Bank of America PFAS Conference Transcript

May 31, 2024

Michael Feniger | Bank of America: Okay, hey everyone. Michael Feniger Bank of America's machinery, engineering, and construction analyst. For next session. We're really lucky to be hosting Rosa Gwinn at AECOM. As many of you might be aware, actually number one rank with the engineering news record in in water, environmental, several other markets that are kind of key players and tackling this PFAS issue.

So right now, I'm going to pass it over to Rosa. Who's going to introduce herself. She has slides prepared. She'll share her screen and go through some of the slides, and then we're going to jump into some Q&A. Anyone in the audience.

If you want to copy the slides, feel free to reach out to me. I could put you in touch with Will of AECOM or shoot over the slides myself. And happy to kind of carry this conversation further beyond the session.

So, with that, all that being said, Rosa, over to you.

Rosa Gwinn | AECOM: Alright. Well, thanks a bunch. I'm glad to be part of this, and I've in really enjoyed the prior presentations. By way of introduction. My name is Rosa Gwinn, and I am AECOM's Global PFAS Technical Lead. And that just means I get to do all PFAS all the time for and have been doing that for some time. So, it's kind of awesome. I'm going to share my screen and talk about today – the addressable market for PFAS in the consulting services.

So, let's begin 1st by just acknowledging this disclosure statement, which, if those who receive the slides will be able to have the time to read and understand the limitations and disclosures.

Alright. So, thank you, Michael. You already shared some of the information, you know who is AECOM? Well, we are the world's trusted infrastructure consulting firm. That means we're the combination of a consulting firm for technical and professional services. And our focus is infrastructure, transportation, water, environment, and facilities. And, as you mentioned, we are routinely ranked number one, and have the pleasure this year of being ranked number one in water, environmental science and engineering and environmental engineering, all of which are highly relevant to the PFAS question.

We're a firm of 52,000 employees, and our revenue in FY'23 was $14 billion dollars. And I can just say on a personal level, I'm coming up on my 33rd year anniversary at AECOM, so this is my home, a great place to work.

So, we've had a lot of great detail on exact regulations. But let's step back a little bit I'm going to talk about the philosophy of regulation, that's on the left-hand side of this slide.

What are the regulatory drivers? Prevention, manufacturing bans, product bans. We heard Miss Sullivan talk about the defense limiting their purchase of PFAS containing materials and equipment right ahead of the pipe doesn't allow PFAS to get out into the wild. Then there are controls, right? Understanding what PFAS are out there where they are, and then applying limits on discharge, or other permitting requirements. And we heard a discussion about that for landfills just in the prior presentation.

And then, of course, there's the drivers of treatment, you know, getting PFAS out of places where they don't belong so that we can preserve human health in the environment, and that is going to be focused on each of these subcomponents that are summarized there for you to review. Interestingly, clients have been taking action on PFAS sort of ahead of the regulations, preparing themselves for what was described by again by Miss Sullivan as this, this tidal wave, bigger than asbestos and lead, and many other items combined.

So, what are they doing? What are our clients doing? Of course, looking at sources identifying where they are, and in some cases highly characterizing where they occur. Forensic evaluation, which is going to be very important for that principal responsible party question. Right? We have entities looking at their catchment, whether it's all the sewers coming into their treatment facility, or it's just the surface water ground water that is coming into a drinking water plan, right? A potable water plan, and the potable water people are already designing, implementing, mitigating the PFAS that are coming into their plan so that they can manage that.

And of course, I also list wastewater treatment, disposal, and incineration of biosolids is occurring ahead of a biosolids bans universally in this country and storm water management. And I'm going to make one other comment.

These regulatory drivers on the left are global. We are seeing them around the globe. This is not just a U.S. question. This is not just a North America question. And so, this geography is expanding. It's giving me the opportunity to work with a lot of excellent AECOM individuals outside of North America, where I sit.

So, I'm sure people are keenly interested. You know how much work is there out there? We're interested in that. And for on 2 points you know, what is it? What is it that we're going to provide? And are we going to have the right resources to do it socially, you know,

globally, as a community and I've shared these estimates of our global market opportunities based on other publications of other folks.

And then ground truthing them against our own understanding. And we see a potential for $250 billion dollars just flat out for the global PFAS market, and that encompasses everything, including what happens with bans and alternative manufacturing and so forth. But it doesn't include the cost to all of us at the, you know, for the health concerns or other personal liability issues that aren't included in that number. And then, if we take that $250 billion and conservatively assume that there is a consulting approach to solve 20% of those types of problems. And I do think that's conservative. That's about $5 billion dollars a year out there ready to be expanded on finding solutions. So, you know, you can do the arithmetic there. That's a $50 billion dollar opportunity over the next decade. How? How in the world is AECOM, and others going to do that? What do we have? That puts us kind of at the leading edge of this.

And you know, 1st and foremost: our clients are great. We get a lot of work across a broad range of industries and client types, and they are feeding into just the broadest range of our technical expertise. I could tell stories. We've already mentioned our rankings, but you know we've been doing this for over 20 years. We have learned a lot of hard lessons in the early days about how tricky PFAS are. And of course, you know, as the science advances, we're staying abreast of it.

We're not going to just sit around. We invest in innovation. We've invested in some development of proprietary solutions for PFAS, we operate at a global scale that helps some of those larger clients are seeing discontinuities between how Asia is responding versus North America versus Latin America. And of course, we have cross-market collaboration. I work with people who are doing water treatment, who are doing compliance, reporting you name it. And what that gives us is the opportunity to provide a holistic solution where we can provide program, manage program management approaches to actually do the work.

Clients are going to need to figure out, where do we need to spend our efforts first, fast, and foremost? And where can we gain efficiencies over time? And that's what we love to do is figure out the hardest problem. So, I think we're ideally positioned to do that. And I think we're doing a terrific job, she said modestly.

So, how's this going to happen? You know, I mean that those are some big numbers I threw out, of course, can be viewed as an opportunity. But there are headwinds, you know. How is this going to be paid for? Right? And right now, we're seeing a lot of focus on the water side of things and in the water side of things you kind of have 3 levers, rate increases right? Pass it on to the user like you and me people who drink water or use sewer systems, government funding and the polluter pays principle. Whoever caused the PFAS problem, that's going to be who pays for the PFAS solution.

So, if you look over on the right-hand side, you know I delve in a little more into each of these 3 rate increases. You know you might be able to do that in a large city where the increase then would be spread over a large population. But what you're not going to be able to do is increase the rates in small communities or traditionally underserved communities, historically underserved communities, because that is a burden that people cannot bear, and arguably should not bear to have a basic need. Clean water, right? I think we all can get that.

So, in the U.S., government funding has moved to fill the gap we've already heard about. Some of the EPA, IIJA funding as earmarked for PFAS, and there's some there's the Defense Authorization Act funding that is also rolled through. The EPA estimates for the drinking water rule alone. One and a half billion dollars a year of cost. And the American Waterworks Association or AWWA says, Yeah, you might be off by a factor of 2. We think it's bigger. So, we're going to have to achieve that. And one of the last levers that I mentioned is the polluter pays. And folks like me are paying a lot attention to the Multi District litigation that's going on in the U.S., where a number of industrial private entities are looking at managing litigation under that litigation liability under that overall umbrella.

So, this graphic at the bottom is sort of what's going on here. So, we identify a PFAS site or problem or issue, we analyze it, we take characteristic samples, or we think about it. And we understand what how it all fits together. It might be a wastewater or a wastewater treatment problem. It could be an environmental problem, environmental release that we're trying to manage.

And then what happens all of a sudden is we get new regulations. The MCLs are more stringent than the prior health advisories that you go back to the beginning, or maybe halfway through this process, you keep getting onto this continual cycle, unless you can engage a destructive solution. That is your exit ramp. That is the exit ramp to resolving this PFAS problem that might have been identified at the beginning. So, we've heard a lot about destruction versus disposal on today's call. And I think that's, you know, part of the nugget of the solution.

So, you know, we're up for a challenge. We're happy to do it. We've done a ton of work in the Federal space, and we heard from a number of speakers the U.S. Federal government. Specifically, the Department of Defense tip of the hat was an early mover, absolutely moved out ahead of the concerns, first, set by identifying drinking water components that could have been effective, affected, and mitigating those. And now there's this really big problem.

Miss Sullivan shared the map of 715 DoD sites. And I'm here to tell you that AECOM is supporting every branch of the DoD and getting across this PFAS issue. We hold the largest contract capacity in each of the services you might pick and say, Rosa, you didn't

list Air Force, but I'm telling you Air Force is buying a lot of work through the U.S. Army Corps of Engineers. We're doing programmatic work for some Federal agencies which I list at the top, or also for the Army National Guard. We're looking at their entire suite of sites and helping them manage those according to priority.

And of course, I don't want to leave out the civilian agencies like NASA for whom we have just recently won a terrific contract mechanism. And we have we. We have just, endlessly contract capacity already in place for each of these clients, and of course, existing agreements and MSAs with a ton of private industry.

So, at the end of the day, I think you know, AECOM is positioned really in a superb location to help capitalize on this market and help provide solutions to create a better world.

What do we have? We're doing PFAS work in about 20 countries. We've looked at PFAS. It's 600 distinct locations around the globe, not in Antarctica yet. I was going to say, on every continent. We have over 300 unique clients. We work. My job is to collectively get our technical experts, not just in the U.S., Australia, or the EU, but Latin America, Asia, Middle East, where we're seeing a lot of client demand starting to emerge. We run a PFAS academy where we train folks, and they love it. I was surprised how much they love it. It's like going back to PFAS school, and we invest in innovation.

And the proof is in the pudding. That's on the right-hand side. We have seen a 50% increase in our year over year. Backlog in the PFAS market. We can project comfortably 2 to 3 times revenue growth over the next couple of years. And we think that's going to impact our net service revenue. So, this is a growth accelerator for a common. And we're really looking forward to tackling it. So, I'm going to leave it there.

There is a QR code to our AECOM PFAS site, and there's my contact information there as well. So, there you have it, Michael, hopefully, with enough time to chat.

Question and Answer Section

Michael Feniger | Bank of America: Yeah, yeah, that was great. Rosa. Really appreciate those slides. And again, if anybody wanted the slides, please feel free to reach out happy to send over. So, Rosa, I thought the last slide actually was kind of interesting. How you saw this big pickup in your backlog for PFAS. I believe it comes 1% of overall revenue today, clearly going to be growing. What is driving the backlog growth today? Because we obviously had the April announcement with the designation and other things. So that's kind of on the calm. So just curious. If you could kind of walk through what is driving the activity that you're seeing. That's picking up right now.

Rosa Gwinn | AECOM: Absolutely a terrific question. And I will say that those regulations that just kind of were fully promulgated in April and May and come into effect in different dates in June and July. Those didn't occur in a vacuum, all of us in the market were like, is it today? And I think that drove quite a bit of the proactive efforts on part of our clients and customers to reach out to get ahead of that wave, that tidal wave. So, for example, that $9 billion dollars of IIJA funding it came out. Gosh! I don't even remember what year. Now I'm embarrassed to say 2021 and that money's out there. So right? So, you want to be a 1st mover on that money, and you know why.

What if you can't buy the gack you need, or the zorbance, or you can't get a vessel made. So, there is a distinct sense in those who know already. They need to perform treatment, to know that there's going to be a supply chain crunch coming, and so they get out ahead of that because they're smart.

Michael Feniger | Bank of America: And Rosa Let me ask you, because, you know, earlier we kicked off the day with David Dunlap, the former EPA admin, and he kind of went through the timeline and April was pretty important month. It seems like we finally got standards of a designation of 2 2 compounds for hazardous. And then there was obviously the drinking water standard. So just help us understand from AECOM's point of view, what is what did April do? And a in terms of triggering any events. And how does that? What happened in April? The designation, the standard drinking water? How does that filter through to AECOM at some point.

Rosa Gwinn | AECOM: Well, oddly, because of this premonition. Right? It's been out in there, the universe. We didn't see what I'd call a quantum step in in interest with the MCLs. There was certainly a great interest in what the actual numbers were going to be. But we had a lot of activity against the draft MCLs. Which, of course, came out last October, and earlier. So in a way, April was super important and kind of solidified that this must happen.

It started the clock for affected utilities to have to take those actions within the 5 year, 3 year, plus the 2-year timeline. It's I'm sure, David explained it. So, that's important. I got to tell you what's really happening now is what I am hearing. I'm not kidding. There is so much focus on what's going to happen with storm water and surface water discharges the Plan15 for affluent limitations, guidelines. That is what is on people's mind. It's almost like those April issues are fully baked. And but we got to see the batter getting made and popped in the oven, and we waited for months. It didn't come out as a surprise.

All there was a long ramp to that. Now there is a long ramp to these next ones. Let me make, for example, a comment. The Hazardous Substance Designation was for 2 PFAS, but we got an advance notice of rulemaking. I forgotten the acronym and prim for 7 additional compounds and precursors to PFOS and PFOA. And if you're not a PFAS nerd that precursors to PFOS and PFOA sounds like a throwaway, but I am not kidding. It is a beast. It's a beast.

Michael Feniger | Bank of America: And Rosa, as you emphasize AECOM's number one in the water market. We've seen some other peers talk about the pipeline in waters growing substantially right now, and water's always been a topic for investors. That's kind of always been out there but has kind of hasn't really seen the growth that maybe people expect. Yet it seems like the last 3-6 months. We're seeing a lot more activity going on the on the water level. So just with AECOM's exposure at with that customer in that vertical. How does the drinking water standards impact AECOM in on the water side? What type of things are you doing today that you're seeing that maybe we weren't seeing a year ago.

Rosa Gwinn | AECOM: Well, absolutely so one of the interesting items, of course, in the water side of things is, there were some entities who had some data on their PFAS influence, and they were interested in kind of taking care of that. And we did some work evaluating the catchments and kind of looking at where the PFAS might be coming from, but they weren't obliged to take active treatment steps which, quite bluntly, are more expensive than evaluating attachment. Right?

So that is the that is the distinct change associated with this. And just a couple of days ago the UCMR5, next tranche of data dropped. I think we've got about 40% of the utilities that are going to be monitored already reporting. You can go look it up. We do and so we kind of have a good idea. Who's doing what? Where? Who's going to have the issues? And who's going to need to respond? I just have to. So, the difference is understanding kind of at a more academic level has transitioned into, we need help. We? We have a partner who asked us several months ago. They said, we have so much work to do, design work to do for pfas just in the northeast. Would AECOM be willing to take these X number of projects for us? I mean, you see what I'm saying?

The demand is so great that companies are without enough bench. I want to make one other quick comment. Those catchment studies that I mentioned. We're starting to see them in Europe. So, if you think it was a harbinger of more work to come in the U.S. I'm telling you it's coming in the UK. I'm telling you.

Michael Feniger | Bank of America: Yeah. And I, I'd love to talk. Cause you guys are global. I'd like to get into in in into the global aspect before we jump in. I couple of questions on the line, Rosa was. When we think of the PFAS business for AECOM today. Is it majority of that just the testing and the monitoring, and not yet the remediation side. And I guess where I'm going with this is over the coming years. What do you feel like? Is the bigger opportunity for AECOM? Are we still kind of an early innings on the testing, monitoring, and the remediation side. Are you starting to see that today.

Rosa Gwinn | AECOM: Well, I always get a little defensive, because I think the care site, characterization and monitoring is actually where you can do some of your most creative work at a certain level. Maybe that's just cause. That's the side I came from. But you heard Miss Sullivan say the DoD is not allowed to budget beyond a certain step within CERCLA. Right?

So, we are only now just seeing the funding for what's known as the feasibility studies, and we are seeing some funding for time critical and non-time critical removal actions, both of which are CERCLA terms. So what I'm telling you is that is a new facet of the DoD early driver work that has come out in the last, I would say 10 months you know, if I had to push it way back, I'd say 12 months or something, but more and more we are seeing that remediation phase, and indeed the costs for remediation at any one site can be kind of mind blowing.

She mentioned a few numbers for you. But at some other sites. It's not as much, and it is really kind of a mix depending on the severity of the problem and the number of receptors and some other kinds of factors, the trickiness of the geology, those kinds of things, absolutely. I mean. So, I mentioned that I've been doing this for 30 years, and about 15 or 10 years ago. Somebody said, well, aren't you guys just working yourself out of work? You know, you clean up these sites, and everybody is so happy they move on. But you're not going to have a job, and I'm like PFAS has taken us back to those early days of my career where we were just identifying. I mean, I've been doing this for 30 years, identifying sites, characterizing, analysing, and finding solutions. We are just about to embark.

Maybe we've learned. Maybe we can compress that time. But, if this is that much more massive, it's hard to imagine. It's just. It's a little bit hard to imagine. We're not done. We've done plenty of damage to the planet to fix.

Michael Feniger | Bank of America: And maybe Rosa, on that. I'm getting a few questions. You made a comment earlier about the people of PE the people of comment that you had pre cursor comments. I think it might have been for safe drinking water or

hazardous. Or you also mentioned that you had advanced notice for maybe 7 additional compounds, that a potential precursor. So, the audience, is asking to kind of expand on that and potential implications we just kind of think about there.

Rosa Gwinn | AECOM: So super super good and interesting question. We've known about PFOS and PFOA as problematic compounds arguably, since, you know, for 20 something, maybe 30 years right. It started to do a little something around the turn of the century, as I like to say, and been hyper focused on PFAS and PFOS, and as a consequence, you can look at the blood levels. If the U.S. population for PFOS and pfas, our blood levels are dropping because we banned those, we banned production. We banned use, you know. People threw away their tough lamp pans and got PFOA free pans. Well, what they have, instead of PFOA is a compound called PFBA. Right? Well. PFBA is another pfas, and you know not to go into an alphabet soup, but there was a replacement chemistry that occurred when the PFOA and pfas were banned.

Okay, so those are some of the compounds that are also being considered. They were also in products. They are also in your jacket shoes, you know, dental floss. All these things you hear, and those have made their way into the landfills, and those have made their way onto your carpets and into your septic tanks, and so forth. So, adding those as hazardous substances just expands the scope of what we have to manage in landfills, etc. Air emissions is a huge topic, and I'm here to tell you that those precursors to PFAS and PFOA can be volatile.

Okay, right? All of a sudden. We're like, oh, well, PFAS aren't volatile. Let's not worry about air. You're like, oh, wait a minute. Now we have to worry about air. So, it just not going to, we're not done yet. We're not done yet, but we can't. We can't give up hope and say, this is hopeless. We're actually we have created improvements. And so, you know, the takeaway should be. We are smart enough to figure this out. We are.

Michael Feniger | Bank of America: And on that Rosa. I'm interested. I don't think you mentioned in your slides, DE-FLUORO. I don't know if I'm pronouncing that right. You kind of discuss the interest around that, and why I bring that up. Is it kind of goes back to what we were discussing earlier today about, you know, destruction versus disposal. So, you know, what are the biggest issues kind of in terms of getting a commercially viable permit destructive solution? Are we still far away from that? What are the conversations that you're having with customers when it comes to destruction versus disposal, and any viable options out there that seem interesting to you.

Rosa Gwinn | AECOM: So, number one, destruction gets you that off ramp, you don't have to worry about them anymore. And it is the preferred alternative in most cases. When the EPA evaluates or we evaluate alternatives. Is this one that will get rid of our headache forever?

So that's great. And there are a number of movers in the destruction market. They have different approaches. Our DE-FLUORO, which you mentioned, is one of those that uses a technology called electrochemical oxidation, a discussion for another day. Works on liquid waste. But if you've got a solid waste problem, you know, that's not going to be your solution.

But there are others out there, super creative people, driven by the desire to either fix the world or make some money, or maybe a little bit of both working in certain areas. We've seen super critical water oxidation. We've seen plasma. And of course, EO, and I think those are sort of the 3 forerunners. But there's some others high alkaline treatment, thermal treatment. And I don't want to leave anybody out of the mix, really? Because, in the last 3 years, I've seen several increases in steps of the technology readiness not level with 9 being the target. That's where we're going to be, you know. Keep your ears peeled and over the next couple of weeks for some exciting news. And we're going to need them all, right. I love to talk about you know the ingenuity that went into what we did.

But the truth is, there is no silver bullet. We are going to need to use each of these technologies either together or in some treatment train or for different problems, whether your problems may be solid or air emissions. Or what have you right? So, we are going to have commercially viable destruction solutions. Some say there's already are out there, and people are going to buy them. And I'm telling you, when our DE-FLUORO looked like something pretty rudimentary, you know, like a fish tank with some wires. I had clients saying, we'll take 10. I'm like, no, you don't trust me. You don't need 10. You don't want this; you want to wait.

And so now that we are right there with something that is commercially viable and functional and have a partner in line to help get it out there so everybody can use it. It's not our solution. It is a solution for everyone to use. I'm telling you. I think it's going to be a real breadth of fresh air.

Michael Feniger | Bank of America: And Rosa, I mean, AECOM's known. Obviously, you guys have a lot of public agency customers we talked about, you know, across the water space. The Federal agencies. Did you guys also have a sizable private list of private customers? Just where are we? I mean, I know you. You reference we heard earlier from marine solvent. The DoD seems like they're a little bit further ahead than others, but in terms of innings like, where are we? You think on the public side? And are you seeing the

private customers? Are they taking note of the public side? Are they going to start ramping up to start doing more testing, monitoring, remediation? Or are we still kind of too? It's too early to see the private side start to increase, spending there.

Rosa Gwinn | AECOM: So, there were a couple of regulations, and I don't know if, Mr. Dunlap talked about to might have to go look at his slide again. But there is a requirement for PFAS reporting one of these prevent components of my regulatory triumvirate there. That reporting required under Tosca and TRI is occurring right now, and industries that manufacture goods of any type that are affected by PFAS are now seeing the need to take action.

It's a slightly different action. It's right kind of at that identification. I'm leaving out of the mix, people who have been manufacturing PFAS and large items that are well known to be PFAS containing, you know, carpets and that sort of thing. I'm leaving them out of the mix. They are already well underway. Right? It's those other oddballs who may not have known that are going to be caught up. And this is all in North America that I'm talking about.

I'm going to compare that, though to a pending rule in Europe. The chemical agency, a group of 5 European members of the European Union have said, we need to ban all pfas period full stop. No such thing as an essential use, right? That that is going to affect all of those industries you just mentioned, all of them, every client we have well.

Michael Feniger | Bank of America: Well, Rosa, maybe we could touch on that, because, like I, reference earlier, I think you know Steve Burn and I have been kind of blown away. Our chemical says we've been blown away. How the record tenants we have for this conference today, and a lot of it, I think, is also driven on the international side. So, where you got like, where do you feel like we are in terms of the U.S., I know you guys have an Australia business. It's been kind of leading in some ways. There's us Australia. And now there's Europe, who's leading and what you are we seeing globally some synchronization here? What is the next sign? Post we need to keep our eyes on? We talked a lot about the U.S. But what are you looking at Europe? Is it behind? Is it ahead? What do you see that playing out in the next 1? 2 years in Europe? There.

Rosa Gwinn | AECOM: Yeah, I spend a lot of time thinking about this, and I don't know that I'm the oracle on it. But I have an opinion. Right? So, this is purely opinion. What we are seeing in Europe. So, Australia was an early mover, and they and it's a smaller population than many others. Right? And so, they said, we're going to manage the PFAS that are largely associated with defense. But there's some other mining and other

applications, and they can manage the number of sites, and they take a holistic approach. We're going to go to this location. We're going to manage it.

We're going to manage the people who are affected. And we're it's kind of right there in one package. Europe well, the U.S. is process oriented. We have regulations under Clean Water Act, Clean Air Act. We've got Pasco. We've got TRI, chug, chug. We just like little machines in the U.S. And that takes a lot of time. Europe is highly conservative. The EU, I mean, they're noted for green and sustainable leadership on the globe.

Let's put it in a nutshell. So, this is, this is. And you know, if you live in, if you live in a smaller area, you got to take better care of it. Right? So that is exactly what's happening with this this proposed EU ban. It's called the reach for any PFAS, and that's a whole other ball of wax. How you define PFAS!

We just heard from the EU Commissioner Ursula von der Leyen weeks ago came across my feet. I couldn't believe it. I follow her on Twitter. I'm such a Weenie. She said, you know what, within this ban we understand that PFAS are bad, but you need to exempt those PFAS that are used for sustainable energy development, the PFAS that are in rechargeable batteries, or, you know, energy hubs where you recharge your cars or buses or vehicles or store massive amounts of clean energy. There's PFAS in that equipment.

What do you think of that? Right? So, Europe is like, okay, none of the bad stuff. And she's saying none of the bad stuff except for the stuff that's going to get us out of the climate change. Bad stuff. Right? But it's very conservative, and it is about preserving the planet. I mean to not to get too, corny. But it is. I mean, that's what it is. So, what are we seeing? We're going to see exactly the same restrictions and we're seeing plenty of work in Europe.

The European regulations and you know this is a broad generalization, create a lot different of response, especially with respect to soil than our U.S. regs. And so, there's a lot of activity that is going to have to happen for soil. And we're doing work for defense and manufacturers. And I mean you name it, you know utilities. And I mean the list goes on and on in Europe. We have a pretty nice burgeoning European team as well. That is just, you know, so smart attack. So, it's been a delight.

Michael Feniger | Bank of America: And Rosa. I know. I know we're coming up on the end of the session. I did want to ask you, because you made a comment that it seems like the pick that we've seen in the backlog kind of coincides a little bit with maybe the IIJA that we started to see some funding, so all of a sudden some of your customers finally had dollars to spend. I'm curious. What are your customers looking for in the next, you know. Obviously, we have a reflection coming up, but in the next one to, you know, 2

years from now to even accelerate further. Is it more clarity on the regulatory front? Or have we had that? And now it's can we get the funding stuff in in place? You know, we just need the funding to go. So just curious what your customers you think are looking for the next one to 2 years to even accelerate some of the spending further.

Rosa Gwinn | AECOM: I think they're leaning heavily into trying to address the 2 biggies that you mentioned the hazardous substance designation and the drinking water in the U.S. They're leaning heavily into it, and that's what the IIJA funding is. They are spending a lot more money now because of a deadline in January, on reporting where PFAS are occurring and that once that data set exists is going to create a response for 2 things. One, find alternatives which we don't really consult in right and 2, fix where those PFAS that we weren't aware of have gone.

So, the pickup is going to just start with another investigation of those issues and whether they are presenting a danger to human health in the environment, right? So, we're going to get on that next entrance ramp for this next tranche of questions. So that's why those regulations that Mr. Dunlap mentioned are so important.

And I think, really, we're going to see it, depending on the election. We're going to see some restrictions on effluent limitations, guidelines. We talked about landfills because people are paying attention. Landfills are part of the solution as well as part of the dilemma. Right? They're sort of in a funny middle space. We're going to see a lot more attention on that. And I mean, I feel like, I'm in the movie, the Graduate, you know. Plastics, I mean, the relationship between PFAS and plastics is huge. There's an air component. There's a solid component. I mean, they're all I don't know. It's an explosion.

Michael Feniger | Bank of America: Perfect. Alright. Well, thank you. I want to thank Rosa and the AECOM team for putting it together great slides and really running through this opportunity, this market with us. For more on the business level, which I think is obviously important for our audience. So, I really appreciate that everyone. Please hang tight. In the next 3 min we'll have our next speaker, mantras to carry on the next session. Thanks. Everyone.