35:16, | dumping (1) | 26:20 29:10 39:20 |
| disinfecting (2) | 17 52:24 53:14 54:9, | 59:22 | 40:22,24 42:12 48:15 |


| 57:9 | 38:3 | equally (2) | everything (14) |
| :---: | :---: | :---: | :---: |
| effluents (1) | engineering (4) | 11:16 54:8 | 10:13 23:4 24:17 |
| 56:22 | 29:18 58:22 63:23 | equipment (2) | 56:22 60:8 65:23 |
| EHS (1) | 83:13 | 14:15 49:24 | 66:11 73:23 79:16 |
| 60:19 | engineers (1) | especially (1) | 82:2 86:1 87:7,8 90:2 |
| eight-mile (1) | 63:19 | 60:5 | evidenced (1) |
| 43:17 | enhance (1) | established (1) | 91:1 |
| either (4) | 85:11 | 27:12 | exactly (1) |
| 12:3 15:1 69:10 | enough (3) | estate (1) | 44:23 |
| 72:10 | 36:19 51:24 80:8 | 86:14 | example (1) |
| Ellen (1) | ensure (6) | estimated (2) | 8:16 |
| 85:23 | 10:1,16 11:20 13:2 | 28:19 76:16 | excavations (2) |
| Ellie (1) | 14:5 20:13 | et (2) | 57:11 59:2 |
| 85:16 | ensures (1) | 29:6 30:3 | exceed (7) |
| else (7) | 27:15 | evaluate (1) | 19:8,22,23 20:4,7, |
| 13:21 59:6 74:9 | enter (1) | 23:15 | 19 21:4 |
| 79:16 86:8 93:12,19 | 62:1 | Even (10) | excess (2) |
| else's (1) | entered (4) | 4:20 14:22 60:11 | 30:23 47:14 |
| 13:17 | 13:13 61:12 62:12 | 62:23 63:19 64:3 | excessive (1) |
| email (1) | 67:23 | 71:19 73:5 77:22 82:5 | 78:13 |
| 16:9 | entering (1) | evening (9) | excited (1) |
| e-mail (6) | 13:20 | 5:1 7:4 17:12 24:21 | 50:6 |
| 12:4 51:1 52:14 | entire (2) | 38:1,2 56:14 82:17 | excuse (3) |
| 62:8 93:2,3 | 39:8 43:14 | 85:22 | 28:18 72:4 81:8 |
| emergency (3) | entities (2) | event (3) | exhibit (9) |
| 31:2 32:8 87:23 | 72:9 73:22 | 42:7 47:14,24 | 12:16 34:17,18,20, |
| employees (1) | entrepreneurs (1) | eventually (1) | 23 37:3 79:20,22 |
| 73:2 | 88:12 | 43:22 | 88:19 |
| empty (1) | envelope (1) | ever (3) | exhibits (9) |
| 46:12 | 66:10 | 62:16 66:4 80:23 | 15:11 33:12,14 |
| encourage (2) | environment (2) | every (1) | 34:7,11 35:12,22 |
| 4:178:8 | 21:15 83:16 | 92:9 | 36:24 50:17 |
| end (5) | environmental (4) | everybody (11) | exist (2) |
| 9:8 18:5 33:10 | 41:3 62:2 68:8 70:8 | 4:1,12 6:10 24:22 | 70:23 91:12 |
| 49:13 72:11 | environmentally (1) | 38:2,2 79:14 80:7 | existence (1) |
| energy (2) | 67:4 | 84:5 93:21 94:1 | 71:2 |
| 87:6 88:9 | EPA (2) | everyone (8) | expanded (1) |
| enforced (2) | 44:10 46:9 | 8:11 11:16,23 | 35:2 |
| 12:24 86:22 | equality (1) | 14:20 17:13 50:14 | Expandex (1) |
| engineer (1) | 13:3 | 57:19 85:22 | 34:14 |


| expansion (2) | 32:12,14 35:14 36:5 | 29:6 | 62:16,21 92:15,16 |
| :---: | :---: | :---: | :---: |
| 30:24 63:23 | 38:21 40:17 43:18 | few (3) | fines (1) |
| expect (1) | 48:23 49:8 55:3,5,7 | 33:16 81:1 93:3 | 61:1 |
| 66:11 | 66:20 67:12,15 69:22 | field (12) | Fire (1) |
| expecting (1) | 72:17,20 79:4 | 30:11 40:22 41:10 | 80:13 |
| 65:6 | fact (7) | 44:23 45:7,8 47:18 | first (13) |
| expense (1) | 14:23 53:8 58:24 | 69:15 89:2 91:4,13,16 | 5:12 33:17 38:15 |
| 89:6 | 71:4 77:10 78:2 90:9 | fields (24) | 40:12,19 45:20 48:7 |
| expenses (2) | failed (1) | 26:5,13,14 28:13 | 53:3,12 65:4 68:18 |
| 61:3,15 | 67:17 | 30:1,9,18,24 31:5,5 | 81:19 89:1 |
| expire (1) | failures (1) | 33:8 44:18 45:10 | fish (2) |
| 24:14 | 57:5 | 47:17,23 48:16 49:10, | 77:3 82:4 |
| expired (1) | Fair (2) | 20 75:20 89:13,14,14 | fitting (1) |
| 71:12 | 36:19 76:2 | 90:191:14 | 38:12 |
| extend (1) | fairly (2) | fighting (1) | five (5) |
| 9:13 | 21:21 46:17 | 87:9 | 21:4 77:22 78:5 |
| extensive (1) | fairness (2) | file (4) | 90:9,20 |
| 21:21 | 11:20 13:2 | 34:14 35:2,19,24 | fix (1) |
| extra (1) | far (1) | filed (1) | 85:5 |
| 32:6 | 21:23 | 5:13 | fixes (1) |
| extremely (1) | farmer (1) | filled (1) | 84:6 |
| 60:21 | 69:11 | 34:14 | fixture (1) |
| eyes (1) | farmers' (1) | filtered (1) | 67:1 |
| 52:6 | 60:3 | 27:21 | flashed (1) |
| F | farming (1) | filthy (1) | 73:9 |
|  | 30:1 | 82:7 | flawed (3) |
| face (1) | fauna (1) | filtration (2) | 77:6,7 78:20 |
|  | 86:14 | 48:12 91:10 | flexibility (1) |
| 87:8 | features (1) | final (3) | 33:6 |
| Facebook (1) | 91:16 | 40:21 41:9 63:21 | flies (1) |
| facilitate (2) | fecal (3) | finally (4) | 87:8 |
|  | 20:18,22 28:2 | 40:21 44:17 48:5 | flocculation (1) |
| 11:19 15:20 | Federal (1) | 85:6 | 18:2 |
| facilities (1) | 76:16 | financial (1) | floor (2) |
| 61:18 | feel (1) | 74:15 | 6:17 16:22 |
| facility (38) | 6:22 | find (6) | flora (1) |
| 5:17 6:1 17:19,20 | feet (5) | 54:24 62:15 67:5 | 86:13 |
| 19:5,7,10,11,19 23:19 | 32:7 47:11 90:24 | 73:20 93:4,5 | flotation (1) |
| 25:6,21 27:3 28:10 | 91:2,6 | fine (8) | 17:24 |
| 29:1,2,9 30:15,21 | fertilizers (1) | 33:23 61:14,16,20 | flow (8) |


| 19:7,9,21 25:17,19 | forum (2) | 63:14,21 | ghosts (1) |
| :---: | :---: | :---: | :---: |
| 31:7 33:3 40:17 | 16:8 52:15 | future (4) | 87:9 |
| flowed (1) | found (1) | 26:6,8,15 60:6 | Giordina (1) |
| 70:19 | 90:7 | fuzzed (1) | 59:11 |
| flowing (1) | Foundation (1) | 72:10 | give (5) |
| 74:19 | 26:19 |  | 8:16,18 16:14 |
| fluctuations (1) | founded (1) | G | 29:14 78:6 |
| 42:6 | 68:6 |  | given (4) |
| folder (2) | four (9) | G130 (1) | 6:15 10:18 15:9 |
| 37:9 52:12 | 18:20 20:13 22:19, | 91:15 | 62:11 |
| folks (1) | 20 40:1,6 50:10 63:24 | G137 (1) | giving (1) |
| 64:15 | 78:5 | 91:16 | 68:13 |
| followed (1) | four-page (1) | gallon (2) | glasses (1) |
| 40:16 | 76:12 | 30:22,22 | 86:11 |
| Following (4) | fourth (1) | gallons (15) | glorified (1) |
| 6:16 15:15 24:7 | 40:21 | 19:8,12,14,22,24 | 49:16 |
| 64:13 | free (1) | 25:18,20 30:20 47:6, | goes (4) |
| food (1) | 6:22 | 13 63:5,9,12 67:8 | 21:23 39:15 65:23 |
| 85:3 | freeboard (2) | 70:18 | 90:2 |
| Foods (1) | 32:7,19 | Garvin (5) | going (71) |
| 5:13 | freezing (1) | 6:4 8:24 9:5 11:10 | 4:9 6:14 9:4,5,16, |
| fool (1) | 66:7 | 15:13 | 17,20 10:21 16:21 |
| 82:11 | frequencies (2) | gastric (1) | 19:2,17 22:8,10,17 |
| forced (1) | 22:2 32:1 | 90:11 | 23:20 25:1,11,14,16, |
| 60:14 | frequency (2) | Gazette (2) | 19,24 26:4,5,22 29:12 |
| forego (1) | 21:19 42:23 | 85:20 88:5 | 30:1,4,12,13,14 33:10 |
| 56:7 | Friday (1) | general (3) | 37:24 38:16,20 39:19 |
| foremost (2) | 9:22 | 17:9,10,11 | 40:12,14 41:19 42:11 |
| 45:20 48:7 | front-page (1) | generated (2) | 45:17 46:12 47:19 |
| forget (1) | 84:5 | 11:9 16:4 | 48:22 49:2,21 51:21 |
| 49:7 | full (2) | geology (1) | 53:9 55:6 56:7 57:14, |
| form (1) | 9:14 53:18 | 89:8 | $24 \text { 58:2,8,21,22 67:2, }$ |
| 84:16 | fully (1) | George (1) | $7,8,15,1670: 1671: 24$ |
| formal (6) | 13:13 | 56:15 | 73:3,5 77:24 80:19 |
| 5:2 6:9 7:2 11:8,12 | functioning (1) | gets (2) | 81:17 89:18,23 90:1 |
| $15: 23$ | $54: 13$ | 13:18 51:13 | $92: 1$ |
| forth (2) | fund (1) | getting (10) | gone (1) |
| 54:20 83:22 | 62:2 | 20:14,17 22:7 | 92:6 |
| fortune (1) | further (6) | 55:10 57:2,12 60:13 | Good (11) |
| 82:21 | 4:11 7:5 9:8 49:18 | 79:9 81:11 89:5 | 17:12 24:21 38:1,2 |


| 56:14 75:18 82:17,21 | 49:5 | Harbeson/Dagsboro (1) | 4:1 10:7,8,12 14:3, |
| :---: | :---: | :---: | :---: |
| 83:12,13 85:22 | guarantee (2) | 61:17 | 18 |
| Google (1) | 60:24 78:3 | hard (1) | heard (3) |
| 88:6 | guess (2) | 67:5 | 53:13 88:3 89:17 |
| govern (1) | 21:9 58:15 | Harim (61) | hearing (27) |
| 37:4 | guideline (1) | 5:13,17 11:5 15:7 | 6:5,8,11 7:9 9:13, |
| Governing (1) | 78:15 | 17:18 18:17 22:17 | 24 10:2,15 11:3,8 |
| 36:14 | guys (6) | 23:4 24:18 26:21 | 12:5 15:4,11 16:4,8,9, |
| grab (1) | 4:7,17 8:21 9:11 | 30:13 31:20 32:12 | 11,14 17:8 33:11 |
| $\begin{gathered} \text { 6:22 } \\ \text { grabbed (1) } \end{gathered}$ | 59:18 87:11 | 33:17,18 34:8,11,15, | 34:17 35:5,18 52:4 |
|  | H | 18,20,23 36:2,12 37:1 | 63:1 70:9 92:18 |
| 32:2 |  | 38:23 39:4,11 40:13 | hearings (8) |
| 82:5 | half (3) | 41:22 43:16 44:3,8 | 4:11,22 7:2 10:24 |
|  |  | 45:22 50:10 53:20 | 11:13 13:5 15:23 |
| granted (6) | 52:8 68:14 81:3 | 54:3,11 60:7 61:14,18, | 72:12 |
| 11:17 13:19 68:21 | Hall (1) | 19,23 62:1,11,17,23 | heart (2) |
| 69:6 70:24 86:18 | $80: 13$ | 63:2,11 64:2 65:9 | 84:17,22 |
| great (5) | hand (1) | 66:16 67:7 71:5 72:17 | held (4) |
| 38:5 41:12 45:17 | 67:23 | 74:19 80:14,16 81:2,3, | 11:1 26:2 41:15 |
| 47:1 60:8 | Handing (3) | 19 89:24 | 46:20 |
| Green (6) | $34: 5,8,9$ | Harim's (3) | Hello (1) |
| 67:20,21 68:2,3 | handling (1) | 25:13 42:15 63:14 | 80:5 |
| 71:14 79:19 | 75:16 | Hatchery (3) | help (4) |
| Green's (1) | happen (8) | 19:14 72:23 89:13 | 6:9 11:22 15:20 |
| 79:17 | 9:4 30:13 32:13 | Haynes (7) | 30:4 |
| grit (1) | 43:15 83:14,15 84:24 | 80:1,3,5,6 81:14,16 | Hi (1) |
| 17:23 | 89:22 | 82:15 | 64:22 |
| ground (5) | happened (3) | hazardous (1) | high (6) |
| 43:4 57:17 90:24 | 80:23 81:6 85:1 | 60:22 | 26:21 49:17 73:10 |
| 91:2,6 | happening (2) | hazards (1) | 77:12 78:14 81:9 |
| grounds (1) | 43:13 87:8 | 68:8 | higher (2) |
| 59:22 | happens (4) | head (1) | 48:1 89:9 |
| Groundwater (6) | 53:17 74:10 84:7 | 22:11 | highest (1) |
| 17:14,14 24:23 | 87:17 | heads (1) | 84:21 |
| 27:15 62:572:1 | happy (1) | 86:9 | highlighting (1) |
| group (1) | 81:22 | health (11) | $76: 14$ |
| 68:7 | Harbeson (9) | 74:9 82:19,22 83:3, | Highway (1) |
| grown (2) | 5:17 18:18 54:3 | 6,11,16 85:13 86:16 | $56: 15$ |
| 78:585:4 | 55:2 66:24 67:13 | 89:6 90:6 | Hinkson (1) |
| growth (1) | 72:18 81:2,3 | hear (6) | $62: 8$ |



| introduced (1) | John (7) | 49:16 51:9 59:14 | Lands (1) |
| :---: | :---: | :---: | :---: |
| 38:15 | 24:19,22 40:24 | 64:14 73:13 83:5 | 26:19 |
| introductory (1) | 44:18 45:16 47:1 62:8 | 93:22 | Large (2) |
| 6:7 | Johns (1) | knee (1) | 24:23 46:17 |
| investigation (1) | 82:19 | 81:9 | last (6) |
| 91:3 | joint (1) | knew (1) | 18:15 64:19 66:3 |
| investments (1) | 37:24 | 64:11 | 85:6 86:20 92:20 |
| 75:17 | jointly (1) | known (2) | laughter (11) |
| irrigation (15) | 42:18 | 77:10 78:8 | 13:23 28:17 56:5 |
| 5:20,23 21:12 25:2, | joke (1) | knows (1) | 64:18,24 79:11 80:4,9, |
| 9,16,23 26:3 27:6 | 61:2 | 79:14 | 22 81:10,13 |
| 31:8 65:12,17 68:24 | July (1) | KONSTANSKI (11) | Law (2) |
| 90:15,22 | 63:17 | 38:1,3 50:18,21 | 7:19 13:6 |
| irrigators (1) | jump (1) | 51:2,5,7,15 64:8,9,12 | lead (1) |
| 49:20 | 88:12 | Kubota (1) | 89:23 |
| issue (6) | June (2) | 50:5 | leading (1) |
| 15:14 23:17 42:9 | 71:9 80:12 | L | 65:18 |
| 45:18 55:12 58:22 | K |  | leak (1) |
| issued (1) |  | lab (4) | 84:1 |
| 86:22 | keep (8) |  | leaking (1) |
| issues (2) |  | 42:2 44:10,13 73:12 | 58:10 |
| 68:9 74:16 | 9:20 56:10,11 | labs (1) | learned (1) |
| items (1) | 57:22 61:9 68:6 70:9 | 46:9 | 86:20 |
| 49:1 | 73:6 | lagoon (19) | lease (1) |
| itself (2) | Keeping (1) | 5:22 24:4 25:15 | 26:2 |
| 37:7 84:16 | 12:6 | 32:5 45:22 46:12,21 | leave (4) |
|  | Keith (2)$53: 4,6$ | 47:5,11 48:15 53:18, | 2422.2333 .16 |
| J |  | 19,21 54:4 57:3 60:14 | $49: 6$ |
|  | Ken (1) | 70:23 71:2,8 | leaves (1) |
| James (3) | 79:24 | lagoons (2) | 43:16 |
| 59:10,13,19 | Kenny (1) | 18:21 22:24 | leaving (2) |
| Jeff (1) | 80:6 | laid (1) | 10:14 22:16 |
| 64:15 | kept (2) | 44:5 | left (1) |
| Joanne (1) | 49:22 59:23 | lakes (1) | 59:6 |
| 80:1 | key (2) | 77:1 | legal (4) |
| job (4) | 23:6 80:18 | land (7) | 35:4 37:2 86:4,8 |
| 38:5 41:13 47:1 | killed (1) | 26:1,10 33:3 48:3 | legs (1) |
| 87:2 | 20:16 | 69:11,21 73:16 | 81:9 |
| Joe (1) | kind (10) | land-related (1) | less (4) |
| 61:23 | 18:22 29:13 38:11 | 76:23 | 20:12 21:7,8 91:7 |


| lessen (1) | 58:5,19 | looked (1) | 93:8 |
| :---: | :---: | :---: | :---: |
| 77:8 | Lisa (1) | 73:12 | made (13) |
| letter (5) | 6:3 | looking (2) | 7:15 8:13 9:2,12 |
| 54:11 76:12 85:19 | list (1) | 74:22 92:18 | 16:1,2 70:6 75:18 |
| 88:7,11 | 21:16 | looks (1) | 79:3 85:20 86:10 |
| level (6) | listening (1) | 60:8 | 89:10 92:17 |
| 20:14,24 26:21 | 14:19 | loss (1) | mail (2) |
| 27:14 78:1 90:5 | liter (7) | 58:18 | 16:10 52:15 |
| levels (5) | 20:5 28:1,5,12 29:3, | lost (2) | maintenance (2) |
| 47:20 56:22 77:12 | 11 89:24 | 41:5 58:12 | 24:11 63:15 |
| 78:13 90:9 | little (10) | $\boldsymbol{l o t}(10)$ | majority (1) |
| levied (1) | 5:6 26:9 43:10 45:5, | 12:7 41:23 43:1 | 77:11 |
| 61:1 | 6 49:18 56:24 79:12 | 46:19 52:1 53:23 | make (20) |
| Lew (2) | 81:11 84:8 | 58:12 71:22 86:20 | 5:7 8:10 9:6,10 |
| 64:17,22 | live (12) | 89:1 | 20:15 21:13 22:15,22 |
| liability (4) | 53:6 56:15 59:20 | lots (1) | 23:3 24:6 33:21 35:16 |
| 74:1,8,16 75:9 | 68:3 71:17,18,21 | 71:11 | 41:7 46:21 51:13 |
| license (1) | 76:10 82:1,10 83:4 | Lou (3) | 73:19 79:13 85:7 87:6 |
| 24:1 | 85:22 | 85:16 88:6 89:10 | 93:5 |
| likely (1) | lives (1) | Loud (12) | makes (2) |
| 23:22 | 57:19 | 65:7 67:19 71:15 | 9:1 75:13 |
| limit (3) | living (1) | 76:5 79:11 81:13 | making (8) |
| 90:3,20 92:12 | 85:2 | 82:14 83:8 85:8,15 | 6:9 11:10,24 20:23 |
| limitations (6) | loading (1) | 88:15 92:5 | 44:24 49:8 50:1 75:16 |
| 19:3,3,15,17 21:2, | 29:24 | love (1) | manage (1) |
| 10 | loads (1) | 85:11 | 85:10 |
| limited (3) | 48:3 | Lower (2) | managed (1) |
| 11:1 52:22 92:11 | local (1) | 83:9 90:9 | 49:7 |
| limiting (1) | 84:12 | lymphoma (1) | Management (3) |
| 62:4 | location (2) | 90:13 | 5:19 25:4,8 |
| limits (6) | 52:22 63:2 | lysimeter (1) | manager (3) |
| 23:8 29:24 41:13 | locations (1) | 45:2 | 24:20,23 87:1 |
| 69:2 76:11 90:19 | 27:12 | lysimeters (2) | manifest (1) |
| line (1) | long (2) | 27:11 45:15 | 84:16 |
| 75:3 | 12:21 52:18 |  | manner (2) |
| lined (2) | longer (1) | M | 10:17 11:15 |
| 5:22 25:15 | 74:13 |  | manual (1) |
| link (4) | look (7) | Machine (2) | 48:19 |
| 16:8 92:18,21 93:4 | 8:17,22 9:12 29:18 | 80:10,11 | many (5) |
| liquid (2) | 37:16 52:5 92:1 | Madam (1) | 64:4 77:3 78:23 |


| 90:4,4 | 28:7 40:20 42:20 | 39:15,16 40:14 | mindful (2) |
| :---: | :---: | :---: | :---: |
| $\boldsymbol{m a p}(4)$ | measurements (2) | 43:2 45:24 46:14 | 12:2 14:6 |
| 18:16 27:7 44:19 | 43:24 44:7 | MGD (1) | mine (1) |
| 45:4 | measures (1) | 25:18 | 56:6 |
| Maria (1) | 28:21 | might (2) | minimal (1) |
| 88:20 | measuring (1) | 8:22 22:23 | 28:3 |
| Marie! (1) | 44:23 | migrating (1) | minimally (1) |
| 88:22 | media (2) | 45:11 | 78:10 |
| mark (2) | 14:12 16:18 | mike (1) | minimum (3) |
| 12:15 80:1 | medical (2) | 59:18 | 23:21 33:2 47:10 |
| marked (3) | 65:19 82:18 | mile (1) | minute (2) |
| 79:18,19 88:19 | meet (2) | 18:17 | 68:14 81:8 |
| materials (2) | 26:22 27:22 | miles (5) | minutes (11) |
| 7:12 9:10 | meeting (3) | 49:13 57:18 75:19, | 11:18 13:18,19 |
| matter (13) | 81:2 89:16 94:2 | 22,23 | 17:3,4,6 33:16 38:10 |
| 7:7 8:14 11:2,5,11 | meetings (1) | Mill (1) | 52:23 68:11 93:11 |
| 16:5 49:2 61:10 62:24 | 74:4 | 91:15 | miscarriage (1) |
| 77:21 83:12,13 90:9 | melding (1) | milligrams (11) | 74:11 |
| matters (2) | 73:23 | 20:4,5,7,9,20 28:1, | misrepresentations (1) |
| 11:6 83:2 | members (2) | 5,12 29:3,10 89:24 | 70:6 |
| maximum (4) | 14:11 15:19 | milliliters (1) | miss (1) |
| 19:9 31:12 66:2 | mention (1) | 20:20 | 43:14 |
| 77:18 | 18:23 | million (14) | missed (1) |
| may (7) | mentioned (17) | 19:8,22,24 25:18, | 4:15 |
| 6:2 10:5,8 13:11 | 6:13 31:1 39:22 | 20 30:20 39:12 63:5,9, | Missouri (1) |
| 14:22 16:7,17 | 40:24 41:16 42:19 | 12 77:17,23 78:14 | 82:22 |
| Maybe (3) | 43:3,20 45:16,21 46:1 | 81:4 | modeling (1) |
| 10:11 45:6 74:24 | 47:17 66:1 86:16,21 | million-gallon (1) | 90:24 |
| Meadows (1) | 87:15,19 | 45:21 | Mohammed (2) |
| 55:5 | mentioning (1) | millions (2) | 82:16,18 |
| mean (3) | 39:14 | 47:13 70:18 | money (2) |
| 9:4 73:574:15 | merchant (1) | Millsboro (7) | 62:11 88:8 |
| means (8) | 58:3 | 65:2,8,14 80:6,13 | monitor (3) |
| 10:14 27:18 31:11 | mess (1) | 82:10 84:20 | 42:13,16,18 |
| 32:3 52:3,9 59:16 93:4 | 73:17 | Milton (10) | monitored (5) |
| measure (1) | messaging (1) | 53:6 59:20,21 | 21:22 22:21 23:2 |
| 83:18 | 16:20 | 60:14 68:3 71:17 76:9 | 42:23,24 |
| measured (1) | met (2) | 78:12 85:23,24 | monitoring (35) |
| 41:24 | 80:13 81:19 | mind (2) | 18:20 19:1 21:17, |
| measurement (3) | metering (6) | 12:6 75:7 | 19 22:5,14,19,21 |


| 23:12 27:10,11,15 | 85:14 88:4 89:17 90:8 | 84:4 | Note (8) |
| :---: | :---: | :---: | :---: |
| 28:14,14 32:20 38:7 | must (4) | news (1) | 4:10 15:24 27:2,8 |
| 39:15,16,19 40:2,3,5, | 7:3 11:1 13:7 65:14 | 14:11 | 31:3 43:7 44:6 55:20 |
| 7,10,14 41:22 43:2,5 | muted (1) | newspaper (1) | noted (1) |
| 45:3,13,17,24 46:14 | 15:1 | 84:4 | 16:16 |
| 50:11 58:17 | Myself (3) | next (4) | notes (1) |
| monitors (1) | 15:18 38:15 85:23 | 12:14 52:14 56:12 | 72:3 |
| $\begin{gathered} 46: 8 \\ \text { month (1) } \end{gathered}$ | N | $\begin{gathered} 93: 3 \\ \text { nicest (1) } \end{gathered}$ | $\begin{aligned} & \text { nothing (5) } \\ & 69: 877: 8 \text { 80:23 } \end{aligned}$ |
| 21:24 |  | 59:15 | 81:5 88:12 |
| monthly (2) | name (15) | nine (1) | notice (11) |
| 28:19,23 | 6:3 17:13 24:22 | 21:3 | 7:10,17,20,22 8:6 |
| months (1) | 38:2 53:5 56:15 59:10 | Nineteenth (1) | 9:17 16:12 35:4,18 |
| 78:5 | 61:7 64:19 68:2 76:7 | 85:8 | 37:3 63:1 |
| Moran (1) | 80:5 82:17 85:17 88:6 | nitrate (1) | noticed (1) |
| 61:23 | names (2) | 78:13 | 7:9 |
| more (21) | 72:15 73:22 | nitrates (3) | notices (1) |
| 20:1,13 22:14 | nature (6) | 76:19 77:13 78:3 | 58:13 |
| 23:22,22 28:2 31:15 | 48:13 50:4 62:3,9 | nitrogen (11) | notorious (1) |
| 33:2 34:7 35:21 40:17 | 69:24 70:4 | 20:3,6 26:24 28:18, | 58:10 |
| 48:3 53:9 55:21 58:10 | navigate (2) | 20 29:1,24 30:4,6 | November (1) |
| 64:4 66:14 74:24 | 36:23 37:16 | 42:1 47:24 | $63: 24$ |
| 78:24 84:4 90:7 | need (11) | no-adverse (1) | NPDES (2) |
| morning (1) | $7: 6 \text { 12:9 31:17 }$ | 90:5 | 8:2 61:16 |
| 89:17 | 47:15 48:9,16 55:13 | nobody (2) | NTUs (1) |
| most (4) | 59:21 60:4 85:5 93:24 | 9:1784:8 | 28:8 |
| 18:19 76:21 86:10 | needed (2) | noncompliance (1) | number (7) |
| 88:12 | 47:20 48:11 | 61:2 | 27:10 29:5 31:9 |
| Mountaire (2) | needs (3) | non-compliant (3) | 32:15 34:23 69:20 |
| 65:15 89:14 | 28:4 54:23 69:2 | $70: 13,16,19$ | 84:20 |
| move (1) | neighbors (1) | non-Hodgkin's (1) | numbers (1) |
| 41:17 | 65:19 | 90:12 | 73:10 |
| movement (1) | never (3) | nor (1) | nutrient (1) |
| 58:1 | 75:11 86:18,22 | 16:2 | $18: 1$ |
| Mrs (3) | Nevertheless (1) | Normally (2) | nutrients (1) |
| 81:14,16 82:15 | 8:4 | 30:16,19 | 41:2 |
| much (14) | new (4) | north (1) |  |
| 11:23 18:14 21:10 | 89:3 | 55:7 | 0 |
| 30:8,10 50:13 55:21 |  | Northern (2) |  |
| 75:21 77:22 82:1 | newer (1) | 5:24 25:5 | O\&M (1) |


| 48:18 | once (9) | operational (8) | 14:18 |
| :---: | :---: | :---: | :---: |
| obviously (4) | 9:6 16:5 19:18 | 8:3 33:9,19 39:3 | otherwise (1) |
| 23:7 32:11 41:7 | 40:17,22 43:16 46:24 | 46:22 53:15 54:2 | 53:20 |
| 46:12 | 74:3,13 | 70:24 | ourselves (2) |
| occur (1) | one (46) | operations (11) | 44:12,16 |
| 40:13 | 5:12,18 8:22 9:1 | 5:14,20 25:10 | out (35) |
| Octer (1) | 10:16 13:1,18,22,23 | 32:18 33:7 38:24 | 4:7,13 8:7,9 14:9 |
| 82:16 | 14:4,7 20:2,12 27:8 | 48:18 63:3,15 72:10, | 18:3 19:1 20:1 30:8, |
| October (1) | 31:5 33:1 34:24 36:10 | 14 | 11 39:6 40:22 43:4,22 |
| 61:11 | 38:13 41:21 44:13,20 | operator (1) | 44:5,17,21 46:15 48:3, |
| off (5) | 46:7,9,10 54:1,10 | 24:2 | 15,23 49:9,20 50:14, |
| 15:1 39:20 45:11 | 55:4 57:8 61:8 63:17 | operators (2) | 22 52:5,10,21 57:7 |
| 59:9 86:11 | 65:4,24 68:23 70:22 | 48:22 50:6 | 61:3 62:15 73:14 85:9 |
| offer (10) | 72:11,11 73:4 74:10, | opinion (1) | 87:2 93:22 |
| 10:6,12,13 11:14 | 18 75:14 78:16,19 | 14:23 | outside (3) |
| 12:7,23 13:7,10 17:6 | 86:3,6 87:13 | opportunity (6) | 22:9 45:23 76:10 |
| 37:22 | ones (3) | 9:11 10:18 31:16 | outstanding (1) |
| offered (4) | 8:2 44:7,8 | 53:7 63:20 88:24 | 62:21 |
| 7:1 14:21 52:16 | online (8) | oppose (1) | ovarian (1) |
| 93:18 | 7:13 8:8,9 9:12,16 | 60:17 | 90:12 |
| offering (3) | 37:17 47:23 63:18 | options (1) | over (22) |
| 10:17 13:3,17 | only (23) | 46:19 | 6:8 16:22 19:23 |
| offers (1) | 7:20 8:15 9:5 13:18, | order (13) | 20:2 24:19 26:9 29:14 |
| 17:20 | 22,23 14:3 26:12 | 6:20 11:16 13:8 | 31:19 32:4 43:13,22 |
| officer (1) | 30:19 38:16 47:6 | 14:4 15:15,16 29:8 | 45:13 46:2 49:13 |
| 6:5 | 63:12,17 67:7 68:11 | 30:16 51:22,22 53:3 | 50:15 52:13 65:5,6,6 |
| Officer's (1) | 72:18 77:9,22 78:5 | 61:13,24 | 67:3 77:19 93:3 |
| 15:12 | 83:18 85:11,20 90:10 | ordered (1) | overload (1) |
| official (1) | on-site (5) | 62:13 | 49:11 |
| 13:24 | 5:14 17:20 31:13 | Ordinance (2) | own (4) |
| officially (1) | 36:15 63:3 | 68:22 69:20 | 13:20 14:23 75:7 |
| 65:10 | open (5) | original (1) | 91:11 |
| off-site (1) | 6:17 9:20,24 10:15 | 59:3 | owned (1) |
| 19:10 | 16:5 | other (18) | 26:1 |
| off-spec (4) | operating (2) | 8:21 10:8 13:10 | owner (2) |
| 18:9 23:10 32:10,13 | 62:20 86:23 | 14:6 15:18 36:10 47:9 | 65:13 69:11 |
| old (8) | operation (9) | 54:1,16 55:17 66:13 | owners (1) |
| 24:4 46:11 72:22 | 8:19 17:17 21:18 | 69:4 71:11,22 72:6 | 80:16 |
| 73:15 78:23 80:7 | 24:6 25:2 36:8,15 | 74:17 86:24 91:8 |  |
| 81:20 89:4 | 48:21 74:18 | others (1) |  |


|  | parts (5) | percolate (1) | 13:3,12 14:8 17:6 |
| :---: | :---: | :---: | :---: |
| P | 40:6 77:17,18,23 | 28:17 | persons (1) |
|  | 78:14 | perfectly (4) | 13:6 |
| package (1) | party (1) | 60:10 65:24 66:4,12 | pertic (1) |
| 35:16 | 44:16 | period (4) | 28:16 |
| packet (3) | pass (2) | $9: 13,18 \text { 10:4 19:23 }$ | pertico (1) |
| 33:21 34:5 36:13 | 53:19 75:19 | permanent (2) | 28:16 |
| page (4) | past (2) | 60:20 67:1 | pertinent (1) |
| 16:8,12 63:1 92:19 | 44:24 67:3 | permanently (2) | 11:7 |
| paid (2) | pay (1) | 26:16 90:15 | pesticides (1) |
| 62:16,17 | 61:19 | permission (1) | 76:20 |
| paint (1) | PAYAN (8) | 63:8 | petroleum (2) |
| 39:23 | 84:9,23 88:20,23 | permissions (1) | $58: 4,9$ |
| pant (1) | $91: 18,19,2292: 1$ | 31:18 | pH (1) |
| 81:9 | Peabody (1) | permit (52) | $21: 2$ |
| paper (3) | 80:9 | 5:3,10,12,14,20 | phase (3) |
| 7:10,18 60:8 | peak (1) | 6:12 7:11,21,23 8:16, | 30:23 33:1 63:23 |
| papers (1) | $25: 19$ | $17 \text { 15:6 16:3 17:4,8, }$ | phased (1) |
| 84:12 | pelletized (1) | $17 \text { 19:16,16 21:18 }$ | $26: 13$ |
| parameter (1) | 88:10 | 23:6,9,18 24:6,16 | phases (2) |
| $22: 10$ | pending (4) | 25:2 26:11 29:13 | $26: 7,8$ |
| parameters (7) | $5: 4 \text { 6:11 11:3 15:6 }$ | $30: 1031: 5,21,22$ | phone (3) |
| 21:21 22:13,15,22 | people (19) | 33:19 34:8,19 36:4 | 56:7 75:7 92:22 |
| 27:23 29:13 31:10 | 12:7 36:23 51:10, | $37: 4,7,861: 1,16$ | phones (1) |
| part (6) | $23 \text { 53:23 71:22,24 }$ | $62: 20 \text { 63:3,8,12 67:22 }$ | $15: 1$ |
| 12:15 39:13 41:3 | $72: 6,874: 17 \text { 82:9,13 }$ | $68: 13,19 \text { 69:3,4 70:24 }$ | physical (1) |
| 54:14 82:7 87:2 | $83: 14,16,1984: 15$ | $78: 22 \text { 86:22 }$ | $55: 2$ |
| partially (1) | 85:13 89:19 92:20 | permits (13) | physically (1) |
| $60: 2$ | people's (1) | $7: 13,168: 3,12,20$ | 13:7 |
| participate (1) | $13: 11$ | 9:3,15 11:7 24:14 | picture (4) |
| $15: 21$ | per (30) | 36:18 53:10 65:17 | 39:23 43:12 46:11 |
| particular (4) | 17:4,6,8 19:8,12,14, | 87:21 | 92:21 |
| 22:3 51:22 53:3 | $22,24 \text { 20:4,5,7,19 }$ | permitted (1) | pieces (1) |
| 68:23 | $21: 2425: 18,2027: 1$ | $15: 22$ | $38: 6$ |
| particularly (1) | $28: 1,3,5,12 \text { 29:3,10 }$ | permittee (2) | piezometers (3) |
| 68:9 | 44:4 52:23 63:9 67:8 | 24:1,15 | 27:10 45:3,15 |
| particulate (2) | $77: 17,2378: 14 \text { 89:24 }$ | permitting (3) | Pinnacle (5) |
| $28: 12,22$ | percent (5) | 8:1 31:4 77:7 | 19:10 65:9 66:16 |
| partnership (1) | 76:17 78:3 90:18 | person (7) | 72:22 80:14 |
| 50:9 | 91:5,8 | 11:13,17 12:23 | pipe (1) |


| 46:5 | 22:1 | possibly (2) | 88:4 |
| :---: | :---: | :---: | :---: |
| pipeline (13) | plus (3) | 10:1 59:11 | prevented (1) |
| 43:18 46:3 54:15 | 57:21 61:14,20 | Possum (1) | 10:16 |
| 55:4,6 56:19 57:5,10, | pm (2) | 65:2 | previous (1) |
| 12,14 58:14 70:20 | 4:494:3 | posted (4) | 22:15 |
| 75:19 | PODOLSKE (4) | 34:1,3,16 36:21 | previously (1) |
| pipelines (3) | 64:20,22,23 65:1 | Potentially (3) | 6:12 |
| 55:3 58:8,9 | point (26) | 29:17,19 70:18 | primary (1) |
| pipes (3) | 17:1 34:9,21 36:8 | poultry (5) | 59:23 |
| 43:4 46:3 50:3 | 37:8,22 39:6 50:19 | 5:16 17:19 19:4 | print (1) |
| place (4) | 57:14,15 58:1,2,6,6, | 39:9 63:6 | 52:5 |
| 4:18 67:11,12 84:1 | 15,19,19 59:4 62:24 | Power (5) | printed (1) |
| placed (1) | 65:2 68:4 71:3 83:23 | 34:9,21 36:7 37:8 | 50:22 |
| 26:17 | 85:6 89:11 92:17 | 50:19 | prior (6) |
| places (1) | points (3) | precise (1) | 10:22 11:10 20:16 |
| 59:1 | 18:15 57:18 68:17 | 11:15 | 22:16 65:12 70:8 |
| plan (7) | policy (2) | prematurely (1) | pristine (1) |
| 24:12 26:14 47:7 | 11:12 13:4 | 7:15 | 57:23 |
| 55:14,20,22 63:15 | polishing (1) | prepared (3) | private (5) |
| plans (4) | 27:1 | 10:6 12:11 14:2 | 71:19 73:13 74:12 |
| 54:2 55:12 60:5,12 | pollutant (2) | present (6) | 76:11 77:11 |
| plant (19) | 66:2 78:8 | 12:13 13:8,10 | privately (1) |
| 18:12 19:4 22:8,11 | pollutants (1) | 14:12 15:19 77:14 | 26:1 |
| 24:3 25:13 39:1,7,18, | 77:24 | presentation (9) | probably (3) |
| 21 46:16,23 48:1 57:2 | polluted (1) | 6:9,15 33:11 34:9 | 12:7 18:19,19 |
| 59:23 65:9 66:16 67:7 | 76:18 | 36:8 37:19,23,24 | probes (1) |
| 80:15 | pollution (3) | 50:19 | 42:17 |
| planted (1) | 65:18 76:23 77:9 | presentations (4) | problem (7) |
| 30:2 | ponding (1) | 6:17 10:7,23 16:23 | 46:7 51:2 73:24 |
| plants (6) | 91:14 | presented (2) | 74:9 84:6 85:5 93:1 |
| 39:12 41:2,8 45:1 | portable (1) | 34:22 52:2 | problems (6) |
| 48:4 60:7 | 48:11 | preservation (2) | 65:18,19 66:5,7,8 |
| platform (1) | portion (1) | 26:18,19 | 71:7 |
| 5:2 | 18:12 | president (2) | procedures (1) |
| platforms (1) | ports (1) | 38:19 61:22 | 57:6 |
| 16:18 | 43:5 | pressure (1) | proceed (1) |
| please (7) | possibility (2) | 58:18 | 7:5 |
| 4:17,24 6:22 12:2 | 32:21,23 | pretty (7) | proceeding (1) |
| 14:7 16:13 93:15 | possible (2) | 18:14 21:10 57:21 | 12:24 |
| plenty (1) | 11:15 57:23 | 71:20 73:10 75:21 | proceedings (5) |


| 6:5 13:24 14:14 | proposal (1) | 43:6,22 | 80:1 86:3 87:18 93:10 |
| :---: | :---: | :---: | :---: |
| 15:2,21 | 71:7 | pulling (2) | questions (2) |
| process (7) | proposed (5) | 44:1 81:9 | 54:1 71:6 |
| 7:16 8:20 15:15 | 7:12 26:3 31:14 | pump (1) | quick (1) |
| 22:5 27:20 77:7 87:24 | 48:18 90:14 | 43:23 | 43:9 |
| processing (10) | proposing (2) | pumped (1) | quickly (1) |
| 5:16,17 17:20 19:5, | 31:4 87:11 | 60:22 | 41:20 |
| 11 63:6 67:6 72:18,19 | prosper (1) | pumpings (1) | $\mathbf{R}$ |
| 78:20 | 85:12 | $\begin{gathered} \text { 57:9 } \\ \text { purify (1) } \end{gathered}$ |  |
| produce (2) | protect (1) |  | rain (2) |
| 29:10 67:8 | 85:13 | 73:16 |  |
| production (1) | protected (1) | purpose (1) | 55:15 66:6 |
| 39:10 | 27:16 | 15:3 | rainfall (1) |
| program (4) | protects (1) | purposes (1) | 49:4 |
| 24:20,23 40:3,5 | 48:12 | 88:18 | raise (2) |
| programs (1) | protocol (1) | pursuant (4) | 68:17 78:1 |
| 8:1 | 11:19 | 7:19 8:6 11:6 13:5 | ran (1) |
| prohibited (1) | protocols (4) | pushing (1) | 7:18 |
| 14:13 | 7:3,6 10:21 14:6 | 66:10 | rate (7) |
| project (8) | provide (12) | put (12) | 29:5 30:7 31:12,15 |
| 38:4 62:3 75:11 | 5:17:20 9:19 10:3, | 8:7 11:21 33:14 | 33:4 48:4 84:21 |
| 77:6,8 78:7 79:1 83:5 | 18 15:5 33:6 50:17,18 | 46:20 49:14 57:17 | rates (1) |
| projects (1) | 53:1 84:5 93:2 | 63:18 65:22 67:11,12 | 68:24 |
| 87:1 | provided (4) | 74:3 92:20 | rather (1) |
| promises (1) | 4:18 12:8 13:12 | puts (1) | 68:10 |
| 89:21 | 88:18 | 46:10 | rationale (1) |
| prone (1) | providing (2) | putting (1) | 75:14 |
| 89:9 | 79:15 92:3 | 21:14 | reach (2) |
| Prong (1) | public (22) | Q | 29:8 32:14 |
| 41:21 | $5: 28: 910: 18,24$$13: 516: 1226: 23$ |  | reached (1) |
| prongs (2) |  |  | 87:18 |
| 40:2 50:10 | 27:17 35:18 36:1 37:9, | quality (3) | reaches (3) |
| prop (1) | 10 41:14 49:23 54:8 | 62:4 86:13,14 | 40:18 46:24 53:18 |
| 43:3 | 63:1,18 69:22,24 70:3 | quarter (1) | read (3) |
| proper (3) | 79:3 82:19 | 18:17 | 71:1 86:12 88:7 |
| 20:14 24:9 75:17 | public's (2) | quarterly (2) | reading (1) |
| properly (1) | 7:23 9:9 | 21:24 23:2 | 70:7 |
| $30: 17$ | pull (1) | question (11) | ready (2) |
| property (3) | 43:15 | 16:24 53:16,23 | 19:1971:9 |
| 56:16 60:3 83:21 | pulled (2) | 54:2,22 56:20 74:7 | real (3) |


| 41:19 86:14 88:2 | 13:11,15,23 15:5,8 | 36:14 | resident (2) |
| :---: | :---: | :---: | :---: |
| really (9) | 16:4 34:13 35:6 36:20 | regulatory (1) | 68:3 76:8 |
| 54:18 59:4 61:2 | 37:23 38:4 67:24 | 90:3 | residential (2) |
| 66:10 67:9 73:20 74:7 | 76:13 79:17 | reiterate (1) | 78:21 90:16 |
| 86:9 91:17 | recorded (1) | 89:2 | residents (1) |
| real-world (2) | 78:13 | related (1) | 60:13 |
| 49:3,9 | recording (2) | 62:3 | residual (1) |
| reason (2) | 14:13 23:12 | remain (2) | 20:11 |
| 14:10 29:21 | recordkeeping (1) | 16:5 84:15 | $\boldsymbol{r e s p e c t}(5)$ |
| reasons (1) | 88:17 | remaining (1) | 67:22 68:12,18,24 |
| 15:17 | Records (1) | 11:24 | 71:7 |
| reassurance (1) | 49:21 | remarks (2) | respectful (1) |
| 57:13 | redesign (1) | 6:7 13:21 | 14:20 |
| Rebar (22) | 29:19 | remember (1) | responsible (1) |
| 24:19,21,22 33:15, | Reed (1) | 80:8 | 75:16 |
| 24 34:3,6,12,24 35:4, | 63:23 | removal (2) | rest (1) |
| 8,10,21,24 36:4,7,12 | reference (2) | 17:23 18:1 | 55:24 |
| 37:5,12,20 56:4,9 | 55:9 86:11 | renewal (1) | restraints (2) |
| receipt (1) | reflect (2) | 24:16 | 52:22 92:12 |
| 15:20 | 34:14 36:20 | repeatedly (1) | result (2) |
| receive (3) | reflects (1) | 67:18 | 65:776:22 |
| 5:2,21 25:11 | 35:7 | Report (2) | results (3) |
| received (6) | regard (3) | 15:12 54:17 | 29:2 44:11,12 |
| 9:21 15:10 26:20 | 6:24 16:3 37:6 | reporter's (1) | retesting (1) |
| 36:1 37:1 52:12 | regarding (3) | 14:1 | 58:16 |
| recent (2) | 53:11 54:12 71:8 | reports (1) | retreated (1) |
| 83:24 90:7 | Regional (2) | 73:12 | 22:12 |
| recently (2) | 5:24 25:5 | require (7) | reuti (1) |
| 70:10 84:4 | regs (3) | 7:22 8:1 22:4,16 | 25:22 |
| Recharge (1) | 26:22 36:17 37:3 | 28:10 30:19 54:3 | review (9) |
| 25:6 | regular (2) | required (7) | 7:13 9:19 15:15 |
| reclaimed (1) | 23:13 50:1 | 7:20 21:22 22:4 | 49:24 52:5 53:9 55:19 |
| 25:22 | regularly (2) | 27:6 33:2 47:6 54:13 | 63:20 93:16 |
| Reclamation (1) | 23:20 24:15 | requirement (1) | reviewed (1) |
| 5:24 | regulated (3) | 23:24 | 15:13 |
| recognized (2) | 40:20 42:8,21 | requirements (5) | reviewing (3) |
| 12:14 13:8 | regulating (2) | 21:17 23:6 24:5 | 7:6 9:10 86:5 |
| record (23) | 40:11 87:15 | 31:21,23 | rid (1) |
| 6:18 9:24 10:3,15, | regulations (5) | requires (1) | 89:5 |
| 19 11:9 12:5,10,17 | 27:1 28:9,10 31:13 | 42:2 | right (17) |


| 8:20 33:15 34:16 | safe (2) | 67:3 | seems (3) |
| :---: | :---: | :---: | :---: |
| 37:13 43:15 46:10,15, | 21:14 90:4 | scientist (1) | 66:9 72:873:13 |
| 15 47:4,18 56:9 59:4, | said (11) | 73:11 | self (1) |
| $981: 1782: 1,1084: 9$ | 10:20 14:18 16:21 | scope (1) | 4:11 |
| ringing (1) | 30:12 38:13 47:5 51:9, | 6:10 | send (6) |
| 75:3 | 18 72:674:5 80:19 | screen (1) | 20:1 23:13 30:8,14 |
| risks (1) | same (15) | 11:22 | 44:14 51:15 |
| 90:8 | 12:13,15 19:13 | screening (1) | sending (1) |
| River (3) | 20:18,21,22 52:11,17 | 17:23 | 54:3 |
| 62:6 82:3,8 | 65:5 67:13,17 72:13 | seaman (1) | sense (1) |
| rivers (1) | 84:7 92:10 93:17 | 58:3 | 73:19 |
| 77:1 | same-name (1) | seasonal (1) | sensitive (1) |
| Road (1) | 41:15 | 91:1 | 67:4 |
| 91:15 | sample (3) | seat (1) | sent (8) |
| roads (1) | 32:3 43:5,9 | 6:22 | 18:10 19:20 20:17 |
| 67:3 | samples (3) | seating (1) | 41:1 42:2 44:9,16 |
| Rocky (1) | 43:5,11 44:1 | 4:8 | 48:15 |
| 80:8 | sampling (4) | second (7) | separate (4) |
| Rodney (2) | 29:17 31:21,22 32:1 | 5:18 18:23 27:9 | 5:11 31:17 68:12,13 |
| 38:18 39:2 | sand (1) | 40:19 43:24 75:10 | September (5) |
| $\boldsymbol{r o o t}(2)$ | 89:8 | 83:23 | 4:5 9:23 10:15 |
| 40:23 44:24 | sanitary (1) | secondary (1) | 15:11 52:19 |
| Route (2) | 69:22 | 59:23 | series (2) |
| 74:5 91:15 | saturation (2) | Secretary (11) | 33:20 35:11 |
| ruined (1) | 91:1,6 | 6:3 8:17,23,24 9:5 | serve (4) |
| 87:14 | save (1) | 11:10 15:13,14 61:12 | 6:4 42:10 82:21,24 |
| rules (1) | 38:17 | 62:13 80:17 | session (1) |
| 64:13 | saw (2) | Section (4) | 15:22 |
| running (4) | 57:11 91:15 | 17:14,15 24:24 | set (2) |
| 38:20 46:13 48:22 | saying (2) | 56:17 | 43:24 90:4 |
| 56:8 | 55:14 69:14 | secure (1) | sets (2) |
| runoff (4) | Scarpa (5) | 57:14 | 49:15 92:16 |
| 24:12 62:5 66:7,8 | 61:6,7,8 64:6 68:5 | seeing (1) | seven (2) |
| runs (1) | scary (1) | 69:16 | 20:2 68:4 |
| 84:5 | 73:20 | seek (3) | seven-day (1) |
| Russell (1) | schedule (1) | 31:17,17 87:2 | 19:23 |
| 78:12 | 44:5 | seeking (2) | several (7) |
| S | $\begin{gathered} \text { schedules (2) } \\ 4: 1342: 22 \\ \text { schools (1) } \end{gathered}$ | 60:16 63:11 | 42:4 57:5,11 59:1,2 |
|  |  | seem (1) | 76:9 91:12 |
|  |  | 73:10 | severe (1) |


| 55:15 | signed (2) | 65:13 | soup (1) |
| :---: | :---: | :---: | :---: |
| sewage (2) | 51:23 61:22 | snapshot (1) | 73:4 |
| 78:10,18 | sign-in (4) | 43:10 | south (2) |
| Sewer (1) | 4:16 6:21 51:19 | social (1) | 18:18 91:15 |
| 83:1 | 92:7 | 16:18 | soybeans (1) |
| sewers (2) | signing (1) | sodium (1) | 30:3 |
| 69:23,23 | 64:12 | 21:8 | Spacht (1) |
| shall (1) | similar (3) | Soil (4) | 38:18 |
| 19:21 | 44:2,20 45:4 | 90:24 91:1,3,5 | speak (5) |
| shallow (2) | single (1) | soils (3) | 4:19,20 14:8 28:17 |
| 90:23 91:16 | 46:6 | 78:4 90:21 91:9 | 81:15 |
| share (1) | site (25) | solely (1) | SPEAKER (7) |
| 72:1 | 17:18 18:16,17 | 11:2 | 4:2 13:16 38:14,17 |
| sheer (1) | 20:17 22:4,17,18 23:4, | solid (1) | 52:23 85:9 88:21 |
| 58:13 | 5 24:13 26:21 27:7,13 | 49:15 | speakers (1) |
| sheet (2) | 43:17 45:12 60:20 | solids (1) | 65:24 |
| 36:22 37:14 | 65:10,11 66:19 72:22 | 28:4 | speaking (2) |
| sheets (4) | 74:20 78:10,11 89:12, | solutions (2) | 14:8,19 |
| 4:16 6:21 51:19 | 13 | 29:18 85:8 | special (1) |
| 92:7 | sites (2) | somebody (2) | 87:1 |
| Shelly (1) | 26:4,16 | 74:8,10 | specific (1) |
| 71:16 | sitting (1) | someone (3) | 70:1 |
| Sherman (1) | 52:7 | 13:17,21 93:12 | specifically (4) |
| 80:9 | situation (1) | something (17) | 55:1 68:23 70:11,22 |
| ships (1) | 55:18 | 32:13 38:13 41:4 | specified (1) |
| 58:11 | situations (1) | 42:11,13,18 43:10,14 | 23:8 |
| shortened (1) | 32:9 | 44:15 46:8 57:7 58:23 | spent (1) |
| 9:18 | skatus (1) | 65:16 74:9 83:2 86:7 | 39:11 |
| show (3) | 42:15 | 89:18 | spirit (1) |
| 22:20 27:9 42:6 | slide (1) | somewhere (1) | 8:5 |
| showed (5) | 92:20 | 75:2 | spoke (2) |
| 28:15 39:5 42:21 | sludge (3) | soon (3) | 64:10 92:14 |
| 44:19 46:4 | 24:9 60:7 88:10 | 8:5 39:20 51:12 | spray (14) |
| shows (1) | small (2) | sorry (4) | 5:23 21:11 25:1,9, |
| 69:9 | 46:17 84:8 | 4:5 76:3 81:12 | 16 27:6 28:13 31:18 |
| side (4) | smell (1) | 91:21 | 32:17 33:3 36:8 65:17 |
| 24:18 39:8 43:21 | 82:2 | sort (1) | 89:2 90:22 |
| 48:14 | smells (1) | 37:14 | sprayed (3) |
| sign (2) | 60:4 | sought (1) | 25:24 57:16 78:4 |
| 4:17 6:23 | Smith (1) | 87:4 | spraying (6) |


| 5:20 47:3,15 69:13, | statements (1) | 48:20 51:24 | supposed (14) |
| :---: | :---: | :---: | :---: |
| 14 75:19 | 79:18 | stretches (1) | 22:4 23:5 41:9 |
| sprays (1) | state-of-the-art (7) | 67:9 | 54:19 61:19 62:1 |
| 78:9 | 66:18 67:11,14 | striking (1) | 66:11,17 67:1,12 |
| spread (1) | 80:20,24 81:5 89:3 | 55:17 | 72:18,21 81:7 87:10 |
| 48:2 | states (2) | strong (1) | supposedly (1) |
| spreading (1) | 68:23 78:17 | 27:14 | 72:13 |
| 60:2 | state's (1) | studies (5) | sure (19) |
| spreadsheet (1) | 59:21 | 79:3 86:12,15,17 | 8:10 9:11 20:15,23 |
| 28:20 | static (1) | 90:7 | 21:13 22:15,22 23:3 |
| sprinklers (1) | 48:21 | study (2) | 24:6 41:8 49:8 50:1 |
| 49:16 | station (1) | 83:7,11 | 51:13 64:20 68:1,1 |
| square (1) | 43:23 | stuff (2) | 76:4 79:13 93:5 |
| 75:22 | statutory (1) | 73:9 92:16 | surface (4) |
| stability (1) | 15:3 | subject (2) | 27:11 90:24 91:2,6 |
| 67:9 | Steck (5) | 11:2,6 | surprise (1) |
| staff (12) | 53:4,5,6 56:1,12 | submit (7) | 84:18 |
| 6:8 15:18 16:22 | still (6) | 53:10 64:5 76:13 | surround (1) |
| 38:5 39:4,14,22 41:12 | 4:21 13:17 41:2 | 85:18 92:13,15,15 | 22:24 |
| 42:19 43:19 44:5 | 78:18 86:23 89:19 | submitted (8) | surrounding (1) |
| 50:15 | stop (1) | 11:4 12:3 16:7,17 | 83:7 |
| stand (2) | 54:3 | 25:3,8 49:22 63:16 | survey (1) |
| 49:17 81:17 | stopwatch (1) | submitting (1) | 78:21 |
| standard (4) | 56:5 | 55:23 | Susan (1) |
| 9:16 21:10 73:5,6 | storage (8) | substance (1) | 61:6 |
| start (3) | 5:22 23:11 30:20 | 60:22 | Suspended (2) |
| 12:18 46:13 82:13 | 31:7 32:5,5,6,7 | sufficient (1) | 28:4 32:17 |
| started (2) | store (1) | 31:6 | Sussex (7) |
| 56:679:10 | 25:14 | suite (1) | 5:24 25:5 68:21,22 |
| starting (1) | stored (2) | 48:24 | 69:19 83:4 86:6 |
| 39:4 | 27:4 60:20 | summ (1) | Sustainability (1) |
| starts (1) | stories (2) | 12:19 | 85:24 |
| 74:10 | 84:5,11 | summa (1) | sustainable (2) |
| State (6) | stormwater (2) | 12:19 | 87:10,12 |
| 62:22 76:16,18 | 24:12,12 | summarize (1) | swimming (1) |
| 78:16 82:22 84:22 | stream (4) | 12:20 | 76:24 |
| stated (1) | 41:5 57:6,8,22 | summarizes (1) | switch (1) |
| 70:11 | street (1) | 51:9 | 66:15 |
| statement (1) | 56:20 | summary (2) | Syndrome (1) |
| 7:15 | stress (2) | 36:22 37:14 | 90:11 |



| 73:17 | 48:24 | treated (8) | 15:1,12 57:7 88:9 |
| :---: | :---: | :---: | :---: |
| thyroid (1) | top (2) | 5:21 18:13 19:19 | turning (1) |
| 90:11 | 47:11,11 | 22:8 25:12 60:2 78:10 | 6:7 |
| tied (1) | total (10) | 88:8 | twice (1) |
| 42:14 | 11:17 13:18 17:4 | treating (1) | 21:23 |
| ties (1) | 20:3,6,11 28:17 29:1 | 18:4 | Twitter (1) |
| 46:3 | 31:768:11 | treatment (35) | 16:19 |
| timberland (2) | touched (4) | 5:15 17:21,22 | two (22) |
| 41:11 45:10 | 72:8 86:18 88:1 | 18:12 19:19 22:6 | 5:3,10 6:11 18:15 |
| timer (2) | 89:1 | 23:12,16 24:3 25:13 | 20:2 30:23 31:5 34:7 |
| 11:21 12:18 | Town (5) | 26:22 27:5,20 32:24 | 40:12,16 42:20 55:3,3 |
| times (2) | 53:6 71:18 76:9,10 | 36:16 38:24 39:7,18, | 57:17 63:13,23 68:12, |
| 21:24 90:20 | 84:8 | 21 48:6,11,13 55:5 | 12 72:12,13 84:19 |
| today (4) | towns (1) | 59:23,24 63:4,14,22 | 87:21 |
| 14:20 49:4 89:20 | 77:5 | 66:18,23 73:4,6 77:19, | type (2) |
| 92:2 | toxic (2) | 20 91:10 | 21:11 78:18 |
| together (6) | 73:4,17 | triangular (1) | types (3) |
| 38:11,12 39:24 | toxins (1) | 91:17 | 29:6 32:1 72:24 |
| 43:12 50:9 73:23 | 56:23 | tried (1) | typical (1) |
| told (2) | track (1) | 22:20 | 24:8 |
| 64:13 81:24 | 56:11 | truck (1) | typically (1) |
| Tom (2) | Tracy (1) | 66:23 | 9:15 |
| 76:6,8 | 38:22 | trucks (1) |  |
| tomorrow (1) | traffic (1) | 67:2 | U |
| 51:1 | 86:15 | try (4) |  |
| tonight (28) | training (1) | 4:24 6:9 22:23 | ultimately (3) |
| 4:19 5:10 6:15 7:1 | 32:12 | 38:17 | 8:18 15:14 49:12 |
| 9:14 10:7 11:14,17 | transcribe (1) | trying (5) | Um (17) |
| 12:4,10,12 13:7,10 | 14:4 | 23:3 56:10 57:22 | 25:7,11 26:3,3,5 |
| 14:2,7,12,22 15:9,19 | transcript (3) | 64:19 75:6 | 28:24 32:10,10,15,19, |
| 16:2 38:17 52:16,23 | 14:1,5 15:9 | TSS (1) | 19,20 33:5,7 35:16 |
| 53:15 62:18 86:2 | transfer (1) | 21:5 | 54:8 86:3 |
| 92:14 93:19 | 62:5 | Tube (1) | unclear (1) |
| tonight's (9) | transparency (1) | 16:19 | 73:8 |
| 6:5,10 7:9 10:2 | 8:6 | Turbidity (3) | uncomfortable (2) |
| 11:2 12:24 13:24 15:4 | transport (2) | 21:4 28:6,7 | 4:8 93:23 |
| 35:5 | 58:19 89:10 | turn (4) | under (2) |
| took (1) | treat (6) | 16:21 24:19 49:6 | 26:2 87:1 |
| 42:4 | 5:15 11:16 30:13 | 50:15 | underneath (1) |
| tools (1) | 63:5,12 83:19 | turned (4) | 28:13 |




| 19:22 20:2 25:18 | 19:8,24 25:20 | 3 (2) | 6:04 (1) |
| :---: | :---: | :---: | :---: |
| 63:9 | 34:20 63:9 | 34:23 47:11 | 4:4 |
| 1.65 (1) | 2.5 (2) | 3.2 (1) | 60 (2) |
| 31:13 | 31:14,19 | 91:2 | 61:21,24 |
| 10 (8) | 20 (3) | 30 (15) | 65.2 (1) |
| 28:1,5,12 29:3 | 20:19 28:3 65:16 | 9:14 16:6 20:4,5,9 | 30:20 |
| 45:21 77:18 78:15 | 2008 (2) | 29:10,15,20,21 45:13 | 66 (1) |
| 80:12 | 91:3,4 | 52:14 53:9 56:16 | 90:19 |
| 100 (3) | 2009 (1) | 61:20 89:24 | 67-million (1) |
| 20:20,20 78:3 | 78:23 | 30-day (1) | 47:6 |
| 11 (1) | 2013 (1) | 10:4 | 68 (1) |
| 81:3 | 80:12 | 30th (1) | 90:18 |
| 110 (1) | 2015 (1) | 61:11 | 7 |
| 33:5 | 63:24 | 31-day (1) | 7 |
| 13 (1) | 2016 (1) | 86:22 |  |
| 49:13 | 64:2 | 36 (1) | 7:37 (1) |
| 14 (1) | 2017 (1) | 91:4 | 94:3 |
| 75:23 | 54:18 | 4 | 8 |
| 15 (2) | 2018 (1) | 4 |  |
| 32:677:19 | 61:12 |  | 80 (1) |
| 15-day (1) | 2019 (4) |  | 91:4 |
| 9:16 | 4:5,6 63:17 85:7 |  | $86.25$ |
| 16 (2) | 2021 (1) | 40,000 (3) | $91: 8$ |
| 56:17 91:15 | 71:10 | 19:12,14 67:8 |  |
| 17 (1) | 20th (4) | 45 (4) | 9 |
| 26:9 | 9:23 10:15 15:11 | 20:7,10 90:19 91:5 |  |
| 1922 (1) | 52:19 | 5 | 9 (4) |
| 69:20 | 21 (2) |  | 56:17 57:18 75:19 |
| 1923 (1) | 4:5,6 | 5 (2) | 78:15 |
| 68:22 | 210 (1) | 28:8 91:6 | 9.2 (1) |
| 1986 (1) | 21:8 | 5.5 (1) | 90:24 |
| 86:22 | 23 (1) | 21:2 | 9.9 (1) |
| 19939 (1) | 63:24 | 53 (1) | 90:1 |
| 84:20 | 24 (1) | 90:20 | 90 (2) |
| 19966 (1) |  | 5-9 (1) | 78:14,15 |
| 84:19 | 250 (1) | 18:18 | 90-million (2) |
| 2 | 21:7 | 6 | 90-million-gallon (3) |
|  | 3 |  |  |
| 2 (5) |  |  | 43:19 47:5 87:22 |
|  |  |  |  |



