

**ENVIRONMENTAL MANAGEMENT COMMISSION**

**COUNTY OF HAWAII**

**MEETING MINUTES – VOLUME I**

**Wednesday, April 27, 2022**

**9:05 a.m. to 3:44 p.m.**

**West Hawai'i Civic Center, Kailua-Kona, and Zoom**

Commissioners present:

Georjean Adams, Chair

Rick Gaffney, Vice Chair

John Burns

Melissa Cardwell

Dee Fulton

Lee McIntosh

Jon Olson

Elyse Robinson

County staff present:

Ramzi Mansour, Director

Sanne Berrig, Recycling Coordinator

Peter Sur, Secretary

Chris Sparber, Civil Engineer IV

Chris Chin-Chance, Recycling Specialist

Chris Laude, Civil Engineer V

David Thomas, West Hawai'i Superintendent, WWD

Toni Nakatani, Highways Superintendent, DPW

Robin Bauman, Business Manager

Sinclair Salas-Ferguson, Deputy Corporation Counsel for EMC

Cody Frenz, Deputy Corporation Counsel for Appellee Mansour

Amy Miwa, Legislative Assistant, Council District 2

Others present:

David Henderson, Richard Henderson, Richard "Ritchie" Henderson II, Nancy Cook Lauer,

Michelle Sorenson, Others

**1. CALL TO ORDER**

Chair Adams called the meeting to order at 9:05 a.m.

**2. APPROVAL OF MINUTES OF MARCH 16, 2022<sup>1</sup>**

**MOTION, SECOND, AND VOTE:** Commissioner Robinson moved, to which Vice Chair Gaffney seconded, to accept the minutes as presented. Ayes 6; (Cardwell, Gaffney, McIntosh, Olson, Robinson, Adams); Absent 2 (Burns, Fulton)

**3. STATEMENT FROM THE CHAIR**

Chair Adams said the County has been having technological issues with Zoom meetings, and if we have a glitch, we'll take a break and we'll try to reconnect. And if we can't reconnect within 30 minutes, we'll phone in. We'll just cross our fingers. It's all going to keep working. So thank you.

**4. PUBLIC STATEMENTS ON ITEMS ON THE AGENDA**

No statements from the public.

**5. UNFINISHED BUSINESS**

- a. Status report on 2022 EMC Commissioner Priorities – Each commissioner may provide a *brief* update, if applicable.<sup>2</sup>

Vice Chair Gaffney reported that the State is anxious to proceed with sewerage Honokōhau Small Boat Harbor, but unfortunately the County is unable at this time to say when the North Hawai'i pump station is going to be online. And so that's giving the State pause because they don't want to make the connection from Honokōhau. They're also reconsidering whether they want to put in the return line to the wastewater treatment plant because they're concerned that there may not be R-1 water available for quite some time. So the lack of any kind of certainty on the County's part is now making the State concerned about spending money now and then not being able to do the hookup. So it's kind of a frustrating situation because we convinced the State that it was essential that they go ahead with getting away from the injection wells that have been used at Honokōhau since it was built.

Commissioner Fulton said she emailed the Director and finally got established that she can directly reach out to David Thomas. He would be the best person to get the chloride data that she has been seeking for over a year. She had not reached out to David Thomas, but within her district there is a sewer project on Ali'i Drive right along the sea wall. She assumes that that repair is probably overdue and that we have some corroded iron pipe or something going on there. She is happy to see that this work is going on to reduce infiltration of sea water and potentially exfiltration.

Director Mansour asked if Mr. Thomas could give his update, to which the Chair concurred.

Mr. Thomas, the West Hawai'i Superintendent for wastewater operations, introduced himself. He oversees the nine pump stations in West Hawai'i along with the three wastewater treatment plants, Honoka'a, Kaloko, and Kealakehe. Last week we started doing what is called CIPP, Cured In Place Pipe repair, he said. And so, we were able to finish from the pier back to

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<sup>1</sup> Agenda 2 - Minutes: <http://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=115752>

<sup>2</sup> Agenda 5a - <http://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=114388>

The Fish Hopper restaurant, 36 feet. We did some televising at low tide just to see how much water we might be dealing with at low tide when we were doing this work. And so we came out with some chloride levels. And he would love to share that with the Commissioner. If she wanted to come by or if he can get an email address, we can share them. It was kind of interesting. So we're pretty much finished from Hulihe'e Palace to the pier. We only have a very small section, about 10 feet, that we have left that we need to do this repair on. But it's the higher section of the pipe. We pretty much got anything that was in sea water at high tide. And we are feeling positive about it. There are some other issues we might be looking at as a source of chlorides. And we're going to start investigating it. We're going to find out where it's coming from, and we're going to seal the pipe up, if it's inflow and infiltration, whatever it is, we're going to find it. We're looking for it now, actively investigating our sewer pipe to see where it's coming from. Also, we're going after fats, oils, and greases that we weren't really doing before, as aggressively as we should have. It's good quality effluent. And the sand filters are coming. We have a site. So, yeah, we're pretty jazzed over at the wastewater, he said.

Commissioner Fulton thanked Mr. Thomas for the update, and looked forward to meeting him.

Mr. Thomas shared a diagram on the screen and explained the work being done on Ali'i Drive.

Commissioner Fulton asked about a rumor that the lateral serving the King Kamehameha Hotel had been dug up and replaced. Was that true or not?

No, Mr. Thomas said. They've done some things when they were renovating, and we're trying to figure out everything that they did. And we're going to start trying to get into the King Kamehameha Hotel and talk to the management and see if we can figure out what's going on. The high chloride levels are coming from that area is what we've determined since we started doing more testing on it, because if we seal from the King Kamehameha going south and we still have high chlorides at our Lanihau pump station, where is it coming from? It's got to be coming from the King Kamehameha Hotel, the county bathroom, the showers. So we have kind of a couple of different sources that are over there that we need to start identifying and start doing lab testing on, and we're going to determine from those service laterals which one is giving us those higher readings.

You can kind of see if you look at (the diagram) toward the front of the King Kamehameha Hotel, that red line is our gravity sewer line, and it's part of the beach, it's part of the restaurant, it's part of the pool, Mr. Thomas said. So it's going to be a very delicate time to work in that area. We need to wait for the tourist season to die down just a little bit so we can get in there and maybe do some more things. I don't want to stop their operations if we're going there and start doing something, he said. Then we're going to work with their engineering department because we already do. We're going to find it. We've already got the video along Ali'i Drive, and we've determined it's not as much there as it is someplace else.

We have a pump station behind West Hawai'i Today that takes care of everything from the end of the hotel there to the back side, which would be Kailua Bay Resort and the Honda dealership,

West Hawai'i Today, and then Kailua Bay Resort. They have their own pump station and they pump to us. And that's another source that we're looking at for chlorides.

But you get eight different pumps, so you get eight different readings of chloride. So you just got to figure out which lateral you're going after. We're going to go after that. We did do a new pump station behind West Hawai'i Today that was one of our oldest pump stations. It went in the ground in the 1960s, Mr. Thomas said. So this past year we just did a refurbishment of that pump station, and now we're going to go after once we secure pumping and mechanical, we're going to start going after sealing up the pipe there also. We think we have a little bit of it coming through the manhole covers on the side because there is a lot of standing water. If you get back in there, that water level is only about a foot below ground. That's saltwater.

b. Status report on action items from previous meeting

a. Next steps for exploring distributed composting

Chair Adams said that one discussion topic from the previous meeting that came up was about the composting facility, and the fact that the contract with Hawaiian Earth Recycling is presenting some communication difficulties on behalf of the Department. Nevertheless, it seemed that it might be worthwhile to line up again discussion about, if we work out something with HER, what are the next steps for looking into how we do distributed composting, or decentralized composting, which is kind of the flavor of what everybody is thinking would be useful on this island instead of having one facility, one faraway place. Back in December, December 16, 2020, Michael Perrone gave a presentation and he made several different recommendations during which he discussed what would be necessary. And he was recommending at the time to establish a pilot program, looking at how we can set up processing, making compost, collecting data for how much is going in and how much is going out from each individual location, developing standardized best practices for safety and technical aspects, developing a network of stakeholders, collectors and processors, and coordinating between the County and State to establish clearly defined regulatory avenues for all sectors. There is some state legislation which may impact some things that we could do, and we'll hear about that a little bit later. The last thing he recommended was doing a needs assessment and asset mapping, and those were all short-term aspects. Long term, he liked the idea of innovation hubs, resilience hubs, to help do the coordination, having multiple processing facilities and funding education. So those are recommendations. Are there some next steps that we should begin looking at for, if we do want to go to decentralized compost facilities, what's the next steps?

Commissioner Cardwell said her takeaway from the last meeting was that the contract with HER is one of the main things that's kind of prohibiting our ability to move forward with this. So it seems like that needs to be addressed first, because the contract with HER is for another 30-some years. And until that's resolved, her understanding is that we kind of can't move forward with the decentralized composting idea unless somehow HER were involved in that. If the plan were able to evolve past this, having one centralized location, if HER were involved somehow in helping the County to create a decentralized composting system, maybe that's a possibility. But

we don't have any information about what's going on with HER because of the possible litigation.

Chair Adams said part of that depends on what the position is of the County, relative to how much the HER contract blocks us from even thinking about another facility for composting. We do have some private composters going on and exploring the ideas or the components which were complex, as Mr. Pierron laid them out. Chair Adams would hate for us to waste time that we might have for looking at just feasibility in general. What would it take? Is that such a high hurdle that we should forget it, and be back to the same place with HER? She does not know that we've examined it in enough depth to be able to say one way or the other, is this something that we do want to begin exploring seriously, or we can put it off for another decade, or two, or three?

Commissioner Cardwell said the public has made it clear that this is what people want. It's just the bureaucratic red tape that seems to be the issue.

Commissioner Olson said the fact of the matter is that if you overlay this with the population explosion and certainly in Puna that is going on, it's just going to crumble under its own weight. We have to find other options.

Recycling Coordinator Sanne Berrig said we are in the final throes of waiting to hear if the County, with its coalition, is going to be awarded a pot of money from the Build Back Better challenge. One of the components that we worked with has to do with a partnership between Mā'ona Gardens and Evan Lam. If we are awarded that, part of that has to do with actually starting doing scoping work, looking at the island as a whole and looking at resource districts, and where would be logical places to expand and develop decentralized organics collections. She hesitates to use the word composting at this point, because when we start looking at composting facilities, we're looking at huge amounts of capital. But we're supposed to find out something within the next month and a half. This is a completely separate matter, but it's looking at a decentralized system, so to speak, of processing organic waste.

Chair Adams said there's also been a comment about providing more resources and technology, big drums, for example, for home composting, which would not involve HER at all or the County, even in terms of collection activities. But the idea is about education and getting individual homeowners better ability to do their own compost.

Ms. Berrig said the County had that Earth Machine composter program, 10 or 12 years ago. They handed out the Earth Machines, the home composting systems, and she could not remember if they require the recipient to take some sort of a training, but that's something that we want to put in place. The Deputy Director and Ms. Berrig are working on looking at grants to get money to start up that program again. Kaua'i County uses it as part of their organics management because they capitalized it out over 10 years, and it's costing them maybe \$8 per ton. They give out the containers, they figured they're going to last 10 years and through attrition and breakage, they're still very active. And that's part of their actual solid

waste management program because of the cost, \$8 per ton. So that's something that not only has the added benefit of educating the public about the importance of keeping food waste and organic waste out of the landfill, it's also a great way to save money. We are actively looking at finding money to reboot that program again, she said.

If you look at the design components of the Ka'ū Transfer Station and the Pāhoa Transfer station, there were spaces allotted in those designs for composting commercial land otherwise to be done there, and those elements were never fulfilled. So they're already on the books, Commissioner Olson said.

Chair Adams suggested keeping this as an item on our agenda for follow up, about what the status is, for the HER contract negotiations and other activities like supporting the home-type or other private-public partnership types of activities. It frustrates her that we haven't made more progress on composting so far.

**b. Clarification on used battery collections – DEM website and beyond**

Chair Adams asked Ms. Berrig to discuss about how batteries of various sorts can be handled in the County, and what clarifications can be made for statements made during the March 16, 2022, meeting.

Ms. Berrig, the Recycling Coordinator, said we get a lot of phone calls with people uncertain about the collection of e-waste as opposed to household hazardous waste. And there is some confusion because there's a slight bit of overlap. Mr. K's Recycle and Redemption has a pilot program that takes alkaline batteries, and we will look at the website to see if there's anything that we can clarify. Mr. K's started a pilot program for alkaline batteries this last year. It's just the basic little household batteries. Those batteries are not considered hazardous anymore. If people ask us to put the alkaline battery in the landfill, we say yes, but besides that, we do prefer that they bring them in to be recycled.

Home Depot does take rechargeable power tool batteries. As far as e-waste, the only type of batteries that are collected are in a computer or built-in a in device. E-waste does not take separate batteries, she said.

There were comments about the large auto and solar lithium batteries. Our state is super progressive in a lot of environmental stuff, but we're also kind of slow and getting things through. The state legal requirements for take back only applies to lead acid batteries. We hope to get that changed real soon, Ms. Berrig said. Large lithium batteries, as you well know, are extremely hazardous and very costly to recycle. That's one thing we want now that this session is starting to wind down and start working on more aggressively with our legislators, to bring up some more legislation that addresses some of this, to not have it be a cost that is covered solely by taxpayers. As a pilot project and to gauge the current demand, the household hazardous waste contract will accept five automotive lithium batteries per year included in our event price. We do it per event. The additional cost, though, per unit is \$50. We would much prefer to see that cost collected when a car is sold or somehow like that. It's similar to the advanced

disposal fee because at the end of the day, as she is always complaining about, we end up bearing the cost for this. Same thing with the ADF glass that didn't get far the session gain. We're collecting glass based 28-year old collection fees. So we'd like to see something. And she does not know if this goes within the County or is something that we can be looking at, but collecting upfront is easier because it's really impossible to get the money after the fact. But if you're spending \$40,000 on a car, then let's take \$50 or \$60 of that, set it aside so when you want to get rid of it or change out your battery, dispose of it, the taxpayers don't have to bear the cost, Ms. Berrig said.

Regarding the e-waste and household hazardous waste collection events in Ka'ū, currently we have two in Kona per year, two in Hilo per year, and then one in the spring in Waimea and Pāhoa. We suspended the e-waste collection at Wai'ōhinu. There was a lot of advertisement, but there was a really low turnout. And then the last household has this waste in Wai'ōhinu was in 2011 and 2012, the same thing. We did a lot of advertising and low turnout rates. We will revisit that again, probably not this year, but next year because of cost. We're still in pain from the COVID costs. We realize the population is growing. But the last time we did that it was a super low turnout. So we just are forced to have it with the highest population areas we did have. I think it was a year and a half ago. We had a little bit of money left over and so we did a quick emergency e-waste collection in Waimea because we wanted to spend the e-waste money that we had. So we quickly did one, got it out there.

Commissioner McIntosh asked if it were possible, rather than just having a single collection point on that particular day, to collect from the other transfer stations and then merge it all together at your main collection site. This is mostly about electronic waste because you're more likely to have a computer or TV to toss than you are with the hazardous waste.

Ms. Berrig said that would be ideal, but it really gets into storage. It would never work for the hazardous waste because our contractors come over from O'ahu. But as far as the e-waste, there's just not space. Then if there are vandals that get in and break it and you have problems and having it on site, it would have to be (secured). It's something that has been looked at, but there's just not the space. And she doesn't even know if storage is allowed for the permit.

Chair Adams said it could be an issue because a lot of electronics now have lithium batteries. So having a pile of lithium batteries sitting in a hot transfer station in a bin some place until we can get around to collecting it on a monthly basis or whenever the volume makes sense, could present a hazard.

Chair Adams asked if there were other questions on the battery issues that Sanne was going through. She liked the idea of going back through and looking at the website and seeing if there are ways to clarify it for the general public. She had commented to the very first Environmental Management Commission meeting that she attended as a new resident that having a bucket or a box or whatever where you throw all your alkaline batteries is probably more hazardous than just pitching them couple at a time in the trash because they do leak. They have acid in them. It's not hazardous if you get some of that, you'll wash your hands and you throw it away. But if

you pile it all together so that they're kind of cooking, you are creating a hazardous waste. So you need to be careful and think about it. It's not easy. It's not necessarily intuitive, Chair Adams said. And once again, it goes to our challenge on education and communication. How do we get the word out?

Commissioner McIntosh suggested that the website is a little confusing to find information. It would be helpful to have a page dedicated to listing, if you have this, this is either the business you can take it to, or this is a place you can toss it at because he has had to contact the Secretary try to get some clarification. And it's not simple.

Our website definitely needs to be updated, Ms. Berrig said. She is in communication with our management looking at ways of redoing. She would like to see a search field and you just type in what you have or there's a list of A to Z, and then you click on that and then it takes you to what your options are. There is a lot of information on the website and we have just not had the opportunity to end the resources to redo it.

c. Preventing fires at the East Hawai'i Reload and Sort Station.

Thank heavens nobody got hurt in the last fire, Chair Adams said. But it was a problem that isn't going to be resolved immediately. We need new trucks. We've got permission to get the trucks, but they aren't going to show up for a long time. So what are we doing today to make sure that we aren't going to have another fire at the reload station?

Director Mansour said it was unfortunate we had the fire, not only because our trucks broke down, but also we were not able to contract with a third party because of the *Konno* decision. We had a meeting with the union members prior to the fire because we acknowledged in a meeting with them that spontaneous combustion could be a result. So it was a health and safety issue, and we brought it to their attention. But somehow they drew that line where we cannot get a third party. Unfortunately, two days later, the fire happened because of spontaneous combustion. Hopefully, moving forward, it is about health and safety. And he spoke with the Mayor and our Corporation Counsel and the Department of Health, and we would take the risk on hiring a third party because, having a fire, it could have been way worse than what happened. It could have hurt our employees, it could have damaged the entire building. Thanks to the Fire Department and some of the staff who noticed it early in the start, they were able to go there and put out the fire. It's a challenge, but we are trying to work with everyone so we could do what we need to get that waste moved from the east to west. And we're going to continue working with everyone, but we may be faced with challenges as well.

Chair Adams said dealing with health and safety is critical, number one. We went through all the rounds on the trailers going in, it's a safety issue. But this one is a fire, and we had one. So it isn't a hypothetical issue. We had a fire. It is reasonably expected if you have piles of waste that you're not quite even sure what else is in there, you have got to be moving it constantly so that there isn't a large quantity there. And the *Konno* decision is on her priority list. And so it particularly aggravates her to hear that as the excuse. Chair Adams wants to emphasize, that putting our employees, putting other employees, the firefighters, at risk because they won't let

us hire anybody to do an emergency action to remove the waste is unacceptable. And she thoroughly supports “just do it.” And if they sue, you've got a perfect argument to make in court that you're protecting life, immediate risk to life.

Director Mansour said we did hire a third party hauler during December 2021, and we got a letter to cease and desist from the union's attorney just a day after we hired the hauler to move that waste. So we have been through that route before where we had a cease and desist order from their attorney. And just to get a contract, that must go through our Department of Human Resources to approve the contract.

Chair Adams asked if there are emergency procedures when it's an issue of imminent risk.

We talked to our Corporation Counsel as well, Director Mansour said, because it is a health and safety emergency. It's just a challenge to deal with what the union laid out in comparison to what we need to do. From the last cease and desist order, it seemed like there was no appetite to do it. But now we have a fire, we had better build an appetite to move forward, because that fire could have really hurt some of our employees as well.

Commissioner Olson said when they built the facilities that are being used now, the question of a fire suppression system was brought up and fell on deaf ears. You would think that the union also could have weighed in on that one, right? Because it's their workers that it would protect but they didn't get a lot of help.

Commissioner McIntosh asked if, when it comes time to renegotiating the union contracts, could the Mayor push for some kind of emergency clause that when something like this happens or potentially could happen, that you have the freedom to hire a third party temporarily? Because otherwise, then why isn't the union helping to solve the problem? If they're going to keep you from fixing it, then they should fix it, he said.

Director Mansour said they anticipated DEM to have more equipment, more staff, and their point of view is, well, you guys should have had twice the amount of equipment. So if you break down, at least you have a spare. But that doesn't work that way. But they definitely see the world in a different perspective from we do running the business. That's going to continue. It's not an easy fix. It's a Supreme Court decision, but we're going to continue navigating through it. That's the reason we had the meeting with them prior to the fire happening. It's just to say, hey, how could we work together to get it done?

Commissioner Cardwell asked if there is a possibility to put a clause in the collective bargaining agreement to say that in the case of an emergency, it is possible for DEM to hire a third party. Is that possible? When do the union contracts get renegotiated?

Director Mansour said it is more of a Corporation Counsel issue because they look at the definition of an emergency. The Mayor has to issue a proclamation to be able to declare it as emergency. We tried that route because every day we deal with health and safety issues to the

public, whether it is wastewater or solid waste. We try to sit down with the union and talk to them, but they look at it as a court decision, and even our own County looks at it as a court decision. So, you cannot renegotiate it back with the union because the court has spoken, right? It's complicated, we have been trying to work on it since we started. That's why the Mayor tried to do that public-private partnership bill that we tried to pass for the last two years to allow us, even in the wastewater, to be able to navigate through public-private partnerships to get us through some of these emergency and health and safety issues as well.

Chair Adams said her concern is that there are degrees of risk. And when we're talking about the likelihood of fire from a pile of trash that isn't being managed appropriately, i.e., moved out and put into a sanitary landfill with cover, that's at the extreme, you're heading toward 100 percent risk as opposed to other risks that we're dealing with. There are low-level risks and there are other risks, like the potential for fire, that are much, much higher. Today we have a high risk we need to deal with. She doesn't know if it would help in any way to have the Commission to write a letter to Corporation Counsel, or if we are just hearing commentary today; something like, this is important and fight it, take it to court if you must.

Director Mansour said if it happens again, our intent is to get a third party.

## **6. NEW BUSINESS**

### **a. EMC recommendations for:**

#### **a. Priority topics for the new Information & Education Specialist position.**

It looks like DEM is going to get a new position for public information, Chair Adams said. How soon that person is going to be able to be hired and show up and start working? It's going to be a while, but the Chair would like to talk about or provide some guidance from EMC on what are the issues that we think ought to be assigned to that person as soon as he or she shows up. One, obviously, is going to be the outreach to any community that's going to be affected by significant projects that DEM is working on, including Pāhala and Nā'ālehu, but also Ali'i Drive activities and whatnot. But are there some things you can start thinking about that we think there ought to be strong focus for that wonderful person that's going to do all education and all public communications in his or her spare time?

Director Mansour said it's going to be one person to start and he or she is going to be working with our IT staff as well to figure out how we're going to manage our website, social media, how we're going to start improving on the outreach as well. So hopefully that person doesn't get burned out and quit on us. But there's going to be a lot of work. Usually once the budget is approved, by July 1, we'll go out for recruitment. And his experience is that things will take time. Look at the Planner position. We got it approved last year just when I started, he said. We still haven't secured a planner. It has been a year and a few months. It took that long. And finally we were able to do some interviews. We offered the position to one of our current staff. She's going to start May 1, but it took about a year just to secure that one vacancy. So we have got to be optimistic.

Chair Adams said her perspective is that it isn't a huge rush for us to give the definitive list, but she would like to start thinking about, what are the areas that we see on behalf of our constituents that we need to get information out? She went back and looked at the integrated solid waste management plan, which but every other paragraph talks about education and outreach. It was the No. 1 priority that SWAC put out, and it was across all sorts of aspects. It was to talk to the public and raise awareness. And that was where her questions that we are deferring (to next meeting) on how much does it really cost to dispose of waste, to recycle something? And it varies by depending on what material you're talking about. Recycling is taken to the transfer station, which right now costs zero dollars upfront. It's hidden to a degree in our property tax, but most people look at it as free service from the County. So part of our challenge is to educate the public on, there is no such thing as a free lunch. You're paying for it. It's costing money. It's taking the County a lot of effort to make sure that they handle the materials that you're either flushing down the drain or disposing of. But that was part of the reason she asked to start thinking about what it is we need to do. We need to generate more revenue. We need to educate people on why it's worth more money to support the activities that go on. We've talked many times about recycling and people don't know where to go. They don't know what to take. We talked about batteries. There are lots of areas around that just to let the public know what they could do today, much less what they're going to do after Ms. Berrig gets done fixing everything there is to fix in the recycling business. There were other educational activities listed in the integrated solid waste management plan, not only to the public, but also to businesses and particularly small businesses, and how they can reduce the generation of waste in the first place, doing audits, et cetera. So there are several different things that she put on a list, and if you have some additional ones, bring them to the next meeting or you can email them to me, Chair Adams said. She will add them to the list and hopes that we would have time next meeting to talk about ideas, but be thinking about it in the wastewater treatment arena. Again, you've already got it high on your list to do public education, particularly for the communities that are affected. But in general, again, consider the true cost, not only the economic cost to the county, but also the environmental costs of the need for wastewater treatment and what happens to our waters when we let it go. And if there's some other comments people have of things that you think are big holes this new person would have to cover.

Commissioner Robinson asked if this will be a permanent position. The Director said he is hoping it is a permanent position.

Commissioner Olson said his biggest concern is the complexity of getting your solid waste to some place, being that in Puna, basically, you're invited to get onto the deadliest highway in the State and drag your trash with you when you go. And we have been trying since Day 1 to get more availability within the subdivisions. If it isn't going to be a trial by combat, you're far more likely to get people to be cooperative. We've got to get them on our side all the way. And the only way you're going to do that is to make it available. His experience, at least in Puna, has always been that issue is, I've got to get in a car, spend gas and time, and risk my life doing it.

That's not what the new position is going to address, Chair Adams said. What the person is going to address is, there's a need and here are the solutions for it. And, oh, by the way, it's going to take work from all of us to make it happen.

Director Mansour added that at the last meeting he mentioned having given the offer for the solid waste division chief. He had some bad news to report: The person declined to offer. We offered the position to two people and both of them declined due to logistics moving from different place to here, and the cost. The cost of living here keeps going up. And it's hard to recruit. We are back to the drawing board on recruiting. In addition to that, we asked for either \$300,000 or \$500,000 to do operational planning. And we were granted that money for FY 22-23. So once again, the Mayor is listening to our needs and we understand we have a piece of the pie that we share with everybody else's. But the good news is we are getting money to do more of the operational planning for the solid waste and also to assist us on whether continuing the landfill is the way to continue operating our facilities. That current landfill could cease operation in 15 to 20 years. So we need to start planning now so we don't get in the same predicament as we were when the Hilo landfill shut down, because it takes about 12 years to site a new landfill. We need to start looking at that now so we'll have a better plan moving forward.

Chair Adams asked commissioners who have any other comments about topics for the information specialist to bring them to her attention to be discussed at the next meeting.

b. The Integrated Wastewater Management Plan to address long-term budget planning issues.

Chair Adams said the idea of developing an integrated wastewater management plan was something that looks like it is going to be approved. She and Vice Chair Gaffney had put together some thoughts, and wanted to share them for discussion. And DEM can hire a contractor to put together those individual pieces. But the two thought there are some key parts that need to be upfront and part of that master plan, specifically: a vision statement. What are we working toward? We have commented before to DEM and the Council that we really would like to see a mindset switch to water resource management rather than wastewater disposal. How do we manage that chunk of the life cycle of water for the benefit of our County and environment? So as an example, we could have an aspirational goal. It's kind of the zero waste concept of no contaminated water. Now, DEM does not have jurisdiction over all water that gets released to the environment. So, looking at it more within the charter of DEM is that, DEM practices sustainable wastewater resource management on Hawai'i Island or that we're integrated with water supply, with agricultural use, with all the ways that water gets discharged to the environment. We don't want contaminated water escaping into the environment. That's kind of the vision statement of what everything should be working toward.

And then maybe some guiding principles, such as: Applying a life cycle assessment to minimize adverse effects. It's a sustainability issue, water resource management versus wastewater management. Being affordable and reliable. Don't over-engineer things. It's kind of the concept that is sustainable both financially as well as from a health and environmental standpoint, that

it factors in expected growth, that it's got continuous improvement as part of it; and that you're going to work with public and private entities to achieve those goals.

And then the bulk of the integrated plan being how you're going to do that, and assessing the different areas we've got, every area on the island is different. We don't have a single solution for anything. And so going through looking at population, looking at land use, looking at the facilities we already have on hand, having sections that evaluate what we've got now, what we think we need, where the capacity is going to need to grow, issues around financial feasibility and regulatory compliance, and then another section that would look at alternatives for collection and treatment systems, and evaluate that by the different districts, and then go into the more nuts and bolts that I think you're more overwhelmed with right now, and that is facility-specific plans. And to look at those in terms of current system improvements, needed repairs, etc. And then 5-year, 10-year, 15-year improvement plans, have a section on financing and funding options, a section on opportunities and challenges, including partnerships, legal issues and jurisdictional issues and social issues, and then conclusions and recommendations, and then have an appendix that has every one of the facilities and all the gory details that you're dealing with.

So it's kind of at that level of guidance of what are the important components and how the individual facility plans integrate. Chair Adams said when she listens to the presentation, what she doesn't want to see is that the integrated plan is just a staple together of facility plans. It needs to be in a larger context of this is how we're looking at managing wastewater and why we're going to do what we're going to do, how we're going to get there, and then go to the detail of the individual operations. What kind of context would we like to see in an integrated wastewater master plan? She asked the Vice Chair to add more.

Vice Chair Gaffney said it has been set up now so that the EMC Chair and the Vice Chair meet with the Chair and the Vice Chair of the Regenerative Agriculture, Water, Energy, and Environmental Management Committee (Tim Richards and Holeka Inaba, respectively) on a regular basis. And this idea of an integrated wastewater management plan came out of that meeting, and it came out in kind of an odd way. Council Member Richards basically said, why doesn't the Commission create the wastewater management plan for the County? Vice Chair Gaffney pointed out that none of us have the educational background or the depth of experience to do something like that. That was obviously a task for a qualified consultant. However, he and Chair Adams took it to heart and immediately started Googling wastewater management plans for other municipalities around the country, around the world, and got some good ideas from that about where this should go. The Vice Chair said we don't want to be the wastewater management planners. That's much too big a responsibility. But what Chair Adams has set out here is our perception of a broader starting point, and certainly everyone should participate in that in the future and ideally in the long run, we end up with a consultant. Vice Chair Gaffney's hope is that EPA will recognize the value of this County setting down in writing timelines and cost estimates and the kind of long-term recycling sustainability program that we want to have in this county. And the EPA potentially will come in with money to support this planning process as well. So that may be a pipe dream, but he really hopes

something like that can happen to support this effort because it's logical. We have a solid waste management plan. We should have a wastewater management plan too.

Director Mansour said we had a community meeting with the Puna district. We had \$2.2 million that was through the U.S. Economic Development Administration to look at the feasibility study for the potential of getting wastewater services to that district. In addition to that, in Puakō, we got the \$1.5 million released from the Governor. Plus we got about \$300,000 from County matching funds. We're going to end up doing more comprehensive wastewater plans. So the the \$500,000 that we budgeted is not enough, as you know, based on what Chair Adams' list is. So our goal was to get that \$500,000 in addition to the other decentralized areas and make a big master plan out of all that, because it's definitely different areas. So, going in with the \$500,000 to bring all the other studies together and put a more county-wide wastewater integrated management plan, or master plan is the intent where the \$500,000 is going to come into play. But having the \$500,000 do a countywide integrated plan, technically it's not enough money and we probably could not have gotten any more than the \$500,000. But with the idea that we're going to capture and maximize the usage of the other plans, then we could put them together and that become our integrated waste management plan islandwide.

Director Mansour continued: So that's some of the challenges where on the east side. We're going to look at the possibility maybe from Kea'au all the way down to Hilo. Maybe you run a sewer collection system with a force main and bring it to Hilo rather than start a different facility for the entire district. So we're looking at multiple options. AECOM is our consultant. These discussions started. We did presentation to Ashley Kierkiewicz's and Matt Kāneali'i-Kleinfelder's district. So that's going to continue. There's so many parts in motion as we speak, but the end vision is trying to create that countywide integrated plan or a master plan, at least with the amount of funding and the resource we have in addition to your vision.

The administration has tasked us to start looking at strategic action planning. And so we revisit our vision and mission, our core values and definitely our vision, we need to share it with you because our Department's vision is going to drive everybody else's visions as well. We need to make sure that we capture some of your vision. But the vision that we came up with is to convert materials recovery from solid waste and wastewater into energy and agricultural sustainability, the Director said.

So our goal is, from solid waste and waste management, we deal with a lot of the resources that we could put back in the economy. And part of it is if we could capture the methane gas into electricity or extract the hydrogen from it for transportation, that would be a win for us. But that's the vision to get there to become sustainable and stop landfilling and start capturing these resources, either through material recovery or some type of recovery that we need to start thinking about. We don't have soil on the island. The mulch is a high (value) commodity. Our sludge is also considered a high value commodity, but now it's going to the landfill. So as part of the Hilo design, we're looking at how we're going to capture those biosolids and put it as fertilizer. People may not accept the fact, but it is a good fertilizer, once you process it well. So

there is also that being in motion. We've been having a lot of different meetings with consultants and trying to get there.

We got the money to rebuild Hilo WWTP. Let's rebuild it with the right mind and thinking rather than just replacing with the same. So our goal is if we could capture it, if we could expand the customer base, that mean we could expand on the gas generation, we could expand on the sludge generation. That means energy, that means ag use. It all adds up together. Our mission is to provide a responsible, comprehensive, safe and efficient management of wastewater and solid waste resources by building and replacing the dilapidated facilities with the new technologies that maximizes water reclamation and put it back to use gas generation, biosolids and green waste composting. So that's in our mission. For us to achieve that vision, we need to be clear on how as a Department we are taking the mission and running with it. And we have set up our core values: Mutual respect, professionalism integrity, transparency, quality, teamwork, dedication, innovation, visionary, and open to new ideas, as always. Then after we set up that we created what we call goals and objectives. Now we got a clear vision, we got a mission. How could we start becoming more sustainable within our own island to capture all these resources, from water reclamation to solid waste, gas generation, diversion, et cetera. So we came up with a bunch of different goals and objectives that will have a milestone, and become our roadmap to be able to achieve the vision that we set out to accomplish. He was still planning to work with staff because without having the staff input, the vision becomes useless. He could share it with the Commission and they could comment on it.

Chair Adams said that is definitely the kind of thing that is part of our charter, to provide guidance and oversight on what you are looking at as your vision, and to emphasize those things that we think are important. And that was kind of the spirit, at least that she and the Vice Chair were looking at in the wastewater arena of, how do we layer within that overall vision and goals, so that everything you're doing is directed toward those higher, broader vision statements, objectives that you're trying to work at. It's so easy and you've got so much pressure and time and no money and no staff to just do the minimum job of what is sitting in front of your face today. Chair Adams said she is a "vision lady." She wants to see how that it fits in an overall construct, and then hopefully it'd be something that would survive this administration, because nothing's going to get fixed in two years. It's going to be decades. And so how do we have a path that we get there? So she would definitely like to see it. It's still a good idea that on parallel we as a Commission look at what are our ideas, because it sounds like we've got a lot of good overlap. And she would be surprised if we come back and say, "You're just wasting your time, Ramzi, that's nothing." We do have some convergence, but it's fair as well. And we have an obligation as a Commission to provide you with our thoughts and guidance.

Commissioner Robinson asked what the Chair needs from the Commission to support the plan, which sounds like a big, hairy, audacious goal to put together, this integrated water resource management plan.

Chair Adams said she would send out the proposal, and it's a very rough outline to everybody, and she asks that members make a comment and alternative suggestions. She was trying to stay 20,000, 30,000 feet up. But if there are items that you would like to see added, then she will take a shot at collating it and we could talk about it the next meeting. Unfortunately, she read an article this morning that said you can't do creative brainstorming on Zoom. We will try, she said. We'll see whether we can get some information or some thoughts down and then we can go through it and walk through it at our next meeting.

Vice Chair Gaffney agreed. Basically what the Chair has created is a very rough draft, a very beginning outline, he said. So each one of you has a particular interest from your community, particular knowledge sets, et cetera, and just read it and go, oh, what about, what about, what about. Let's add some of those "what abouts"; let's add some possibilities. The Director said maybe it would make more sense to run this long, downhill sewage system. Well, guess what? You can generate hydro power from a long, downhill sewage system. So let's brainstorm it. And by the time we have a contractor online to do the actual plan, we're going to be able to present a lot of ideas to open the door. And that's where the Chair and the Vice Chair want to go with this. We don't see us building this whole thing. We see it as handing it off, but providing a contract with a really good starting point.

Chair Adams said she would love to be able to incorporate things the Director already put together. It's got to be iterative, it's got to be alive. So it needs to be a community effort.

c. Revisions to the Hawai'i County Code and the DEM Administrative Rules.<sup>3</sup>

Chair Adams said the Director has already told us that they're looking at pretreatment code changes which mostly apply to commercial operations, but by the same token, just clarifying where the codes need to be fixed, need to be improved, maybe some dramatic changes, maybe some minor changes, that we could go through and line-item as some comments back to DEM on what we'd like to see changed. There obviously were some issues raised with today's contested case hearing, but there are plenty of other issues. An example that the Chair put in there was at one time there was proposed back in 2019, a whole section on laterals, and it got dropped. Is that something we want to make sure gets put back into the code (or the rules). So those kinds of things and again, think about what they should be and be prepared to talk about them next time, she said.

Commissioner Cardwell said she would mention it at the next meeting, but that there needs to be something in the County code about volume and people being charged for the volume of water usage, sewer usage. That just seems really important. The flat rate fee doesn't make any sense, she said. She wanted to just get that on the record.

Chair Adams asked Commissioner Olson to comment on the historical reason for the billing.

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<sup>3</sup> Agenda 6a(c) – Example – 2019 proposed DEM Rule Article III, Rule 20:  
<http://records.hawaiicounty.gov/weblink/DocView.aspx?dbid=1&id=115746>

Commissioner Olson noted that he comes from a district that does not have a single public sewer system. And of course, now it's the most populous district on the island. And at the rate the building is going on right now, Puna is going to be the island at this point. They are building like crazy out there and we have no infrastructure to deal with it. No roads, no water, but here they come. And this is all the wonders of 1960. If you haven't read "Land and Power in Hawai'i" yet, all you have got to do is go to the chapter on Puna and you'll know all you need to know about where our troubles lie, he said.

## 7. **REPORTS/CORRESPONDENCE**

Director's Informational Report. (Note: the report is posted online with the agenda under [www.hawaiicounty.gov](http://www.hawaiicounty.gov)>Our County> County Calendar> (Meeting date).

### a. Legislative update

Chair Adams asked for any legislative updates.

Director Mansour said Recycling Coordinator Berrig has been working hard on following legislation. She's been working with Council members, and representatives from the House and the Senate on getting some of these bills going through. The extended producer responsibility bill seemed like it's moving and taking some steps forward. He asked if there was any bill in particular to be followed up on.

Chair Adams said there's going to be a certain amount of delay, as the state DOH needs to do things before you'd get hauled in, having to do things. It seems like the electronics bill, if that one passes, and the EPR, certainly, it's going to be another demand on your time and resources to figure out how you're going to administer the whole thing and what you're going to do with it. And as a former Solid Waste Advisory Committee member, the idea of, oh, holy moly, got to do another needs assessment on recycling, boggles her brain. These are the repercussions that may or may not occur.

### b. Requests for Updates.

#### a. Actions discussed with EPA Region 9 in April

##### i. EPA call regarding Administrative Order on Consent for closure of large capacity cesspools in Pāhala and Nā'ālehu on April 1.

Chair Adams invited the Director to discuss the conversations he has been having with the Environmental Protection Agency. It sounds like good news on the large capacity cesspools.

Director Mansour said it is definitely good news on trying to revisit the current AOC on Pāhala and Nā'ālehu. We started the process and hopefully DEM's Counsel Malia Kekai will be working with their attorney on finalizing that aspect of that revision.

Commissioner McIntosh read that the solution for the County is to essentially build a septic tank for each separate system for each house on the gang cesspool. Since the houses already have pipes running through them, would it be possible to convert the gang cesspools to a septic system? And then that way the individual homeowners won't be responsible for having to empty or clean out their septic systems every couple of years? And then the County could

continue charging them the fees. It would be less money to do that solution rather than digging up everybody's yard.

Director Mansour said this started with a design for an aerated lagoon. And our goal was too expensive. And when we first came board, we recommended the package unit. And then that evolved to possibly individual wastewater systems (IWS) to be able to use that as a model for the whole state because we have in the County of Hawai'i about 55,000 cesspools. The goal was to create a pilot program within that community, that could be utilized statewide because we're going to go through certain challenges as we do it, and then the entire state could benefit from that as well, learn from our experience. The Department of Health was on board with that and EPA told us, yeah, we'll be on board as well. So the way it's going to be negotiated is we're going to provide two options of a package unit and two options of IWS, and they're going to allow us to do the engineering report, analysis and evaluation. So the good thing is everybody agrees the aerated lagoon is not the way to move forward, and a package unit or IWS is the way to move forward.

Commissioner McIntosh asked about Nā'ālehu. For the community, from his understanding, there is not enough room for IWS to be placed on each TMK. Does the county have a solution for that TMKs that are too small for that, or would you be able to convert the gang cesspools to septic systems rather than digging holes in the ground and laying pipe or whatnot?

Director Mansour said he does not think the Department of Health will approve a community septic tank. That also defeats the purpose of an injection well, as well because you have more accumulative flow flowing into that structure. So you might as well go with a package treatment to secondary treatment level. But the idea with the individual septic tanks, yes, the entire state is working on cesspool conversion, and there's a public report you could access through the State, they have addressed the issue of the small lots versus areas right on the shoreline. So there is a different alternative. As we move forward, the Department of Health will be willing to issue a waiver if the size of the lot is too small. Anything prior to 1990 could be grandfathered in and especially with these plantation homes, if it's a smaller lot, you could go vertical seepage pit rather than a horizontal leach field. Dr. Rick Bennett has done a study about the layer cake solution, and also we presented that to EPA as well because that could also extract nitrogen and phosphorus for better leaching of the effluent. So we will be entertaining some of these design criteria as we do our preliminary engineering report for the IWS. IWS could be an aerobic treatment unit as well. So if you have a small lot we could use ATU, that gives you a great treatment, but it takes a smaller space as well to construct.

Commissioner McIntosh asked about the County spending a lot of money coming up with the aerated lagoon system and there wasn't enough generated waste to sustain it. Is there any way the County is going to get any of their money back from a useless plan that even if the County had the money to build, it wouldn't have worked? Is there anything the County can do to get any money back or is it just flushed down the toilet, so to speak?

Director Mansour said unfortunately, he doesn't know what type of instructions they were given by a prior administration or prior director. It's hard to go back and try to say, okay, you guys have something that may not work. So it could be driven by our own people? He doesn't know. So to answer the question, no, it's hard to go back and recoup some of that money.

Commissioner Fulton agreed. Looking at the presentation, she had questions about what the individual homeowner is going to be responsible for if they are forced to go to this layer cake system. If they have a lot size large enough to accommodate that standard layer cake system, what exactly are the dimensions? Because maybe the dimensions are on this little picture, but she was not seeing them. What's the footprint and what's the depth that has to be excavated?

It depends on the permeability, Director Mansour said. The consultant will be doing permeability testing on each lot, and the leach field will be designed based on the permeability needs. A standard design is 3 feet deep. It could be sand, soil, wood chips, it could be the current existing condition. So without having the permeability, it's hard to tell what type of soil you need to import. So the idea is, yes, we'll be looking at a consultant that will be doing individual lot analyses and running permeability tests for each site as well.

Commissioner Olson said that for Pāhala the sugar companies put the housing there because they couldn't grow anything on it. It's a solid basalt structure.

Commissioner Fulton said if it's solid basalt and the water is not going anywhere, then it would have to be excavated.

Director Mansour agreed. It depends on the size of the lot. If it's 10,000 square feet, you could do a horizontal excavation and you have to import 3 feet of soil. And we anticipate if we go to that level, Wastewater Alternatives and Innovations (WAI) had done a pilot program in the Puna district, late last year, and it ended up costing them about \$40,000 to import soil from O'ahu to create that leach field and what have you. So even if we take that high estimate, multiply it by the 175 homes, we're looking at \$7 million \$8 million versus \$50 million for the cost of construction. But that's why we need to do the preliminary engineering report. He cannot prejudge and tell you what we're going to do without doing the analysis and doing the four options that EPA told us we need to do, which includes the package units and entertaining the IWS. So as we do the preliminary engineering report and meet with the communities, we'll have a better idea which one is going to pan out to be the best.

Commissioner Fulton said she is aware that the layer cake system was developed for locales that had sandy substrates like Long Island, N.Y., and Florida. Their concern there was that for the leach fields, the stuff went through too fast.

And that's true for the lava rock, the Director said. So the idea is to prevent it from going too fast, you need to import soil to be able to meet the requirement of DOH at a certain rate.

Commissioner Fulton asked if there is any concern that if we get heavy rains, someone will basically have a septic swimming pool in his or her backyard.

All that will be looked at during the permeability testing, Director Mansour said. If you have biological clogging or if you have clay, you're not going to improve the percolation rate. And you're right, you could have a swimming pool with sewage in your backyard, but everything has to be designed accordingly. The type of soil is very important, he said.

Would some homes require an aerobic treatment unit in conjunction with the layer cake system, Commissioner Fulton asked. Where does that come into play? An ATU speeds up the whole breakdown process.

Director Mansour said the ATU unit is a better septic system, which is to treat the effluent to a better quality. And it's recommended for homes right on the shoreline, close to the shoreline, because it gives you a better treatment, not like the septic tank itself, but you still have a leach field.

Chair Adams said there's a whole lot of detail for each individual kind of fix, if you will. And being site-specific is something you're just going to have to work through. The good thing she is hearing is we have maybe too often looked at the ultimate Cadillac solution, as Mr. Jerome Warren always describes it, rather than something that will work. It's also kind of like Ms. Berrig was saying that we buy everybody an Earth Machine and it costs piddles next to how much it would cost to dispose of the organics. So sometimes some simple solutions can work. And she is glad to hear that you're looking at those various alternatives. And if you really want to deep dive, go look at all that stuff that the Cesspool Conversion Working Group on the state level put together. It has tons of background information on the kinds of technology and problems and financial impacts and all sorts of great studies on all the different alternatives. And maybe at some point we'd want to have a full description of that group's findings and what they're still working on for EMC. On the other hand, DEM has a relatively narrow area of responsibility, which means EMC also has a fairly narrow one, and it's managing the disposal sites we have, and not necessarily planning all the solutions for every water issue that exists in this county. So if you go do some of that homework and maybe she can again send you links to that study. There's a lot of really good meat there, she said. Her question to the Director is, how are you working with the community and getting input? Who are you talking to? And we've seen from our testifiers, you need to communicate with the people who are going to be directly affected. So what's your communication plan for this changing situation?

That is great comment, Director Mansour said. He said he is a member of the Cesspool Conversion Working Group that the state has. He does attend their meetings. He is familiar with what the committee is proposing and what we've been working on for the last year. But as far as communication, yes, that was EPA's major concern because the County needs to communicate with your people within the community. So we heard that loud and clear. We cannot keep them in the dark. We need to have more communication, more public meetings. We have been fortunate that the Mayor also had an approved request for us for a public

information officer in FY 22-23. So we're going to have that individual start to do more of the public outreach, and we need to do more of the public meetings. We need to create a website that is dedicated to what's going on in Pāhala and Nā'ālehu, because we're going to have a limited time window to come in and finish it. Because EPA is not going to tolerate any more delays. And it is understandable. The idea now we need to take it and run with it and have a better detail and a roadmap how we're going to get there. We cannot afford delays. We cannot afford not having the public involved. It's going to take a lot of effort on our part. As you know, we are short-staffed. We have one engineer on the east side, one engineer on the west side for the whole island. And \$1 billion worth of projects. But our engineers are doing a great job. They're working overtime, they're working weekends. But we try our best to deliver based on the resources that we have.

Commissioner Robinson asked whether there will be an expectation of homeowners to directly finance or bear the cost of the conversion. I guess it depends on which direction you go, she said.

Unfortunately, no, Director Mansour said. The County is going to bear the cost because we have a contractual obligation, so it's our responsibility.

Those communities don't have a lot of resources, Commissioner Olson said.

Commissioner McIntosh asked whether has the County decided, after building the wastewater treatment units, to continue to charge them sewer fees, or would that end?

That depends, Director Mansour said. If we go with the IWS and they want us to continue maintaining it, they continue paying the fees. If they opt out, then they have to maintain that septic and the leach field themselves. So there's the option.

Would that be up to each individual owner or would that just be a collective decision, Commissioner McIntosh asked.

Based on the community meeting we had, it seemed like they saw it as a saving to them. So they're probably going to opt to have the county doing the maintenance for them. So they're probably going to opt to pay the approximately \$45 a month.

Commissioner McIntosh said it's probably cheaper than what they charge to clean out a system whenever it needs to be cleaned.

The good thing with septic is that it would get cleaned once every five to 10 years, the Director said. So it depends on the usage. But yes, every five years or so, you could pump it.

ii. EPA site visits to Hilo WWTP and Kealakehe WWTP on April 6.

Director Mansour noted that EPA came and visited both the Hilo and Kealakehe Wastewater Treatment Plants. It was raining so hard that they couldn't stand outside for a long time. It was

raining that day, but they were able to visit both locations. And there are some changes that we need to do and we are doing it, just for the Hilo facility. We already got the funding that we need to start the design process, which we already begun with the consultant. So we are also entertaining options of converting waste to energy as well, trying to capture the gas from the digesters. We're looking at generation numbers now and how we could expand on getting more customers to be able to generate more gases and more biosolids that will allow us to do such diversion. So we're working with that currently and with both the consultant and Sustainability Partners, where they have a contract with the state. They are navigating that for us because we're also looking at the closed landfill in Hilo with the possibility of capturing hydrogen to fuel the buses at the transit facility. We are looking at the possibility of connecting the gas from the wastewater to the gas that we generate from the landfill, and be able to pipe that and create supply to the Mass Transit Agency. That would be great. So there's a lot of work behind the scenes with our staff, the consultants, being worked on.

As far as Kealakehe WWTP is concerned, the Director said, we got the contract with R.M. Towill to do the headworks, odor control, and are looking at assisting with the sand filter installation. The sand filter installation is being scoped by another consultant. Staff are working with that as well.

The challenge is, as you all know, because injection wells in the State of Hawai'i now are prohibited (without a permit) because of the *County of Maui v. Hawai'i Wildlife Fund* decision. So unless you go through certain calculations and prove to the state and the Department of Health that you could utilize some of these injection wells, and you have to do the functional equivalency test, you have to go through an analysis to make sure that your discharge does not make it to the navigable waters of the United States.

That is also applicable to Kealakehe because we don't have a National Pollutant Discharge Elimination System permit for that site. So that potentially will open the door for an enforcement order. And he anticipates the EPA probably will get us one. So that would be true for other facilities with injection wells or facilities that doesn't have NPDES permits currently.

Chair Adams asked if one could get a permit by cleaning up the discharge to the injection wells.

Director Mansour said there are two challenges. You have to go through an NPDES permit because the court assumes that just 2 percent could be making it to the navigable waters of the United States. So you have to do your own calculations to be site specific. As far as cleaning the water, that's not the issue because Department of Health does not currently have a nutrient limit, a stringent limit, to the navigable waters of the United States. The State of California had some, he doesn't know if the State of Hawai'i will eventually create their own nutrient removal limitation. We could see the writing on the wall. If the state ends up adopting nutrient removal limits, that's going to probably make it impossible to reach these type of limits, especially with nitrogen and phosphorus and other nutrients, because certain treatment facilities cannot just remove 100 percent. And the purpose for that? They want us to start finding ways for the reuse of that water, which is better than just dumping it in the ocean. So you could have the option of

having good effluent with high nutrient numbers that we could use for ag purposes, or we could go through \$50 million to \$60 million of additional funds just to clean the water, and yet dispose of it to the ocean and kind of defeat the purpose. So our goal is to see if we could capture our resource to become sustainable and put it back into the ag use and the energy sector.

Vice Chair Gaffney asked about the chemistry in deriving hydrogen from either a wastewater treatment plant or from a landfill. Can you briefly describe how you would extract hydrogen from either of those places? He was 100 percent in support of that but didn't understand the technology required.

Director Mansour we are still looking at exploring the technology for gas generation. We haven't got to the technology yet. First, we need to look at feasibility. So we're looking at the amount of gas we generate. Once we think we have enough gas to accommodate whatever technology exists, then we need to look at the dollar figure and see if it's feasible. So we're still in the early stages of analysis first.

Vice Chair Gaffney asked if it involves converting methane to hydrogen.

Chair Adams said the bacteria eating the organics in the landfill or in a digester at a wastewater treatment plant are converting the organics, the sugars and other carbohydrates into methane.

And then we would extract the hydrogen from the methane, the Director said.

The process may capture the gas itself on its own and produce electricity if the hydrogen doesn't pan out. So the idea now is just looking at the feasibility. First, we need to confirm the numbers. If the numbers don't add up, it becomes moot, the Director said.

- b. What is the cost to the County for a resident to:
  - i. Dispose of solid waste and hazardous waste.
  - ii. Recycle materials accepted at Solid Waste Division facilities.
  - iii. Sewer and treat wastewater.

(Discussion postponed)

- c. Status and timeline of the North Kona Sewage Pumping Station (Gaffney)

Director Mansour wanted to address one of the questions that the Vice Chair stated earlier in the discussion<sup>4</sup> about the county and the North Kona Pumping Station in regard to the sewer. The County is not holding anything. It's the State Historic Preservation Division of the Department of Land and Natural Resources holding our environmental assessment, and we have no control over it. If DLNR could accelerate that process, we would appreciate that as well, because you may have more leverage on that process to accelerate it. The County's hands are

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<sup>4</sup> See Page 2 of these minutes

tied. We've been trying to push it because we need to get that money and we need to get that project constructed. But unfortunately, it's in the hands of other state departments.

Vice Chair Gaffney said he did not mean to imply that the County was holding it up. What he said is that the County doesn't know when that pumping station will go online, and that's what DLNR is stating as their reason for not wanting to fund it now. He has reached out, but basically, he got the kind of response that you'd probably get if you reached out to the Planning Department and asked them to move ahead more quickly. DLNR is the largest single agency in the state, and their response is that SHPD is SHPD, they're over there. They're not us. So it's a typical finger pointing thing. But the bottom line is that DLNR's Division of Boating and Ocean Recreation, which is the one that's deciding to put the system in, doesn't have any control over SHPD, unfortunately. So he did reach out. He did ask if this is something they can do. The Vice Chair needs to try to reach First Deputy Director Bob Masuda because it's really at the higher level where they can push the buttons. So he hasn't given up on it. But the bottom line is that, unfortunately, like everything with wastewater, there are three government bodies. There's the federal side, at the EPA level, there's the state side at the DOH level, and now SHPD, and then there's the County side. And too often we can't get where we want to get because they all have issues and they're all standing in the way. So a point of frustration for everybody, he said.

d. Expected budget shortfalls and impacts in FY 22-23

If there's anything that EMC can do to help with priorities or to go beg for some more money, it would be good to know, Chair Adams said. You don't have staff, you don't have budget. You are going to be getting more money, and some good news from Council, it looks like, although that isn't official until their vote next month. But are there some things that EMC should provide input on?

Director Mansour noted that the budget review hearing for DEM was held in April. We were given three additional engineering positions. And in addition, of course, we asked for more, but we're hoping that they give us more as the May budget submittal comes through. We need the staff, so we asked for it. We got some during the March budget, and hopefully we get more. As far as the money, the Mayor has done a great job also by going out and committing that wastewater is one of his top priorities, and we got the approval on that 22-23 CIP budget as well. So now the is pressure on us to start staffing up to deliver on that promise.

c. Solid Waste Division Projects and Updates

(No discussion)

d. Wastewater Division Projects and Updates

a. Pretreatment code draft proposal status

Director Mansour said that DEM's Deputy Corporation Counsel was working with the Department of Health. Once we navigate through that, then she instructed us we could share it with you, he said.

**8. FUTURE AGENDA ITEMS**

- a. Follow up on action items determined today.

Chair Adams said if you want something on the agenda, tell her or the Secretary so that we get it on there. We'll be covering the findings for the hearing, and she will carry over the new business that was not covered today, and maybe a couple of other items. The Chair will be sending some links and a copy of what she read through during the meeting.

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

(No discussion)

**9. ANNOUNCEMENTS**

The next meeting is scheduled for May 25, 2022, via Zoom and at the Puna Conference Room, Hawai'i County Building, 25 Aupuni Street, Hilo. Please contact the Department of Environmental Management or monitor the website for updates.

(No discussion)

**10. CONTESTED CASE HEARING**

Kai Ala Partners LLC appeal of the Director's decision to bill two wastewater accounts for TMK (3) 7-5-019:018 and (3) 7-5-019:026.<sup>5</sup>

NOTE: See Volume II.

**11. ADJOURNMENT**

**MOTION, SECOND, AND VOTE:** Commissioner Robinson made a motion, to which Commissioner Olson seconded, to adjourn. Ayes 8 (Adams, Burns, Cardwell, Fulton, Gaffney, McIntosh, Olson, Robinson). Motion carried.

Respectfully submitted,

Peter Sur, Secretary

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<sup>5</sup> Agenda 10 – Appellant and Appellee briefs and exhibits – <http://records.hawaiicounty.gov/weblink/Browse.aspx?dbid=1&startid=115747>