

**ENVIRONMENTAL MANAGEMENT COMMISSION
COUNTY OF HAWAI'I**

MEETING MINUTES

Wednesday, October 30, 2024

9:06 a.m. to 12:56.m.

DEM West Hawai'i Office, Kailua-Kona, and Zoom

Commissioners present:

Georjean Adams, Chair; Dorothy Norris, Vice Chair
Laura Acasio, Jim Beets, Dell Otsuka, Erica Perez, Lee McIntosh, Gonzalo Garcia

County staff present:

Ramzi Mansour, Director; Christy Swafford, PIO; Alex White, Recycling Specialist; Chris Sparber, Acting WWD Chief; Alan Fukamizu, WWTP Operator; Shelise Lamb, Project Coordinator; Lindsay Moore, Environmental Compliance Specialist; Peter Sur, Secretary; Kelly Hartman, DEM Planner Sinclair Salas-Ferguson, Deputy Corporation Counsel; Pomai Bartolome, Executive Assistant.

Others present:

Rep. Matthias Kusch, Steve Holmes, Sharde Freitas, Gary Deis, Lance Lam, Jason Nikaido, Mike Ewall, others.

I. CALL TO ORDER

Chair Adams introduced commissioners and called the meeting to order at 9:06 a.m.

II. APPROVAL OF MINUTES FOR SEPTEMBER 25, 2024¹

Motion 1, second, and vote: Commissioner Beets made a motion, to which Vice Chair Norris seconded, to approve the minutes as submitted. Ayes 8: (Acasio, Beets, Garcia, McIntosh, Otsuka, Perez, Norris, Adams). Motion 1 adopted.

III. STATEMENT FROM THE CHAIR

Thank you all for being here, Chair Adams said. A lot of things have been cooking, and as I said, our Director is tied up in a meeting dealing with another one of our many hot issues of what we're going to do about cesspools. So we'll be talking about that as we go. But I wanted to encourage everybody to contribute and to make sure that we're indeed helping DEM and Council in the environmental arena.

IV. PUBLIC STATEMENTS ON ITEMS ON THE AGENDA

Steve Holmes: Aloha and good morning Commissioners. My name is Steve Holmes. I served on the Honolulu City Council for 12 years and worked as an Executive Assistant to Mayor Jeremy Harris for a couple more. I spent a lot of time in executive session myself talking to city attorneys. We had both our Office of Council Services attorneys, plus we had Corporation

¹ II. Draft minutes: <https://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=140054>

Counsel attorneys and often got very different advice. Honolulu, like the County of Hawai'i, faced a very large wastewater lawsuit and we were under a federal consent decree and had to do a whole lot of work in a very short period of time. And we needed flexibility. So I really would urge the Commission and the Department to go for the maximum amount of flexibility. If you simply get a legal opinion from your attorneys rather than having them act as a pathway to solutions that revolve around specific issues, if you just give an open-ended assignment to attorneys, you're going to end up with a Frankenstein's monster, in keeping with the holiday. The *Konno* decision applied to the City and County of Honolulu just like it does the County. It was done by the Hawai'i Supreme Court. And there's two takeaways. One is it dealt with privatization. So the West Hawai'i landfill was privatized. As we got away from the old landfill here in Kona and built a new one, there were new federal standards called RCRA standards, Resource Conservation Recovery Act. And that required a whole lot of new detailed conditions that had to be met. And so the County made the decision to go with a private Waste Management. But the Supreme Court did not strike down the Waste Management contract that exists today. So if you're thinking that *Konno* somehow has this broad-based approach and prevents you from doing things like public private partnerships, leveraging access to private capital, I would tell you that that's not true. That in fact that contract was not struck down. The other takeaway is that you need to work with your union employees and follow State law and include them in decision making on critical things. That always makes good sense. And the same was true with the *Salera*² decision, which went against the City and County of Honolulu. Council members, not me, made it clear that they were going to cut all funding for solid waste pickup using city trucks, and they lost. But there was no union negotiation. So I would just urge you to think in terms of context for what the *Konno* decision does and what it doesn't do, and not handcuff yourself as you're facing a federal consent decree. Thank you for your time.

Alan Fukamizu, see pages 27-28.

V. UNFINISHED BUSINESS

1. Discussion/presentation with Carollo regarding Integrated Wastewater Management Plan³, public engagements, and cesspool conversion plan. *Postponed September 25, 2024.* (Adams) Chief Sparber introduced the team from Carollo. Carollo has been tasked with the challenge of putting together our wastewater facilities and cesspool conversion plans. And so the County's vision for this was to help us understand and create a plan for dealing with all of our cesspools that we have on island, as we are the island with the most cesspools, and also looking at our existing facilities and understanding what the impacts are to the existing facilities. We have Jason Nikaido, we have Lance Lam, and Gary Deis with our Carollo team and they're going to go through the presentation and give an overview of our current approach.

Mr. Deis introduced himself and began the presentation.⁴ We have a contract with the Department of Environmental Management prepare a wastewater facilities plan, and cesspool conversion plans, he said. I'll be assisted today in the presentation by Mr. Nikaido and Mr. Lam.

² *Salera v. Caldwell* (2016), <https://law.justia.com/cases/hawaii/supreme-court/2016/scap-15-0000106-0.html>

³ VI.3.4.1: IWWMP - <https://www.dem.hawaiicounty.gov/projects/integrated-wastewater-management-plan>

⁴ Presentation slides - <https://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=140741>

So you'll be hearing from them as well. Now, I want to preface, the information that we're going to present today is all draft. We're still getting input from staff, getting input from County administration, County Council and the public, but it's our effort to update the Commission on where we are to date. Things could change because this is a draft document. As we go through the discussion, you want to keep it informal. So if you have questions, you have comments, please feel free to raise your hand or make a comment.

So our objective for today is to provide an overview of the components of the wastewater facilities and cesspool conversion plans and how they relate to the overall integrated wastewater master plan that's required by the Administrative Order on Consent with EPA, Mr. Deis said. We want to summarize public outreach efforts completed to date and provide the Commission feedback on the public's comments that we've received. And then we're going to present an updated cesspool conversion planning activities that have been ongoing.

I'll provide an overview of the wastewater facilities plan and cesspool conversion plan, Mr. Deis said. Mr. Lam will be talking about public outreach completed to date. And then Mr. Nikaido will be reviewing the cesspool conversion plan status, talking about conversion categories, criteria that we've used for developing the draft sewer extension projects for the existing sewer service areas, as well as the criteria that we've used for identifying potential new decentralized collection treatment opportunities. And then we'll summarize the overall potential cesspool conversions by type of method later in the presentation and talk about schedule.

First, an overview of the wastewater facilities and cesspool conversion plan, Mr. Deis said. The cesspool conversion plan and wastewater facilities plans are key elements of this integrated wastewater master plan that's required by the AOC in January of 2027. There are other inputs to this wastewater master plan as well. In accordance with the agreement with EPA. They include operation and maintenance manuals for the sewage pump stations and all the wastewater treatment plants. Regional plans for Puna and Puakō and other areas that are essentially complete at this point, as well as an organizational structure to be submitted by the County to show how the county is going to staff and implement the overall AOC program.

But the cesspool conversion plan and wastewater facilities plan are really key components of this overall integrated plan, Mr. Deis said. So I'll talk about the wastewater facilities plan first. The plan will incorporate all the recommendations for extending existing sewer service areas that we'll be talking about. We'll also identify wastewater treatment plant and sewage pump station improvements to address condition assessments that have been identified through condition assessments. If there's any capacity that's needed for cesspool conversions, that would be addressed in the facilities plan, as well as the potential future regulations that may impact primarily effluent requirements from the treatment plants. We'll then take this analysis and develop an overall capital improvement plan, or CIP that incorporates the existing County CIP, which you talked about already in the meeting this morning, Hilo as an example. Wastewater collection system improvements are examples. And then the AOC-required projects, all part of the existing plan, and then any new capital projects that are identified as part of the facilities planning effort.

The cesspool conversion plan will incorporate findings and recommendations for conversion of all 48,600 cesspools in the County, Mr. Deis said. There'll be three primary methods for conversion. One would be the extension of existing county sewer service areas. The second would be potential new decentralized systems with a new package plant or connection to an existing non-county treatment plant or conversion to an upgraded individual wastewater system approved by DOH. This last method, IWS conversion, is the full responsibility of the Department of Health and not necessarily the responsibility of the county. And you'll see later that about over 60% of the conversions in the county are expected to be to an approved IWS system. And we'll talk more about that. So that's a general overview of what we're working on.

Lance Lam provided an overview of our first public outreach. Our first round of public outreach was held this past February. We were able to visit all across the island at four locations. The first location was at the Old Kona Airport Pavilion. Second one was at Auntie Sally Kaleohano's Lū'au Hale. Third was at the Nā'ālehu Community Center, and the fourth one was at the Kohala Intergenerational Center. At all of these events, we were able to hand off to all the attendees comment cards and also surveys. The intent of these comment cards and surveys was for us to gather a little bit more of intel and insight from the public and all the attendees of what topics and concerns they had regarding cesspool conversions. So after the event, we were able to compile all the comment cards and all the surveys and I wanted to just highlight some of the topics that people want to talk about. First one is cost. With the cost, there were a lot of concern about the cost for successful conversions. And people wanted to know what were those funding opportunities for them that they can apply for and proceed with and ultimately how are these things going to get paid for?

Another concern, Mr. Lam said, was if people had to pay twice, meaning that, hey, if they're trying to, you know, convert to IWS, are they going to have to connect down in the future to a sewer connection plant? So they were just having concerns about having to pay twice for sewer connection. Second topic was about the individual wastewater systems. Also known as IWSs, a lot of people wanted more information regarding the cesspool conversion technologies that was out there. It's just more for public knowledge and see what they were able to apply for their homes. Also people had some concern about the effluent quality from septic tanks and if it's not significantly improved over their cesspools. Other concerns were site constraints for their homes. They want to know, hey, if I were to do the IWS, do I have enough space or land availability to, you know, implement that on my property? Also there was concern about adequate workforce availability. Meaning, hey, how who's going to be pushing this out? Do we have enough, you know, contractors, engineers and people to maintain all these IWS? And they also want to know, hey, where can I get these types of homeowner resources? Who can I contact? Who can I connect with to get this job done? And also they also had some other questions about regulation on some of the residential uses such as composting, toilet toilets and gray water systems.

Last topic was the centralized and decentralized options, Mr. Lam said. A lot of people had some questions regarding if there's recycled water opportunities on the island. They also

wanted to know, hey, what's the possibility of connecting to a decentralized or non-County wastewater treatment plant? And also they wanted to figure out what the County's timeline and framing for the plans of sewing those areas. Lastly, they just wanted to just have a little bit more public knowledge and information about the improved water qualities that these types of technologies would have.

At each of the meetings we did an activity with all the participants, Mr. Lam said. So the purpose of this activity with all attendees was so we could figure out what aspects of accessible conversion are most important for them and their community. We want to know, hey, what's their interest, what they want to know about and what impacts them the most. So there were six boxes. There were boxes used to represent each of the aspects of the cesspool conversion. First aspect or concern was construction costs. Second one was annual operation and maintenance costs. Third one was the responsibility of the operation and maintenance. Fourth one was compliance with legislative requirements. A fifth one was the utilization and availability of the land. And lastly environmental concerns. So with these six boxes we had this open for everyone to put their little votes and tallies on. So each participant was given three tickets to vote. And ideally this is the results. As you can see highlighted in the red and orange. These were the main concern that people wanted to more information and what they thought was important. So construction cost along with environment concerns was one of the areas of highlights that they wanted to get more information about and what hit home with them. So this just gives a good summary of what people were thinking and what kept them up at night.

Mr. Jason Nikaido introduced himself next. We're going to discuss our approach to our cesspool conversion methods for the counties, he said. 48,600 cesspools. As you can see from this figure here, cesspools are located all around the island. And Hawai'i County actually has the largest amount of cesspools in the state. We developed three categories for our cesspool conversion methods. I'm going to discuss each of the three here, and you can kind of think of it as categories or spheres. So we're going to start kind of close to the treatment plant and the existing collection system, and then work our way further.

Sphere 1, which is closest to the existing collection system, is going to be within the initial sewer extension service boundary area, and these cesspools must connect to a sewer system extension project and the treatment plant, and the flows from these cesspools will be within the treatment plant and collection system capacity. So no additional upgrades to the existing infrastructure is anticipated.

As we move to Sphere 2, further away from the treatment plant and sewer system, the cesspools lie outside of the service area boundary. They may be feasible to connect to the sewer system and treatment plant, but with the flows from these cesspools, it may require expansion to the systems, either to the treatment plant or to the collection system pipes leading up to the plant. With the cesspools as well, there is potential for decentralized, where those groups of cesspools will kind of pool together and have their own treatment plant. And lastly, they can also convert via IWS.

And lastly, Sphere 3, furthest away from the sewer system, we have cesspools, where it is probably not feasible to have a decentralized or connect to the existing sewer system. So these cesspools will primarily be converted with IWS.

The next few slides, Mr. Nikaido said, we're going to do a kind of conceptual rendering of kind of how we would expect the cesspools to convert. And then we'll have an example showing the Hilo basin. So here we have existing collection system and treatment plant. And then as we move to Sphere 1, further away from the treatment plant, we have cesspools that are dense enough and located close enough to the existing sewer system, where we can extend the system and connect these cesspools to the system.

And then moving on to Sphere 2, these are a little bit further away, and they have more options. We can either, if it's feasible, extend the sewer system to serve them, they can have a decentralized system or convert via IWS. If they do extend, you know, you can see in the purple that it might include treatment plant expansion or sewer system upgrades.

And then lastly, Sphere 3, further away from the sewer system, we have IWS conversion methods for the cesspools that are furthest away from the treatment plant. So the criteria we use to develop these projects, as you can see they're listed below, we took into criteria such as prior EPA commitments that the County had, how big the lot sizes were, how close the cesspools were to the existing sewer, the available treatment plant capacity, what were the priorities set by the Department of Health's analysis of the cesspools, how dense the cesspools are. Typically, if you have a lot of cesspools located closer together, it's more feasible to connect or have a decentralized system. We also looked at neighborhood boundaries. We wanted to make sure we included entire neighborhoods and also affordable housing, DHHL properties, and commercial and industrial entities that require pretreatment under the AOC.

Mr. Nikaido showed an example for the Hilo service area. You see the existing collection system in brown with the treatment plant off to the right of the airport. He showed Sphere 1, where we have the potential project areas in green so those cesspools would connect to the existing sewer system and treatment plant. I just want to point out that the purple areas are DHHL properties, and the County would need to work and coordinate with DHHL to figure out how DHHL would want to connect or not connect to the sewer system.

Okay, Sphere 2, moving further away from the Hilo plant and collection system. That area is primarily south of Hilo, Mr. Nikaido said. And there is a potential because of the density to connect, but it might lead to capacity expansion at the plant. And then lastly, you see the yellow dots? Those are individual cesspools that would be converted to upgraded IWS. Typically, these are less dense and further away, so the feasibility of connecting them to an existing sewer system is low.

Based on our analysis for the eight different treatment plants for the County, we identified 39 projects that would convert 8,649 cesspools, connecting to existing systems. And then after that, we looked at decentralized systems. So we have the criteria we use to identify those

projects. We looked at kind of clusters of cesspools, 50 cesspools within a one-eighth of a mile radius. And with that kind of overlay and analysis, we identified 66 areas covering over 17,000 cesspools. We removed areas within service area boundaries. And then we also looked at, with these clustered cesspools, would it make sense to group them together if they're close enough so they can share a treatment plant. So we looked at that versus individual treatment plants. And we also added the Puakō community because of their desire to have a decentralized system or connect to a treatment plant. And this resulted in 26 potential projects.

Vice Chair Norris said this seems to include residential areas and that sort of thing, but on the Kona side there's been a potential for new stuff going in the northern part of the town. And I was wondering, are they going to increase the piping in that area as well and will the developer assist in that money or is this not in your scope? I'm just wondering.

So this part of the project is focusing on how we're going to convert the cesspools, Mr. Nikaido said. The development side and how the undeveloped land connects is going to be part of our facility plan coming later.

Chair Adams asked whether “decentralized” includes private treatment works.

That does include private treatment works. So non county treatment plants, Mr. Nikaido said.

Ms. Perez asked whether the consultants have looked at how many cesspools are in each sphere of conversion that you're putting together. Mr. Nikaido said that was coming up.

Here we have a summary of the decentralized opportunities, Mr. Nikaido said. There are 26 potential decentralized opportunities with 9,723 cesspools covered through these opportunities. And they are located across the County. Largest areas would be Hilo and Kealahou. And note that even though we identified them as decentralized, they still could potentially convert via IWS if there is no traction within the community to decentralize amongst themselves.

Mr. Nikaido gave a summary of the three different spheres. Sphere 1 would convert approximately 18%, Sphere 2 has 20%, and Sphere 3 has 62% of the cesspools. So still the largest percentage conversion method would be IWS.

Mr. Deis continued with the schedule. Here's where we're anticipating will be as into next year with this work, he said. I want to note it's what pending County management confirmation and that we're going to be beginning this process of involving County administration, Council, and the public. And depending on the input received from each of those groups, this could impact the schedule. But here's what we're anticipating at this point. We will have a draft Cesspool Conversion Plan available for public review in the second quarter of next year, a draft Facilities Plan available for public review in the third quarter of next year, and then draft of what we're calling the Integrated Wastewater Management Plan, which is the executive summary of these two reports. The Cesspool Conversion Plan, the Facilities Plan late third quarter, 2025. Any

questions about the schedule, the content of the cesspool conversion plan, of the facilities plan, public outreach, any of the information that Mr. Nikaido presented?

Commissioner Perez asked about the integration process of what you receive from community and the input and how it's being integrated into the plans and into your process.

That's a good question, Mr. Deis said. There's a lot of concern about costs. And so that gets into, you know, how all these projects, the sewer extension projects are going to be funded, what kind of support the County is going to provide, either on the technical side or not. And those are issues that we're just now getting into discussions with staff about. All those concerns that were raised are things that we feel that need to be addressed at the next round of public outreach.

Commissioner Perez said she understood that to mean it's a priority to integrate it, but the "how" or "in what fashion" is not necessarily clear.

Not at this time, Mr. Deis said.

Commissioner Garcia asked heard there is a concern that, okay, we're going after cesspools, but as the IWS systems age out, are those going to start being looked at as a potential risk, and should there be some voluntary basis for people to move from IWS to a more centralized system?

We're focused on the conversion of the cesspools by the 2050 deadline, Mr. Deis said. If an individual wastewater system is implemented by a property owner, I think we just want to emphasize that the maintenance of that system is on the property owner. The permitting of that system is with the State, it's with the Department of Health. And so those future conversions of septic tanks that may fail or haven't been maintained properly are all under the jurisdiction of the Department of Health.

Chair Adams said it sounded like Carollo or the Director is very focused on meeting that 2050, deadline. We're in this process right now of looking at a General Plan update for 2040. I think it'd be the Integrated Wastewater Management Plan, dealing with the issue Commissioner Perez raised of future development expectations. Are you just looking at the smaller box, not that it's small, but smaller of cesspool conversions and fixing our decrepit wastewater treatment plants and not what we're going to need in the next 20 years?

It's a good question, but the answer is no, the Director said. That's not the intent. What you see before you today is one portion of the Integrated Wastewater Management Plan. They still have to do facility planning. We did it in three different spheres. Sphere 1 is to take care of the current situation under the AOC. Sphere 2, that's where the planning comes in. We want to move to that Sphere 2 for existing and proposed developments. Sphere 3, that may take you way beyond the 2040 horizon and everything we are doing is intertwined and that's where you need to come in and help us in identifying policies and procedures from the document, the

planning documents that we are working on now. So the intent- once Carollo finishes and finalizes their product, it's upon us to sit down and start looking at code changes to Planning Department subdivision requirements. Because right now we know what we are dealing with either based on existing or a new development, based on certain capacity that we have to divvy up to all these entities within these spheres.

Cost is very important as it become prohibitive to even connect people beyond Sphere 2 and 3, the Director said. It's unfortunate the County had out priced themselves from a sewer service because it was not planned correctly from Day 1, where it should have had a dry sewer to every subdivision that was constructed. Hopefully moving forward, that will allow us to plan better if we're going to continue providing sewer service. So the concept is, this is what's going to get us to start implementing new policies and procedures moving forward to improve any future projects or subdivisions or developments. It's all covered under what we're trying to achieve. So you're going to have a roadmap to cover your immediate need and also to set policies and procedure for the future. Hopefully that answers your question.

The devil is going to be the details of us looking at the whole progress of the General Plan, public interaction, and how that's being developed and the basic provision of infrastructure to support growth on this island, Chair Adams said. And I'm not sure who's talking to whom. Is that a discussion that the DEM is having with planning on, there may be some places where we don't allow development because we cannot do anything but do the conversion of these cesspools because that's going to overwhelm us on its own. And to think about adding in more people and more services that we don't have is frightening to me.

Our staff has been working with the Planning Department looking at their 2045 General Plan, the Director said. Our consultant has a copy of the plan as well. As we were laying the spheres and priority area- it's a complex strategy that we are trying to connect all the dots together to come up with a very clear roadmap. So the idea of- your current facility has a certain capacity. We are at maybe half of that capacity for Hilo, less than half for the west side. So we need to bring these capacities and the capacity that we allow to bring in is going to determine the number of connections or conversions you could make. So they are all kind of connected outside that capacity or that limitation. It become a Planning issue. And that's where we need to sit down with the Planning Department, the Mayor, and everybody else and strategize, from a subdivision point of view, from the size of the lot. So you could probably go with 1 acre or more subdivisions outside Sphere 2 and Sphere 3. So all that discussion is going to start happening once we have the plan completed. But in the meantime, we need to start thinking of policies and procedure that we could drive out of this plan. Facility Planning is still in the works, and from integration and meeting the demand of the public, they'll have a better roadmap. Our goal is, people could be able to log in and understand their options so they don't have to spend the money twice to replace their current system. We are going to target affordable housing and commercial, industrial and state because these are the entities that are going to put the infrastructure for us to help the residents hook up. So the strategy is- a good example is that project we did for the affordable housing on the west side, a mile and a half of sewer. Now that's going to open the windows for the people on cesspools to be able to tie into that sewer

line if it happens to sit within their boundary. So our goal and intention is strategically to lay the groundwork to minimize the cost for residents to be able to afford conversion.

I want to say I really appreciate and agree with your approach of the spheres and planning for different options within those spheres, Chair Adams said. I think you're approaching it right. I'm just looking a little bit longer term. And when I think integration, I'm thinking the whole island and the future and how do we begin to bring the pieces together. And I think this is going to be a good base. It's, how do we build on it? What are the principles we're using to look at where we devote our limited resources? So I appreciate your work.

Just a quick question around the criteria, Commissioner Perez said. Were they just equally weighted across all criteria or were some of the criteria weighted differently? And then within that, was there a threshold that was looked at within your threshold density criteria that was kind of like an indicator to recommend IWS or a call out of- EPA has thresholds for these kind of IWS already established. Were those thresholds used to kind of flag community density areas to then say, okay, these areas should be sewerred? We do have communities that are high density cesspool areas and are they being looked at in a specific way under your criteria?

As to the question about cesspool density, Chief Sparber said, the Carollo team kind of came up with a cluster analysis. And so with their cluster analysis, the way that they put it together was they used our DOH state requirements for the ability to install a septic system. So DOH has specific criteria for septic systems, a minimum lot size, various other parameters. So what the Carollo team was able to do is say is, okay, if we have a cluster of cesspools within a certain amount of area, then likely DOH isn't going to permit IWS in that area and those community members are going to be faced with coming up with a different solution. And so that was the whole premise of our cluster analysis. Within that cluster analysis we say, okay, well, this would be a decentralized system. So this group of people are so tightly packed, their lots are so small that we're not convinced that the state is going to let them put in IWS. So that's why they would be within the decentralized criteria. Another criteria that was used was proximity to an existing facility. So potentially somebody could be close enough to an existing smaller wastewater treatment facility that they could potentially connect to that. In terms of our criteria and weighting factors, within sphere one, say you have 15 projects. So each one of those projects, we came up with a weighting factor for each of the criteria and we scored them and ordered them in priority. Once agencies and internally administration, everybody, is aligned and we have a workable, presentable draft, then we'll be looking at getting and sharing all of that for public input and all of that. We just don't have a public engagement plan put together at this point because everything at this point is very fluid.

Commissioner Acasio asked what is that density that was used.

It was 50 cesspools per one-eighth of a mile, Mr. Nikaido said.

For up to 49 lots you could do septic, Director Mansour said. But just keep in mind it goes back. We built a whole city based on 49 lots at a time. So what we are facing now, if you look at the

Hilo area, the idea is, it's not one size fits all because Hilo may be different than Honoka'a, could be different than Kealahou. But look at these areas. Homes are so dense even outside Spheres 2 and 3. But some of these lots are one acre or larger. Even within Sphere 2 you have very dense communities. But we looked at the size of the lots and definitely the 49 lots- you're going to hit that criterion quick because it's a whole city built around that concept of 49 lots. But affordability is major factor. So the sphere has to consider expansion of facility, or decentralization, or IWS. So within Sphere 2 the three options were looked at and the criteria is, it even feasible from a construction cost perspective to include Sphere 2 even though they are dense versus having do decentralized versus IWS. Unfortunately we need to face it. Not everyone is going to be able to connect. And that's a fact. So we are not going to be like CCH where they are 90% connected. Cost-wise it's probably not going to happen unless we spend billions of dollars and be like the CCH at \$300 to \$800 a month sewer rate fee.

Is that not where we explore how development and how CIP projects can bring down that cost, Commissioner Perez asked. And I recognize that's your next phase of this report. And so I'm super keen and interested to hear where that arrives. My takeaway is, this is an overlap again of where departments can cross-pollinate each other with information in that, I'm hoping that this is a loud and clear message to the Planning Department of how we're utilizing this density rule is really setting up our County for fiscal failure or fiscal challenges in the future when these structures and when these areas need basic infrastructure. So one is, I hope that that is happening with the Planning Department and if we can help as a Commission echo that request, maybe that's a great role for us as well as a Commission. And then reiterate that we do have current needs, we do have current emergencies, both found within communities as well within our natural environment, of our shoreline health and marine health. And so I recognize the urgency. I see the layers of challenge and concern and I think it is attempting to try to do everything all at once and relying on that communication between departments to be able to look at the future of Hawai'i County and see where we want to go within our development.

You're right, the Director said. It's a major challenge and I think that's where we all need to get together. You will be a major help in trying to navigate through policies and procedures that could benefit the future of the County. And yes, control costs. You heard City and County is going to be \$244 a month by 2035 just for sewer fees. And, and the reason their costs is still-it's going to be way lower than ours because the volume of customers they have, it's huge in comparison to our County. If we do it here within our county and with the residents we have, it's a huge dollar figure per month. Our people cannot afford it.

I'm concerned about the level of treatment at the IWS that you're hoping to install, Vice Chair Norris said. Since it's mostly residential, I imagine you will have a lot of organics but not much toxics in them. Are you thinking of a complex system? Are you going to be able to recycle the water in those? It's a possibility to do groundwater recharge as well.

You make a good point that we keep hearing it all the time, the Director said. Septic is not a better system. It's a little bit improvement over cesspools. But as engineers and planners or scientists, when we look at these issues, you look at it from a holistic point of view. We don't

just look at septic. The CDC already came out with reports based on the proper disposal of effluent. It could achieve the ground level discharge requirement into the recharge requirement. So the concept is, cost plays a major factor. How far is it from groundwater? How far is it from shorelines? What are the benefits? And in addition to that, technologies are improving and things are probably going to get better and better as we move forward. The septic is still a good system if you could design that leach line in accordance to the requirement. If you have 1 acre, you could reuse that influent for your trees, non-human consumption trees that could absorb the leachate coming out of your leach fields.

But you have to plan for it, the Director said. You have to plan to change the codes. And that's what I was saying. Policies and procedure need to be implemented where we maybe need to start looking at the building code again and do black and gray plumbing within the house to allow the gray water to go back to your landscape area rather than going into your septic. What we are doing now and what we are talking about is exactly what we intend to happen, is to get a brainstorm discussion between all parties to find the best solution moving forward.

Thank you for this information, Commissioner Acasio said. Very, very enlightening and informative. Director, I'm curious, are the policy suggestions part of this report or coming after the report? Will you have some suggestions coming from the Department where we could start?

Great question, Director Mansour said. It's going to be a combo. We are starting in our own department, kind of connecting the dots of policies and procedure we would like to see. Because we have five AOCs. One of them is the pretreatment. Pretreatment is going to play a major factor. So we want you, the Commission to be able to review this and start coming up with your own policies and procedure that also could subsidize the Department's stance on policy and procedures, and definitely the public, this next meeting. And as you see from the first meeting, we created an exercise for the public to tell us what is their most important thing that they would like to see. So we participated with the public, EMC, the Administration, County Council. So it's a collaborative effort. We're not going to work in silos. That's not the intent. The more that we get you involved, the better the policies and procedures could be developed to benefit the future of the county.

Is there a timeline or when can we expect perhaps a draft of some of these policy changes, Commissioner Acasio asked.

The draft is dependent on the people who will start sharing some of their thoughts so we could put a draft together, the Director said. So the idea is we working on the plan. Hopefully once the plans are complete, we could, at least from our Department, we could start thinking what we foresee. But if you could start sharing with us any ideas so we can start working on the draft as well, include them within our draft, that would be perfect.

Just to be clear, Commissioner Acasio asked, you're waiting for us, but is there already some suggestions coming from the department?

There are suggestions, the Director said. I just told you about the pretreatment, but we haven't drafted any of it yet.

Commissioner Acasio asked about more specific code changes in that you- we all have access to the code language and such. But being that you're much more familiar with the specific codes. What is coming out right now from all of this research from the gathering and from the Department as for specific code change requests?

That code change is the draft- we are working on it as part of the pretreatment. I don't know- where are you at on the code change, the Director asked Chief Sparber.

In May and then subsequently in June, we did release a couple versions of our proposed code changes for comment, Chief Sparber said. The code was more weighted toward pretreatment. However, we had proposed several updates to various development sewer connection changes. So there is a working draft available. The county is, you know, continuing to put in comments that we've received at the staff level. And also we are hoping to incorporate some additional potential updates from the cesspool conversion plan as well as the integrated wastewater master plan.

We had it out since May and June, so please review it, the Director said. And if you foresee any changes, additions because it's a working document. But if we cannot get comments from you guys to the May and June draft that we shared, we are going to end up finalizing it without your comments. And then you will say, we haven't seen it, we haven't submitted comments.

I will get the Secretary to send out the latest draft to everybody, Chair Adams said. I will try to take a whack at highlighting sections where there are these policy- It's very jargony with what kind of pipes and what kind of filters and- yeah, that's not what we're talking about. We're talking about the bigger issues of who can do what. So I'll see if I can maybe highlight that for everybody, so it's not quite as deadly to read. But I think we can start. It's a lot easier working off a draft or if you have a list of policy issues that you're working from that we can comment against. But if you want us to start up *de novo*, let's try and see what we can pull together for next meeting in November.

Can I quickly add, Commissioner Perez said, the two recommendations that I heard from the Director and just make sure that they're either attached or associated with that list in some way, which is the cesspool density of the 50 over one-eighth of a mile, and the black and gray water use regulations. And those were two that I just wrote down. So I don't know if others heard more recommendations.

And also we need to start thinking about dry sewer, the Director said. Right now it's within the hands of the Department of Health, but I think any future development, they need to start thinking about putting the system in so we don't have to come back and tear up the roads and try to reconstruct it. So all these are foreseeable. And that's what we kind of did on the first

draft of the code change. But please, you know probably the issues more than anybody else. So anything that you would like to change or see changed to help the future of this County when it comes to sewer services, that will be awesome.

2. Discussion with DEM regarding Inflow and Infiltration of water at the Hilo WWTP system and Wastewater Division's efforts to address it. *Postponed August 28, 2024, September 25, 2024.* (Acasio)

I'm going to look to Commissioner Acasio to guide questions and discussion on this item, Chair Adams said. But you've had an interest in understanding just what's going on with inflow and infiltration for the Hilo wastewater treatment sewer system and what the Wastewater Division has been doing to address that.

Acting Chief Chris Sparber said that the current approach to our I&I is- just so that everybody knows- we do have the capability in house to do point repairs with CIPP on smaller pipes, 12 inches or less in diameter. We're able to do 8-foot sections at a time. That's one approach that we have to I&I efforts. We also have a grouting capability for joints that don't hold pressure or that we have found through our CCTV assessment to potentially be areas where we could get I&I. We can use our grouting capabilities. Our AOC requirement is that we do CCTV assessment of 20 miles per year. The idea is that the entire collection system is assessed per NASSCO standards within the first five years. And then after that point, based on the NASSCO condition assessment, there's routine re-inspection. But also there's prioritization and repair of the NASCO assessments where we found that we have various failed sections of pipe and different things. We know that we have infiltration inflow by our Onekahakaha SPS on Kalaniana'ole Avenue. So we've packaged up a request for manhole to manhole type CIPP. That way it's much more efficient, less impact to traffic. And so we package that request up and we've sent that request in to Finance. They're working on identifying funding for that project. That's one current project that we're looking on. We know from our basic desktop analysis of the Hilo WWTP that we have I&I. All of our Hilo side collection system has not yet been fully assessed. But in terms of identifying areas of I&I and working toward repairing that, our current approach is to package up this first project, submit it this year, and then as we find areas that need point repairs, our staff can do that in-house. But a lot of times, especially on Kalaniana'ole, the pipe is larger than what we're tooled to repair in situations where a manhole to manhole repair is actually better or more efficient. We're not equipped for that. So that's why we would outsource that in the future. Next year there are plans to do a price term agreement for this kind of work so that it becomes more routine. And we would essentially follow in the footsteps of the City and County of Honolulu which has annual agreements and an allocated budget for these types of repairs each year. So that's our focus and pathway to address the I&I. We're scoping out a separate consultant contract to come in and help the County as a whole create an overall collection system assessment and prioritization effort. That's what we are doing to assess the I&I issues.

Thank you so much for that information, Commissioner Acasio said. That's a lot of what I was asking for. However, I'm curious, you mentioned there's a separate contract that you're going to be looking into. I'm looking at- with the CCTV, how much of our shoreline- you mentioned

the AOC requires 20 miles per year. Have we not started it yet or was that started under the AOC? How much of our piping have we assessed prior? I guess another question that did come up was about the CIPP. Is that polymer? What are the materials used for that?

For the CIPP, there are a couple different things that we use, Chief Sparber said. So one of the things that we use for the point repair CIPP that we can do ourselves on the smaller size pipes, we're talking 6 inch, 8 inch, 10 inch type pipes- that would be a resin-impregnated liner. Imagine a cloth tube, and what we do is we mix various resins. We lay this cloth on a couple of tables and then we impregnate it with the resin and then it gets put on a packer and then we pull the packer to the area we know needs to be fixed. And then this inflatable balloon packer expands and then it sits for two hours and cures. So that's one method. So that would be resin and a carbon fiber type or a fiberglass mesh, a surfboard type material. So the next type of material that we use is a grout and almost a kind of a rubber type consistency material. And then there's also a link sleeve that can be used. We don't necessarily like to use that because it's actually a metal, it's a stainless steel. And we're really trying to get away from that because over time those will corrode and fail. The other question was, what is the status of our current assessment? Prior to EPA's technical assistance of the county in 2019-2020, the data showed that we had about 5 percent of the collection system CCTV'd. Now the paradigm of our assessment was different at that time. The paradigm at the time was, let's look within the pipe and if there's a problem, we identify the problem and we see it. And it was all very- we were hand filling out work orders at that time. There wasn't really a great control on the CCTV video. So we may have had 50% done, the records were not essentially reproducible. So then EPA came in with a grant and they helped us in this case, they helped us get the NextGen software and they brought in a technical assistance consultant to kind of help us get more organized. And so now we have the asset management and they also helped us get a couple of more CCTV vehicles. So now we have a way to take the video, do our condition assessment in the field on the truck, and then we have a way to push that data into our next gen database. Now we have that capability. Hopefully that addresses that question.

Commissioner Acasio asked Chief Sparber how much have we actually done and where are we in terms of repairs.

In terms of repairs, we're or essentially getting started, Chief Sparber said. As far as the repairs identified are concerned, we have made the various spot repairs and areas where we've had spills and areas that need to be immediately addressed. But in terms of what we've identified as NASSCO level 10s or 8s, we're still in the process of prioritizing that, getting budget identified and getting those items repaired. As to how many miles of pipe have been assessed, this year we were at about 7 miles assessed. That's on our system. And then prior to the start of the AOC, we were about 20 or so miles assessed. And so right now we're just working on becoming more efficient and consistent with our assessments. And then the reason that I'm going to bring in a consultant to kind of help us is we need help in terms of prioritizing the assessment, and then we need support and once the assessment is done, prioritizing the repairs and packaging up those projects. And so that's where we're at.

Commissioner Acasio asked for Onekahakaha SPS, is there a timeline? Have we started any kind of repair on that, for example?

That will be included in our most recent request for emergency procurement, Chief Sparber said. We've identified all these areas that have existing problems that are contributing to significant I&I at the Hilo WWTP. Now, we need to keep in mind that all sewage, no matter where it is in Hilo, is pumped to the treatment plant. So I&I is a challenge for the County because the County is paying to pump seawater or whatever is leaking in- rainwater through manholes or broken laterals. Whatever the cause of that infiltration is, the County has to pump it. When we look at that it's an environmental hazard. We put together all the necessary documents. For the timeline, Finance is working very diligently on finding us necessary funding to get that work done.

Commissioner Acasio said that her questions were not just about intrusion but we know that if there's intrusion, there's extrusion, right? So we're talking about exposure in the shoreline, in the ocean nearby, especially for Keaukaha, that's our most-used coastline as far as recreation, as well as for food and fishing. The conversation is continued around cesspool, septic and tapping into our sewage treatment plant in the big picture. And we have all of our waste coming from Hilo through Keaukaha. It just seems also like that the intrusion and extrusion would be a focal point and wondering what DEM is doing to actively fix and address the situation. But not just along Keaukaha, really. We see it along the shoreline here, more on the Hilo Bay side by Kaipalaoa, the lighthouse, and areas of Downtown Hilo as well. So have you folks done any of the CCTV assessment in the Downtown area as well?

So in the downtown area, I don't believe that that assessment has been complete, Chief Sparber said. I believe our focus has been out in the Keaukaha area and out in those areas. And some of our largest collectors are there as well. You have 18-inch and 30-inch pipes in there. And with the staff that we have, we could adequately do traffic control for the trucks and the various staff that need to do the inspection.

Chair Adams asked Commissioner Acasio if she needed the chemistry involved with this resin that's used to plug the pipes.

It's concerning because, if there's impact on nearshore waters when we're talking about highly toxic substances. At the same time, I recognize that there's the issue of sewage leakage. So there needs to be a preventative solution, Commissioner Acasio said. However, I do think we should always take into consideration these toxic chemicals leaking into the groundwater as well as nearby ocean water.

Chair Adams asked the Chief whether there are a set of approved resins by EPA to be used in sewer line repair.

As far as CIPP repairs go, Chief Sparber said, I'm not sure that EPA has a certain list of approved resins. I follow an ASTM standard for sizing and the strength of the resin once cured. When we

put it in place, we cover the ground where we prepare the packer and all of that is covered with plastic. We have BMPs in place. These things are kept in thick plastic containers and, and we have the MSDS and necessary provisions if there is a spill during preparation. Once you're in the pipe and you are going to cure- I don't see that this could escape and leach into waters. Usually is a very thick, viscous material and it's, it's not like a gasoline or oil that would seem to want to run away from your site. And then once it's hard, it's inert at that point. That's how we have to dispose of it. We have to harden it and then it just becomes standard refuse, standard waste. We can take a look and see if there's something that could be more environmentally friendly. And then in terms of manhole to manhole repairs those companies come in and it's interesting. They have equipment that impregnates the resin and does everything and then they can harden it within minutes with hot steam or a UV light trolley that drives through the pipe. So it's a clean process as far as the manhole to manhole in situ repairs are concerned.

I just wanted to clarify if there were any additional questions, Chair Adams said. Personally, I don't have a big concern about contaminating the wastewater treatment plant with toxic materials. I think that they aren't going to be leaving and traveling very far. So I don't think that they're going to be a source of it, but it's a question to ask and to be comfortable that we're using the least hazardous materials that are possible, that still meets the performance requirements of not having to be repaired again in another year or two. So as you say, it's a trade-off in terms of how do we make sure we're fixing these things. One of the other questions I had is, it sounds like we were very reactive in the past and maybe still. Was there a budget that covered discovery of leaks? Why is it that you're asking for Finance to go find money that there wasn't a fund already set up for them?

Chief Sparber said as far as his budget is concerned he had maybe \$250,000 generally allocated for collection system repairs. So the request that we made to Finance for the most recent CIPP repair is \$5.9 million. It all funnels down to our collection system needing a significant capital investment as well as our actual vertical facilities. And in looking at a budget for repair, in my AOC capital plan, I've requested \$5 million per year for in situ CIPP repairs. But that's in conjunction with all of the other various budget items requested by other departments and requested as part of the AOC as a whole. The Hilo bid opened at \$337 million. And we're also looking at the Pāhala collection system, which is another \$30 million. And so we're at \$367 million just this fiscal year. And that's only one and a half projects. Because in Pāhala you still have the wastewater treatment plant. Then you're looking at Nā'ālehu, as well as the other AOC stipulated projects.

So that, you know, I appreciate that there's a lot of money, Chair Adams said. In fact, I was the one, as we get further down in the agenda that asked that the preliminary priority ranking for capital projects was included in the package for people. Because I was very impressed with the laying out of the factors that go into setting priorities. And the money we're talking about is humongous. So you need to set priorities based on risk, and that you've got now a rational system instead of their old reactive "Fix it, it's squirting up in the air, we've got to do something" approach that we, we've had in the county for probably hundreds of years.

Commissioner Beets thanked the Chief for the information. He had a question about the consulting work on the collection system assessment. Has that contract been drafted or is it already in completion? That's question one. Question two, how many miles of the sewage system will that consulting firm complete?

Chief Sparber said that we're in what we would call a scoping process for that contract. So currently, what that would entail is somebody putting together an inspection and assessment process and manual. So other utilities in their collection system are maintained by groups, say, called the Corp Yard. The Corp Yard guys. Other utilities will have a book, a red book or a green book or some sort of sewer service area map or something. And it basically has, "okay, the first week of March, you go here, you inspect this," or it'll have consistent month by month goals to be done. It'll also have a defined process for which, if something is identified as a NASSCO level 10 or an 8 or 5 or 4, whatever it is, we prioritize it in a certain way. So the total miles for the whole system, we're looking at about 120. So then when that gets done, you essentially have an implementation plan for your collection group. And that's how they prioritize and do their work. There's always other stuff that distracts them. There's One Calls, there's emergencies, there's in the plant work where they get called out to help operations. But in a general sense of, how do you maintain the collection system? There's kind of a guide and a process. And so that's really what the consultant would do is it would help us create, a written procedure and manual and process and kind of help us put together maps and different things for this effort. And then that way if something happens to me or some other person who's been helping run the show, then that document hopefully lives on and moves to the next person. And so, you know, that. That's where that goes. There are other groups that have these. So we're just spending some time to develop that, that scope and then move forward.

Vice Chair Norris asked whether the MSDS sheet for the resin has any kind of information on leaching after it's been cured. And I also, she said, want to comment that toxic materials can shut down a wastewater treatment plant if there's sufficient amount that causes the biological parts of the plant to die, essentially. The parts of the plant are based on a biological digestion system. And if there's toxins going in, that could cause some real problem.

I do not know of any formalized leaching studies or within the MSDS sheet, Chair Sparber said. I do know that CIPP, in the last 20 to 25 years, has become increasingly popular for utilities to use in their collection system repairs. And know, I'm, I'm thinking that, you know, and you know, with. Within our pretreatment program, you know, that that program is really designed to keep toxic materials out of our facilities.

Chair Adams asked for the set of MSDS that you've got and we'll package them and get an information packet out to the Commission.

I also wanted to comment that whenever you have inflow, you also have the possibility of groundwater contamination from outflow, Vice Chair Norris said. So are we checking the groundwater? Especially for homes that are dependent on groundwater for their water supply, are we checking for bacterial contamination?

We're not really doing specific groundwater testing, Chief Sparber said. We have discharge requirements that we meet. I do know that the drinking water, Department of Water Supply, they check the groundwater for bacteria issues. But as far as wastewater division, no, we don't necessarily have any, well monitoring occurring.

Do you contact DWS when you have discovered a leak so that they can evaluate potential drinking water contamination, the Vice Chair asked.

If we have a spill or any sort of a leak like that, Chief Sparber said, generally they'll likely be notified because we'll be digging around their utilities, so they would know that way. But in terms of a leak with respect to, do we notify them to do testing on their aquifer if we have a sewer spill? I would say no, that's not part of our procedures.

Could it become part of your procedures to inform them whenever, if you have a detection of a leak, the Vice Chair asked.

It could, we could let them know, Chief Sparber said.

That whole interagency communication issue, I think, is one that's a challenge across the board, particularly when there's these different jurisdictions and everybody's overextended, Chair Adams said. I would certainly support that kind of process as you're setting up your SOPs, that if there's indication of significant leakage coming out, as well as in, to the sewer pipes, that you contact all the various agencies that may be impacted by it to protect the population.

Commissioner Perez said that nobody really is sampling private water wells. I don't ever really think of the Keaukaha or Hilo areas having private water wells. But if they do it would be good to, along with DWS, just give a quick notice of a broad- if you do have private water wells in this area, maybe homeowners can have them tested.

Commissioner McIntosh pointed out that in Hawai'i, for the most part, private water wells are very rare. And I think there are only a handful in the entire state. Most of it belongs to the state. So I don't really see that as much as a big issue or concern for the County, especially on the Big Island.

They're heavily used in HPP and the Puna District. People definitely drill for water, Commissioner Perez said. And that's why I don't see the connection with the County system just because we're so far removed. But if there are private water wells within the County system- that's all I was referring to.

Commissioner Otsuka said that you mentioned SOPs. Chair and Chief mentioned having consultants look up or maybe establish policies to address certain things. The County should already have policies in place and maybe given the circumstances of late, just include that in

the existing policies rather than having a consultant draw up a new policy to reflect everything that's happening now. Because that would be costly. And that's all I need to say about that.

I think when you're saying policy, you're probably meaning the procedures, Chair Adams said.

Chief Sparber had mentioned having consultants help draft up different policies to address procedures, Commissioner Otsuka said. But shouldn't the County already have- such as the spill that happened in June. I mean, it was as if they had no policy in place. So all I'm saying is we need to maybe look back at all the different policies that's been drafted and should have been implemented. And if as things change, because the circumstances and the frequency of the skills, we can include a better procedure handling. But I think communication is key, whether we think so or not, because as a State and as a County, health is a priority. And so it shouldn't matter whether it's within our jurisdiction or not. I think it is.

Commissioner Acasio said that in terms of the timeline and urgency, it seems that if the County is moving forward with the vertical build for a new wastewater treatment plant, it would really make sense - especially we have so much intrusion with heavy rain events, which we know that happens a lot in Hilo - and then the system does get overloaded because of the pukas in a system with the rainwater event. That's where we have the pump blowouts or we have situations where we have too much water for the pumps to handle. So the pumps then get turned and that's when we have other spills - but at any rate, if we're building a new one and we're having saltwater intrusion going into that new system, then we're going to damage that system. Is that your understanding? I mean, that's my understanding. So if you can kind of comment on that in terms of prioritizing fixing the collection system and the holes in the collection system prior to a new system, I mean, a new treatment plant.

Chief Sparber said the treatment plant- it actually is something that should be occurring synonymously. In the ideal world the collection system repairs should be occurring at the same time as your vertical construction because if you can't get the flow there, what's the point of having a treatment plant? And if you get the flow to the treatment plant and the treatment plant doesn't work, then you're going to have polluted water leaving. So I would see it as, it needs to be done in parallel. The treatment plant is in disrepair. A lot of the process areas are dilapidated. They're not performing. And our analysis has shown that we're at a point where, you know, in some, a lot of the areas that they just need to be reconstructed rather than try to be rehabilitated. So that's where the Hilo project comes from. So now as we're assessing our collection system and finding pukas, or finding areas of high infiltration and inflow, we need to repair those as well.

And the other thing I want to note is, all of Hilo's wastewater is pumped, Chief Sparber said. So the challenge with seawater is the high salt content. It's corrosive. Wastewater is already corrosive, and now you're adding, additional corrosiveness to it. So each mechanical thing that gets touched, each metal surface that gets touched, you know, is potentially, you're putting more wear and tear on it. Additionally, you're using more electricity because your wastewater volume is increasing. So to answer your question of priority, I think they're synonymous. We

need to fix both of them. I know the financial component is huge. I know our financial team is working very diligently to find us the resources and help us get the resources we need to get the things done.

VI. NEW BUSINESS

1. Discussion with DEM about County advancing wastewater treatment upgrades and cesspool conversions through State capital improvement projects. (Perez)

With this conversation, I don't feel that it needs to be a huge discussion, especially with what we just reviewed, Commissioner Perez said. It was just more my wanting to call out opportunities that were potentially State, such as State Parks and other initiatives that are coming from state CIPs as not just private developers as being potential collaborators in sanitation movement and progression forward, but also the State and State parks that lie within communities and shoreline areas where cesspools need to be upgraded and sanitation needs are also urgent to address that. Again, just calling those projects and opportunities for collaboration and wanting to incentivize that.

Well, let me defer it for next time and we'll give DEM a chance to come back with some thoughts, since they'll be working away at the funding part of the Integrated Wastewater Management Plan, Chair Adams said. Unless Chief Sparber knows something.

I just want to further clarify that request, Chief Sparber said. For example, he said to Commissioner Perez, you're looking at it from a perspective of, if the State had a building that had a cesspool and connection to our sewer system was, say, a half-mile away, that the County would say, State, to close your cesspool, you need to install this half mile of sewer and then as a benefit, all the people in between the State building and the County sewer system could connect. Am I understanding that correctly?

Or a variation of that, yes, Commissioner Perez said. And there are examples of that even within- I know we frequently speak of Puakō and the heavy movement that that community has made over many years in trying to advance sanitation. And they have State parks that are directly adjacent to them, that see high numbers of visitors per year and support our local tourism dollars, especially for Hawai'i County. And so what are opportunities like that within State projects and CIP projects and their assets to be able to partner with our County? The one that brought this up specifically was the park that's being proposed, which I live in HPP, so I'm very excited to see some kind of a community park in HPP and love what that could do for the community. I also am just curious of, is that an opportunity that could potentially help also and overlap with connection and transition goals and initiatives. And I was also chair of the CIP funds that were awarded for the Kona Airport wastewater treatment system. And that also is in line with a lot of the Kealakehe service area. So again, just curious of, is there, you know, conversation between State and County that could be had to look at these projects more into the future and create plans of potential benefits for funding and financing?

Chief Sparber said that on the Kona side, DOT Harbors just bid- they want to connect the Honokōhau Harbor to Kealakehe WWTP. So we're in the process of reviewing those plans. But

we would potentially look at our master plan and then request that, yes, hey, state we do offer wastewater treatment but There are some improvements that we need help on so that other folks upstream can connect. The other thing I can think of is I think last year DLNR has various commercial/industrial parcels and whatnot. And so they were actually doing some studies with respect to what parcels were connected to cesspools. And so the consultant that was working on that project reached out to us and so we had a chance to kind of work with them. But if the State and those areas came back and said, well, we need to connect and close our cesspools, then absolutely, the County, as part of our standard review process would say, hey, we do have plans to connect folks in this area. Can you please install this master planned infrastructure if it's within Sphere 1? That would be our ask.

Director Mansour called Commissioner Perez' attention to Slide 12 of the Carollo presentation. Our criteria were, affordable housing, then State DHHL, you need to lead by example. That's why we ranked it at No. 2, slide number 12. So it's already there. And to your point, discussion has been going on with the airport waste treatment plant with the idea of, the County could take it over expand it. So there's a lot of discussion that went on probably back in July. Our last meeting was with them. Our criteria, affordable housing, State departments, commercial, industrial, then residential, commercial, industrial. They're going to play a major factor. We have a Costco here on the west side. They need to connect.

Chair Adams said this is another potential policy recommendation that we could make on setting up the procedure of, any time money pops up anywhere, potential from the State or other EPA or whatever, go chase it and see whether or not there's a way to leverage because we got to leverage every cent we can get a hold of.

VII. REPORTS/CORRESPONDENCE

- **Sustainability Summit – Solid Waste Reduction Workshops (Adams)**

I am the first one just to let you know, Chair Adams said, there is a Sustainability Summit Solid Waste Reduction Workshop. It is very informal, trying to put together ideas primarily right now focused on the concept of a Resource Recovery Park and we're scoping it out. We had been chasing the idea of a federal grant and decided we weren't far enough along to go for it. But we haven't given up. We're working with it working with Craig Kawaguchi and with Alex White in the solid waste group on ideas to scope that out as a public/private type of operation. The other is the legislation that we had sent to the council- slowly, slowly trying to flesh that out. I've made some drafting changes but need to pick it up, but this is election time so forget trying to get attention at the moment but it's still on the docket. We are having a group meeting November 5, so I'll have hopefully some more information to provide next meeting.

- **EMC letter to Council and Director supporting water technician certification programs.⁵**

We did send out from the motion from last meeting the motion about support for water technician certification that went to the Council and to DEM, Chair Adams said. We would also

⁵ VII: EMC letter water tech certification- <https://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=140075>

recommend that DEM take that letter and go run it past other appropriate agencies, the HR Department, Finance, whomever, to go for it.

- Director's Informational Report⁶

1. Legislative update

I think we don't have any updates since our last meeting unless- the Secretary keeps a good job on keeping an eye on it, the Director said. I still believe some of these policies and procedures we talked about it could be legislatively driven. If anyone is listening from the State, we need to target the 49-homes policy. I know Erica, I've been bringing it since I started. If you recall, I brought it through the cesspool conversion working group committee with the State. There's certain legislative matters that we need to take at a State level and we need to have somebody capable of taking it and carrying that vehicle on and present it at a State level, start implementing changes. Otherwise the old habits will continue and if it continues the harder and more difficult our duties and responsibility become. Because I'm trying to stop the bleeding, and it's going to continue bleeding, it's going to get us more and more deep into wastewater. But we need to identify all the potential obstacles that could allow to stop the bleeding so we could focus on what we have and build better moving forward.

Jumping ahead on future agenda items, Chair Adams said, I'm going to try and see if I can come up with a theme for next meeting around, all right, let's start laying out what the policies and legislation are that we think we need to push for the next year or so.

2. Solid Waste Division Projects and Update

1. Recycling, Greenwaste, and Landfill Diversion updates

Congratulations to Craig Kawaguchi for his Supervisor of the Year award, Chair Adams said. And a lovely picture, fabulous lei, on the back of the Director's Report. So thank you for that and congratulations. (Mr. Kawaguchi was not present)

2. Solid Waste Operational Analysis update

Last we spoke, Ms. Shelise Lamb said, the Solid Waste Operational Analysis was going to be resubmitted as a Draft 2. In accordance with the contract the consultant requested for an extension of time with the Director and the Chief, they granted the consultant E2 an extension of time until November 25 to submit the second draft of the report.

3. Wastewater Division Projects and Updates

1. Pāhala and Nā'ālehu Large Capacity Cesspool Closure AOC⁷

Chief Sparber said we provided the notice to proceed for the Pāhala Collection System construction project. We're moving forward on that. We're starting to work with the contractors. Submittals are going to be coming in.

2. Hilo WWTP and collection system upgrades and extensions

⁶ VII: Director's Report - <https://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=140118>

⁷ VII.3.1: Ka'ū - <https://www.dem.hawaiicounty.gov/projects/pahala-na-alehu-large-capacity-cesspool-closures>

We provided an (intent to award) letter to our contractor for Hilo WWTP, Chief Sparber said. The way that those contract documents are put together is we can start getting their schedule, their subcontractor submittals, and then we look for actual award and notice to proceed in January of next year because we're going through all of the various steps as far as funding from Council and all of those things, but that is moving.

Regarding another project, the Hale Hālāwai SPS, the planning work is done, Chief Sparber said. I'm going to be receiving 100 percent bid documents on that project here the end of this week.

We have the various AOC projects, Chief Sparber said. The Pua SPS rehabilitation and the force main replacement, those designs are also progressing as well. The most recent operational repair that we had, it's really great to see is, we installed a new centrifuge at Hilo WWTP and we were able to, with this new centrifuge, put out 29 percent solids. And so there were various operational challenges during startup, but we're pretty well finished up with startup and so that will be an improvement in that facility, at least until we can get all the construction and rehabilitation done. So as far as major projects, I would also report that Kaloko, the replacement of Train 1 has been completed. I'm closing that project out, and Train 3 is online and working up in, in that facility as well.

Regarding the Kealakehe, the R-1 upgrade, Chief Sparber said we have two consultants working on the design of that project. So we have Engineering Partners, they're working on finalizing our sand filter design. And then we have R.M. Towill Corporation working on the overall headworks repairs as well as integrating the whole project to make sure it all functions. And so we're looking at the 100% bid documents, being ready for that early next year. We've had to do some environmental permitting work, some Section 106, some Section 6E work on that project. So trying to get that finished up, have a couple of letters and different things to get over to SHPD and stuff to get that closed out. the AOC requirement for that project is September of next year. Our internal goal was January of next year. But I think realistically, after all the reviews dealing with our own internal staffing challenges, we'll have that project ready for construction in April or May, which is still ahead of the AOC, but again, later than we would have liked.

3. Countywide AOC submittal: Preliminary Priority Ranking for capital projects⁸

I mentioned before the preliminary priority ranking for capital projects, Chair Adams said.. I just thought it was important for the EMC to see there is a very deliberate priority ranking process for what projects are the highest risks that need to be addressed and the kinds of factors that go into it. I thought was very well-done document and appreciated seeing it. I think you have really gotten to the point of nailing down your process. We have a question from Mr. Alan Fukamizu about whether we have drivers to operate the new trucks to haul sludge.

The answer at this point in time, yes, Chief Sparber said. But let me preface that- so on budget, Wastewater Division has been approved for an Equipment Operator III. So typically those "EO III"s generally exist within the Department of Public Works and also within our Solid Waste

⁸ VII.3.3: AOC submittal: <https://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=140076>

Division. I haven't been able to get that that EO III allocated yet. We are working on it, but at this point in time, Wastewater Division would be reliant on using Solid Waste. So for the time being, what I've done is, the Wastewater Division has a tractor that we're going to be using to pull the new trailer. And so until I can get that position allocated through HR, all the inner workings of the County, then, you know, Solid Waste will be operating that vehicle which is within their job description. They can do it and they'll be helping us once we're finished- (reading a question in the chat) - no, the new trucks and equipment are not sitting unused because solid waste will be operating those until such time that I'm able to onboard and hire the EO III that sits within Wastewater Division itself.

4. Wastewater Plans

1. Report by DEM on barriers to increasing public-private wastewater connections due to issues such as the *Konno decision* and other challenges.

Chair Adams said this agenda item was related to a request from last meeting to talk about when DEM is doing the Integrated Wastewater Management Plan and thinking perhaps the instructions had been given on where you draw the boundaries of what Carollo was looking at, in particular with the perceived actual barriers to what your options are, specifically the *Konno* decision, and any other challenges, and you had offered last time, Chief Sparber, to describe to us where you see the limits of your exploration of options.

In terms of exploration of options as far as the *Konno* decision for the Integrated Wastewater Management Plan, Chief Sparber said, we just need to keep in mind that anything that we are already doing as a County needs to stay that way. So potentially, our distribution of reuse water- CCH has a private-public partnership that they work with to distribute and take that reuse water. And so potentially, their Wastewater Branch is not necessarily involved in that. So with respect to our overall wastewater master plan, that could be one alternative on how the County could use a private-public partnership in distribution of, say, reuse water. Because we are not in the water distribution business per se. We just take and we treat wastewater. We do have the capability to produce R-2 at our Kaloko site, but at this point, we don't necessarily have a reuse water project that's ongoing. That's one thing. But as for the *Konno* decision, it's a challenge to balance because as a Wastewater Division, we have to perform. I have to haul sludge regardless of if I have a driver or not. We have to fix electrical problems, whether I have any electrician or not. We have to get creative in how we address that and still follow the correct rules.

I'm trying to recall, Chair Adams said, and if there is a different kind of angle to it, I think it was the issue of, as well, yes, you provide wastewater treatment, but you don't provide it everywhere. And so do you see it as categorically, it's the County that has to provide wastewater treatment, or it's the County's responsibility to keep doing what they're doing?

That's an interesting challenge, Chief Sparber said. It goes back to, yes, the County is going to keep doing what it's doing, but as we close cesspools, you're going to have decentralized wastewater treatment facilities? As we build and develop our vacant land, potentially you may have a decentralized unit that, has 400 or 500 homes connected to a package plant. And I think

it comes into the question of the Integrated Wastewater Master Plan of, what are the public expectations of the County? Is it important to the public that the county have a way to take this infrastructure as dedicable? So now the County takes that package plant as a dedicable, package plant, and now all the ratepayers are going to provide income for that. Is it fiscally responsible for the County to do that, and is it important to the public? I think that's something that could potentially come out through the IWMP public consultation.

And then there's the other side of, is that the direction that County administration wants to go? For me, I can't fully answer that question without taking into consideration the public's desire and also what is the Administration's and Council's, you know, desire and directives as well?

If I'm hearing you right, Chair Adams said, as of today, and the study that you've contracted with Carollo to work on the Integrated Wastewater Master Plan, you do not see that as a hard constraint at this time. It's something that's going to be a political issue for the future.

I think it very well will be, Chief Sparber said. it goes into, if you're dealing with a decentralized community, and that community is large enough and willing to meet the County's requirements for dedicable infrastructure, I think that could be a conversation that could be had. Additionally, on the development side, if you have a developer that comes in and is building homes, which we're drastically short of, again, that's a conversation that could be had. And I think that it is something the County needs to look at with respect to our master plan, because it's an alternative. I can't really make that determination but I mean I can't throw it out the window. It's definitely an alternative.

Director Mansour answered the question of whether *Konno* impacts the current plan and how are you going to navigate it. If the County has been doing anything within the County's restriction, we're going to continue doing it, but it doesn't mean we have to provide wastewater services to everybody in the County. Remember we have about 52 private waste treatment plants within the County so we are not the only entity providing wastewater. But we are supposed to maintain the wastewater collection and treatment to the people that we provide the service to. But if John Doe comes in, wants to build a new facility, he could do that.

Commissioner Perez was excited for this conversation and there has been a lot of work already done, and I'm equally as excited because I think the next component is going to be more of the "how are we going to really get there and make it achievable?" Within DEM and Planning there are plans for future and current things that are being redone and then there's also the Climate Action Plan that the County has come out with, and there is absolutely a wastewater and a reuse need highlighted within that Climate Action Plan that again is another County division that calls out wastewater goals and initiatives into the future. And funding wise, even from an EPA federal component all the way down to how you fund wastewater initiatives are really being driven with community voices and how can community and working community get involved and help work with their government in making these changes possible. Because I really hope that we don't just continue par the course of what we've been doing, because I think that it's kind of gotten us into a mess that we're now all having to wade through and kind

of find a path to, to something better, I hope. But look at those plans that another County division has put together because they do they call out for the need for reuse within these wastewater systems and there is a from an environment perspective a high demand for reuse as we've seen on Maui and the devastation in Lahaina. So I think that that's another way that we could utilize these plans that we've as a county- I see us kind of actually being ahead of the other counties in this regard with all of these plans. And so I'm excited to make them applicable and drive these plans forward to get the funding needed in all these inventive ways. But staying the course and keeping it as what we've been doing, is not really an option right now.

Just to let you know, Director Mansour said, what we are trying to achieve is policies and procedure from all these master plans. So that's where, you know, a new policy and procedure to understand the *Konno* decision and allow private waste treatment plants to connect residents within their sphere of influence, such as Puakō, for example. So these are policies and procedures. That's where we need to start implementing. All that discussion, he told the Chair, your question has really become policy and procedure of how to maximize connection with what you got from resources, private or public.

Vice Chair Norris said that these individual WWTPs are being operated by the private sector, but, she said, I have my feeling that the County should maintain a hand in the consistency of their operations because- well, I imagine you do have regulations that you monitor the treatment plans for. But I have a feeling that with the private sector, you will try to cut corners sometimes. That could be said for the County, too. But also look for experience in the mainland. There are lots of experienced and new innovations going on with wastewater treatment, and I'm sure you're keeping abreast of that as well. Thank you.

Director Mansour said that from a regulatory point of view, the Department of Health oversees our waste treatment plants and private waste treatment plants. So the County cannot oversee private wastewater treatment plants because they are all under the Department of Health. And they have to comply with the Clean Water Act through EPA and the State. So we are under the same regulation as the private entities as well.

The jurisdictional issues in this County drive me crazy, Chair Adams said. So it's DOH. And I think our responsibility as EMC and DEM is, if we see something that's not working, we say something. Is that the duty of the people who are actually part of that community to actually report problems?

The challenge here is we cannot police State waters, the Director said, and any wastewater whether private or public, eventually contributes to the groundwater, which is a State water, or the shoreline, which is federal. So we cannot police our own selves. So you cannot have the fox watch the hen house. That's why we have the process we have.

5. Status of existing staff vacancies and recent hires

Testimony of Alan Fukamizu: As far as the staff vacancies go, this Department has done minimal hiring or leaving the jobs postings open. The last time I previously, I think was- I could be wrong,

but prior to this last month, where they opened it, I think was last year. And, you know, nothing came out of that. You know, nobody was hired. I don't know how many applicants they had, but the issue is they can't even move up our own operators who get licensed, and they said they would, but we have one operator who got licensed in March and still hasn't been moved up, so he's not able to get the pay differential from going from an Assistant to a Grade I. And this has been a continuous problem. We've heard excuses, oh, we don't have HR. We don't have this and that. But, you know, that shouldn't be an issue. You know, something needs to be done about it because this is what's hurting people that want to move up too, is like, if you get your license, we have to wait till somebody from HR, be it one or even two years, to move you up. It took me, when I got my Grade II license, a year and a half. And that's after having to grumble about it and getting everybody else moved up, too. So, you know, this department is really lacking on just the fundamentals of this stuff.

Chair Adams acknowledged the comment and the written Okay, I think we hear your comment and very much appreciate it. We also have written testimony from Dell Otsuka relating to the extraordinary number of vacancies that exist at DEM. But before we go into more discussion on the topic, I think we need to hear from Sinclair Salas-Ferguson, our Deputy Corporation Counsel, and whether or not you recommend we go into executive session.

Yes, I think you should go into executive session, DCC Salas-Ferguson said.

Commissioner Otsuka asked why this particular item has to go under executive session.

I'm going to provide legal advice to the board, DCC Salas-Ferguson said.. So in order to protect that attorney-client privilege, we have to go into executive session and exclude everybody else but the board members or other necessary staff. So I think the Secretary would be a necessary staff that can stay in the executive session.

Motion 2, second, and vote: Motion by Commissioner Beets, seconded by Commissioner Acasio, that the board hold a meeting closed to the public pursuant to HRS Section 92-5 to consult with the board's attorney on questions and issues pertaining to the board's powers, duties, privileges, immunities and liabilities. Ayes 8: (Acasio, Beets, Garcia, McIntosh, Otsuka, Perez, Norris, Adams). Motion 2 adopted. The board subsequently entered a brief recess and then held an executive meeting for approximately 46 minutes.

Following the conclusion of the executive meeting, Chair Adams made the following statement pursuant to HRS 92-4(b): "We are out of executive session where we discussed with Corporation Counsel EMC's advisory authority regarding human resource issues."

As a result of that meeting, Chair Adams continued, we will close out the item on the status of existing staff vacancies and recent hires. And I will be working with Dell and Otsuka and Sinclair on an agenda item for next meeting, she said.

6. Questions from commissioners

1. Wouldn't it be faster to purchase the land for the Nā'ālehu sewer plant rather than use eminent domain? (McIntosh)

As far as buying it, it could be faster, Chief Sparber said. And by all means, if the seller wants to go that route, then that will greatly accelerate the process. But the eminent domain process has already been put into motion and is moving through Council.

That takes two years, Commissioner McIntosh said. I always think that would affect our time frame for meeting deadlines.

DCC Salas-Ferguson commented he has done eminent domain proceedings, and we only use eminent domain in the County when the landowner is not willing to sell it to us. So that's when we enact the eminent domain proceedings and it's relatively quick, to answer your question, Commissioner McIntosh. We go and survey what we want. We ask the Council to provide us the authority to institute an eminent domain proceeding. So we have to go get a resolution. That's pretty quick. We file a complaint in Circuit Court. We put a deposit for what the property is valued at. We have an appraiser appraise the property. If it's \$50,000, we put \$50,000 in the court, and then we can get possession of the property pretty quick. There's a mechanism where we can file an *ex parte* motion for possession of the land, and the court has to rule on that motion within 10 days, and they're required to. So it's not two years. It can be as quick as a couple months, depending on how fast the resolution gets through.

2. Is the Department of Research and Development putting together a Request for Proposals for Waste to Energy? (G. Adams)

Chair Adams said she read in the paper that R&D was working on a RFP for Waste-to-Energy of some sort and she wanted to know what DEM knows about it, if anything.

That's outside of what I've been involved in, Chief Sparber said. We can get back to you on that.

I'll defer that, Chair Adams said. And it probably warrants its own agenda item rather than be buried in a question.

VIII. FUTURE AGENDA ITEMS

1. Follow up on action items determined today.

Chair Adams said items for further discussion would be to look at policy, legislation needs, as might appear in previous pretreatment code, wastewater code changes. She would work up some kind of agenda item around that, maybe more broadly, as we look at next year's legislative activities. What might we want to start recommending?

We'll have a couple other items that we've discussed, the Chair said. If there's anything any of you want to bring up for next meeting, just let me and the Secretary know and we'll try to come up with a decent statement for you to see on the agenda.

2. Other (Commissioners may suggest items they would like placed on the next agenda.)

Commissioner Acasio wanted to know more details about DEM's potential or involvement in the Waste-to-Energy project, or when that will eventually switch over to DEM and a timeline on that, but also if there's any involvement with DEM and conversations on a recycling plant on island, public or private.

Responding to Commissioner Otsuka's query, Chair Adams said she would be working with her on an agenda item around new ideas for Human Resources for DEM.

IX. ANNOUNCEMENTS

The next meeting is scheduled for Wednesday, November [20] 27, at the Puna Conference Room of the Hawai'i County Building, and via Zoom. Please contact the Board Secretary or review the agenda posted on the County Calendar within six days of the next meeting for confirmation.⁹

The Secretary noted that due to a conflict with the Council meeting on November 20, the next meeting will be changed to Wednesday, November 27. There was no objection.

Commissioner McIntosh said he would show up in person, bring his photographic equipment, and take a picture of whomever shows up, and you all can have it through email.

Chair Adams said she would try to make sure we have some lunch available. Especially if this goes on as long as this meeting, we will have some lunch provided. It will be the "swan song for Chair Adams and Commissioner McIntosh, she said. Although technically, we can carry on for another three meetings, but I will not be the Chair. So all of you start thinking about whether or not you want to be the Chair next time. And back to one of the conversations we probably shouldn't have had in an executive session, how you would like to define or set goals for what you want to accomplish with EMC next year. So that could be our lunchtime conversation. Anything else I'm forgetting? I guess not. Thank you very much. Great conversations. No great answers. But we're moving forward. Things are happening. Congratulations to DEM on getting monies and actions started relative to the wastewater challenges you have. So thank you. And we really appreciated the Carollo presentation. I think that was very valuable. And we'll probably have 59 different questions we'll bring up for next meeting. So thank you all. Aloha.

X. ADJOURNMENT

Motion 3, second, and vote: Motion by Commissioner Acasio, seconded by Vice Chair Norris, to adjourn. Ayes 8 (Acasio, Beets, Garcia, McIntosh, Otsuka, Perez, Norris, Adams). Motion 3 adopted and meeting adjourned at 12:56 p.m.

Respectfully submitted,

Peter Sur, Secretary

⁹ VIII: Hawai'i County Calendar: <https://www.hawaiicounty.gov/our-county/county-calendar>