

**Allen Restoration Project  
Virtual Community Meeting: September 22, 2021  
Questions & Answers**

**Q. How has TVA been a community partner in the Memphis area. And can you describe TVA's investment and commitment to Memphis?**

**A. Mark Yates, Regional VP of Western Region:** If you look at what we've done, meaning we mean TVA over since I've been in the organization, which is since January, in getting to the point where we are in Memphis, and the amount of investment going back to 2018. If you look at the Allen combined cycle plan now, which replaces the Allen Fossil Plant, that is about an \$850 million investment there. If you want to round up we can call it a billion dollars there once you get it installed and operating. And then you look at what we've done in terms of infrastructure, with respect to overall transmission and the generation assets that's about another \$72 million here just recently. So those things are important. Those things are directly important when we look back on an event such as the polar vortex event that happened here this past February, when the lights didn't flicker in West Tennessee. But we did see them flickering in some other parts of the country. But then if we shift to the model that we're currently operating on and as I mentioned during the introduction, we have a pull model, and so that pull model focuses on the regional model, and how do we look at our discrete communities and what are those things that we're doing within those communities, and how do we affect and leverage those investments.

For example, one that comes to mind immediately is just here last week, we had a significant participation in what we would call the Southern Heritage Cultural event. The Southern Heritage Classic has been around Memphis for plus or minus 30 years. And so TVA participated in that event. My colleagues in Memphis, my staff, my directors and everyone worked really hard to ensure that we were, again, just immersed in that opportunity. Another is here we're looking at how do we look at...and we have to focus all of these events on the mission of TVA. The first of which I spoke about which is electricity. We talked about the generation and ensuring that the lights stay on. The second is economic development in no order. The third is environment, but we're looking at economic development and how do we leverage those investments. What can we do to really make that happen. So, in Whitehaven we've looked at opportunities for us to go and invest and work with the greater Whitehaven economic redevelopment corporation, GWERC, and so how do we work with them and the managers there to give them some bigger, and just technical, technical expertise. So they're just a number...if we look across, if you will, a tapestry, there are about 20 to 25 different projects that we have on our dashboard that reflect that. And then lastly, but, of course not least is the environmental efforts. There are down at Allen, what about 100 wells that we've got that are located on site. And so those wells are monitoring the

groundwater to ensure, and what I like to say is that Memphis has not the best water in the world, but the best water in the known galactic universe, until we find the water somewhere else in the universe Memphis has the best water. And so we're very jealous about that. And so that's...we're protecting that water, and we're working very hard to do so.

**Q. You briefly mentioned during your remarks, but some people may be actually quite surprised to know about the history of the Allen site, and how that site represents a shared responsibility among key community stakeholders, Can you elaborate on that for us?**

**A. Scott Turnbow, VP of Civil Projects:** You know those key stakeholders that we're talking about really are the city of Memphis, MLGW, Shelby County, of course, the Port Commission. So keep those four in mind, but back in 1956 MLGW actually built this fossil plant to actually run there in the Memphis community. They own that complete facility, it's about 500 acres and at the time, they own every bit of that and so from 1956 until around the 1960s timeframe they owned and operated that site. In the 1960s period TVA actually went into a partnership and leased the site and operated the site through the 60s and 70s, up until 1984. In 1984, TVA actually purchased the Allen Fossil Plant. Now it's very important to know what we actually purchased, we actually purchased just the Allen Fossil Plant itself. The plant and the property it sits on - the property to the east and to the west, which is dictated in this picture, where it's dark blue where it says the West Ash Disposal Area and in the green where it says East Ash Disposal Area - both of those pieces were continued to be owned by MLGW, the city of Memphis, Shelby County and the Port Commission. So as that progresses on up until 2018, we owned and operated the Allen Fossil Plant site itself. Now when we got into 2015 and this is the part where you say well how does all this piece together and how is there a shared responsibility and partnership that's going on? In 2015 the EPA issued what it calls the coal combustion residual rule - CCR rule. It's a rule on coal ash on how to properly manage and store it, there was some investigative nature to it and evaluations would have to take place through that rule from the EPA, and at the same time, the Tennessee Department of Environment and Conservation as Mr. Flood mentioned a minute ago, the TDEC issued a commissioner's order and that commissioner's order kind of ran parallel with the CCR rule, but it was more robust, more investigative than the actual CCR rules and a lot more involved. So with the two of those together in 2015, that creates quite a bit of a burden on those entities that own and operate the site, which there is that partnership and the multiple people who are involved as I just outlined. So, to deal with that part of our responsibility we see as being a good partner, and a mission of service as we've mentioned before, is we brought all those entities together back in 2015 and began to talk about how do we go forward on this side and meet both of those expectations. And at that time, that's when we actually entered into what we call the Memorandum of Agreement, and that Memorandum of Agreement basically takes all those issues, pulls them together and TVA agreed to take

on the burden of that, of these activities relative to the CCR rule and the TDEC Commissioner's Order and allows for TVA to do what is necessary to implement both of those rules and both of those Commissioner's Order, and then ultimately gave us sole responsibility to do so. Now we entered into that with good faith, and ultimately, we have done that multiple times. One of the pieces of it is that we would meet on a quarterly basis, as we work through the investigation of the site, how do you keep everybody up to date on what's going on. We're meet quarterly, with each of those entities together, talking about the investigation, what we're finding in the groundwater monitoring results, how we're working through the department remediations endeavors there, and how we would ultimately get to the remediation of the site. All of that has transpired over the past five years roughly. Five years, that's right. So absolutely, so that's where that's where that is. Now we're at this point now where the shared partnership has to move towards the remediation of the site, and the remediation the site becomes so important to each of those entities, and the community, because once we are able to restore the site, remove the coal ash, take it to an engineered landfill, remove it from a 1950s vintage pond system, it makes that site available for economic development and repurposing, and that's what becomes valuable not only to these entities that own the property, but also to the community itself.

#### **Q. How is TVA protecting the Memphis aquifer?**

**A. Angela Austin, Construction Manager, Allen Restoration Project:** My daughter talks about it when she comes home to Memphis about how she misses the Memphis water so I know just like my kids know, we grew up here, raised my kids here, and we know we have the best water in the world so I have to second that motion. But being the boots on the ground, as the construction manager, there are three things that we're doing to protect aquifer. I'd like to start back with the 100, monitoring wells, I don't know if we have a slide to show whether those monitor wells are around the site, but those monitors are there to ensure that we are not affecting the aquifer, we do quarterly sampling to ensure that we're not doing anything to the aquifer. Second of all, we're removing the coal ash on the site. So I think Pat you talked about that a little bit about, you know, that was one of those things that we have to put in place before we can actually move the ash off the site. Thirdly, is the groundwater pump and treat system in which you know your surface water, you know, when we talk we call it...I'm sorry, groundwater, but it's rainwater surface water that Pat talked about that we have some high level constituents that we will remove that surface water, send it through a water treatment facility and treat it. So that way we're continuing to make sure that that area would not affect the aquifer. So going back to those three things safety's always first and foremost and safety's always first to the employees, to the public and things like that. So these are just things that we're doing on site to ensure that we can safely do it, and also protect the aquifer.

**Q. What role does TDEC play as it relates to the Allen restoration project, and take us through the regulatory process which includes, among other things, securing permits and getting approvals on plans for long term storage of the coal ash, and where are we in this process?**

**A. Pat Flood, Senior Advisor, Tennessee Department of Environment & Conservation (TDEC):** Okay, thank you. Happy to answer that question, but I'm going to answer it to kind of a high level, because if I were to get down to the details, we would be here a long, long time because there's a lot of things that are going on, on this project. So, first of all let me kind of divide it into two categories. There's what we're doing at the Allen facility and there's what we're doing at the Republic's landfill. So, first let me talk about what's going on at the Allen facility. Now, as I've already mentioned, there's an order out and the order outlines the steps that we have gone through. And there's various work plans that are submitted, there's various reports that are submitted and we review all of those, we comment, especially on work plans, because we do not just let TVA go out there and just well, we just want to drill a few wells and do a little bit of investigation. It's a very robust thing, we review it, we comment on it, we go back and forth. So by the time that we are done with the investigation plan, we're very happy with the way it is. And then the next step is to review and assess and then corrective action. Now, as I've already mentioned, we had to kind of short circuit that process because when we did the investigation, we found on levels that were of concern at the Allen, and in, it's in such proximity to the Memphis sand aquifer that we feel felt like geez, we need to get the show on the road and not go through the long drawn out process. Let's just start moving, moving some materials, so we kind of switched gears got away from the order process and got into the Superfund process, which also has a series of events, proposed plans, public meetings, various documents that gets submitted. And where we're at with that right now is that we are down to the last document that needs to be approved and that's the corrective action work plan. And I think we're very close. We've gone back and forth a number of times on that we've gotten things I think mostly the way we want to see it. So I think we're very close to getting that done and hopefully we can start moving ash pretty soon, so we're in pretty good shape there.

At the Republic landfill, we're basically ready to go. And so, briefly, I want to talk about what it is that TDEC does with this regulatory oversight in landfills. So, we permit those landfills, and to permit them, they're highly engineered facilities, and they submit permit applications and they come in multiple three ring binders, filled with engineering calculations and design drawings and things like that, and we go through those very thoroughly to make sure that everything is up to snuff and suitable. And so when they start construction, we do oversight during construction to make sure that everything is being constructed. They also have third party CQA, but we're out there to making sure that everything's done the way it needs to be done. There's also this thing called a special waste application. So, although the facility's already permitted to receive these, these materials, it's different from what they receive day in and day out, so there's an extra regulatory....I don't want to use the term burden, but that's what it is, regulatory

burden, where, you know we are allowed to look at what's going on and to provide input as to how this material needs to be handled, and to be safely disposed of. And, one of the things that came out of that is that we ended up putting it in a monofill, for reasons that would certainly take us through the end of next week, you don't like to mix the coal ash with other waste materials that they're already receiving. So it goes in its own special cell called a monofill, so we had to work out details on that. There was permit modifications to accommodate all that, and we have worked through all that. The cells constructed, I think we are less I hear something differently, we are good to go on that.

**Q. Does TVA and Republic Services have all the permits to move forward?**

**A. Pat Flood:** Well I think I kind of touched on that. Republic does have all their permits; they're good to go. And it's not just permits, it's approval of documents and reports and plans. So we are one document away from being done and that's the corrective action work plan, which I described previously as a mechanism by which TDEC can review how the ash is being managed and for us to just make sure that it's all being handled in a way that's protective of the environment and human health. So, I think we're pretty close on that. I forget which iteration or which version we're on, but we're very close, and I think we'll be done with that shortly.

**Q. Republic Services and South Shelby Landfill have been operating for several decades in the Memphis area. There's been discussion about where exactly that landfill is located. Talk to us about where exactly you are located and then tell us the measures that are in place to safely store coal ash.**

**A. Jason West, General Manager, Republic Services:** So South Shelby landfill is located in the southeast portion of Memphis in the Capleville district. It's an industrial district right off of Malone Road. That's where we're located. And as far as the safe storage of coal ash, we've said highly engineered landfill a lot tonight, and just kind of want to get into that a little bit more so when we say highly engineered, we are talking multiple layers of protection here including an impermeable clay liner. A few other soil layers as well as that geosynthetic membrane that we talked about that will last in excess of 400 years so really what we're talking is generations of safe management and protection for the community.

**Q. How were the meetings advertised to the community?**

**A. Latrivia Welch, TVA Program Manager, Media Relations:** Multiple questions have come in about how this meeting was advertised to the community, so I'm going to read it to you, just to make sure I don't mess it up. We had 40,000 mailers mailed last week throughout the community so 40,000 mailers. 500 door hangers have been placed in the communities. If you came outside and saw it on your door, that's us. Print ads were running in the Commercial Appeal, the Tri-State Defender, and the Daily Memphian.

Radio spots have been running since September 15 on the following stations with iHeart media, and that's WHAL FM was on there, WDAI AM. You heard Bev Johnson's voice earlier today. KJSM FM and Cumulus Media, and that's WRBO FM and WLOK AM, so we had radio spots on all of those stations. Bev Johnson interviewed Mark Yates on her show on Monday and TVA spokesperson Scott Brooks was on with WREG Live at Nine. That's Marybeth Connelly and Alex Coleman on yesterday to share the information so television, print and radio. Neighborhood association leaders were contacted directly about the meeting, and we also posted a story on our website, and shared it with local media, and community stakeholders so we gave them a call we shared, sent as many emails as we could and we shared on our social media platforms. So our efforts were designed to drive as many people to this meeting as possible and we hope those of you who are watching right now are enjoying this and it's informative and we really just appreciate you taking the time to be with us.

**Q. When will the project start?**

**A. Scott Turnbow:** Excellent question, so you know really the project started quite some time ago, right, because it started with the investigative process back in 2016 17 timeframe. So that process has been ongoing for quite some time. You know it's funny, again we get a question like this a lot of time like, why it's taken so long, how long is it going to be? And when you heard Mr. Flood talk about the commissioner's order and how robust it was, and that various things it requires, I mean we've been out there doing a lot of investigation for a long period of time understanding really how deep the impact is. And so the Memphis Sands Aquifer is roughly 200-250 feet below our facility. We have monitoring wells at various layers below their 50 feet, 100 feet, 150 feet. So we know that we're not impacting them but I'm just saying all that to say that there's so much investigation that's taking place that this project has been ongoing since around the 2017 timeframe. Now as we move forward to when we're going to actually start moving material. You know we're set up to start doing that now and we're waiting on a few things, mainly the remedial action plan approval, but the site is prepared and ready to go as we speak, as we know the permits are already there at the Republic landfill.

**Angela Austin:** As the construction manager, just kind of tell a little bit more about what's going on right now, at the site. We have started dewatering the ash ponds, which makes it safe for the workers that need to excavate the ash, we have started with the construction of our groundwater pump and treat system. We should be completing that and have it ready to operate in late summer of 2022. So basically, we are prepping the site, we're preparing the site but the biggest thing I say always is safety first. You know along that pathway, we had to train our employees as they came on site, so it wasn't like we just brought people off, you know, snap of the finger kind of thing. We brought people on, we trained them, we made sure they understood where they were about to work, understand the safety measures, PPE requirements, so on and so forth. And one thing that we always talk about a TVA we always talk about the safety first and anybody has the ability to stop work at any point in time, so that's always a wonderful, awesome

thing to where that person is out there, they see something that's not right, they can stop work at any point in time. We stop, we investigate, we have conversations, we want to make sure that individual is confident and comfortable with any decisions that we made based off of their saying we need to stop work. But we have started work, happy to say that I'm ready to move that ash. I'm ready to move it.

**Scott Turnbow:** One other thing I want to add on to this is still the question becomes why does it take so long, we talked about the investigation that takes a lot of time but everything that we're doing is very methodical. It's been laid out very, in a very detailed manner, right, because it's not something you just wake up one day and you start moving material, or you wake up one day and you just do this job. There's a lot of work that goes into making sure you do it correctly, you do it safely you don't impact the environment, and it's going to be it's a long project, there's a lot to happen there. And so when you think about it, you think, well, how long did it take to accumulate there? Remember, the plant was built in 1956. It's been accumulating for many, many years. And, we've been reaping the benefits of that as a community, the electric power that came off of it which is great. And now we're at a point now where we get a chance to correct some of that, take care of the waste, it's going to take a little bit of time to get that done, but the end of the day we look at what we're left with, and it's going to be a really nice site for future development. And the ultimate bottom line is that ash is stored now in a safe place.

**Q. Did TVA consider any sites that could be served by rail?**

**A. Scott Turnbow:** Well, I'll take that question or at least start it off and someone can jump in there with me if they want to. Back in 2017 we started that investigating process in 2018 we start to work on how are we going to deal with this material. Now there's two things we looked at. We looked at can you close and leave the material in place and close it in place. Which within the EPA realm and CCR rule that's an equally protective measure of closing in place or closing by removal. However, you know you want to look at site conditions to make that determination. So we had made the determination based on this site based on these characteristics that really a closure by removal scenario where we dig up the ash is the right answer. So with that being said, we start to look broadly. We did an exhaustive study of various landfills over 700 landfills over a 600 mile radius from the Allen site to evaluate which location is the best to transport this material to whether it is rail, whether it was by barge using the river, or whether it was by truck.

*{technical difficulties with video; question was revisited later in the meeting.}*

**Q. What does TVA hope to accomplish with the new regional model, and your role as regional vice president in Memphis, and why is this important?**

**A. Mark Yates:** Well, that's a great question, and it's really important. So as we look at the organization and how do we interact with the communities that we serve. How can we become better at pulling the full resources of TVA into those communities. We look at the history of Memphis, MLGW and TVA, it goes back eight decades, over 80 years. And if we're on Union Avenue, and we're downtown and we see November 6 Street, that that stub of a street tells us how long this relationship has been in existence. And so TVA, now, one thing that's noteworthy is that it has been, it was the original economic development engine in Memphis. And so as we look to the future, how can we, if you will, double down on that idea, and look at what we can do to help the communities that we serve, and that's throughout the entire valley. So we're separated into four regions: north, south, east and west. And we serve over here in the west region which is headquartered here in Memphis. And so we're looking at opportunities all day every day in how can we advance along our mission - those three missions - one electrification, two the environment, and three economic development. This site in particular, in particular, is critical, if you will, in terms of its mission central with being in the port of Memphis, if you will, and how can we remediate this site, put it back online, safely place it back online, and then look at what it brings in terms of jobs, investment, other opportunities that become exponential to our overall economy in Memphis. And we know that we need to really look at that and TVA along with our partners, which are the city of Memphis, Shelby County government, the Port Authority, and also MLGW, last but not least, which is the local power company that we support. And, and we are getting input from those partners on how we can advance this, with all due alacrity.

**Q. Is it safe to store the coal ash at the South Shelby landfill?**

**A. Pat Flood, TDEC:** Yes it is. The South Shelby landfill meets federal subtitle D requirements, which for the most part that TDEC has adopted. TDEC standards are actually more stringent than that and we add another soil layer called the geologic buffer on top of federal requirements. Subtitle D landfills have been demonstrated to be very safe to store materials like this. So, that's just a simple answer of yes.

**Q. What is TDEC'S oversight of Republic Service once the ash is stored there? And what constituents will be monitored at the landfill?**

**A. Pat Flood, TDEC:** So, first of all TDEC has been along for the ride, getting the landfill ready to receive the coal ash. So we've been a very active participant in the permitting, the design, the construction, and the groundwater monitoring plan so we've been there all along. So, when the material gets put in that will be part of our routine monitoring program. We do at a minimum, monthly monitoring at the Republic facility just to make sure that the landfill is being operated properly. So, that will continue. And this, unlike other parts of the landfill will be filled in, capped and closed relatively quickly,



and then even after it's capped and closed, they're still part of TDEC's oversight program. We're still going to go out and look at it to make sure that everything is fine and dandy that the cap and cover is holding up and things like that. So, again we've got a robust inspection program, monthly, that will go on in perpetuity.

Yeah, so that's a more complicated answer because the constituent list is really long. And so I would refer to people to actually kind of Google the landfill requirements and towards the end of those regulations, there will be several pages of what are called appendix one constituents, and that's the list of constituents that we are looking for in groundwater. Groundwater is semi-annually investigated, and they also look at the leachate to see what's in the leachate. We're particularly interested in what's going on in the groundwater, because that's, if there is a leak, it just let me pause there very quickly, I've worked on these types of landfills, for a long time and I've investigated the old style landfills that really did leak in chasing down old landfill plumes when I was in the private sector. Put a lot of food on the table at the Flood household, which I'm very grateful for. But there's a lot of problems with the old-style landfills. I do not know of one of the modern subtitle D landfills that leaks, you know, they're very good design. EPA came out with that, we adopted it with some more stringent requirements. But still, if something should happen, you're going to see it in the monitoring wells. And that's the kind of data that we look at very closely in the monitoring wells. So we were looking at that semi-annually. If there's something that looks questionable, then we up the monitoring to quarterly, just to kind of see what's going on. And if it turns out that it's kind of a no never mind, as they most frequently do, then, then we reduce them back to semiannual, so we're looking very long and very hard and looking at these things. And there's multiple levels of environmental protections and the last protection is the monitoring wells, we do look at that very hard, and I just do want to mention a series of constituents that are called RCRA metals, RCRA is the federal statute in which landfills fall under, and it's a listing of all the metals that need to be looked at. And those are the metals that you would see in coal ash in so that's specifically what we would see in the monitoring wells, but we're looking at a whole bunch of more stuff.

*{Latrivia: Unfortunately, we were having some technical difficulties, a little bit ago and so we're going to work through that by re-answering that question that was posed by the audience member, we do apologize, but we want to revisit this question regarding the traffic. The traffic route to the landfill and the measures taken to ensure the coal ash is safely transported again.}*

**Q. Can you explain please to us, the measures taken, or should I say, the traffic route to the landfill and the measures taken to ensure that the coal ash is safely transported.**

**A. Jason West:** Yeah, so I apologize that the audience couldn't hear it the first time, but we'll pull back up the picture of the route. And so these routes were carefully selected these are well traveled routes, but you can see that we come from the Allen fossil plant down River Port Road, 55 South, South Shelby Drive to Malone Road, and then that's our landfill right there. So these routes were selected to have the least amount of impact on the community so there's not very many residences or neighborhoods near the route. And then the average number of daily trips from this project will represent a point three increase in traffic on these roadways so it will have minimal impact - this project on the amount of traffic that's on that road. The other thing I did want to hit on was the trucks, and I'm not sure if they heard that part or not, but if we could pull up that slide again. And so these trucks were specifically commissioned for this project. So, these are solidly built trucks. They are side dumps so they don't have the gates in the back, they look different than the typical Republic Services trucks that you would see traveling down the road. They've also got a heavy duty vinyl tarp that goes over the top that completely seals the truck. So as they are traveling down the road, these are the safest trucks that we can use to make sure that there's no fugitive dust and there's, there's limited impact to the community, period. And I'd also like to point out that Republic Services, you know, one of the reasons that we were chosen is that we have a safety record that's 29% better than the industry average.

**Angela Austin:** What's so important is that, we know we're a partnership, right, and so I have to set him up for success, right. If he's going to transport the ash off the site, I got to set it up for success, so my job on site is first of all we paved the roadway on site where trucks will be traveling, so that way we're not kicking up dust, because you know there are a number of trucks we'll have coming through there. We have a dedicated loadout area on the site. So that continues to make sure we're not creating any fugitive dust. So, before we actually load the ash into these lined trucks. We have to make sure it has a certain moisture content. And once we do that, make sure it is the certain moisture content, we load into the truck. We cover it with this tarp that Jason was just talking about, and then we send it through a truck wash, while it's still on site, and what this truck wash does is that it cleans off any possible coal ash, any dust, any dirt, anything so it thoroughly yields Jason a free carwash before his trucks leave the site. So that way you know, we're in good shape before it gets on our public roads.

**Q. Will the drivers transporting the coal ash be employees of Republic or subcontracted?**

**A. Jason West:** Once again we have, we've gone through, and we've carefully selected the best routes, the best trucks, what we feel like are the best things possible to get this done, this project done as safely as we possibly can and so that means the best drivers as well.

**Q. What is Republic Services track record on safety and environmental stewardship?**

**A. Jason West, Republic Services:** I'm glad I get a chance to kind of toot that horn again so I talked about our safety record a little bit, a little bit earlier but we are 29% better than the industry average. You know, as far as environmental stewardship goes, so even outside of this project, there's things that we do in the Memphis community, you know, as we've been here for so long, so we've partnered with Habitat for Humanity and Clean Memphis and a few other local nonprofits. We also are the ones that operate the recycle facility for the city of Memphis, so environmental stewardship is something that is just right up there below safety for Republic Services.

**Pat Flood, TDEC:** If I could chime in, TDEC doesn't use the term environmental stewardship, we use the term environmental compliance, and which is basically how compliant were you, are you on your permit. I would like to add that if your safety record has been within the average environmental compliance record is also better than average. And I credit that to the strong corporate program that the Republic has, so they have very good compliance record.

**Q. How does TVA put safety first?**

**A. Angela Austin, Construction Manager:** You know, this is just one our core values right. I mean, it's important to each and everyone. I would say every family is probably out there watching right now, safety is always first, we always want our loved ones, our friends, when they go to work, they come back home safe. That's our number one core value. So part of worker safety, I talked a little bit about earlier is that we train our employees. We train them so they understand, you know, what they're about to do, how they can safely execute the work, especially I talk about the mission of service. We want them to safely, to be able to do that for us. Part of that too and it also protects the public we know we have a robust air monitoring plan that we have in place so we have a perimeter air monitoring system that basically sets off an alarm to say if we could possibly create any kind of dust that can get off site, we have an alarm system that alerts us very early to make sure we stopped the work, we investigate it, and we mitigate it, and we understand before we go back to work, that those things have been done, we cannot create any dust that goes off the site. Well guess what, we also have something that protects the workers, and that worker area, you know, we have these

workers that have to be out there. First of all is safety, we actually dewater, but when they're out there excavating this ash. We want to make sure they're protected right and so we're monitoring that area where they're working in the same type of process. The alarm system is that low enough to where we can stop work, investigate and mitigate. Once that's done, we'll go back to work. And lastly, each worker that's out there working within the ash ponds, we have a personal monitor own, so also if they're working in it there's a reason that they may have stirred some dust up, guess what, the alarm system is set low enough that we stopped at work. It's all about protection of that work right, early enough to where we stopped when we get them out of that area. We investigate and we mitigate before we put anybody back to work so it's very important to talk about safety first, we're looking at the workers that's out there doing a service for us. We're also out there protecting the public to ensure that anything that we're doing on site does not affect the public.

**Q. How will TVA protect the workers during this project?**

**A. Angela Austin:** So, a little bit more, you know, I kind of did a little bit about the biggest thing is you know we educate, so basically we train our individuals, we make sure they understand, you know, the work they're about to do. We talked about the air monitoring system right. The other part of that, I take for granted is that it's always a must to have your PPE - personal protective equipment so that goes around to wearing booties, to wear the workers that go on to ash pond, they put those on, they might have to put a different suit on. Depends on where they're going to work, of course we have the hardhat, safety glasses. There's different levels of respirator protection that the employees use, and like I said that goes with the monitoring along the way. But the personal protective equipment is just a standard thing so that's I apologize for leaving it out but it's just a standard thing, expectation that we have for the folks on site. So part of our talks about the booties right you know you put these protective boots on before you go out there so we have a disposal area to where when they come off the ash pond, they take those off. And they suppose in a drawing for us. Right, so that way they're not transporting that ash to other places to transport to somewhere else right because you'll be surprised how you can take a little bit that goes a long way in different places. So we have a decontamination area for our workers that are on site, so that way they go in and they clean their boots their clothes, different methods. We actually have a shower, available for the employee. And it's about protecting employees but guess what is about those family members that these employees are going home to that we're protecting them also.

**Scott Turnbow:** One other thing I want to add to what Angela mentioned there, you know, she's covered a great portion of the things that we do to make sure our employees are safe. The other important piece is in primarily most of our folks that are out there working are working in enclosed cab equipment. So the bigger equipment you're out there thinking about someone out there driving in this environment, what

does it look like digging in this environment. It's all enclosed cabs that are filtered positive pressure, and so we make sure that we keep those in that environment clean for them all the time so there's not the need to wear respirators, not the need for some of these other things, if they're in that enclosed cab.

**Jason West:** Let me piggyback...Angela...she covered a lot of it and I wanted to make sure that people know that, you know, even as the material gets to the landfill, I mean we are we are hitting on a lot of those same safety features as well. In addition to things like daily cover. So at the end of the day, you know after we're done, we cover the material with, with six inches of compacted soil, just to ensure that it's not exposed to the elements to ensure that you know, no wind or anything comes and kicks up dust, and then we've got extensive air monitoring systems in place, or an air monitoring network in place to, to, to ensure that there's minimal impact to the community.

**Q: Why did TDEC approve the plan, their record of decision, that allows for coal ash to be stored at the South Shelby Landfill?**

**A: Pat Flood, TDEC:** So I think the record decision says the material needs to be removed not stored disposed of in the South Shelby Landfill. The South Shelby Landfill is demonstrated to be safe and protective. It meets all subtitle D requirements. It meets TDEC requirements which are over and above subtitle D requirements. And those designs are known to be protective. So our expectation is it will be protective. And we'll be out there monitoring you make sure that things get filled correctly, we've already been out there during construction, to make sure it was constructed correctly, and it'll be filled in closed protective, so we think that this – in fact there's a whole lot of evidence to support our way of thinking - that the material is going to be moved to South Shelby and disposed of, and capped and sealed off in a very environmentally protective manner. We're very comfortable with that.

**Q: Should coal ash be stored in a special landfill?**

**A: Pat Flood, TDEC:** So you can if you want, it's not a requirement. When you do take it to what's called the subtitle D which is normally used those sorts of landfills are normally used for municipal solid waste, which is the kind of things that households get rid of, but also specialists, so if you can fill there are some few landfills in the state of Tennessee that are special landfills just for coal ash. They have to meet the same requirements. In fact, legally they need to meet the same requirements that subtitle D landfills, so in terms of liner section, in terms of groundwater protection, monitoring wells, all that stuff would be identical. And if you are going to put it in a subtitle D landfill, we are pretty insistent, unless it's just tiny amounts of it in, and we're not talking about tiny amounts here. We're talking about a pretty significant amount, it has to go into monofill, so it has to be disposed of separately. And if you're willing to do that, and Republic is and TVA is on board, TDEC's on board with that too. So we think that that methodology is perfectly protective.

**Q: And that's a monofill that you guys are currently building? And how many acres?**

**A: Jason West, Republic Services:** The dedicated waste cell that we've been talking about...that's exactly it. It's specifically designed for this project. We've designated 27 acres at the South Shelby for this project.

**Q. How does TVA know it's not contaminating the Memphis aquifer?**

**A. Scott Turnbow:** Excellent question, I think I touched on this earlier maybe a little bit but we'll talk about a little bit more, as we mentioned that we have 100 monitoring points we call it monitoring wells or groundwater monitoring wells but there's 100 points that we have all around the site. And that – first of all – we know what's coming underneath the ground onto our property and off of our property by this monitoring network of monitoring wells. The next piece is that each of these wells is measuring groundwater at various locations underneath the facility, so like at 50 feet deep, 100 feet deep, 150 feet deep underneath and around this facility. So, we know that the Memphis aquifer is roughly 200 feet below the surface of this facility, we have these monitoring wells above that. And the reason we have them where they are is so that we can monitor and know how close the groundwater issues that are around the East ash pond are actually relative to the Memphis. We know that there's no impact at the moment. And that's why we're taking the action as we have been moving at the speed as director, Floyd mentioned a minute ago about the direction, or excuse me the remediation effort being fast pace, and that's the whole reason all that's being done. So we can deal with that equipment.

**Q: What kind of economic development opportunities exist for the Allen site once it's restored.**

**A. Mark Yates:** I think that if we look at the feasibility studies, and there have been several that look at the port and the value, the value that the port represents to the economy of Memphis and Shelby County and the state and the region, what that represents is potentially a billion dollars a year. From its exponentiality on what can be done with the remediated site, it's a tremendous strategic asset. And as we've talked about, you know, safety first, but we are working really hard to bring that asset back on line because at the state level and at TVA's level, at the county level, and at the city level, looking at that land, where it sits in Memphis, where it sits on the river, the Mississippi River - the Mighty Mississippi River that we all love. It provides just a tremendous opportunity for connectivity all the way from Illinois going up to Minnesota and going all the way down to the Gulf of Mexico, in terms of traffic and what we do as the distribution hub of America, here in Memphis. So it's, it's a tremendous asset, the feasibility studies pencil it out and if you look at that, we are really excited about that.

**Q. We want to make sure everybody gets a last word so I'm going to work my way all the way down the line and have each of you just sort of put in your last words.**

**A. Mark Yates:** I have to go with safety, and what we've looked at in terms of safety to the aquifer, safety to anybody, employees, contractors that are all working there. It's safety in terms of to our employees, to our contractors, and how do we bring this asset back online in a safe, just really efficient and effective manner.

**Q. Construction manager over the Allen restoration project, Angela Austin, what do you want them to know?**

**A. Angela Austin:** Well, being responsible to make sure I keep people safe and we're successful with this project, you know, living in Hickory Hill and I travel to White Haven quite a bit so I travel Shelby Drive quite a bit, right, so I just think about, you know, I have no choice but to make this successful because this is my neighborhood. This is my family. These are my friends that over 26 years that I've been here, you know, Memphis is so important to me and I love Memphis and I love what I do for TVA, this mission of service so basically I want to say that I'm responsible, and I'm on it.

**Q. Director Flood. What do you want to want the viewers tonight to know about this project?**

**A. Pat Flood, TDEC:** So I think what I would like folks to know is that TDEC has been very engaged in this effort, we have not been passive participants, just waiting for things to be thrown our way. We've been engaged in reviewing, oh geez we've looked at a lot of documents, we've gone through just a number of things, we've had countless meetings to go over the data, discuss what the data looks like, how it's being interpreted, our thoughts on how it's being interpreted, various ways to look at the data. It's a very intensive process. In this process the TDEC people working on this are experts in their field, it's not people that are just kind of wandered in the door and said, well today, you're going to be a remediation person. These are people that are top notch in their field, you know, I myself have designed landfills, you know, for the most of my career. You know I've designed well over 100 cells probably close to 200 at this point, the other participants for TDEC have similar skills and experience in their area of expertise, which is, you know, geology hydrogeology, quality assurance, radiological, we are looking at a lot of things. We've got top notch people looking in a lot of detail on these things. And I want folks to know that because I don't think people tend to understand how deeply we go into all of this. TDEC represents, fundamentally represents, the citizens of the state of Tennessee. We feel that obligation, very, very seriously, and we take it very seriously. So we are doing the job that you would want us to do. That said, we are in full agreement that the direction that this project is going, the removal of the ash, the putting it in a safe facility, that is the right direction to go. That is the right thing for the citizens of the state of Tennessee, and TDEC is on board with

that. I want you all to know.

**Q. Scott Turnbow is vice president of civil projects, tell us what you want the people to know about the Allen Restoration Project.**

**A. Scott Turnbow:** Well you've seen so much tonight, hopefully you've had your questions answered, we've done our best to do so. But one of the things I hope you've seen more than anything is, when Angela was speaking, I was sitting there thinking, wow what compassion, what care she has for her job, technically competent, just the right person for the job. When you see her, that's a reflection of the entire team that is working on this project, a team that truly cares about the job they do every day. It's a reflection on them. It's their legacy. They've worked their whole life with this, whether it's a project management organization or engineering group, the construction management folks out there, our environmental team that supports us so importantly here at TVA, our outreach team, you know, all this is being done to help change the way things are in Memphis at this site - a restoration project. And at the end of the day, that's what we're going to have is a great site that really brings value to the people, and it becomes the legacy that we leave, of doing something great for the people of Memphis.

**Q. Jason West, general manager for Republic Services here in Memphis, please tell us what you want people to know.**

**A. Jason West:** Yeah and I think it's been touched on a lot but you know when we talk about community, and we talk about people here that live in the city of Memphis, myself included, I mean, you know, this project is it's personal to us. And so I know myself personally in Republic Services, appreciate the opportunity to bring this solution forward with TVA and help move to the next chapter with the Allen Restoration Project, so thank you guys for having me and thank you guys for having us as Republic Services.

**Q. Can you tell me more about the electric, gas, water and weatherization of people's houses? Can you tell us more about the community support?**

**A. Mark Yates:** We have several products at TVA that we are working to advance into the community. I think I saw a statistic on yesterday that we were up somewhere around - there was either 100 or 105 homes that we had actually provided weatherization treatment to in the Memphis community for fiscal 2021. So, we're really excited about that. So, and then you look at what we're able to do with several of our initiatives, we've got a lineman program that we've been working really hard to look at in terms of workforce development. We've got again the weatherization program. We've got an energy right program, and we are working with the local power companies, in this case MLGW to get those, those opportunities and those assets into the community. We've got seniors who really need help with their homes to weatherize and, you know, to kind of caulk up and change windows and there's so much. So, yes, definitely. We are doing all of that and more, and we're keeping the lights on, so that's really important.



**Additional questions received from the public during the September 22 virtual community meeting, with TVA responses:**

**Q. When do you plan to post the quarterly reports required by the Memphis-TVA MOU to the TVA website/shared online for transparency purposes?**

**A.** TVA meets with our community partners of the Memorandum of Agreement on a quarterly basis to provide updates and information about the environmental investigation and project activities for the coal ash management units on the Allen site. The related information and documents are publicly available on TVA's website at [tva.com/ccr](http://tva.com/ccr)

**Q. What percentage of coal ash is going to Tunica vs. South Shelby landfill?**

**A.** All the coal ash is going to the South Shelby landfill.

**Q. Has TVA received a permit from the City of Memphis to traverse our roads?**

**A.** The truck loads for the transportation of the coal ash to the landfill are legal loads that do not require any additional permits from the city.

**Q. Will you invest dollars to clean grey water to cool the new plant instead of buying water from MLG&W?**

**A.** To be clear, this question relates to the Allen Combined Cycle Plant and is not related to coal ash or the retired Allen Fossil Plant.

During our detailed engineering phase, in an effort to innovate, TVA spent significant time and resources looking at several wastewater treatment technologies, but unfortunately determined that the use of this waste water was not a viable option. The treatment costs alone (excluding significant initial capital) would be over \$6 million per year. Even worse, these treatment options significantly impacted the plants reliability, its world class efficiency, and world class flexibility.

River water was also evaluated as an alternative but because of the extensive treatment that it required, as well as logistical issues due to the plant location, it was also determined to not be a viable alternative. The Allen Combined Cycle plant is land locked and does not have access to the river. Even if we could quickly get access to the river at our existing Allen Fossil plant, we could not utilize the river front without impacting the future viability of the site for future economic development. Using river water also caused additional environmental complications because of the additional chemicals required and the additional solid waste streams that would have to be disposed of.

**For more information, please see the posted Q&A from our follow-up virtual community meeting held on September 30, 2021.**

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