DISASTER, RESILIENCE, INTERNATIONAL AFFAIRS, AND PLANNING COMMITTEE

Council of the County of Maui

MINUTES

February 21, 2024

Online Only via Teams

CONVENE: 1:31 p.m.

PRESENT: VOTING MEMBERS:
Councilmember Tamara Paltin, Chair
Councilmember Tom Cook, Member (In 2:46 p.m.)
Councilmember Tasha Kama, Member (In 1:34 p.m.)
Councilmember Keani N.W. Rawlins-Fernandez, Member (In 1:37 p.m.)
Councilmember Shane M. Sinenci, Member (In 1:43 p.m.)
Councilmember Yuki Lei K. Sugimura, Member (In 3:42 p.m.)

NON-VOTING MEMBERS:
Councilmember Alice L. Lee, Member (In 1:37 p.m.; Out 3:20 p.m.)

EXCUSED: VOTING MEMBERS:
Councilmember Nohelani U'u-Hodgins, Vice-Chair

STAFF: Paige Greco, Legislative Analyst
Ellen McKinley, Legislative Analyst
Richard Mitchell, Legislative Attorney
Maria Leon, Committee Secretary
Jean Pokipala, Council Services Assistant Clerk
Richelle Kawasaki, Deputy Director of Council Services
Shelly Espeleta, Supervising Legislative Analyst

Zhantell Lindo, Council Aide, Moloka'i Residency Area Office
Roxanne Morita, Council Aide, Lāna'i Residency Area Office
Mavis Oliveira, Council Aide, East Maui Residency Area Office
Jade Rojas-Letisi, Council Aide, Makawao-Ha'ikū-Pā'ia Residency Area Office

Angela Lucero, Executive Assistant to Councilmember Paltin
Laura McDowell, Executive Assistant to Councilmember U'u-Hodgins
Susan Clements, Executive Assistant to Councilmember U'u-Hodgins
Jared Agtunong, Executive Assistant to Councilmember Cook
Evan Dust, Executive Assistant to Councilmember Kama
Haunani Madela, Executive Assistant to Councilmember Rawlins-Fernandez
Sarah Sexton, Executive Assistant to Councilmember Rawlins-Fernandez
Keomailani Hirata, Executive Assistant to Councilmember Rawlins-Fernandez
Dawn Lono, Executive Assistant to Councilmember Sinenci
Don Atay, Executive Assistant to Councilmember Sinenci

Axel Beers, Executive Assistant to Councilmember Johnson
Kate Griffiths, Executive Assistant to Councilmember Johnson
Michele McLean, Executive Assistant to Councilmember Lee

ADMIN.: Christie Trenholme, Deputy Corporation Counsel, Department of the Corporation Counsel
Robert Schmidt, Deputy Director, Department of Environmental Management
Kurt Wollenhaupt, Senior Planner, Department of Planning

OTHERS: Jim "Homer" Holm, Founder and Executive Director, Clean Oceans International
Dr. Willie "Skip" Rochefort, Associate Professor of Chemical Engineering, Oregon State University
Kevin DeWhitt, Chief Executive Officer, PDO Technologies
Philipp Schmidt-Pathman, Chairman of the Board, Founder, and Chief Executive Officer, Institute for Energy and Resource Management
Logan Graves, Account Manager, Clean Harbors
Timothy Gunter, Gunter Consulting
Tim Newberry, Blue Marble Innovations

Testifiers
Nicole Heard
Jerry Isdale
Brian Hauser
Spencer Headley
Testifier OPIE
Brian Lehmann

PRESS: *Akakū: Maui Community Television, Inc.*

CHAIR PALTIN: *. . .(gavel). . .* Will the Disaster, Resilience, International Affairs, and Planning Committee come to order? The time is 1:31. And if everyone could please silence their cell phones or other noise-making devices. Under the Sunshine Law, if you're not in the Council chamber, please identify by name who, if anyone, is in the room, vehicle, or workspace with you today. Minors do not need to be identified. Please see the last page of the agenda for information on meeting connectivity. At this time, I'm the only one in the Committee. There was a...sorry, there was a ground...groundbreaking ceremony at Maui Lani. And so, you know, I don't know. That's where everybody is, I think. And so the Governor has suspended the quorum requirements for boards with Maui-based members under Section 92-15, Hawaii Revised Statutes by his Ninth Emergency Proclamation Relating To Wildfires. Therefore, the Committee is able to proceed with its meeting today without anyone else present. And this meeting of the Disaster, Resilience, International Affairs, and Planning Committee of the Maui County Council is located on the traditional ʻāina of Kānaka ʻŌiwi, who never ceded their sovereignty to the United States. We recognize that Her Majesty, Queen Liliʻuokalani, yielded the Hawaiian Kingdom to the U.S. in duress, under threat of violence to avoid the bloodshed of her people. We further recognize that Hawaii remains an illegally occupied nation-state by

the U.S., as documented in a 2021 scholarly article for the National Lawyers Guild Review by Andrew Reid, adjunct professor of law at the University of Denver Sturm College of Law. Generations of Kānaka Maoli and their knowledge systems have sustainably cared for Hawai'i and continue to do so. We are grateful to occupy this space and learn the ways in which we can contribute. As a Committee, we seek to support the varied strategies that the indigenous people of Hawai'i are using to protect their land and their communities, and commit to dedicating time and resources to working in solidarity. From the Administration we have Corporation Counsel, Deputy Corp. Counsel Michael Hopper; from the--oh, we do have one Committee Member. Committee Member Tasha Kama. Aloha 'auinalā and welcome. Oh, you're muted. Can you unmute?

COUNCILMEMBER KAMA: I'm unmuted, Chair.

CHAIR PALTIN: Oh, now we can hear you.

COUNCILMEMBER KAMA: Okay. Aloha 'auinalā, and it's good to be here this afternoon. I am in my office because I've been having coughing spells, so I wanted to be here so I can mute myself when I got to cough. Thank you, Chair.

CHAIR PALTIN: Thank you. Next, we also have Planning...from the Planning Department Senior Planner Kurt Wollenhaupt, as well as from the Department of Environmental Management Deputy Director Robert Schmidt. And we did request someone from the Department of Management. They said the Managing Director or representative is likely unavailable due to meetings with the U.S. Secretary of Transportation and other Federal delegates. Our resources that we have today from Clean Oceans Internationer...International Jim "Homer" Helm, Founder and Executive Director; Oregon State University; Chemical Engineering, Dr. Willie Skip Rochefort; PDO Technologies Kevin DeWhitt, CEO, who...we'll probably hear from him first because it...I have noted that he has to leave at 2:30; Institute for Energy and Resource Management Philipp Schmidt-Pathman, Chair of the Board, and Founder, and CEO. And from Global Biochar or Global Biocarbons--I'm not sure which one--we have Founder and Executive Chair Brando Crespi; CEO Kyle Wendling; Chief Technology Officer Clayton Turner; and from Clean Harbors Logan Graves, Account Manager. Our Committee Staff...today we have Committee Secretary Maria Leon, Legislative Analyst Paige Greco, Legislative Analyst Ellen McKinley, Legislative Attorney Richard E Mitchell, and Assistant Clerk Jean Pokipala. Because we only have one item on the agenda today, I will ask for opening comments and presentations before receiving testimony.

ITEM 2(14): ALTERNATIVE 2023 WILDFIRE DEBRIS PROCESSING SOLUTIONS (Rule 7(B))

CHAIR PALTIN: So, on the agenda today is Alternative 2023 Wildfire Debris Processing Solutions, DRIP-2(14). And as we had a presentation previously from Brittany Simmerman...Zimmerman, other people that are doing similar things reached out and wanted an opportunity to present also. And so under Rule 7(B) of the Rules of the Council, the Committee may receive presentations on Alternative 2023 Wildfire Debris

Processing Solutions including pyrolysis, ocean plastic cleaning, landfill waste diversion and mitigation, sustainable waste disposal and reutilization processes, biochar, and alternative waste containment options from Clean Oceans International; Dr. Willie Skip Rochefort, Associate Professor, Chemical Engineering, Oregon State University; PDO technologies; Institute for Energy Resource Management; Global Biochar Incorporated; and Clean Harbors. The Committee may also discuss related matters. No legislative action will be taken. And in the meeting details on Granicus, there is corresponding presentations from the presenters as well dated January 30th, 2024. Let's see. So, with that being said--oh, aloha ʻauinalā, to Councilmember Keani Rawlins-Fernandez. We're almost to quorum.

COUNCILMEMBER RAWLINS-FERNANDEZ: Aloha ʻauinalā, Chair. E kala mai for my tardiness. And I believe there are no testifiers currently at the Molokai District Office.

CHAIR PALTIN: Thank you. Okay. So, I'll call on Mr. Kevin DeWitt first for his presentation, because I see that he needs to leave at 2:30 p.m. Mr. DeWitt, are you available to do your presentation?

MS. GRECO: Mr. DeWhitt, you need to unmute on your end.

CHAIR PALTIN: Oh, we see you.

MR. DEWHITT: Thank you so much. Apologies. So, thank you, Madam Chair. I actually, as of yesterday, grabbed a little bit more flexibility with my schedule. So, if it...if it's all the same, I'd like to have Captain Homer and Skip start, and then I can segue in into my normal slot. Thank you so much.

CHAIR PALTIN: Oh, okay. No problem. Okay. Clean Oceans Internationer [*sic*]…International, Jim "Homer" Helm [*sic*], we can start with you, followed by Dr. Willie Skip Rochefort, and then we'll move on to Mr. DeWhitt. Jim "Homer" Helm [*sic*], can you unmute your video and microphone?

MR. HOLM: How's that?

CHAIR PALTIN: Perfect. We can see --

MR. HOLM: *(Audio interference)* --

CHAIR PALTIN: -- and hear you.

MR. HOLM: Fantastic. Thank you very much for...for giving us time to speak today. As you mentioned, my name is Jim Holm. I usually go by Homer. I...I speak with a great deal of love for Lahaina as I...that's where I learned my craft as a commercial boat captain there in the '70s and '80s, and I have friends that still live there, and...and we all lost friends there in the fire as well. I represent Clean Oceans International, and we're an environmental nonprofit in Santa Cruz, California, that is working to reduce ocean plastic. And our sympathy for what everyone is enduring in this time of disaster and

such. And we recognize that what everybody in Lahaina needs is the ability to get home and rebuild their lives as...as quickly as possible. And, hopefully, we'll be able to give you some assistance. We do not have a miracle technology that treats the toxic ash. And so I'll start off with that, as much as I wish I could say differently. However, we do have technology that could be useful in the cleanup and rebuilding process. Clean Oceans uses a process called...we call portable plastic to waste conversion. And that's what we use to help manage plastic rubbish. Unlike a mechanical plastic recycling at the collusion...conclusion of a plastic waste conversion process, the plastic is actually gone. And in its place is a valuable diesel fuel additive that can be used to supplement existing diesel fuel supplies and needs. Portable plastic waste conversion converts approximately ten pounds of plastic into a gallon of diesel fuel. For pennies worth of energy. And this process creates approximately 14 percent less carbon impacts than the normal way of creating fuel by digging in the ground and such. Our partners, Dr. Rochefort and Kevin DeWhitt, will explain a little bit more of the details...the technical details after I finish. In the long cleanup and rebuilding process that Maui is facing, the ability to convert a waste management issue, such as plastic, into a profitable...a fuel that can support the cleanup and rebuilding efforts could go a great way...a great way to reducing costs and impacts from the cleanup and reconstruction process, and be valuable for years to come afterward. As a gesture of solidarity to the citizens of Maui, Kevin from PDO Technologies has made an offer to donate a plastic waste conversion system to Maui for their use and instruction and...and...and so that you're able to understand the potential for this to help you in the...the near term and on into the future. Within a couple of months of permission to do so, these systems could be imported to Maui, and up and running, and contributing to the...the cleanup and rebuilding process. If we are invited to participate, Clean Oceans International is offering to work hand in hand with Maui County Administration to help secure funding, provide design, installation, and operational assistance for such a facility, and guidance during the time that's required for the Central Maui Landfill staff to understand and take over the operations in...on site there in Central Maui. This letter is, you know, very light on technical details. As I said, Dr. Rochefort and...and Kevin can answer technical questions later. We also are inviting Maui County Council to send representatives to Kevin's facility in Brooks, Oregon, to view these...this facility in person, firsthand to further under...help you understand the scale, and the simplicity, and the efficiency, and efficacy of portable plastic waste conversion. In the process of doing homework to understand what the needs of Maui are and where we could or could not contribute, we learned quite a bit in...in doing our homework. And one of the things that came to our attention is that there may be some ways that we can assist in...in terms of increasing the efficiency of the process. And in my experience on commercial shipping and such, every time you increase the efficiency, you reduce your costs and your impacts. We recognize that Lahaina residents need to get back to their own property at the earliest, safe opportunities. And we believe there are profound benefits to adopting some changes to the process that you're employing at the moment. These changes would not impede the existing efforts during setup. And we believe they would dramatically expedite the process once they're up and...and operational. We also understand the importance of honoring the culture and spirit of Hawai‘i and the desire for a disposition of the remaining ashes on Maui to respect the remains of lost relatives that are potentially still mingled with the ash. Our proposal would provide time for everyone to

agree on the best way to process that ash efficiently and respectfully. From an environmental point of view containing...temporarily containing the toxic debris in the landfill raises many...many, many concerns. And the new landfill is a dramatically different situation than the existing landfill next door there, the old Olowalu dump, as it were. I'm not 100 percent sure how old that was, but in that I'm going to say 50 to 70 years' worth of service life, the...the toxics were added gradually day-by-day to that pile rather than an enormous quantity at one time. And this is a dramatic difference in how the environment accepts that toxic waste. It...right now, the way it's done, creates an enormous quantity of toxic, what I'll call, stew that is deposited as quickly as possible, of course, into a bowl that is impervious to drainage; at least that's what you hope. If that...it is, in fact, not overflowing upon every rainfall, then you know that that membrane is not functioning properly, because it should not let any fluids through the bottom of it. So, unless it's flooding and overflowing, it's not working. And if it's flooding and overflowing, it's not working. And, of course, immediately downstream is one of the...the premier tourism sites of the Olowalu Reef and one of the most sensitive reef areas in the State of Hawai‘i. So, this is a great deal of concern. And, of course, obviously the Maui's visitor economy depends on a pristine environment. So, our suggestion...response to many of Maui's...Council's stated concerns; a speedy cleanup, daytime traffic impacts, and the environmental concerns. And it does this by cleaning numerous sites at a time starting as...as soon as the equipment can be delivered. And this can happen at many sites at...at the same time during the daytime. And containers can then be...shipping containers can be used and filled on-site at numerous locations, rather than waiting for individual trucks to transport and drop off their loads at the Olowalu site. And that way, small skid steer style tractors can treat individual home sites, clean them up, and when those containers are ready, they can then be pre-staged at a...a loading area, perhaps at the Pioneer Mill site, for delivery during the nighttime hours so that traffic impacts are mitigated as much as possible. And then we also recommend that rather than an interim dump site at Olowalu, these containers be taken completely around to Central Maui Landfill, and there they can await the disposition once a proper disposal system has been agreed upon for the...the long term. Twenty-five to 30 sites could be cleared at a time instead of 4 or 5 sites; that seems to be what is available at this point. And in terms of speeding up the process, it can go from years down to a number of months to get all the sites off of the...out of the existing disaster area. If...if, in fact, that's done, the estimated 400,000 cubic yards of debris would cover approximately 17 acres if stored in shipping containers stacked two high. And there seems to be plenty of room on the CML campus for that. If there is any interest in learning more about this process, we invite the Council to contact us, and we'll have lengthy conversations about the process. We wish you all the best in what choices you make in the future, and we...very appreciative of the opportunity to speak with you. Thank you.

CHAIR PALTIN: Thank you, Mr. Holm, for your presentation. Just clarifying that it would need to be an agreement with the Administration, not the Council, but he would come to us for funding because...just...just clarifying that.

MR. HOLM: I'm sorry, I didn't completely understand the...

CHAIR PALTIN: Well, you...you said if the Council wanted to work with you folks. The Council doesn't make those kind of decisions. We just fund those types of decisions. And --

MR. HOLM: Okay.

CHAIR PALTIN: -- I'd like to recognize Councilmember Shane Sinenci. So, now we're legit at full quorum.

COUNCILMEMBER SINENCI: Aloha ʻauinalā, Chair. Sorry for being late.

CHAIR PALTIN: Aloha. Okay. Next up, we have Dr. Willie "Skip" Rochefort for his opening presentation. Oh.

MR. ROCHEFORT: Hi.

CHAIR PALTIN: Sorry, Mr. Rochefort, I'd like to recognize our Non-Voting Committee Member Alice Lee to the meeting. Aloha ʻauinalā. Aloha. Okay. Go ahead, Mr. Rochefort. Or sorry, Dr. Rochefort..

MR. ROCHEFORT: Okay. That's fine. You can call me Skip. So, I do have a presentation. I don't know if I can actually present it or if you have to do that because I don't have the share capability here. How do we want to proceed with that?

CHAIR PALTIN: Staff you got, Mister...Dr. Skip's back on that?

MS. GRECO: Yes, if you want to try again now, we just --

MR. ROCHEFORT: Yeah. There we go.

MS. GRECO: Okay.

MR. ROCHEFORT: Got it.

MS. GRECO: Okay.

MR. ROCHEFORT: All right. Let's see slideshow from...so, can you see my slideshow?

CHAIR PALTIN: We sure can. You're good --

MR. ROCHEFORT: Okay. Great.

CHAIR PALTIN: -- to go.

MR. ROCHEFORT: Okay. Good. Thank you. So, I...first off, I want to really thank you for this opportunity. Over the last three or four meetings that I've been able to hear the presentations, I've really learned a lot and especially learned a lot about the relationship...the very amazing relationship that the people of Hawaiʻi have to the land

that they live on. I think that's very unique. And I think that's what makes this particular cleanup process extremely unique. And so with that as the background, I just like to say at the beginning that I am...I'm a researcher. I work at a university. My goal is education. And so the first slide that I put up here is my team at OSU, which is comprised of undergraduate students, and...and this is only a part of them. We have probably 20 people working on this project. And I also want to also reinforce what Homer said, which is this is not the panacea, right. This isn't the answer to all your problems. What we're going to present today, amongst the people that you'll hear, is a series of different technologies that can address different components of the waste that you're dealing with. What I deal with in particular, and what you'll hear from PDO Tech. in a minute, is the plastic waste. And there's a substantial amount of plastic waste in this...in this debris, as least as far as I understand. I do also want to say that before I go into the details of this--and I'll just spend a couple of minutes telling you a little bit about what we do. Our lab gets samples from all over the place. People send us samples all the time, and we have a small-scale reactor, which I'll show you. And what people will say is, hey, this is a waste product that we have. Can you...can you...what can you do with it? Most of the time, it's not something that can be easily recycled by, you know, chopping up, and...and melting, and making something else with it. We've done a lot with waste plastics from the ocean and from a lot of other waste streams that nobody else wants to deal with that are plastics. Okay. So, that's kind of what we do. We do it on a small scale. And then we work with people like Kevin that can...that can translate that to a large scale. I also want to say that I view this as both a short-term solution to...to get the people back on their land, and a long-term solution to maybe the waste issues that you have in Hawai‘i, in general, and on Maui as your landfills fill up. You know, I been...we been talking to the people in Hawai‘i for some time about how do you deal with your plastic waste even outside of...of an event like this. And I think the...the...the...what I'd like to...you to take away from this is that this isn't like we come in, do it, and leave. I think that what we want to do is be able to set up some technologies that we would be able to deal with your waste on an ongoing basis and also make Maui sort of a model for how we treat the waste in...in the islands and the islands all around the world. So, with that as a preface, I just want to show you a couple of things that we do at OSU. So, pyrolysis, the way we think about it, is we take these large plastic molecules, which is on the left there, and we break them down to something smaller. And that's...that...what we do in our process is we break that down into a diesel fuel that can be easily added or...or blended with the current diesel fuel that you use to run, you know, tractors, vehicles, generators, and things like that. Okay. So, that process is pretty simple. This is what we have in our lab. We built it as a kiln because we felt we were trying to design this for underserved communities around the world. And...and almost anybody can build a kiln. And so if you see on the right-hand side, that's a schematic of it. And that is, basically, just a tube. We put the plastic in here; we heat this with air. So, any way that you can heat air, you can heat the...this tube up. And then, as you see coming off the top on the left-hand side up here--I hope you can see my pointer--then you can...that's where the...the vapor comes out and it turns into diesel fuel right at the end. So, we can do this in one step only by adding heat. This is the process in a nutshell. We get this...the plastics that are collected. So, this happens to be the plastics from a local coffee shop. We grind them up in our lab, we put them into this reactor. And right out at the end of the reactor comes this very nice-looking

diesel fuel. We have all the analytical techniques to...to tell us how...what the quality of this is and to what the distribution looks like. And so that's what we do. And we do it all just by adding heat. Now, the process you'll hear that...that Kevin DeWhitt is going to talk about has a little bit more capability than this. But this is what we can show you we can do with all kinds of different plastics. So, I don't expect everybody to really understand all this. But, basically, on the...on the Y axis here we have how much material is...is there...is made and then the carbon number. And diesel is on the left-hand side. This is standard, what we call, red diesel or off-road diesel. And these carbon numbers you see can go from about 10 or 11 up to about 26 or 27. This is ocean plastics that we collect from beaches in Alaska. And we can see it goes almost the same distribution. And so even though it's not perfect, diesel is pretty forgiving. So, we can actually blend this ocean plastics in with red diesel that we get, you know, from the farm and...and they can use it. So, the...the product from this is something that you could use on site or even...or in Lahaina, or wherever it is you want to use it, or you could sell it if you wanted to. Okay. So, the point is, we take something that's a waste product and we turn it into something that's a really usable fuel. And then these are just my collaborators. Okay. I didn't want to give you too much information, but this is my...the collaborators. So, PDO Tech. is one, we work closely with Clean Oceans International. We work with a group in Hawai‘i to collect plastics from the...not Hawai‘i, sorry. Wrong...wrong...in Alaska, sorry, from...and we collect ocean plastics from there. And we also work with a company here in Oregon that collects agricultural plastics. So, the other point here is that we can clean...help clean up what you have in your...as a waste right now. We can help with the plastics issue you have in...in the...let me stop sharing here so you can see me. There we go. The plastic waste issue that you have in Hawai‘i, in general...and you know you do have a plastic waste issue and you have limited landfill capability, right. And we can, I think, do a really good job at addressing the...the initial...the...the immediate problem and also a long-term solution, as I'll say, that makes you a model for the world almost. And so I think that's the...that's the nice part of what we're proposing is that...that combination of technologies, which I'll just call an energy center, okay, up...up where your landfill is, or wherever you want to locate it, would be a real model for the future. And so I just leave you with that, that we're committed to this. We're committed to helping you do it. We're not looking to make any money. And we're just looking to, both, educate the people, because that's what I do is education. I can tell you; my students are very excited to be able to help your community. And every time I mentioned Lahaina, they...they...they just get...they ask me about it all the time. It's like, Skip, when are you going to talk to the people in Lahaina? And just this morning, one of my students that I met told me she was married in Lahaina last May. And she, you know, was like, I can't believe that you're going to be able to, maybe, help these folks. And...and she just loves that area. So, of course, what she said is, are you going to get to go visit? You know, that was the...that was the immediate thing, right. So, anyway I...I...I thank you again for listening and for listening to us. And we really hope that you will at least contemplate what we have to offer, because the way that I've been seeing it, and looking at the video footage, and what's been happening; you're creating a toxic landfill there, and...and you just don't want to do that in your community. You know, it's just not a problem that's going to go away. I think your...your...your situation is unique. In the...in the mainland what they do is they scrape it all up and take it to some toxic dump, and they don't necessarily deal

with it. They just leave it there. It's somebody else's problem or another generation's problem. But in your case, it is your problem. And...and I don't think you really want to be dealing with this in the long term. So, I really hope that you consider some of the alternatives that we might be presenting to you today. Thanks very much. I really appreciate it.

CHAIR PALTIN: Thank you, Dr. Skip. And at this time, we'll move on to Kevin DeWhitt.

MR. DEWHITT: Hi, everybody. I trust you can see me. I'd like to share my screen as well, if I can.

CHAIR PALTIN: Okay.

MR. DEWHITT: Great. Thank you.

CHAIR PALTIN: We'll enable you and you should be good to go.

MR. DEWHITT: Thank you. Going to, I think, get this one. So, hopefully, everybody could see that.

CHAIR PALTIN: Yes, we sure can.

MR. DEWHITT: Thank you so much. So, I'll get right to...so, I know that you all have this slide deck, so I won't read all of this. Our history goes back to 2000 when I was involved as a consulting chemist in this type of effort. Just, you know, pyrolysis, which is what Skip has been doing. From those efforts I started my own company in 2004 called Agilyx. It's now publicly traded in Norway of all places. And left that company in 2014 to start PDO Technologies. Our focus has really been on small-scale technologies that can move themselves...not literally speaking, but we can move the technology to where the problem exists and not move a problem to where the technology exists. So, that's a...sort of a fundamental difference between us and a lot of people in this space. We have partnered with Agriplas; Skip mentioned them. They're an agricultural plastics recycler. They recycle approximately 15 to 20 million pounds of ag. plastic every year. And that's mechanically, right. So, that's plastic that gets turned into more plastic --

UNIDENTIFIED SPEAKER: . . .*(inaudible)*. . . --

MR. DEWHITT: -- materials mechanically and not chemically. We do a chemical recycling process called pyrolysis, as you...as you've already heard. So, that's what we do. We've been doing it for quite a while. I'm going to show you a few pictures. This is not Hawai'i. This is, I believe, in Indonesia. It might be in the Philippines. There's been a lot of attribution of this top picture. But, essentially, we don't want to see this top picture ever happen, right? This is plastic floating in a river. The picture below it's...I think the backside of Indonesia in Bali. In general, we are an environmental solution, but to a very specific problem, which is the waste plastic problem. We...like Skip and Homer said, we are not a one-size-fits-everything technology. And it's important to reinforce that idea. But this is why we do what we do. We want to make sure that we leave our

heirs with something better than what...what we found. And that's going to be hard in my case, I'm a boomer, and we've created a lot of this mess. And in a place like Hawai'i...the islands and Maui, specifically...you know, Skip is right, you...you are a unique people on a unique, you know, portion of the globe. And you have to be and are much more in tune with...with everything that goes on environmentally, I'm sure spiritually, and economically; all those factors play into your life. People here, in the mainland, can discard a lot of that, and I think to their detriment, but you don't. And it's...it's...it would be our...our honor to...to help with this effort. So, this is why we do what we do. This is why I've been doing this for 24 years. I got started when I started Agilyx in 2004. You can see this is not very big equipment, right. This is not a giant campus. Upper left, left to right, top to bottom is generations 1, 2, 3 and 4 of the technology. It's pretty simple, and it works quite well. Next pictures are three different ones. One from the old...the previous slide. So, the upper left is what one reactor looks like. Now, this is an older reactor, but it's...the scale is about the same. You know, you can see the fire extinguisher, and the ladder, and it's just not very big. That will process about two and a half tons or about 5,000 pounds of plastic each 24-hour day. So, that's great. That's 24 hours though. That's not eight hours, or a shift, or something like that. It's all 24 hours. The upper right is four of those units ganged together. And, of course, four times two and a half equals ten. So, those four units will process about ten tons or 20,000 pounds of waste plastic, again in a 24-hour day. If you get to a really large scale where you combine 16 together, and then that bottom picture is 16 of our fifth generation or the commercial version of our technology. You'll get about 50 tons a day. So, it's not 40 tons, which would be the linear scaling, but you get a little bit more. There's some economies this scale. The point is that this...the technology is small scale for a reason, and that's to scale the technology to what the problem is...is...you know, it needs to be addressed, right. So, it's...if there's several hundred thousand tons, you're going to need a lot of these...of our units, you know, reactors. A lot of people think of them as crock pots only on an industrial scale. If you have a very small-scale problem or, more importantly, you have a constant five or ten tons a day of waste plastic that's generated on the island that gets landfilled. Well, let's scale our technology approach to make sure none of that plastic enters the landfill anymore, where it takes up a lot of space, but it all gets directed through the technology and gets turned into valuable fuel products, which Skip has already alluded to. So, that's our thinking with small scale, and that's resonated with our customers. We had a plant in Minnesota, one in Georgia, and one here in Oregon. Those are back about 12 years ago now. Again, lots of words. I'm not going to read these to you, but in general, we think because waste is distributed, and especially in this sense. The islands are unique. Even the waste is distributed at household level. You have to aggregate it to some very localized point because Maui is not a very big island, you know, as...as land mass goes. And so the technologies like mine can scale to that problem; they don't get too big, they don't get too small. If...if seasonally, the reactors aren't running all the time, that's fine. If they need to run more in one season and less in another, that's fine. You know, this is a very adjustable approach to the problem. The products we make have been accepted by off-road fuel customers. I'll show you a picture of that in a minute. And also by major oil and gas and petrochemical folks. They would like to turn the plastic product that we make this pyro...pyro oil, which sort of looks like this. They would like to turn that into more plastic. That works on the mainland when there's lots of infrastructure refining. On

the islands, of course, we believe that the...the higher value...the highest and best value is as a...an additive for the fuel to displace the importation and to conserve the diesel that you would normally consume in a piece of yellow iron, or in a generator, or something along those lines. So, that's...that's the...that's sort of the thinking. Again, eight and a half to nine pounds Skip...or Homer said ten...ten is actually easy to do the math, but it's really about 8.1 pounds creates a gallon of...of product. We try to do two things; have a conversion technology and work on aggregating or collecting and aggregating at plastic. That's sometimes the harder thing to do. We don't require a lot of specialized people, or equipment, or training, or a lot of capital. It's...it's a very skinny-down process to make sure that it's affordable for anybody. In this particular case, as Jim...Homer alluded to, PDO would like to help assess what the needs would be and if the needs...you know, by the end of the year, we're well assessed. We could certainly provide some initial equipment over there to sort of see how it functions within the context of the cleanup and the...and the sort of ongoing mission of...of making sure waste plastic doesn't enter a landfill *(audio interference)* so we would be happy to do that. I have one more slide here. Oh, here's the pictures, right. So, instead of 1,000 words from me, you can see a few pictures. Agriplas is where we're co-located there on the left there. That's our equipment set right now. It's a fully scaled, fully functional prototype. So, it's a little different from those pictures you saw in the past. And the...the product we make locally blends into, what Skip alluded to, on…off-road diesel that's dyed red. And we can blend it into that diesel, and then it can be used in power washers, and generators, and, you know, tractors, and skidders, and anything you can run off-road diesel on. So, the process works, the product works, the technology works. It's not a solution for everything, but it is a solution for most of the waste plastic that we find. And I think...aww there's my team. So, very proud of my team. We have well over a century...no, I'm not half of that, although I sometimes look like I am, but I'm only 25 years of it. But we have a lot of good people. And some young folks, too. So, I think that's it for me. And with that, I'd like to just entertain any questions and then, you know, help you move on with solving this problem. Thank you so much.

CHAIR PALTIN: Thank you, Mr. DeWhitt. We were going to do all the presentations, then take testimony, and then we can ask questions; if...if that's all right? Just because that's the --

MR. DEWHITT: Okay.

CHAIR PALTIN: -- process of the...the way the Committee meeting works.

MR. DEWHITT: No problem. I'm sorry, I was unaware of that. I...I may not be able to stick around for the entirety, which is...but for at least for this part, I...I was able to get in. And thank you so much for the time. I appreciate it. To --

CHAIR PALTIN: Thank you.

MR. DEWHITT: -- to your point about questions, any question you have, Skip or Homer can probably answer pretty well because we have actually worked together with those two groups for, gosh, two or three years now. So, they'd be able to answer if I'm not able to.

So thank you so much.

CHAIR PALTIN: Think...not...we can email you to get the answer. Is that correct?

MR. DEWHITT: Yes.

CHAIR PALTIN: Okay.

MR. DEWHITT: Absolutely true. Yes.

CHAIR PALTIN: Okay. Next up we got Philipp Schmidt-Pathman from the Institute for Energy and Resource Management, to be followed by a representative from Global Biochar or Global Biocarbons. Not sure which one is the correct name, but is there a Philipp Schmidt-Pathman? Oh, I see a hand being raised. Yeah, okay. That's Philipp raising his hand. And you're unmuted on our end. If you can unmute yourself on your end and begin your presentation. There should be a camera and a microphone in the upper right-hand corner, and if you press it, then you'll be unmuted. We do see your hand is up, Mr. Schmidt-Pathman. Okay. Let's see. Is Brando Crespi available, or Kyle Wendling, or Clayton Turner? Okay. Moving down. Logan Graves. Is Logan Graves available?

MR. GRAVES: Yes, I'm here.

CHAIR PALTIN: Okay. Since we weren't able to get the other two folks that were before you unmuted, are you ready, now, to give your presentation?

MR. GRAVES: Yeah. Yeah, I don't really have a presentation. Just really a letter to read out about my company and what we can do. Let me just start off. I'm Logan; I'm with Clean Harbors. I'm out here in California, but I am the sales rep. for Hawai‘i, so it's nice to meet everyone. Clean Harbors waste disposal services provides the widest range of treatment and disposal options in the industry for all hazardous and nonhazardous waste. We are unmatched in North...North America. Our facilities provide services for all the United States, Canada, Northern Mexico, and Puerto Rico. Clean Harbors is equipped to handle all aspects of large-scale waste removal and disposal projects. Clean Harbors provides off-site transportation, landfill, and...and incineration disposal services for soil and other contaminated media for remediation activities. We also can assist contractors and project managers with support services, including groundwater disposal, investigation derived waste disposal, roll-off container management, and many other services. Our portable...our portable truck to rail services provides the most economic and safest method of overland bulk waste transportation. Our custom truck-to-rail loading ramps make it much easier to manage material shipment from your project site to a Clean Harbors' treatment and disposal facility. Our turnkey approach to providing bulk transportation and waste disposal services provides liability protection and our wide variety of logistic options supported by our system of bulk waste disposal and management facilities is unmatched in North America. With seven hazardous waste landfills and two nonhazardous waste landfills, Clean Harbors provides cost-effective, safe, and secure waste stream disposal throughout North America. All of...all of our

hazardous waste landfills are built to Subtitle C standards. We thoroughly audit and routinely inspect every site to make sure final disposal is in full compliance with all regulations. All Clean Harbors sites are state-of-the-art and fully engineered with sophisticated collection systems. With all Clean Harbors' expertise and resources, we are confident in submitting a budgetary proposal to remove the ash and debris in...in Lahaina and the Olowalu temporary landfill for $400 per cubic yard at a rate of 150 cubic yards per year. This pricing does not...does take into consideration some assumptions about the waste and conditions for the job. For a more comprehensive and detailed proposal, we will need additional technical and logistical information, along with a written indication of interest from the main decision-making agency and those financially in charge. We are willing and ready to meet or discuss at any time, and you are all welcome to reach out to me anytime with any questions.

CHAIR PALTIN: Thank you. Okay. So, going back, is Philipp Schmidt-Pathman on the call still? Or Brando Crespi, Kyle Wendling, or Clayton Turner? Those are the three other presenters that we have. Okay. I guess maybe no. Mr. Schmidt or Mr. Wollenhaupt, do you have any opening comments? Deputy Director Bob Schmidt of the Department of Environmental Management, I see your hand raised. Are you able to unmute your microphone and your camera? Deputy Director Schmidt. Oh, you're unmuted on our end. If you can unmute yourself on your end? Deputy Director Schmidt, are you available to unmute yourself? Okay. Well, we can try and come back to those folks after the testimony.

MS. GRECO: Chair.

CHAIR PALTIN: Yes.

MS. GRECO: Kurt from Planning has joined.

CHAIR PALTIN: Oh. Mr. Wollenhaupt, are you available? Did you want to make any opening comments about the presentations that we've had so far?

MR. WOLLENHAUPT: Oh. Good afternoon. Can you hear me?

CHAIR PALTIN: Yeah, we sure can.

MR. WOLLENHAUPT: Oh, that's good. Hello. Hi. Hi, this is Kurt, the Planner V over in the current division. Well, from what we've heard, of course, probably the question would be where...

CHAIR PALTIN: Oh, we just stopped hearing what you said. The question is where...we didn't...we didn't hear the rest of the --

MR. WOLLENHAUPT: Oh.

CHAIR PALTIN: -- question after where.

MR. WOLLENHAUPT: There...there seems to be a feedback going on. I'm...

CHAIR PALTIN: We hear you good. I...I don't hear a feedback. Maybe it's just you.

MR. WOLLENHAUPT: Okay. Well, if you can just hear me...so, the question always would be, where would these different modalities of waste management be located? And then, of course, we have the extensive question of where the future of the Central Maui Landfill is going in light of the State Land Use Commission's decision and order. So, that would....that would be my comments.

CHAIR PALTIN: Thank you so much. Hopefully, we can get Deputy Director Schmidt on so he can fill us in on that Land Use, future of CML as well. Deputy Director Schmidt, are you available to unmute yourself? You're unmuted on our end. Shoot. So, Deputy, if you wanted to phone in, the number is 1 (808) 977-4067 with the code 585709254 and then the pound sign. But at this time we'll move on to public testimony and, hopefully, our resources can get their video and microphones or just microphones figured out; that'd be great. Is there anyone that is signed up that would like to give public testimony?

MS. GRECO: Yes, Chair.

CHAIR PALTIN: Okay. Then I'll read the public testimony instructions for DRIP-2(14). Written testimony is encouraged and can be submitted via the eComment link at mauicounty.us/agendas. Testifiers wanting to provide oral testimony should join the online meeting via the Microsoft Teams link printed on today's agenda, or call into the phone number which I just mentioned. For individuals wishing to testify via Teams, please raise your hand by clicking on the raise-your-hand button near the top right of your screen. For those calling in, please follow the prompts via phone. Staff will add names to the Testifier list in the order testifiers sign up once...or raise their hands. For those on Teams, Staff will lower your hand once your name is added. Staff will then call the name you're log in...logged in under or the last four digits of your phone number when it is your time to testify. At that time, Staff will also enable your microphone and video. If you wish to testify anonymously, please notify Staff. Otherwise, please state your name for the record at the beginning of your testimony. Oral testimony is limited to three minutes. If you are still testifying beyond that time, I will kindly ask you to complete your testimony. Once you are done testifying or if you do not wish to testify, you can view the meeting on *Akakū* Channel 53, Facebook Live, or mauicounty.us/agendas. At this time...do we know the first testifier, Staff?

MS. GRECO: The first testifier is Timothy Gunter in the chamber. You can come down --

CHAIR PALTIN: Okay.

MS. GRECO: -- to the podium.

CHAIR PALTIN: Great. Timothy Gunter, our first testifier.

. . . BEGIN PUBLIC TESTIMONY . . .

MR. GUNTER: Good afternoon, Madam Chair and Councilmen. I'm here today representing a company that would like to bring waste to energy to Hawai'i This technology also could work to handle the ash in Lahaina as...and I...as I mentioned before. This technology is the downdraft gasification. Gasification technology is not new. What is new about it...we are bringing to the table is the downdraft addition. This technology, which Dr. Ratner from the University of Iowa has been working with for 15 years, takes the waste at 2,000 degrees and takes the emissions, the gas, and pulls it through the biochar on the bottom. The gas fire is eliminating 99.9 percent of all the tars and resins that are naturally present when burning anything. This gas is cleaner than natural gas and cleaner than, say, a digester or pyrolyzer that is half the heat and would not break down asbestos or other carbon chains that would end up in the biochar. The gas from the gasifier can then run a generator or boiler to make electricity. The company I represent is offering to bring this technology to Molokai at no expense to the County. A hedge fund out of Florida is behind Dr. Ratner, so much that they are willing to put up $7 million to prove this technology will benefit the people of Hawai'i. We would bring this innovative technology to Molokai, handle all the non-recyclable trash, sell the electricity to Maui Electric, operate the facility using County employees for five years, and then turn it over to the County. This base power will eliminate 100 gallons of diesel per hour. The County will then make 1.7 million per year, which could go into the General Fund or lower the electricity for people of Molokai, which right now is the highest in the nation at 57 cents. Maui Electric will also spend 25 percent less for their base power than what they are spending now for diesel. If at any time the County decides that this technology is not working, we will pack up and leave with no footprint of us being there, again with no money from the County. I have lived on Maui for almost 50 years dealing with the County going back to Hannibal Tavares. I was the first to bring commercial composting to Maui, and have helped 5 to 6,000 people on Maui to become organic farmers or gardeners, diverting almost 100,000 tons from the landfill. I'm not a charlatan. Landfills produce 30 percent of the deleterious gases into the air in the United States. Our technology is good for the people of Molokai, Maui County, Hawai'i, and the planet. It's time we do something instead of burying the problem. I hope this...the County considers this no-risk technology. Thank you. I'd also like to *. . .(timer sounds). . .* mention that this can handle tires, plastic, wood, pesticides, waste oil. So, there is no, we can handle this, but not that. We can handle everything.

CHAIR PALTIN: Okay. Thank you. Members, any questions for Mr. Gunter? Would...would we like him as a resource? Go ahead, Member Sinenci.

COUNCILMEMBER SINENCI: Yeah. If...if he's able to stick around, Chair. I wouldn't mind asking him to be a resource, Chair.

CHAIR PALTIN: Mr. Gunter, are you able to stick around?

MR. GUNTER: I wasn't going to, but I can be if...if I could get asked the questions first so that I could then go to my next appointment.

COUNCILMEMBER SINENCI: Okay.

CHAIR PALTIN: Okay. Sure.

COUNCILMEMBER SINENCI: I can ask the...the first question was, would we need a green waste to...to be part of this downdraft gas...gasification process?

MR. GUNTER: You do want some...depends on the percentage of the wood that's already in the...the waste. It's plastic, and tires, et cetera burn off a higher BTU, but...yeah, what's...you know, as far as the pallets and a torn down house, you still would like to have some...some wood waste in...mixed in with that.

COUNCILMEMBER SINENCI: Okay. Great. Thank you for that clarification. Thank you, Chair.

MR. GUNTER: Would you still like me to stay now? Okay. You can get a hold of me. All right. Thank you.

CHAIR PALTIN: Okay. Is there anyone else signed up to testify? Oh, I see somebody's hand is raised.

MS. GRECO: Chair, the next person signed up is Tim Newberry in the chamber as well.

CHAIR PALTIN: Okay. Tim Newberry.

MS. GRECO: To be followed by Nicole Howard. Sorry, Nicole Heard.

CHAIR PALTIN: To be followed by Nicole Heard. Okay.

MR. NEWBERRY: Good afternoon.

CHAIR PALTIN: Good afternoon.

MR. NEWBERRY: Thank you, Chair and distinguished Members of the Committee. Just like to take a few minutes to acknowledge the folks that have made presentations already today. Good job. A lot of it's...I thought today's meeting was about the fire debris. This one sounds like it's a little bit more forward-looking for Maui County. But I could address both of those. As far as the Lahaina fire is concerned and the debris that has been created, we have several ways to take care of this problem. First, let me just give you a little bit background. I'm a Hawai‘i resident for 35 years, brought my children up here, had many projects. I'm an architect by trade, so I've done housing projects here on Maui as well and on O‘ahu. And I am currently the Chair of the Education Committee for Waste Conversion Technologies through SWANA, which is the Solid Waste Association of North America. So, I've been involved with pyrolysis and gasification for over 20 years and have quite a bit of knowledge in that area. As far as the...let me get back to the debris. That pile which...which has dirt, I would imagine, as well as wood, and potentially some other materials, you know, nobody has addressed that. We would

bring several different technologies, a twofold approach to handling that depending on what might be in that pile. I do not have a characterization of what, the pile, exists in it, so it's hard to say specifically. But if we brought in…you know, we could bring in a gasifier or…actually we would do pyrolysis for the wood debris, which would provide the fuel to do either a rotary kiln for the dirt, which would render it sterile. Or we could bring in…we could use the fuel that we would produce from pyrolysis to run a plasma arc, which would turn all the dirt into obsidian, which is kind of a glass product…will look just like the black sand beach from Hawai'i. Or from…from the Big Island. We do have other technologies, so I represent three different technologies of varying sizes, anywhere from 40 ton a day to 1,000 ton a day. So, if one were to look at . . .*(timer sounds)*. . . doing something for Maui County in the future, as far as the landfill is concerned, I have had discussions with Bob to talk about this. We been kind of going through that process for little over a year now. The one thing that I did want to address with this --

CHAIR PALTIN: Mr. Schmidt, the timer ring, if you can wrap it up in --

MR. NEWBERRY: Oh.

CHAIR PALTIN: -- the next minute or so.

MR. NEWBERRY: Okay. Well, very good. Well, I wasn't sure that folks would…would take presentations today. But at some point in time, I would love to do a full presentation for the…for the Committee, if that's possible. I can always come back and do that. I flew in today from Seattle just to…just for this. But I would certainly do a Teams presentation if that would be acceptable. Yeah, that would…that would be terrific.

CHAIR PALTIN: Members, any requests to have Mr. Newberry as a resource?

COUNCILMEMBER SINENCI: No objections, if he's going to stick around for the rest of the meeting, Chair.

CHAIR PALTIN: Okay. And are you familiar with Mr. Gunter, as you guys are…

MR. NEWBERRY: No.

CHAIR PALTIN: Oh, okay.

MR. NEWBERRY: Not at all.

CHAIR PALTIN: All right. Okay. We'll designate you as a resource for when the item comes up for discussion. Next testifier.

MR. NEWBERRY: Thank you.

MS. GRECO: The next testifier is Nicole Heard in chamber, to be followed by Jerry Isdale in Teams.

MS. HEARD: Okay. So, I just wanted to be here today to have my voice heard and express how I feel strongly that the County has yet to provide any options reflective of a truly adequate solution to the debris disposal. So, I feel it's very important that we be here today to hear the presentations for alternative solutions out fully and objectively, with an open mind. I feel confident that at least some of these alternative solutions do hold potential for great merit in finding a better resolution to the issue of debris removal. However, I also feel strongly that appropriate testing be done prior to adopting these technologies to assure that they are, in fact, safe and effective solutions regarding the specific toxins for the fire debris that our situation specifically involves. Because it's my understanding that these technologies are still unproven in this specific scenario. That being said, I sincerely hope, after hearing these presentations and testimonies, that the County will spend time reflecting on all that they have heard here today, and strongly consider incorporating one or more of these alternative solutions into the long-term disposal plan, with emphasis on somehow utilizing the storage of debris using shipping containers, specifically Clean Harbors' proposal. In conclusion, I strongly feel that if the County insists on disposing of this debris locally rather than holding FEMA to their original promise or accepting an alternative solution to dispose of this debris elsewhere, such as the solution offered with Clean Harbors' proposal, there must be more effort put into incorporating a multifaceted approach to this issue in order to mitigate environmental and public health impacts. I feel it's absolutely unacceptable to simply dump this ash and debris into any of the proposed Subtitle D Solid Waste Landfills on Maui that the County has currently selected because we know, in fact, it does contain hazardous ash and debris. And simply reclassifying this hazardous debris by labeling it as special handling material instead of calling it what it really, actually is, hazardous waste, is completely unacceptable and is not an actual solution. Especially when taking into consideration the fact that the hazardous waste from 103 different properties, which comprises about 10.6 percent of the properties in the burn zone, still needs to be disposed of, and we still have not received any clear answers surrounding who will be handling this removal and where it will eventually be disposed of. Thank you.

CHAIR PALTIN: Thank you. Members, any questions for the testifier? Seeing none. Thank you for your testimony. Next up. Jerry Isdale.

MR. ISDALE: Aloha. Is that working?

CHAIR PALTIN: Yes, we can hear you.

MR. ISDALE: Great. I did submit written testimony on the eComment site. I'm not sure if it actually showed through or not. I like to have a few comments. One on the ash debris encapsulation for construction materials, which was discussed in some of the submissions and at previous meetings. I have a concern about that in that those sorts of construction materials would often be cut during construction, releasing their dust and debris. And at some point the...the construction will be demolished, both in construction and deconstruction. The materials needed to be disposed of somehow. That debris would still contain the toxins except for what may have leached out. What conditions would need to be imposed on the disposal of the debris to keep the toxins

sequestered? How will those be enforced decades from now when that deconstruction happens? During...as for the sequestering of toxins, I haven't seen anything over the leach rate of the toxins. I've seen data on conventional Portland concrete leach rates, which can be very concerning, as well as the gypsum ones. And nobody's really done any studies on what this...or this does for the type of . . .*(inaudible)*. . . of debris that comes from our Lahaina ash. I'm concerned that the bulk of the testimony today and in the submissions is marketing materials for the general waste stream processing. While this is a huge concern for Maui County going forward, it is not all that relevant to the discussion of fire debris from Lahaina. Very little is provided to document the safety of the proposed methods for fire debris. I would note that there is...there was some mention about doing separations, and so forth, of the plastics and so on. That would require, in my understanding, manual handling of the debris in order to remove those plastics. That would expose the people who are handling it to the toxins. They may need to be doing some sort of washing or other things of the plastics in order to clean them. I don't know, they haven't addressed that. My suggestion is that we should be sequestering the debris in the temporary, and whenever it is actually selected, the long-term debris, hopefully, upgraded for containment. And then we can do some studies by these companies of the processes they...they have...they proposing . . .*(timer sounds)*. . . probably doing shared costs of that with the company so that...so it's not all, like, on County to prove their technologies.

CHAIR PALTIN: Thank you, Mr. Isdale.

MR. ISDALE: And I would like to suggest that --

CHAIR PALTIN: If you can wrap it up.

MR. ISDALE: We're getting...got to close?

CHAIR PALTIN: Yeah, one minute.

MR. ISDALE: Okay. My last suggestion is that for the...the debris sites and the test sites, if done, we need to have good solid testing of them. We know a little bit about what is in there. The testing techniques are available. I would suggest that we set up testing sites of the debris, and downstream, and we can actually train our students...our youth in how to run these test sites and give them a...skills for extra...for use elsewhere. Thank you.

CHAIR PALTIN: Thank you so much for your testimony, Mr. Isdale. Members, any questions for the testifier? Seeing none. And I just got a reminder from the Sunshine police. Does any of our online Members have anyone in the room with them? Just checking if...if you have any adults in the room with you folks. No. Okay.

COUNCILMEMBER LEE: No dogs, nobody.

CHAIR PALTIN: No dogs, no adults. Got it. Thank you.

COUNCILMEMBER LEE: Not even...

COUNCILMEMBER KAMA: I just have my Staff in the other room, Chair.

CHAIR PALTIN: Oh, just her Staff in the other room. Is that okay? Okay. All right. Perfect. Thank you. Next up to testify we got Brian Hauser, to be followed by Faith Chase. Brian Hauser.

MR. HAUSER: Yes. Aloha, Chair Paltin and Councilmembers.

CHAIR PALTIN: Aloha., Mr. Hauser, if I could pause you for one second, I'd like to recognize Councilmember Tom Cook has joined the proceedings. Aloha ʻauinalā.

COUNCILMEMBER COOK: Aloha, Chair.

CHAIR PALTIN: Aloha. Sorry. Go ahead, Mr. Hauser.

MR. HAUSER: Okay. So, I would love if you just allow me a couple of minutes, probably less than three minutes. I don't know the right way to get something on the Council's radar or on the agenda, and some of it is about the item that's on the agenda. You know, one...so it's two items, basically. And the first item is that the Council had recognized Curt Kiriu as a resource during one meeting. He primarily--I'm sorry. My name is Brian Hauser. I'm an advocate for people with disabilities. So, this is...he is a ADA contractor and goes well beyond ADA in creating accessible communities, especially in the context of aging in place. He also can talk to ideas like water reclamation, as we have over on Kahoʻolawe, which would add more water as we discuss water rights and also water distillization [*sic*]. Even if that's just for the mitigation and resilience...and resilience. The second item that I would like to bring up is that I attended a Stand Up Maui meeting. And Mr. Michael Williams, he's a lawyer, he did a lot of research on...he did a lot of research on eminent domain. And the understanding is that only the County has the ability to use eminent domain, and they can use it in...for short-term rentals for four or five years. The...we want to debunk this thing that it takes a long time or it can get tied up in court because it can be done in two months or less, as quickly as 23 days. And the compensation rate for landlords is determined later on and can even go to a jury. But it will be at far...fear...fair market value. So, I...I'd really like to get that on the radar of the Council. Mr. Michael Williams will be emailing you details on this subject. Mahalo. Thank you so much for allowing me to testify publicly.

CHAIR PALTIN: Thank you, Mr. Hauser. Members, any questions for the testifier? Seeing none. Thank you for your testimony. Next up, we have Faith Chase, to be followed by the last four digits 9774, to be followed by Spencer Headley. Faith Chase, it's your turn to testify. Are you available to unmute yourself? Okay. Testifier with the last four digits 9774. You can press star six to unmute yourself. Star six to unmute yourself.

MR. SCHMIDT-PATHMAN: Good afternoon. Can you hear me?

CHAIR PALTIN: Yes, we sure can.

MR. SCHMIDT-PATHMAN: Excellent. Yeah. My name is...my name is Philipp Schmidt-Pathman. I been trying to call in for a long time, and I been...I'm one of the presenters...original presenter. So, my apologies that you see neither my name or my camera, and I don't know what's wrong and I restarted my PC probably five times already and Microsoft doesn't seem to work. I usually use Zoom, so my apologies for that. I don't know if I'm restricted to the two minutes. Or can I give the regular presentation?

CHAIR PALTIN: Let's just consult our legal counsel at this moment. This is one of the presenters. Is it okay to stop public testimony and do his presentation? Or should we complete public testimony and then do his presentation? Just asking our attorney.

MR. SCHMIDT-PATHMAN: If you'd like, I can wait.

MR. MITCHELL: Thank you, Chair Paltin, for the question. I don't know the answer offhand, but since the testifier has indicated that they're willing to wait, then I think we can proceed that way.

CHAIR PALTIN: Okay. Apparently we have dueling lawyers in the house. What's...what's the opinion from the other attorney, or lawyer, or whatever you call yourself?

COUNCILMEMBER RAWLINS-FERNANDEZ: I'm not an attorney. I just have a law degree. I believe we already designated him a resource person.

CHAIR PALTIN: Correct.

COUNCILMEMBER RAWLINS-FERNANDEZ: So, if he...the...if he wants to hold his presentation for...for after then we can wait --

CHAIR PALTIN: Finish testimony.

COUNCILMEMBER RAWLINS-FERNANDEZ: -- until public testimony is completed, and then we can ask him questions, and he can include it in his presentation...his responses in his presentation.

CHAIR PALTIN: Okay. And I --

MR. SCHMIDT-PATHMAN: Certainly.

CHAIR PALTIN: -- I...so, we'll wait until we finish public testimony. And I just also got a message that Deputy Director Schmidt has technical issues on his end and that he also has no comments. So, let's see, after 9774 we'll come back to you after we close public testimony. And moving on to Spencer Headley. It's your turn to testify. If you can unmute yourself, we'll take your testimony.

MR. HEADLEY: Hello. Especially, because Philipp hasn't had a chance to go yet, I'll yield my testimony. Just want to take a few moments...I know there's a lot of important issues

going on, on the island right now. And especially in regards to health and toxic ash debris and as well as more forward-thinking stuff in regards to conventional waste streams with...which is what the presentations are both on. So, I don't want to take up any more of anyone else's time. I appreciate you discussing...or...or having the space to hold this discussion, and I'll leave it at that. Thanks. Aloha.

CHAIR PALTIN: Thank you. Members, any questions for the testifier? Member Rawlins-Fernandez has a question for you, Mr. Headley.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Chair. Since the previous testifier…I believe that was Mr. Schmidt-Pathman. I think he was calling in. So, Mr. Headley, since you're...oh, are...oh, you guys are working together? No.

MR. HEADLEY: So, we...at Regenerative Education Centers, we really...we're in collaboration with...with...with basically independent of people *(audio interference)* --

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. My...my question was going to be about the presentation. If there was, like, a PowerPoint maybe.

MR. HEADLEY: Oh. Yeah, yeah. No, I'm not --

COUNCILMEMBER RAWLINS-FERNANDEZ: Or maybe Staff can.

MR. HEADLEY: -- that...that's...that's not --

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. Mahalo, Mr. Headley. Mahalo, Chair.

MR. HEADLEY: -- that would be me, that would be *(audio interference)* yeah. Yeah.

CHAIR PALTIN: Okay. Thank you. Last call for testifiers. At this time, our list has been exhausted unless Ms. Faith Chase comes online or if there's anyone else. I do see somebody approaching the podium. So, we got...we got one more testifier, and maybe Faith Chase will pop on right after.

MR. OPIE: Aloha awakea, Chair.

CHAIR PALTIN: Aloha.

MR. OPIE: Where'd Mr. Sinenci go?

CHAIR PALTIN: *(Audio interference)* --

MR. OPIE: So, something was weird going on; maybe I'm just paranoid. The last time we started up when Mr. Gunter was here and...and talking about this stuff, we started make some progress. And then it was...the COVID thing hit, and then...it's like November 5th, 2019, I remember. So, I cannot explain what the devil is, and I cannot explain what God is. In God We Trust, that's on America's currency. But I put my trust

in you, Chair. I put my trust in the Councilmembers from the Hāna and Molokai. And I see Kahului is back and Wailuku is on there, Mr. Cook is here. So, they're on the Oz screen, so at least they're halfway here anyways. I used to be a trash man on Quantico in Quantico, Virginia, worked six days a week, on Saturdays we had half a day. So, I have some experience with ʻōpala and landfills, but I learned so much more, when I came to Maui, about waste disposal. And I learned a lot about spiritual warfare here too. So, I think it's some kind of battle going on where like to...I don't know. I...I...I don't want you guys think I'm crazy. Maybe Councilmember Kama can explain. She's shaking her head, but...yeah, you guys...I think Maui can...we...we got to...I see all these guys from the...the mainland and stuff. I think the whole world is...world is watching us. This is only ten percent of the problem of what we got to do to save the planet. So, yeah, thank you for doing that, Chair Paltin.

CHAIR PALTIN: Thank you. Just double checking that you want to be recorded as Jacee Law, or is there another --

MR. OPIE: Oh, yeah . . .*(inaudible)*. . . I'm O...it was OP which stands for...and...and it was under...I asked the Clerk to put O-P-I-E, but it was a...is a play on words, and it was for ʻōpala picker.

CHAIR PALTIN: Got it. Thank you, Mr. ʻŌpala Picker. And is there a Faith Chase available to testify? Faith Chase, last call. Going once, twice. Okay. This will be general last call for testimony. Last call for testimony. Going. Going. Gone. Okay. All right. Members, any objection to closing public testimony and accepting written testimony into the record? I believe we had four eComment testimony.

MS. GRECO: Excuse me, Chair. Sorry.

CHAIR PALTIN: Yes. We just got someone, a phone number, raising their hand. The last four digits 8976.

CHAIR PALTIN: Oh, okay. Phone number with the last four digits 8976. You can press star six to unmute yourself, and we'll hear your testimony.

MR. LEHMANN: Can you hear me?

CHAIR PALTIN: Yes, we sure can.

MR. LEHMANN: All right. Thank you. I'm Brian Lehmann, resident in Maui.

CHAIR PALTIN: Brian Lehmann, we're ready for your testimony.

MR. LEHMANN: I want to thank the --

CHAIR PALTIN: Go ahead.

MR. LEHMANN: Thank you. I'd...yeah, I'd like to thank the Committee for continuing to

pursue these issues and for receiving this presentation prior to public testimony. From what I've heard and heard previously, Yummet seems to have the inside track as far as detoxifying any hazardous material. But what's been presented now could possibly benefit Maui tremendously in the long term. As you may know, Honolulu is already processing 85 to 90 percent of its municipal solid waste with the pyrolysis system, which also produces about ten percent of its energy. So, I'd say we have a long way to go to catch up on Maui, at least in comparison with that. But thanks again for having this hearing.

CHAIR PALTIN: Thank you so much for your testimony. Members, any questions for the testifier? Seeing none. Thank you for your testimony. And we'll, once again, call for last call. If there's no further testifiers, we'll close public testimony and receive written testimony into the record.

COUNCILMEMBERS: No objections.

. . . END PUBLIC TESTIMONY . . .

CHAIR PALTIN: And then I think we'll go to Mr. Schmidt-Pathman, for his ten-minute presentation. And, Mr. Newberry, if you wanted to do a ten-minute presentation, you can...you can come down as well. But, Mr. Schmidt-Pathman, are you ready?

MR. SCHMIDT-PATHMAN: Yes, I am. Can you still hear me?

CHAIR PALTIN: I...I beg your pardon? I --

MR. SCHMIDT-PATHMAN: Can you still hear me? Yes.

CHAIR PALTIN: Yes, we can hear you. Do you need our Staff to pull up --

MR. SCHMIDT-PATHMAN: Excellent.

CHAIR PALTIN: -- any slides for you?

MR. SCHMIDT-PATHMAN: No, I do not. No. Thank...thank you. No. Somebody submitted some information yesterday. A PowerPoint and a document with that. And if there are any questions to it, please *(audio interference)* free to reach out to me. My contact information is on there, but I'd like to give a quick overview of who we are, and what...what is it that we do, and if that's okay.

CHAIR PALTIN: Yeah. I can have Staff pull that up as you...so that the Members and the audience watching on television at home can see that, if that's okay.

MR. SCHMIDT-PATHMAN: If...if you like to. It's a very long presentation and *(audio interference)* some kind of *(audio interference)* information for review and could be shared. I mean, it's a public document and I'll refer to it.

CHAIR PALTIN: Okay.

MR. SCHMIDT-PATHMAN: But let me...let me get started...introduce myself. And --

CHAIR PALTIN: Okay, it's item number 10 on Granicus.

MR. SCHMIDT-PATHMAN: -- first of all, my apologies for my technical difficulties.

CHAIR PALTIN: Go ahead.

MR. SCHMIDT-PATHMAN: So, good *(audio interference)* Committee Members and aloha from Seattle. Losing family and friends, your home is devastating. And you have my deepest sympathy and condolences for your losses. Now, being left with what is next is very difficult, and I'm sure there are more questions than answers. My name is Philipp Schmidt-Pathman. I came to the U.S. from Hamburg, Germany, over 30 years ago to attend university. I have a BA in economics and an MBA and an MIS. I maintain a very close relationship to Germany and Europe. For the past 26 years, I've been in the field of resource management with a specific emphasis on how best to manage the waste we produce. I've seen a lot of injustices and decisions that were made based on short-term gains and special interests, and not for a long-term economic and environmental reasons, taking into consideration the ones who are affected most, the public. To make a stand, and create awareness, and to offer alternative solutions that are proven to work economically as well as environmentally, I co-founded the Institute for Energy and Resource Management, IeRM, in October 2021. Half of our board members are in Europe and the other half is in the U.S. IeRM is a 501(c)(3) nonprofit organization to educate and provide scientific research and expertise, which includes navigating challenges, processes specifically dealing with waste. We are a team of leading experts and specialists from universities, institutes, authorities, and similar institutions. We bring our expertise and proven track record to educate, to correct false information, and to counter special interests so that corrective actions protecting the people, the environment, and the economy can be taken. We work independent from technology providers. Based on our extensive experience worldwide and our overall scientific and economic expertise, we have concluded that as long as we continue to rely on landfilling, as we have been in the U.S., we will never reach a circular economy, nor will we be able to achieve meaningful quality recycling, and composting, waste reduction, or avoiding subjectives. Because of the serious and immediate threat that landfilling poses to the climate and the environment, and because little is being done in the public sector to counter this threat, IeRM has made the elimination of landfilling municipal and similar reactive waste by 2030 our top priority. The goal is to replace landfilling with integrated waste management system, prioritizing the international waste management hierarchy. IeRM's mission is to provide reliable research for the purpose of finding and implementing sustainable solutions to society's energy and resource management challenges. At IeRM, we seek to continuously develop...the continuous development and the use of technologies and practices that will enable us to significantly reduce the impact...or the human impacts on the natural environment. IeRM connects scientific research with business and policy solutions in order to serve the best interests of the public and moving toward a sustainable economic future. You can find all out about

us on www.ie-rm.org. So, how can I...what can...and how can IeRM help this process? We do not provide the technology, as I said, so I'm not affiliated with any of the technologies you're hearing about today, out of principle as we are technology independent. We have been involved in the discussion, now, for about two months. As we understand, there are two issues. The most important one moving forward and rebuilding. In order to do so, we offer our expertise in evaluating in how best to move forward with the ash, as there are a number of options on the table. The second card...for the second part in this rebuilding process, we offer our expertise in helping the people of Maui navigate toward a sustainable future, and I hope I'm saying this correctly, in the direction of a ahupua'a ranging on...ranging on how to deal with the huge amount of waste and finding alternatives to the current landfill approach, and investigating options to replacing the energy dependance on fossil fuels with renewables. So, please see the PowerPoint and please feel free to share. That was forwarded to you by, I believe, Spencer Headley yesterday, and it has the title, It's Time to Stop Wasting On Waste, which I presented in April of last year at the Academy...Academy of Lifelong Learning. It was submitted together with a...with an editorial that's termed with the headline, The Zero Waste Utopia. Please reach out to me if you have any questions. And in this PowerPoint you will find many topics discussed...discussing...pertaining waste management and a comparison, for example, of the country of Germany, currently the third largest economy in the world, and the U.S., which is the second largest. A little bit more about us. So, for the past 26 years, my new colleagues and I have analyzed and studied the U.S. waste management system. The problem with landfilling is that they are artificially cheap. They're subsidized by not incorporating the true costs such as...as true environmental impact, long-term maintenance, lost resources, and so on. The only way to start moving toward a circular economy is, first and foremost, to stop landfilling waste. The cost-effective proven method is *(audio interference)* of integrated waste management system. Such a system has been adopted in a number of countries in Europe with many years of success. If there is a desire, please let me know and how things develop. But we can make arrangements for anyone to see these programs in action or to speak with...with the officials in Europe. In the past 20 years, I've taken ten delegations from the U.S. to Europe to see these systems work, and how they operate, and how...how it could be implemented. So, the Europeans have passed laws that require all E.U. countries to phase out landfilling of untreated still reactive, like municipal solid waste. Sixteen countries have nearly achieved them, and including Germany, Sweden, Denmark, Austria, and they landfill than five percent of their waste. Germany, currently the third largest economy in the world, landfills less than one percent. The recycling composting rate is tangible at over 64 percent. That is quality recycling working with manufacturers to be able to reuse the materials, make new products, and working with farmers to be able to use cross-contaminated free--so no glass, plastics, battery, et cetera--compost in, for example, agriculture. About 30 percent are sent to thermal treatment with energy and material recovery being able to send less than one percent to landfill, effectively destroying the toxic organics. The E.U. decided to require its member countries to phase out landfilling due to the environmental impacts of landfills, not due to space limitations. Landfills are the worst solutions when dealing with waste and leave a legacy of pollution at an exponential cost. There's nothing sustainable about landfilling. Sanitary landfills are an oxymoron, meaning no landfill is sanitary, just an acronym used by the landfill industry trying to

justify landfilling. Mine landfilling is also an option that should be explored. And just to give you a brief background, one of our board members is the current scientific advisor for the Country of Germany, moving toward a circular economy. Another one is the head of the Federal Ministry of the Environment, or was, for 26 years that oversaw the move away in Germany...moving away from landfilling to alternatives and to implement a well-working system. And another is. . .*(inaudible)*. . .landfilling . . .*(inaudible)*. . .International Solid Waste Association from Denmark. One of our partners is the Sanitation Department of the City State of Hamburg, who I've recently talked to and they also send their aloha and best regards to you. They have had zero waste to landfill since 1999 so...and have over 100 years of waste management experience of a city and state with nearly about 2 million people. And we have a number of other institutes. We also have close ties to. . .*(inaudible)*. . .which might be of great interest to you. For the past 15 years they have had been in the spotlight for producing 800 percent more energy than they consume. The Vice Mayor, who is credited with this, frequently has been invited across the world to speak to communities, specifically island communities such as Maui. And they're actually currently indirectly. . .*(inaudible)*. . .working on a project on Oʻahu, I believe. We work...we would like to work with you and the people of Maui, if you choose to do so. We're here to listen, incorporate our extensive network of experts, many in Europe, and provide a path forward navigating systems, technologies, facts versus fiction, grounded on decades of experienced work on the best interest of the people. And you can find more about on our website at www.ie-rm.org. Thank you and mahalo. Any questions, I'll be here. Thank you.

CHAIR PALTIN: Thank you, Mr. Schmidt-Pathman. Mr. Newberry, did you have anything you wanted to present? Or...okay. You can come down and...and speak into the mic.

COUNCILMEMBER RAWLINS-FERNANDEZ: So, I was just saying that you had to speak into the mic so that the public can hear.

MR. NEWBERRY: So, I know I did...we did present some written testimony earlier. So, I think that you probably have that available.

CHAIR PALTIN: Yes. And we're just limiting the presentations to ten minutes to give us time to discuss.

MR. NEWBERRY: Sure. Obviously, this is not the kind of presentation that can be substantive in ten minutes; it's much more than that. And, like I said, I been speaking with Maui County Waste Department...Solid Waste for a better part of a year now, trying to talk about what the future does look like. The landfill issue is, you know, the same as everybody else's landfill. They're filling up. They potentially have some land next to it that they could do...but from what I understand, that's still another five years out with zoning. Nobody has really talked about the permitting side of things and whether a permit would be required for the debris to be taken care of...not sure about that yet. But we do have technologies that can take care of that. So, as I explained earlier, what we would do is we'd take a portion of...of...oops, sorry...of the pile that could be pyrolyzed into a fuel or electricity. Whatever's left is typically the dirt, which has all the toxins in it that we usually will run one of two ways. You can run it through a rotary kiln, which

operates at very high temperatures, which will make the dirt sterile, but it won't change the characteristic of the dirt. There's...the other option is to take what we do make from the pyrolysis portion of it, turn that into electricity to power a plasma arc. That plasma arc will turn the dirt into obsidian, which is basically glass, something like, you know, kind of like Madam Pele does. So, if you see on the Big Island, you know, the black sand beaches, that's what it would come out looking like. It's completely inert. The gentleman who mentioned something about, later on, if it were to be used in construction material, if that gets cut or broken does it, you know, leach material out. Initially on a...on a dust that could be airborne, I agree it...it is a possibility, but that thing stays in its original form, which is still non-leachable. So, if you cut it in half, it doesn't ooze out like an egg. It just stays there. It's a solid. So, what we would propose to do is use one of our three various technologies to come in and address that where it sits right now. Let's not move it around. Let's leave it where it is. We'll come in and take care of it. And because we can handle higher amounts per day…you know, I think the other gentleman with 50 ton a day, I think would take 21 years to take care of that pile. So, I think we could do a little bit faster with that technology. Not that it's...again, it's...it's...it's not the silver bullet we're all looking for; it's just a part of...and then moving forward, if we were to, you know, work side by side with Maui Landfill...we're actually looking into that right now. As I said, we've been working together for a while. We have very much local partners on the financing side of things and on the land side of things. So, I would just love to see that move forward. Problem with all of these is the...is the timing and the permitting. So, I'm not sure if there's emergency permitting that's available for the debris or whether that still has to go through its normal phases. Because that...knowing, at least on Oʻahu, right now I've got permits in that have been there for two years, still there. So, I'm not sure about what Maui's backlog is right now. So, that would be a huge consideration. But, again, working with the...with Maui County, in the future we would just ask for a tipping fee. We would not ask them to put up the system or anything like that. And just give you a heads up on these technologies, they're not inexpensive. The project that we're talking about for 1,000 ton a day is over $300 million. So...but we're willing to do that. We're willing to come in and take care of it. This is my home, too. So, you know, it's important, and it's emotional for all of us. So, you know, otherwise I would have made a PowerPoint presentation. But I wasn't sure I'd be able to do that, so I just wanted to come in and provide the testimony. You know, our projects are zero landfill. We don't want to do that anymore. It's not a good...good idea. So, all the products that we would make are sustainable aviation fuel, which the State needs to meet the RPS or the law for 2045 to be carbon, at least, neutral, if not negative. We have...I want to say a specific number, but we have very little in the way of emissions. It's pyrolysis. It's a closed-loop system. If we have emissions, we've got a problem. So, I just want to let people know that this is not incineration. We do it under a closed-loop system that has very little oxygen at all. The only oxygen comes from the moisture in the material that goes in, and we do dry that material down to one percent. So, it's...it's super small amount. But, you know, we would...we would encourage, you know, the County to kind of at least hear us out on some of our things. And if you decide that it's not the way to go, then so be it. But we are also pursuing this on Oʻahu. We're working with the City and County of Honolulu right now in the same type of discussions that we're having with Maui County. And there it's a little bit different. To my knowledge, there is not a pyrolytic process at all on O'ahu. They do

have H-POWER, which is mass burn facility, and the emissions from that are going to be even further restricted with the new EPA laws that are coming down. And the fact that they also just lost their…well, I don't want to say that specifically, but they…they may have issues moving forward with their PPA with Hawaiian Electric. So, they're in need of some…some serious options. And that's all we wanted to do today was present another option but more, specifically, around the actual reason we're here, the debris from the Lahaina fire. That's first and foremost. What we do moving forward is…is, you know, just a matter of time as, you know, we all pretty much feel that landfilling is just not a good option especially for islands because there's just a limit to how much you can do. All right.

CHAIR PALTIN: Okay. Thank you. At this time, I want to make sure and give everybody a adequate bio break. If there are no objections, we'll come back in ten minutes at 3:30. And then at that time maybe we can have you sit over here in case...we're going to get into discussion so the Members can ask any of our resources any questions and...and start the discussion. So, at that time, if you want to join us on the floor so that you can sit and speak into the microphone. But if there's no objections, we'll take a ten-minute recess to return at 3:30. And. Any objections?

COUNCILMEMBERS: No objections.

CHAIR PALTIN: All right. Let's do it. . . .*(gavel).* . .

RECESS: 3:20 p.m.

RECONVENE: 3:31 p.m.

CHAIR PALTIN: . . .*(gavel).* . . The DRIP Committee meeting of February 21st return to order. The time is 3:31, and we're in the discussion phase of our meeting. I will start with Members Sinenci, and work my way down. And we can put four minutes on the timer for folks and do as many rounds as we need up until 4:30 because there's a 5:30 meeting in West Maui. Okay. Go ahead, Member Sinenci.

COUNCILMEMBER SINENCI: Mahalo, Chair. I was actually signaling to get my camera on, but I just have a question for you, Chair. For clarification, FEMA has not agreed to using these alternative fire debris solutions.

CHAIR PALTIN: Yes. So, my understanding is that FEMA has agreed to do the debris removal, which in most other...this is the first time in the history of my knowledge that FEMA is fronting debris removal...debris removal. Usually County, State jurisdictions have to front the removal and then get reimbursed. So, they're kind of in control of it. The part that they need...they assigned to us was to create the permanent disposal site, wherever that may be. And the survey finished February 15th. I imagine the choice most people selected was Central Maui Landfill, but I could be wrong. And so Army Corps of Engineers is in charge of what is Phase 2 right now, debris removal. They're bringing it to the temporary disposal site. A permanent disposal site will be selected, I believe, by March 1st, and then constructed, and the County has to pay for that. But the Army

Corps of Engineers would pay for transport from the temporary site to the permanent site.

COUNCILMEMBER SINENCI: Okay. Thank you for that. And so for vendors who want to use these alternative debris...fire debris solutions, they would, one, have to go to the Administration, and then it would be at the cost of the County.

CHAIR PALTIN: Yes. Like if...if the...so, the...from my understanding from the Yummet presentation, the Army Corps of Engineers would not deliver it to her. They deliver it to the permanent disposal site. And then what the County does with the ash debris from the permanent disposal site is between whomever vendor and the County, and the Army Corps and FEMA are out of the picture, was my understanding.

COUNCILMEMBER SINENCI: Okay. Thank you for that clarification, Chair. So, the vendors would have to approach the...like I believe Mr. Newberry has already reached out to the Department of Environmental Management. So, that would be the process?

CHAIR PALTIN: Yes, yes. And I did get word that Mr. Schmidt may have fixed his tech problem. So...oops, sorry. So, if...if you did want to try and ask him a question, we can try and have him unmute himself if...if that was where you're going with that.

COUNCILMEMBER SINENCI: Okay. Thank you, Chair.

CHAIR PALTIN: Oh. Is...that conclude your questions?

COUNCILMEMBER SINENCI: Yeah, for now. I can defer to my fellow Councilmembers.

CHAIR PALTIN: Okay. Member Cook, your opportunity.

COUNCILMEMBER COOK: Thank you, Chair. . . .*(Inaudible)*. . . so it's Tim...the last name? Mister --

CHAIR PALTIN: Tim Newberry or --

COUNCILMEMBER COOK: Mister --

CHAIR PALTIN: Yeah.

MR. NEWBERRY: Newberry.

COUNCILMEMBER COOK: Mr. Newberry. What's the energy source? It sounded like it's very energy intensive to do the process that you're discussing.

MR. NEWBERRY: Are you speaking primarily about the fire debris?

COUNCILMEMBER COOK: The fire debris and in general for waste processing.

MR. NEWBERRY: The fire debris we hope would just be self-sustaining by the pyrolytic gas that we would produce. So, we would, you know, pretty much produce our own parasitic load. It is possible, depending on how fast we want to go, that we could require little bit of electrical power. Could be up to 2 or 3 megabytes or megawatts. I'm sorry.

COUNCILMEMBER COOK: So, I have not seen the ash debris that's being hauled out. My understanding is that it's...because of the intensity of the fire, that it literally melted glass and metal. That there's not a lot of combustibles left and that there's glass, metal, there'll be the concrete that they're...that they're removing, but then the dirt. So, what is the combustible material that you would be processing to...how would you address that?

MR. NEWBERRY: So, if there is no combustibles in there, then we would not do a pyrolytic process. Then we would go straight to a...you know a rotary kiln. And...because that's the most efficient for doing dirt, and then to get the power for that one, we would need to get some power from, you know, Maui Electric.

COUNCILMEMBER COOK: It...does...how does that pencil out as far as, like a rotary kiln, the electrical and in broad strokes? I understand it's highly technical and --

MR. NEWBERRY: Right.

COUNCILMEMBER COOK: -- and a lot of variables.

MR. NEWBERRY: At this point in time, it would probably be some kind of an arrangement of a fee like a tip fee per ton.

COUNCILMEMBER COOK: Okay. Thank you.

CHAIR PALTIN: Is that...conclude your questions?

COUNCILMEMBER COOK: Yes.

CHAIR PALTIN: Okay. Member Rawlins-Fernandez, your opportunity.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Chair. Okay. My first question is regarding the...this flier that was on our desk. Is this a facility in Washington or Chicagoland?

MR. NEWBERRY: No, that facility is a rendering of one that we are going to do in Long Island. It's a 250,000 square foot building, of which all of the materials and processes would be completely inside that. So, what we tried to do there was to create more of an asset to the community by bringing in...or having everything under one roof and having a nicely landscaped area. We create a pond, you might see in the front of that, and that's basically from the water that's extracted from the waste. It goes through a process where we filter it and we sterilize it so the water is clean water. It's...it's like R-1 water, if you're familiar with that. So, it could be drinking water, but we don't suggest it.

COUNCILMEMBER RAWLINS-FERNANDEZ: Oh, we don't drink R-1.

MR. NEWBERRY: Yeah.

COUNCILMEMBER RAWLINS-FERNANDEZ: We…we would drink R-0.

MR. NEWBERRY: Yeah.

COUNCILMEMBER RAWLINS-FERNANDEZ: But I know we're not ready for the ick factor we were told, so…

MR. NEWBERRY: But it is fine for fish. So, if you wanted to create a pond for folks to come to the facility, and have an opportunity, or have a Friday night movie out in the…in the big yard, that could be done. So, we're just looking for ways to make it an amenity instead of a landfill.

COUNCILMEMBER RAWLINS-FERNANDEZ: I like that. So, there's a PowerPoint presentation on your website in the documents. Is…is that kind of similar to the PowerPoint that you would have shown us today if you were aware that you are going to be giving a presentation to this Committee?

MR. NEWBERRY: We, definitely, would have tailored it to this discussion.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. All right. Okay. Okay. My next question is for another resource person. Oh, shucks. I think he left. And so Mr. Holm and Mr. Skippy [*sic*], I think, were going to --

CHAIR PALTIN: Dr. Skippy [*sic*].

COUNCILMEMBER RAWLINS-FERNANDEZ: -- Dr. Skippy [*sic*] were going to be able to answer the question. So, the photos that we were shown of the plastic were coffee cups, or that's what was told to us in the presentation. And so they are very, like, thin and, you know, clean. It…with like debris and other stuff that we have, like, would they need to be scrubbed clean in order for them to be processed into the plastic chips for the…I think you do pyrolysis…pyrolysis.

CHAIR PALTIN: Either --

COUNCILMEMBER RAWLINS-FERNANDEZ: Dr. Skippy [*sic*].

CHAIR PALTIN: -- Mr. Holm or Dr. Skip.

COUNCILMEMBER RAWLINS-FERNANDEZ: Or Mr. DeWhitt.

CHAIR PALTIN: Or Mr. DeWhitt.

COUNCILMEMBER RAWLINS-FERNANDEZ: I think he's raising his hand.

CHAIR PALTIN: Oh, Mr. DeWhitt, go ahead. We can unmute you.

COUNCILMEMBER RAWLINS-FERNANDEZ: Oh. His...his mic is...needs to be enabled. Oh, there we go. Now, you can unmute yourself, Mr. DeWhitt.

MR. HOLM: *(Audio interference)* actually with a little bit of daylight. I...I thought Skip might be able to answer that, but the cleaner it goes in, the easier it comes out. This process is...is proposed to handle as much as ten percent contamination. What that really means is that the cleaner you get it, the easier it works. And so it...it can handle --

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. My next question --

MR. HOLM: Oh. Okay.

COUNCILMEMBER RAWLINS-FERNANDEZ: -- I have a...I have a timer. So, if everyone could be as concise as...as they can in their response. So, the...what comes out...what was shown in the presentation was liquid. And so what was going to go in was plastic. Is there any kind of additive or is there some kind of like chemical reaction . . .*(timer sounds).* . . that makes it that diesel liquid?

MR. HOLM: You can use catalysts, and there are various types of catalysts depending on who's doing what, and what the product is, and what the....the...the intended goal is. Catalysts can make the process more efficient. It's not absolutely required. And in our particular application, we want to be working with remote island communities. So, the less amount of outside influence, in the form of a catalyst or something like that, that we use, the easier it will be for those communities. So, it there...it can be adjusted and...but either process does work.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Mr. Holm. Mahalo, Chair.

CHAIR PALTIN: Thank you. Member--oh. At this time I would like to recognize Councilmember Sugimura to the meeting.

COUNCILMEMBER SUGIMURA: Thank you for allowing me to be late to your meeting. I did go to the press conference that was held at Launiupoko Park. Right now, I can't get back into my office to get my computer to set up. So, OCS help...I don't know who to talk to about that. Like it's locked.

COUNCILMEMBER RAWLINS-FERNANDEZ: Public Works or Marlene. Marlene.

CHAIR PALTIN: Oh, your badge doesn't work on the clicker thing?

COUNCILMEMBER SUGIMURA: So, this doesn't work. And my key is in the office with my computer so...thanks.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. Back to the meeting.

CHAIR PALTIN: Okay. Member Sugimura, so then in that case, I'm going to skip you on the question unless you had questions. Okay. Member Kama, go ahead.

COUNCILMEMBER KAMA: Thank you, Chair. So, I wanted to speak with Mr. Logan Graves with Clean Harbors.

CHAIR PALTIN: Mr. Graves, are you available?

MR. GRAVES: Yes, hello.

COUNCILMEMBER KAMA: Hi.

CHAIR PALTIN: Okay. Go ahead, Member Kama.

COUNCILMEMBER KAMA: So...so, I'm just reading from your...your...your...your CliffsNotes, I guess, that you sent to the...to the Council regarding what you folks do. So, what have you...what...where...where is it that...it says that you...from San Jose. But...but what aspects of large-scale waste removal projects have you done in the U.S. of A, if not here?

MR. GRAVES: Our company has done quite a few large-scale projects like this. The biggest one in comparison would be the Paradise fires in California. I wasn't directly involved with those. I did work on the CZU fires, which were in Santa...Santa Cruz in California. I was involved mostly in the Phase 1...or your guys' Phase 1 aspect. But we...we have done large-scale projects like this.

COUNCILMEMBER KAMA: And so you...part of...part of what you said to us was almost like a budgetary proposal --

MR. GRAVES: Um-hum.

COUNCILMEMBER KAMA: -- to remove the ash and debris in Lahaina. So, I don't know how to do the math in terms of what the total cost would be, because you gave it by per cubic yard at a rate of 150,000 cubic yards per year. Do you know what the total cost would be based upon *(audio interference)* --

CHAIR PALTIN: *(Audio interference)* --

COUNCILMEMBER KAMA: -- I'm sorry.

CHAIR PALTIN: -- maybe approximately --

COUNCILMEMBER KAMA: Yeah.

CHAIR PALTIN: -- *(audio interference)* --

COUNCILMEMBER KAMA: Yeah.

CHAIR PALTIN: Would...would that be right, Mr. Graves?

MR. GRAVES: *(Audio interference)* yeah, that's correct. The number I've seen is total ash and debris is 400,000 cubic yards. So, that would be $106 million.

COUNCILMEMBER KAMA: And this is a year or is it for...for the total removal?

MR. GRAVES: So, we could remove it at a rate of 150,000 cubic yards per year. So, it'd take about three years to get all that removed.

COUNCILMEMBER KAMA: Okay. Well, thank you. Thank you, Chair.

CHAIR PALTIN: That concludes your questions, Member Kama?

COUNCILMEMBER KAMA: Yes, Chair. Thank you.

CHAIR PALTIN: Okay. I'll take my opportunity. So, the first question for Mr. Graves is when you said that there were certain assumptions made, I was wondering if you could clarify what those assumptions were.

MR. GRAVES: Yeah. So, a lot of those assumptions are the...that waste is nonhazardous. We would probably need some...some metal testing of the...of the waste to prove that it is nonhazardous. That's one of the assumption...that's the biggest of the assumptions. And then also the rate of work that we can perform. So, like, if there's any limitations to the...to the site...or to the sites where the waste is, that could also delay and change the price.

CHAIR PALTIN: Okay. And then so by nonhazardous does that mean that it doesn't need a Subtitle C landfill? Like I thought...or you said you're going to put it in a Subtitle C.

MR. GRAVES: Our landfills are rated for...for Subtitle C. All the hazardous landfills...we do also have nonhazardous landfills, which would be a Subtitle D, but we can...but the proposal is mostly just to remove it from the island entirely. So, all the ash, all the debris, just have it removed from the island. And then...but the pricing does depend on if it's nonhaz. or hazardous. We can do both.

CHAIR PALTIN: And what would be your definition of nonhazardous versus hazardous? Because we've heard a lot of different interpretations of hazardous and nonhazardous.

MR. GRAVES: Ours would be the legal definition set forth by the EPA. So, the biggest one would be TCLP metals...TCLP metal analysis.

CHAIR PALTIN: And, I guess, the Department of Health and maybe even the EPA have done sampling of the ash debris. I just was wondering if you've seen the results of that testing, and that provides you the information you need for your assumptions. Like --

MR. GRAVES: I have not --

CHAIR PALTIN: Oh.

MR. GRAVES: -- seen the process, but if the EPA does have them and I can review them or have the landfill review them just for confirmation, then that would answer the largest question.

CHAIR PALTIN: I think the Department of Health posted their sampling of the ash debris online. It tested very heavy...like very high for heavy metals, I believe. Like lead, arsenic, and those things. Is that what you would consider hazardous if it test high for lead and stuff?

MR. GRAVES: There is a...the EPA does have a legal limit for how much...parts per million on a...on the TCLP analysis that would need to be seen in order to designate it as hazardous or nonhazardous.

CHAIR PALTIN: Okay. All right. And then would expect the County to pay that 160 million plus; if it's hazardous, it costs more. Do you know what the cost would be if it is hazardous?

MR. GRAVES: I don't. I would have to run that by our Waste Projects VP to get that number. But that is part of that discussion that we want to have with the decision makers, is to lay out that whole plan, see the analysis, and then we can provide a full, actual quote for what the full job would be.

CHAIR PALTIN: And if it's nonhazardous, your plan is still to put it in a Subtitle C land...landfill?

MR. GRAVES: We would use a landfill. I don't know specifically which one or what category. I would have to, again, check with the VP . . .*(timer sounds)*. . . on the specifics.

CHAIR PALTIN: Okay. All right. Round two. Member Sinenci

COUNCILMEMBER SINENCI: Thank you, Chair. Just a follow up on Mr. Graves...for clarity, the...FEMA has not agreed to fund shipping the debris off island, correct?

CHAIR PALTIN: Correct.

COUNCILMEMBER SINENCI: Okay. Thank you, just to be clear. And then for Mr. Wollenharp [*sic*], is he available?

CHAIR PALTIN: Mr. Wollenhaupt, are you available?

COUNCILMEMBER SINENCI: . . .*(Inaudible)*. . . because, Chair, I believe both Kauaʻi County's, as well as the City of Honolulu, on Oʻahu, landfills are up for either renewal or they've

reached their capacity. So, I know those two counties at our last HSAC, was looking for either alternatives or another site for their…just for their regular landfills.

MR. WOLLENHAUPT: Hello.

COUNCILMEMBER SINENCI: Oh, thank you. Mr. Wollenharp [*sic*], is…can…I know you…we've had some past discussions on some of these technologies. We've spoken with Mr. Gunter about having a…a pilot project in East Maui. However, there are some challenges to doing that, including Department of Health approval as well as water for some of these technologies. Have you had any discussions where we could, possibly, use some of these technologies at our landfills, including Molokaʻi and Hāna?

MR. WOLLENHAUPT: Oh, hello this is the --

COUNCILMEMBER SINENCI: Oh.

MR. WOLLENHAUPT: My name is Kurt. Hello, Chair. And hello, Councilmember. In regards…I think that that question would probably be better answered by the Department of Environmental Management. But I can update you that the question regarding this Central Maui Landfill is that at the last time the special permit at the State Land Use Commission was up for review, the Land Use Commission, although they did approve the fourth amendment, they did indicate, and I'll read this, the applicant shall commence the process to seek a district boundary amendment with the Land Use Commission for the approximately 96 acres of the total permitted area of the CML within five years of the LUC's DNO. So, that puts us into a complex process requiring the environmental impact statement, moving that entire area, as defined right now as a landfill, into more of a waste management center, which probably would more appropriately be in the urban area in which the land…in which the current landfill is within the urban growth boundary, and then have a concomitant change in zoning and community plan amendment. So, that's a rather long-winded answer that we're in the process. The Office of Environmental Management, along with the Planning Department, to get this ready to go to the State Land Use Commission. That's sort of why I was here today at the behest of the Planning…Acting Planning Director to acquaint you with kind of the process we're in at the CML. With regards to these specific technologies, it would appear that the location of them would be ideal at the Central Maui Landfill because that entire process, then, could be encapsulated within those areas. Otherwise, you're going to be looking at probably only heavy industrial, of which there is not too much land. So, I hope that brings you up to date at least a little bit, but I would recommend getting the Department of Environmental Management on the line, if possible, to discuss the specifics with regards to the technologies that they may someday wish to use at their facilities.

COUNCILMEMBER SINENCI: Okay. Thank you.

MR. WOLLENHAUPT: Thank you.

COUNCILMEMBER SINENCI: Thank you for that clarity and that update on the CML. Thank

you, Chair.

CHAIR PALTIN: Did you want to see if Mr. Schmidt is available to answer your question?

COUNCILMEMBER SINENCI: Yes, please.

CHAIR PALTIN: Mr. Schmidt, are you able to unmute yourself? You're unmuted on our end.

MR. SCHMIDT: Yes, I can. Yeah. Thank you, Kurt, for…for very well describing the situation. As we…as we proceed forward with the district boundary amendment and go forward with the EIS, we fully intend to describe as many, I guess, up-and-coming technologies as…as we can to give us the flexibility to maybe host or…or have, you know, a new technology come to bear. And so we're…we're…we're planning on…on trying to make the EIS as broad as possible to incorporate whatever may come our way that's viable and…and bring us to a better place.

COUNCILMEMBER SINENCI: And real quick, Chair. Would that include an MOU should the County want to go into partnership with some of these vendors?

CHAIR PALTIN: Mr. Schmidt.

MR. SCHMIDT: Yeah, I mean, a public-private partnership is…is…been done in other places and…and depending on the, you know, cost benefit I…I…we'd be agreeable to that.

COUNCILMEMBER SINENCI: Okay. Thank you, Chair, for the leeway.

CHAIR PALTIN: Thank you. Sounds like we got the same treatment as UH Maui, Molokaʻi; they'll give us the permit but next time DBA. Okay. Member Cook, your opportunity.

COUNCILMEMBER COOK: Thank you, Chair. Mr. Homer, I didn't hear your presentation, but I'm…I wanted to ask all three of you, and I'll start with you. What's the approximate size of the type of unit that you would project to satisfy some of the processing needs we're discussing on Maui? I'm…I'm just…ballpark.

MR. HOLM: In…in order to accurately answer the question, we'd have to come and do a quick survey of the amount *(audio interference)* the individual canisters that go in and out of the heater carry 1,250 pounds of shredded plastic at a time. So, you can do…you know, it's approximately three or four hours between batches. You trade out the canister. While you're cleaning one, you put in the other. If it was a larger volume, you can have two heaters and four canisters, and so on, and so on. So, it…it is a…a modular system that can be set up to match your…your needs. But I don't know…I…I can't predict what that is right at the moment.

COUNCILMEMBER COOK: That's understandable. So, it's for plastics only?

MR. HOLM: Yes, I…I wish we had the…the miracle tools, but no this…this just be for plastics. We see that it might be very valuable in the…the amount of new plastics introduced to

the island during the cleanup process, and certainly with the rebuilding of that many homes as fast as possible. The packaging is going to be off the charts for what Maui would normally experience.

COUNCILMEMBER COOK: So, does it do like . . .*(inaudible)*. . . EPS like a variety? Because plastics come in so many shapes, forms, and types.

MR. HOLM: Right. That...that is always a dilemma. What we classically suggest is that in...for most people, you recognize the...the recycle codes on your...your food packaging and stuff. And this would recycle most easily types 2, 4, 5, and 6, which are low- and high-density polyethylenes, the polystyrene, and polypropylene. It does not like the number one, which is the PETE for drinking water bottles and such. It does not like PVC, and it does not like nylon. That's not to say that it's not possible to use this technology with those plastics, but there are additional considerations to be made each time.

COUNCILMEMBER COOK: Thank you, sir. And, Mr. Newberry, what's the size and is it modular for the type of machinery technology that you're proposing?

MR. NEWBERRY: Absolutely. It...it...it's going to vary again on what...what we have. But if I was just to characterize MSW, the facility that we would be talking about, to take a 1,000 ton a day and convert everything, you're looking at about 30 acres. That's how big that footprint would be. But, again, it is modular and scalable, so --

COUNCILMEMBER COOK: So --

MR. NEWBERRY: -- depending on how much you want it to do.

COUNCILMEMBER COOK: -- that many acres would be like the entire processing plant. Then the...then the machinery would be placed in that. And then you have handling, and storage, and --

MR. NEWBERRY: Right.

COUNCILMEMBER COOK: *(Audio interference)*

MR. NEWBERRY: Because we would have...we would have a MRF on the front end, the material recovery system so that we can sort out the things that we, you know, want to just recycle versus the things that we are going to then dry and pelletize before it goes into the pyrolysis units.

COUNCILMEMBER COOK: Thank you for that . . .*(timer sounds)*. . . clarification.

CHAIR PALTIN: Thank you, Member Cook. Moving on to Member Rawlins-Fernandez.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Chair. I'll dovetail off of that. So, the...for the, what is this, Blue Marble Innovations or Blue Marble, that proposed structure, the footprint would be 30 acres, including like a pond or something else like

that.

MR. NEWBERRY: Yes, the...it would be all inclusive. The site, you know, would be 30 acres or something of that nature. That would include all of those things. And I think maybe the one thing I forgot to mention was as we want to make it an amenity, we do include the environmental education center.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mmm.

MR. NEWBERRY: So, that would be for building footprint as well as the moving of vehicles on the site.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. And then that...that would pretty much be...be it.

MR. NEWBERRY: Yes.

COUNCILMEMBER RAWLINS-FERNANDEZ: Deputy Schmidt, how big is the Central Maui Landfill? What's the footprint? The current footprint and then the, you know, Phase 6 and 4 --

MR. SCHMIDT: Well, our --

COUNCILMEMBER RAWLINS-FERNANDEZ: -- *(audio interference)* --

MR. SCHMIDT: -- our new property to the north is about 96 acres.

COUNCILMEMBER RAWLINS-FERNANDEZ: The new property is 96 acres or with the new property is 96 acres?

MR. SCHMIDT: No. No, the new property footprint is...is in the 96-acre range.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay.

MR. SCHMIDT: So...so not currently being used by landfill. There's...there's a little bit of the green waste operation in there, but there's plenty of room for 30 acres.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. And then our existing operations, how many acres is that?

MR. SCHMIDT: I don't know offhand. It's got to be in the --

COUNCILMEMBER RAWLINS-FERNANDEZ: Hundreds.

MR. SCHMIDT: -- hundreds, yeah. Couple hundred, maybe.

COUNCILMEMBER RAWLINS-FERNANDEZ: Yeah. Mahalo. Mahalo, Deputy Schmidt. So, I

think all of the...the technologies that we heard from today, in presentation, would be able to produce something that could then be sold. It...it is, I think, what I understood. And...oh, man, I guess I...I couldn't go one by one and ask; that would probably take longer than I have time for, but I guess whoever speaks first. So, like, in the...in the flyer for Blue Marble it says increase revenue, and I...I imagine that's for the fuel...jet fuel...or diesel that would be sold. And then that revenue would remain with your entity because your entity would front the cost of constructing the facility?

MR. NEWBERRY: We're certainly open to a partnership if that's what we want to do. We were just trying to see which would be the most convenient to do. And at the time, it seemed like just the private sector. And then potentially just having Maui as a customer, and they can just bring their materials to us for a reduced tip fee for what it's costing you right now. But then it would all stay with us, but Maui would see the savings. But we're certainly open to any kind of partnership.

COUNCILMEMBER RAWLINS-FERNANDEZ: So, Mr. Newberry...oh, it's...it's...it's easier because you're here in person. . . .*(laughing).* . . Have you ever met with anyone from our Solid Waste Division?

MR. NEWBERRY: Yes, I've met with Bob on several occasions.

COUNCILMEMBER RAWLINS-FERNANDEZ: Oh, okay. And...and you've talked to him about the technology that --

MR. NEWBERRY: Yes.

COUNCILMEMBER RAWLINS-FERNANDEZ: -- you have in Washington. And so is there a facility in Washington and Chicagoland?

MR. NEWBERRY: No, it is in Tennessee --

COUNCILMEMBER RAWLINS-FERNANDEZ: Oh, okay.

MR. NEWBERRY: -- is where the one is . . .*(timer sounds).* . . up and operating.

COUNCILMEMBER RAWLINS-FERNANDEZ: And how...just one last question. How...how large is that facility in Tennessee?

MR. NEWBERRY: It's a relatively small unit running there. Probably 100 ton a day.

COUNCILMEMBER RAWLINS-FERNANDEZ: One hundred ton a day.

MR. NEWBERRY: Um-hum.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. Mahalo. Mahalo, Chair.

CHAIR PALTIN: Thank you. I see Member Sugimura doing something. Any questions? No

question. We can move along to Member Kama. Go ahead, Member Kama.

COUNCILMEMBER KAMA: Thank you, Chair. So, this question is for Mr. Newberry. So, is the...is...is your company's intent that once they break everything down to its smallest scale that it can be that you would probably, most likely keep the debris on island? Or would you transport it out?

MR. NEWBERRY: It would stay on island.

COUNCILMEMBER KAMA: Okay. That was my last question. Thank you, Chair.

CHAIR PALTIN: Okay. Member Sugimura, any questions?

COUNCILMEMBER SUGIMURA: My obvious question, which probably was discussed earlier, so my apologies, is we're talking about 2023 wildfire debris processing solutions. So, are...is this organization in communication--sounds like not by listening to some of the other questions--to help with the debris removal that we're going through in West Maui?

CHAIR PALTIN: I don't believe they...they have communicated back and forth with the Administration. Although, it's different...different...it's not one group. Mr. Graves is with Clean Harbors. There's Clean Oceans International, PDO Technologies, Oregon State University. And Mr. Newberry is with Blue Marble PNW. So, it's...it's a variety of different things. I'm not...Mr. Newberry said he's been in discussion with Deputy Director Schmidt for a couple years. I believe the other entities have reached out from...to the Administration, but have not heard back from the Administration.

COUNCILMEMBER SUGIMURA: Okay.

CHAIR PALTIN: So, it's...it's been one-sided.

COUNCILMEMBER SUGIMURA: So, basically, they're interested in helping with the wildfire debris movement? Or is this...you're looking at for a future expansion of the Central Maui Landfill? What is the purpose of the meeting, I guess?

CHAIR PALTIN: They are interested in helping, but they haven't heard back from the Administration.

COUNCILMEMBER SUGIMURA: So, are you intending to do something? Because the wildfire debris removal is happening now in West Maui. So, are you trying to insert this in as a process for the Army Corps of Engineers to review or --

CHAIR PALTIN: They presented in the beginning that it would...I guess, yeah, they would...they could insert in the process. But I'm just having this because they reached out to me and to show that Ms. Zimmerman wasn't the only one who was talking about pyrolysis and alternatives. So, when Ms. Zimmerman presented, these entities reached out to me that they would also like to present. And so I'm accommodating that.

COUNCILMEMBER SUGIMURA: Oh, I see, so you're taking a --

CHAIR PALTIN: It's not the…not Yummet or nothing. It's there's other folks doing other things.

COUNCILMEMBER SUGIMURA: So, it's just for education for us so we understand that there's bigger opportunities out there.

CHAIR PALTIN: It's a 7(B) presentation.

COUNCILMEMBER SUGIMURA: Yeah. Okay. Thank you. No questions.

CHAIR PALTIN: Okay. Member Kama. Oh, sorry, did we skip ahead to you?

COUNCILMEMBER KAMA: I asked my question, Chair.

CHAIR PALTIN: Oh. Thank you. My bad.

COUNCILMEMBER KAMA: Yeah, I did. No, no.

CHAIR PALTIN: Okay. My question would be, I guess, for Mr. Homer. In the other places where you've done your technology, is it at the landfill or is it an independent other facility? And if so, what is the zoning at your other…is it heavy industrial?

MR. HOLM: That would best be answered by Kevin, because I'm not familiar with the facilities that he set up in Atlanta and on the East Coast. However, the existing facility is a standalone shared facility with an agricultural plastic recycling company. And, again, he knows what he went through to do the permitting process. It wasn't onerous, because I know we've talked about that for the future, and he suggested it was strictly a process. You know, that you answer the questions and…and they have not had a problem with that. But, again, I…I can't answer those questions, specifically, I apologize.

MR. DEWHITT: I…I can probably help with that.

MR. HOLM: Great.

CHAIR PALTIN: Oh, Dr. Skip, go ahead.

MR. DEWHITT: So, not Dr. Skip, sorry, not that smart, but this is Kevin.

MR. HOLM: Great.

CHAIR PALTIN: Okay. Go ahead.

MR. HOLM: Perfect.

MR. DEWHITT: So, there was…there was a question earlier about the size *(audio interference)*

one of our units takes up about 1000 square feet. I want to make sure that was asked and answered. In terms of permitting, it's...this is a light industrial type of technology. Some people call it an industrial appliance. But we're actually sited in Oregon, in Marion County, which houses the State capitol on an exclusive farm-use tract of land because agricultural plastic recycling was granted that usage. And then the Land Use came in and said, we'll allow a very small-scale pyrolysis of plastics to site on that facility as well. So, we...we can comply with anybody's regulatory requirements. Typically, that's just air emissions and...and...and, of course, land use. Because the technology is so small it allows us to sort of be very nimble in that regard. I hope that answers the question.

CHAIR PALTIN: Yes. I guess, Deputy Director Schmidt, for our current Central Maui Landfill, is the zoning industrial? Or is that what we would get the DBA to become?

MR. SCHMIDT: Yeah, the current zoning, I know on the new property, is agricultural, and I...I believe the whole thing is...is ag., and some of it is actually, you know, important ag. So, that's why the DBA...that's...that's why they wanted us to do the DBA to more of a...and...and...and I don't know exactly what...what zoning we're going to.

CHAIR PALTIN: Oh.

MR. SCHMIDT: I...I don't recall. I don't know if Kurt is still on.

MR. WOLLENHAUPT: Yes. Yes, I'm...I'm here. Hello. Hello, everyone. This is Kurt again. It...it is agricultural. And that therein lies the...therein lies the problem. As a...as a facility moves from a landfill now to a waste management center, the Land Use Commissioners feel this, now, is a urbanized project. It now reflects a variety of uses and, therefore, we are moving into a whole different realm. It's in...within the urban growth boundary, so it would need to be urbanized. That's the State Land Use Commission leg of the tripod. Then we have to worry about the community plan, and we'd have to worry about the zoning, and we would want them all to be congruent. So, I would anticipate a heavy industrial use. We also have M-3 which is rarely . . .*(timer sounds).* . very rare lands here, but important. Those would be the most noxious of uses. And then you tie that in with the community plan of, again, that would also be heavy industrial. So, that I believe is what the...the goal is, is to have urban state, heavy industrial, and then M-2 or M-3 for the waste management center. It...it...it...it is a complex and lengthy process, to say the least.

CHAIR PALTIN: Thank you --

MR. WOLLENHAUPT: Thank you.

CHAIR PALTIN: -- for that lengthy answer too. Nah, just joking. So, just to...to clarify, if we go to heavy industrial and say any of these technologies, for example, Mr. Newbery's or Mr. DeWhitt's technologies, I just was wondering, and maybe Deputy Director Schmidt could answer the question, if we have a landfill that is sealed and is still in its like 30 year, or however long we monitor it, phase, would it be possible, since the zoning would

likely be going into heavy industrial, for them to do their technologies on top of the landfill? Or is that not allowed? Like when you monitor a landfill, you have to have the top of the landfill open to be monitored or something.

MR. SCHMIDT: Yeah, that would depend more on kind of the structural integrity of whatever you wanted to put there, because it's...it's obvious...not a solid base. And so that would have to be kind of engineered designs and would be particular to, you know, the weight of whatever equipment or...or structures you wanted to place there. But I think...I think we'd be open to those uses, and it could be engineered to be sound design.

CHAIR PALTIN: Or...or, I guess, the other option would be adjacent. And then is it possible to open a landfill after it's been sealed to pull that rubbish out? Or would you rather use the new rubbish to convert it first? And then when you use up all the rubbish, then you go dip into your sealed landfill ones? Or what would be the strategy there? You never thought of it.

MR. SCHMIDT: Well, I think...I think both options are available. I mean, if we get a...if we get a technology to take care of the incoming waste stream...some have already offered, I think there's examples out there of...of landfills being mined.

CHAIR PALTIN: Okay.

MR. SCHMIDT: So, it just depends on the technology and the flexibility, right.

CHAIR PALTIN: Sounds good. Any burning last questions? Member Rawlins-Fernandez, followed by Member Sinenci.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Chair. I...I guess this would be for everyone. I think, you know, to understand the parameters of your technologies, so in terms of the waste debris the most problematic with the Yummet, for example, was the...the lack of evidence of it completely disposing of the heavy metals; the...the arsenic, the lead...what else is...cobalt in the debris. So, could...could each of you speak to whether your technology would be able to, I don't know, neutralize those heavy metals and chemicals?

MR. HOLM: I believe that the only person that can speak to that is Mr. Newberry. I believe his technology...our technology is not capable of dealing with the heavy metals. It's more of a convenience and look into the future. Wish we had more to offer, but it sounds like Mr. Newberry's technology might be that silver bullet.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mr. Newberry.

MR. NEWBERRY: Yeah, we can...we can certainly take out the heavy metals out of the soils that were...that are remaining. But we would...we would definitely use a rotary kiln to do that, because anytime you're going to put dirt into a system, you don't want to put it into pyrolysis. It's generally just...just going to wreak havoc. A lot of these run on screw drives, and you can think about your car cylinder, if you go put dirt in there, boy, it's

going to scratch everything up, and then you're going to have oil leaking everywhere; so it's just not a good idea. But a rotary kiln would...would work tremendously on that.

COUNCILMEMBER RAWLINS-FERNANDEZ: So, in taking in the debris, let's say, you know, I guess the larger things like the...the...the...the lead from paint on something...something old, would you...would you, like, wash the debris, and then crush it, and then pyrolysis it?

MR. NEWBERRY: Well, again, we don't know how much actual solid debris there is. If it's *(audio interference)* --

COUNCILMEMBER RAWLINS-FERNANDEZ: 400,000.

MR. NEWBERRY: Pardon me.

COUNCILMEMBER RAWLINS-FERNANDEZ: Oh, I guess like 400,000 tons of debris --

MR. NEWBERRY: But that's --

COUNCILMEMBER RAWLINS-FERNANDEZ: -- and soil, and ash, --

MR. NEWBERRY: Right.

COUNCILMEMBER RAWLINS-FERNANDEZ: -- and stuff.

MR. NEWBERRY: So, we don't know is the answer to that as to how much there actually is remaining. But even still these kilns run at very high temperatures, so it's going to destroy any heavy metals that are in there.

COUNCILMEMBER RAWLINS-FERNANDEZ: So, you would take the 400,000 tons of stuff; separate out the soil; put it in the kiln; burn off all the arsenic, lead, asbestos, et cetera; and then take the debris. But if the debris also is contaminated with toxins, dioxins, et cetera --

MR. NEWBERRY: Yeah.

COUNCILMEMBER RAWLINS-FERNANDEZ: -- that it would be washed. And then would it be, like, pelletized too? Or how does that work?

MR. NEWBERRY: We would take...if there is solids in there, we would definitely run those through our front-end processing and we would get those down to a small size. And then we would pyrolyze them after pelletizing them. But the thing to understand with...with this type of thing, and nobody's really talking about it, is...is PFAS, and you're going to wind up...that...that's a big deal. So, with what...the process that we use, it really rips that . . .*(timer sounds)*. . . material down to a very small particle. And because you have a small particle size, you can get 100 percent penetration of the pyrolysis through that material. So...and then, again, running at the temperatures that

we do will destroy that.

COUNCILMEMBER RAWLINS-FERNANDEZ: It destroys the PFAS?

MR. NEWBERRY: Yes.

COUNCILMEMBER RAWLINS-FERNANDEZ: Wow. Chair--mahalo for that response. I...I see Mr. --

UNIDENTIFIED SPEAKER: . . .*(Inaudible)*. . . --

COUNCILMEMBER RAWLINS-FERNANDEZ: -- Schmidt-Pathman with his hand up, I think *(audio interference)* --

CHAIR PALTIN: Mr. Schmidt-Pathman, did you have something to contribute to that? You can press star six to unmute.

MR. SCHMIDT-PATHMAN: I think I did. Can you hear me?

CHAIR PALTIN: Yes we can.

MR. SCHMIDT-PATHMAN: You can. Okay, great. Thank you. Yeah, I appreciate this. Again, I'm not coming from the *(audio interference)* technology...I'm not a technology provider and neither is our team, but people that have been on our team have analyzed over 6,000 different technologies worldwide on *(audio interference)* on processing. And for me, what...what comes out when we...when...when I discussed this briefly with my team is that we think what might make a lot of sense is to run the...the materials through a shredder with air extraction operating a negative air pressure, filtering out of the exhaust air in a protective hall, and with appropriate suction and filtering out the excess air which the...which will be critical just to break down the materials in order to be able to see what materials you have so that they can properly be processed. Any kind of process would require air filtration, like some kind of flue gas treatment system. If it's a rotary kiln and it's at really hot temperatures, you do you...do have to have a flue gas treatment system in place that will adequately take care of, you know, what you have the...the dioxins, . . .*(inaudible)*. . . other things...materials that come out. And having a good flue gas treatment system would be, in this case, very appropriate to...to add to any...any facility. But they...knowingly they...they do cost money. They...often they cost about one-third of a facility because depending on how...how stringent you want the requirements and what you want. If you want the dioxins low, if you want the PM levels low...2.5 low, whatever it is. So, it does require an elaborate system of flue gas treatment, which would make sense. It specifically depends on what, in the end, really does come out of a process where the...of the ash processing. You know, I've seen pictures of it too; I have not been there. So, I don't know exactly...and my team urges me that we needed an...to see an exact analysis or potentially do an analysis of the materials that go through there in order to give a proper...proper feedback on...on...on the process. But that's...that's what I would suggest on...from my side here, right now. And I'm gladly...I'm gladly open to have more discussions. If you want to contact me,

please do. Thank you.

CHAIR PALTIN: Thank you, Philipp. I think the last question will go to Member Sinenci, and then our...it looks like our time might be up. Go ahead, Member Sinenci.

COUNCILMEMBER SINENCI: Thank you, Chair. I didn't have any more questions, but I did want to thank you, Chair, for bringing this to the meeting today and for our resources today for their willingness to help Maui County with the fire debris removal, staying up late with us, and answering all of our questions. So, again, mahalo for that. To Member Sugimura's point, our...Chair, our interest has always been landfill diversions because we are an island community with limited space and...for our trash. And part of seeing more trash in our oceans is because other island communities that do not have these technologies, let alone a landfill, just go ahead and dump their trash right into the ocean. So, I'm hoping that...I'm happy to see...and hopefully some of these technologies will help us process the trash that we've already buried in the last 30 or 50 years. Thank you, Chair.

CHAIR PALTIN: Thank you. Thank you. Member Kama, did you have anything else? Oh, okay. Member Rawlins-Fernandez, you get the --

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Chair.

CHAIR PALTIN: -- last question.

COUNCILMEMBER RAWLINS-FERNANDEZ: Since Member Sinenci didn't take the last question, I have a last question. *. . .(laughing). . .*

CHAIR PALTIN: Okay. Go ahead.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. Mr. Newberry, to...to...to...to close the loop...well, I'm sure there be more questions later and I can email you. But to follow up on the questions of the...the...the...all the toxins...I'll just say toxins. You know that the kiln would burn off everything...all...all the toxins from the soil because you've tested it. And have you tested it in the Tennessee plant? And did you also remove it from the water before it was put into the...or it conceptually would be put into the pond?

MR. NEWBERRY: So, our Tennessee facility --

COUNCILMEMBER RAWLINS-FERNANDEZ: Sorry, little bit closer to the mic.

MR. NEWBERRY: Yeah. Our Tennessee facility does not do a rotary kiln application; that is a pyrolysis application in that particular facility. But our...our world-class engineers will let us know what they think would be the best for that location. So, we consult with them on all of our projects. They stand behind all of our projects. With a process interview --

COUNCILMEMBER RAWLINS-FERNANDEZ: I...I guess my question is do you have, like,

actual, like, testing that show that it's not just conceptual? Or, like, is it...has it been done?

MR. NEWBERRY: Oh, it's...it's definitely been done. That's what they use these for. And I could certainly come up with some data for you. And I can email it to you.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. And then I'll forward it to the experts because I'm not an expert.

MR. NEWBERRY: *(Audio interference)* --

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Mr. Newberry. Mahalo, Chair, for giving me the last question. Mahalo, Member Sinenci. And mahalo to all of our...our resource persons for answering all of our questions. Mahalo, Chair.

CHAIR PALTIN: Thank you. Yes, thank you to all of our resources. If there are no objections the Chair will defer this item.

COUNCILMEMBERS VOICED NO OBJECTIONS.

ACTION: DEFER pending further discussion.

CHAIR PALTIN: Thank you. This concludes today's Disaster, Resilience, International Affairs, and Planning Committee meeting. Thank you very much, everyone. The time is now. 4:27, extra three minutes on me. This meeting is adjourned. *. . .(gavel). . .*

ADJOURN: 4:27 p.m.

APPROVED:

Tamara A. M. Paltin

TAMARA PALTIN, Chair
Disaster, Resilience, International Affairs,
and Planning Committee

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Transcribed by: Tricia Higa

CERTIFICATION

I, Tricia Higa, hereby certify that pages 1 through 51 of the foregoing represents, to the best of my ability, a true and correct transcript of the proceedings. I further certify that I am not in any way concerned with the cause.

DATED the 3rd day of March 2024, in Mililani, Hawai'i.

Tricia Higa