

## REPRESENTATIVE POLICY BOARD

### PUBLIC HEARING

*(LAKE WHITNEY WATER TREATMENT PLANT CHEMICAL IMPROVEMENTS PROJECT APPLICATION)*

APRIL 25, 2024

### TRANSCRIPT

Jamie:

I'd like to call this public hearing to order. I'd like to remind everybody that this meeting is being recorded, and we need to read the Notice of Public Hearing, as follows: The Representative Policy Board, or RPB, of the South Central Connecticut Regional Water District will hold a public hearing to consider the South Central Connecticut Regional Water Authority's application for approval of the Lake Whitney Water Treatment Plant Chemical Improvements Project or application. The public hearing will take place on Thursday, April 25th, 2024 at 7:00 PM. Members of the public may attend the meeting in person at 90 Sargent Drive, New Haven, Connecticut, or via remote access. For information on attending the meeting via remote access, and to view the application and accompanying information, please go to <http://tinyurl.com/yyxk7xcs>. The public hearing is being held pursuant to sections 10 and 19 of Special Act 77-98, as amended.

The application contains confidential information subject to protection under Connecticut General Statute section 1-200(6)(E) for matters covered by section 1-210(b)(19)(i)(ii), pertaining to safety risk. Portions of the public hearing may be held in protected confidential session. In the event of a protected confidential session, members of the public will be instructed to leave the public hearing and may rejoin after the confidential discussion is ended. All users of the public water supply system, residents of the regional water district, owners of property served or to be served, and other interested persons shall have an opportunity to be heard concerning the matter under consideration. Questions may be submitted in writing to the board office by emailing [jslubowski@rwater.com](mailto:jslubowski@rwater.com), or by calling 203-401-2515. Submitted by Robert E. Harvey Jr., Chairperson, Representative Policy Board, South Central Connecticut Regional Water District, 90 Sargent Drive, New Haven, Connecticut, 06511.

The procedure to be observed during this hearing will set three minute time limits for external questions, but otherwise no time limits for any of the presentations or testimony. Anyone wishing to offer testimony will be sworn in. They will be asked to state their name, residence, and business affiliation, if any, and may be subject to questioning by the presiding member and members of the RPB. Members of the public will be provided the opportunity to ask questions at the end of the public hearing, and are not required to be sworn in. Can I, at this time, ask if all individuals that will be testifying to identify themselves by name, home address, and organization?

Sunny Lakshminarayanan:

Sunny Lakshminarayanan, 90 Sargent Drive, Regional Water Authority, New Haven.

Jeff:

Jeff Donofrio, 4 Nichols Farm Road, Trumbull, Office of Consumer Affairs.

Jamie:

Is there anyone behind you? Go ahead, Orville?

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Orville Kelly:

Orville Kelly, 90 Sargent Drive, Regional Water Authority.

Jamie:

Is there anyone else? I'm going to ask you to stand, raise your right hand, and follow this oath. Do you solemnly and sincerely swear or affirm and declare that the evidence you shall give concerning the case now in question shall be the truth, the whole truth, and nothing but the truth upon pains and penalties of perjury or false statement?

Sunny Lakshminarayanan:

Yes I do.

Jeff:

Yes I do.

Orville Kelly:

Yes I do.

Jamie:

Thank you. I'd like to inform those present that this application does contain confidential information that is subject to protection under the terms of a protective order granted by the RPB. If the information is going to be used during the public hearing, members of the public will be asked to leave the meeting and can return after the confidential discussion has ended. At this moment, I'd like to pause and ask are there any members of the public present? No? Thank you. Then the RWA, I'd like to ask to begin the presentation.

Sunny Lakshminarayanan:

Oh, thank you. We are here to hear the presentation for the Chemical Improvements at the Lake Whitney Water Treatment Plant. I'll give a brief background then we'll go over the scope, need, budget, and schedule. As a background, the plan is located in Hamden Connecticut. It is certainly a critical source of supply and treatment for New Haven and surrounding areas.

The average capacity is four MGD. It has a design permitted capacity of 15 million gallons per day. This facility was constructed in 2004, and no significant upgrades have been made. This project would consist of the potassium permanganate, the caustic, sulfuric acids, and other improvements associated with it, to get into the more detailed scope, as well as into the needs. The schedules and budgets, I'll have Orville take over, and go over the rest of the presentation. Any questions you have, you can stop us at any time, or at the end of the presentation as well.

Jamie:

Thank you, Sunny.

Sunny Lakshminarayanan:

Thank you.

Orville Kelly:

All right, thank you, Sunny. Good evening everyone. Thanks for the opportunity. As we look at the project scope, the scope of this project includes the replacement of the potassium permanganate and the caustic chemical feed systems. Each chemical feed system replacement will include bulk and mixed tank, day tanks, transfer, and meter, and pumps, piping, instrumentations, and controls. The potassium permanganate system will be relocated to a new room with more space. It also includes installation of reinforced fiberglass platform, and an electric lift table for dry chemical pallet storage, along with a new dust collection system. The caustic system will include installation of new stainless steel piping, bringing it in conformance with the RWA's latest safety standards, along with demolition and installation of concrete masonry wall, with chemical door frames and chemical doors.

The Project Need. Replacing these identified chemical systems will improve the reliability, safety, and consistency of this treatment plant. Reliability. The plant will be more reliable by replacing old equipment and components that are exceeding their useful design life with new equipment. One of the two existing bulk tank leaks and is presently offline, which reduces our storage capacity. This reduction in storage capacity results in more frequent chemical deliveries and batching of permanganate by staff. The upgrade of these systems will increase bulk storage capacity and reduce frequency of batching, along with lot staff labor and maintenance issues.

From a safety perspective, installing new equipment and piping will prevent chemical leaks, and bring these chemical rooms up to current updated RWA safety standards by optimizing the room sizes, piping layout, and ergonomics, preventing injuries and safety hazards. The existing potassium permanganate system is operating on a temporary system, with poor lighting and low overhead clearance. There is presently no dust collection system, which is now an RWA safety standard requirement for mixing all dry chemicals.

Also, new welded stainless steel piping for the caustic system will significantly reduce leaks, and the potential for staff exposure to the hazard. From a consistency, updating and replacing components within the Lake Whitney Water Treatment Plant will result in consistency with other RWA treatment facilities. The standardization across all facilities and operators' familiarity will contribute to increased efficiencies and reduce user errors.

Jamie:

Before you begin, excuse me for interrupting you, Orville, but I'd like to ask all those that are joining the meeting remotely that you please mute. Thank you. Go ahead, Orville.

Orville Kelly:

Summary of Alternatives Analysis. In determining the best course of action to replace the components within the treatment plant, two different alternatives were evaluated. Alternative number one, status quo, which is to take no action. This alternative was not acceptable and quickly dismissed as it does not provide a means to address the known issues with limited chemical storage, or the current chemical system layout hazards, which includes one of the two sodium hydroxide bulk tanks has a leak, so only one bulk tank is available for use. Secondly, the potassium permanganate tanks are undersized, so staff needs to frequently make new batches. Thirdly, the ceiling height in the potassium permanganate room is very low, so staff can't stand straight up if you are regular height, 6'1", 6'2" like myself, when maintaining system components at the facilities. If not improved and left online, equipment would potentially fail, and chemical leaks from aging piping and fittings, along with the health and safety risks would remain.

Alternate number two, replacing the chemical system, or improving the chemical system. Replacing the new chemical feed system would provide permanent solution, as well as a reliable and safe option, by eliminating equipment and components failure. It also increases the safety of staff by optimizing the chemical room's layout and ergonomics. Larger storage volume will equate to the reduction in frequency of chemical batching, and also delivery, which reduces safety hazards and exposure. This alternative also minimizes cost and impact during construction while maximizing storage capacity. Therefore, alternative number two was selected as the most favorable alternative, as it meets all the project objectives in reliability, safety, and quality of outcome.

The budget and schedule. The project budget is to cost \$3.1 million, which includes 20% contingency. It also takes into account the price escalation that we've seen due to the pandemic effect that is still in place. Previous spent is \$64,000, with approximately just over \$3 million budgeted to be spent through FY24 into FY26. It is expected that this project will be using a combination of funding sources, which is DWSRF, RWA bonds, and internally generated funds. The proposed schedule project schedule is as follow, as on the slide, RPB submission and approval between January and May of 2024. Final design, DPH approval, and bid somewhere between May and June, and project award and the end of construction between July 2024 through October of 2025.

From a permitting perspective, this project involves the replacement of existing chemical systems. Thus, we do not intend to that any major permitting is anticipated and there are no unusual circumstances involve in this project. Next slide, please. In summarizing and concluding, the Lake Whitney Water Treatment Plant is a critical source of supply, as Sunny as stated earlier. The treatment for the New Haven and surrounding areas, the proposed chemical system replacement is a priority project for the RWA as it is needed to replace agent chemical feed system and components that have reached, or are beyond their extended useful life. It optimizes construction and project cost. It improves reliability, safety, and stability of the Lake Whitney Water Treatment Plant, and it is consistent with, and advances the policies and goals, of the RWA. Thank you very much for your time. If you have any questions, we'll take those questions at this time.

Jamie:

Thank you, Orville. Are there any questions? Go ahead. Please provide your name.

Greg:

Greg Malloy, from West Haven. Orville, during the construction of this, will the system be shut down at all?

Orville Kelly:

No. We're presently operating the permanganate system in its original room. This project is relocating it to a new room, so that system will remain online. The caustic system, we are going to install a temporary system so that the plant will stay online, and we will still be operating while we construct the new system.

Greg:

Due to the fact that the demand for water keeps going down every year, do we really need to put this back online?

Orville Kelly:

Yes, we do. The way in which we operate, pretty much the Whitney was always designed to run during the winter months in particular to allow Gaillard, which is our major supply, to replenish itself. With the resiliency that we've been operating with, we want the capability of moving water from one place to the next, and with this plant online, it does give us that potential.

Greg:

I don't think you were employed at the time, but during the construction 20 years ago, this system was down for quite a while, and I don't think we had any problems when it was down.

Orville Kelly:

If I may, sir, I started working at the Regional, I built this plant [inaudible 00:16:42] shoveling the ground. Yes I was, and so I'm fully aware of the time [inaudible 00:16:49] that was done.

Greg:

But how long was it down during the construction 20 years ago?

Orville Kelly:

During the... It took us three, just about three, three and a half years to get the plant back online once we started on construction. Well, less than three and a half, we came back online somewhere in 2005, was when construction was finished and we went online. It was offline for about a two-year period. During that time, while it was offline, yes. While we did not have any issues, if you remember somewhere soon after, we had the drought, and we had to be moving water from one place to the next. The level in Lake Gaillard went down, beyond we have ever seen. The importance of having this plant, and having that water being used, is a benefit to the organization.

Greg:

Thank you.

Orville Kelly:

You're welcome.

Mark:

Hello. Mark Levine, Woodbridge. Is there any salvage back on all these stainless steel tanks you're taking out, or tanks you're taking out? Is there going to be a salvage coming back?

Orville Kelly:

Mark, unfortunately on this project, there is really no salvage value. There is no stainless steel or steel tanks being replaced. The one steel tank, which is the potassium permanganate, there is not much on that because it's lined, and chemical is stored on the inside of that. All the others are just plastic tanks and plastic pipes.

Mark:

You know I'm always big on that.

Orville Kelly:

Absolutely, absolutely sir.

Mark:

You say the plant puts out, what? 4 million gallons a day?

Orville Kelly:

On average.

Mark:

On average?

Orville Kelly:

On average-

Mark:

But it's capable of putting out how much-

Orville Kelly:

... going beyond.

Mark:

What's the capability? I forgot. 15?

Orville Kelly:

The plant is permitted for 15, yes.

Mark:

Okay. Could it do it? Could it do 15?

Orville Kelly:

We presently can't do 15 as we stand, because the permanganate system is undersized, as is, that is a temporary system that we're operating on.

Mark:

But after this is done, we'd be able to go 15 million gallons?

Orville Kelly:

Absolutely, if we need to.

Mark:

Okay, thank you.

Jamie:

Thank you, Mark. Are there any other questions from the RPB? Any other questions? I would-

Stephen:

Jamie, this is Steve.

Jamie:

Go ahead, Steve.

Stephen:

Steve Mongillo, Hamden representative. I have some questions similar to Greg's, because it's described as a critical source, and yet it's just in a decreasing draft. It's done no more than 5 million per day. I remember when it was built that redundancy was one of the reasons for this plant. Is that still the case? My second question is, if you were to sideline this plant right now, for a while, would that be more costly to bring back, than to do these upgrades and keep it running?

Orville Kelly:

All right. I'll attack the last one first. I believe if we have to sideline this plant, it would be more costly to bring it back on, as we'd have to go through disinfecting the entire plant all over again. Just like anything else, if you have, whether it be pumps or machinery that sits and do not run, after a while they're either dry rot. When you go to turn them on, you don't know what you're going to get or how it's going to respond, so from that sense.

The first question, of when redundancy was always one of them when the plant was originally built and installed, it is still a big portion of it and the resiliency. I believe that as we're looking to even move more water north, that system, or this treatment plant, is very beneficial to us as it affords us that opportunity to push more water up 10 should we have issues with all wells.

Stephen:

Okay. Do we anticipate the draft continuing to go down, or is this another Route 10 direction a potential new source?

Orville Kelly:

Could you restate that? I'm not certain I understand that question. Sorry.

Stephen:

Do we expect that we'll be using it more in supplying water up Route 10, northerly, from this? What do you anticipate in terms of the draft, continuing in the next five, 10 years?

Orville Kelly:

I believe that we're presently doing a study on draft, trying to figure out where we think it's going to be in the next 10 to 20 years. I'm not certain if I've seen the results on that yet. Presently, we have somewhat seen a slight decline, on average, annually, I believe. In terms of the treatment plant, utilizing the treatment plant, when we say an average of four MGD, is that we do more than four MGD at a given point in time. If there are, well, it could be from a main break depending on where in the system it is. If we need to boost the pressure, or to boost the flow in the system, we are able to do that.

We have gone from four, we have gone up to six, we have gone to eight on occasion. But typically we go on, higher during the colder parts of the year, the colder period of the year, pretty much so that we can, as I stated earlier, allow Gaillard to replenish itself. With some modifications within our distribution system, yes, it will give us the flexibility to push more water north, Route 10.

Stephen:

Okay, thank you very much.

Orville Kelly:

You're welcome.

Jamie:

Thank you, Steve. Tim?

Tim:

I have a question, really taking off of Steve's question, relative to water going north. I believe there was a report earlier in the year, or a report that indicated that the Cheshire well had been frontally short with recharge and water didn't, in fact, come north, and that would be a redundant source. In recharge impacts with the well fields, both in Hamden and Cheshire, that would be the source of the recharge. The lake Whitney would be the source of the water, correct? Am I interpret that correctly?

Sunny Lakshminarayanan:

Not sure on that, Tim, but anyway, I think you know what Orville was mentioning was I think we could push water north using the Whitney Water Treatment, right? It serves as a resilience feature to provide for water if we need to push water up north, but not as a source of surcharge for the well fees.

Tim:

No, I realize it wouldn't go into the well fields, but it would go to consumers?

Sunny Lakshminarayanan:

Correct.

Tim:

In other words, the pipe split going into home-

Sunny Lakshminarayanan:

Correct.



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Tim:

... could be supplanted or-

Sunny Lakshminarayana:

Correct.

Tim:

So the supply would be-

Sunny Lakshminarayanan:

Right.

Tim:

I realize it's not recharging the well field, but it's there when that happens. But in the meantime, it's also servicing that amount of [inaudible 00:25:06] every day for customers that need it.

Sunny Lakshminarayanan:

Correct. It does service parts of Hamden, New Haven, as needed.

Tim:

Right.

Sunny Lakshminarayanan:

We actually push water towards the western portions of New Haven.

Tim:

So in essence, there's a little over capacity with how much you can process, in terms of whatever, but it's just... It's over built but it's built.

Sunny Lakshminarayanan:

Correct.

Tim:

Got it. Thank you.

Jamie:

Thank you, Tim. Are there any other questions?

Stephen:

Jamie, this is Steve Mongillo again, Hamden representative.

Jamie:

Go ahead.

Stephen:

I just have one last one question of Orville. These repairs, how long would we expect a life expectancy of what we're going to do for that plant in terms of the upgrades?

Orville Kelly:

Typically, on chemical feed system, those life expectancy, I think, with these two chemicals... It depends on the chemical variants. You're seeing anywhere from 10 to 12 years on chlorine or hypo systems. On this system, you're seeing anywhere between 15 and 20 years, at its best, once it's well maintained.

Stephen:

Okay, thank you.

Orville Kelly:

You're welcome.

Jamie:

Thank you, Steve. Are there any other questions? Any from the floor? Any from remote? Peter, did you have a question? Hearing none, I would like to make a point, Orville, that I like to think that my height, at 5'5" is regular, that 6'1" is not the only regular height. Just so that that's on record.

Orville Kelly:

Point taken.

Jamie:

Our Office of Consumer Affairs, Jeff Donofrio.

Jeff:

Good evening. Jeff Donofrio, office of Consumer Affairs. I submitted a memo, that's in the record, last Thursday, April 18th, recommending approval of the application. A pretty straightforward project. Now, as you've talked about tonight, the plant is online, and it treats an average of 4 million gallons of water per day. It's an important source of water supply and treatment for the district. The system is going on 20 years old, and it's probably past its useful life. The original system's not operational. The plant's using a temporary system and if you've got one of the two bulk storage tanks offline due a tank failure, so there's all kinds of operational challenges and inefficiencies that are being experienced, as well as let's not lose sight of the portion of the application that talks about the safety, and the impact on safety of plant operations. I found that the application was necessary and appropriate.

It's no surprise, given the [inaudible 00:28:45] outline useful life of this equipment that there's a need for this project. It'll reduce the frequency of chemical deliveries and mixing events, and increased bulk storage capacity, and address safety issue. There's some, as has been the pattern in the last few years, some bundling within the project. If you look at the cost breakdown that's within the application, you get a little bit of a better understanding of what exactly the project consists of from the scope

perspective. These projects are always difficult for us lay people to understand, but there really is a lot in this project.

When you look at the breakdown of the costs, I think you really have a better understanding. When you look at that time bond opinion of probable construction costs, you have a better idea of what's being proposed, and why it's being proposed. I think that the budget estimates are reasonable. They're escalated to the main point of construction, at a rate that probably is okay, even though we still seem to be in an inflationary environment. The contingency is likewise appropriate. I recommend approval of the project.

Like I said in the application, this is one of those projects that most people don't even know about. They just assume that the water, they turn on faucet, is drinkable and safe, and it's projects like these that are really at the core of what the authority needs to be able to do to deliver quality water to customers.

Jamie:

Thank you.

Jeff:

At a buck 19 per year, per residential customer, it's a prudent investment.

Jamie:

Thank you, Attorney Donofrio. Are there any questions for Jeff, or for both, or the team? Are there any additional questions? Are there any members of the public that wish to provide testimony? RPB members have any questions that they wish to ask, in general, about this project? Are there any questions? I've invited members of the public to comment, we have no members of the public, so I think this closes our discussion. I'll ask again if there's anyone who would like to make any other testimony or contribution to this discussion, or any additional questions? Hearing none, I'll close the record of this hearing. Chairperson Bob Harvey will read the exhibits into the public hearing record, but I guess I haven't closed it yet. No, I'm going to wait till after the exhibits.

Bob:

Okay. The exhibits for the public hearing. Exhibit A is the application to the RPB for approval of the Lake Whitney Water Treatment Plant Chemical Improvements, dated January 25th 2024, the Application. Exhibit B, The affidavit of Sunny... Excuse me, I can't pronounce.

Jamie:

It's okay.

Bob:

Dated January 18th 2024, regarding Confidential Exhibits for the Application. Exhibit C is the Motion for the Protective Order dated January 25th 2024, signed by David Borowy, Authority Chair, and Larry Bingaman, RWA President and Chief Executive Officer, regarding requests for motion of Protective Order for the Application. Exhibit D is the Protective Order, signed by Stephen Mongillo, RPB Vice Chair, on February 2nd 2024. Exhibit E is the interrogatory submitted by RPB member Joe Oslander, from Madison, dated February 6th 2024.

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Exhibit F is management's response to Joe Oslander's interrogatory, dated February 6th 2024. Exhibit G is management's responses, dated February 13th 2024, to interrogatory submitted by RPB member. Exhibit H, Notice of Public Hearing, published in the Connecticut Post and the New Haven Register on April 2nd 2024. Exhibit I is the OCA's memorandum, dated April 18th 2024, recommending approval of the project. And Exhibit J is the application's presentation, tonight, dated April 25th 2024. That is all I have at this time.

Jamie:

Thank you, Bob. If there are no other questions or comments, the public hearing can now be closed.  
Thank you.