

Landfill Advisory Committee (LAC)
Meeting #4
Tuesday, December 14, 2021 – 10:00 am
Virtual WebEx

MEETING MINUTES

ATTENDANCE

LAC Members Present:

Steven Chang, Suzanne Jones, Ken Kawahara, Emmett Kinney, James Nakatani, Cynthia Rezendes

Honolulu Board of Water Supply Team Present:

Ernie Lau (BWS Energy and Chief Engineer), Erwin Kawata (Head of Water Quality Division), Barry Usagawa (Head of Water Resources Division), Kathleen Elliott-Pahinui (Head of Communications Office).

Project Team Present:

Wesley Yokoyama (ENV Director), Michael O'Keefe (ENV Deputy Director), Markus Owens (Public Information Officer), Chris Hirota (Refuse Division Chief), Ahmad Sadri (Energy Recovery Administrator), Josh Nagashima (Project Manager), Julie Leano (Planner), Luciana Bishay (IT), John Katahira (Limtiaco Consulting Group), Mike Kaiser (HDR), Ayako Nakasato (HDR)

I. CALL TO ORDER (*John Katahira, Facilitator*)

John Katahira welcomed the group and called the meeting to order at 10:06 am.

John Katahira opened the meeting noting that this meeting is being held pursuant to Governor David Ige's Emergency Proclamation Related to the State's COVID-19 Delta Response issued on November 29, 2021 and in order to follow public participation in this meeting in a manner consistent with safe practices and social distancing requirements, this meeting is being conducted as a remote meeting by interactive conference technology.

John Katahira reviewed and summarized the agenda items:

- Call to Order/Roll Call/Public Comment Period
- Approval of Prior Meeting Minutes
- Presentation and Discussion
- Announcements and Adjournment

II. ROLL CALL (*John Katahira, Facilitator*)

John Katahira proceeded with roll call in alphabetical order. Six LAC members were present. All present members stated that there was no one present at their location.

III. ORAL COMMENTS ON ALL AGENDA ITEMS REMOTELY VIA VIDEO CONFERENCE OR PHONE

John Katahira reminded everyone that the meeting is being recorded and will be posted on the ENV website. He stated that the members of the public may participate in this meeting by interactive conference technology from remote locations and present oral testimony by video conference or phone. The following procedures were in effect for the meeting and read aloud by John Katahira:

1. Remote testimony will be accepted on all agenda items. Each speaker will be limited to 2 minutes per person.
2. All participants will enter the remote meeting with view-only privileges. For individuals providing remote testimony, staff will bring you into the meeting and unmute you at the time you are called to present comments. When reminded of the time limit, please conclude your remarks as promptly as possible.
3. For those who joined by telephone only, your name will not be known so you will be identified by the prefix of your phone number.
4. Public comments will be taken from each person on the registered list.
5. If you did not previously register and wish to provide comments, please raise your hand on WebEx. If you have joined by telephone, press *3 to raise your hand if you would like to provide comments.
6. When your name or telephone prefix is called, you will be given a few moments to respond. If you do not respond after a few moments, we will move on to the next person. Please state your name and identify the agenda item on which you are speaking on.

John Katahira indicated that no one on the preregistered list would be providing comments. Josh Nagashima (ENV Project Manager) and Luciana Bishay (IT host) confirmed there were no raised hands in the meeting.

An opportunity was provided for other participants to raise their hand and provide comments before proceeding.

Joelle Simonpietri made a request to have the public commentary after the presentation in future meetings.

John Katahira proceeded to the next agenda item to approve the prior meeting minutes.

IV. APPROVAL OF MINUTES

John Katahira explained that meeting minutes from the three previous meetings needed to be approved. It was noted that the minutes were provided to the LAC members in advance for review. The minutes are also available on the website.

1. John Katahira proceeded with requesting a motion to approve the meeting minutes for LAC Meeting #1 – October 4, 2021. A motion was made by Cynthia Rezentes and seconded by Suzanne Jones. Ken Kawahara indicated no objections. John Katahira noted no objections from the committee members and the minutes were approved.
2. John Katahira requested a motion to approve the meeting minutes for LAC Meeting #2 – October 25, 2021. A motion was made by Cynthia Rezentes and seconded by Suzanne Jones. John Katahira noted no objections from the committee members and the minutes were approved.

3. John Katahira requested a motion to approve the limited meeting minutes for LAC Meeting #3 – November 3, 2021. A motion was made by Cynthia Rezentes and seconded by Suzanne Jones. John Katahira noted no objections from the committee members and the minutes were approved.

V. DISCUSSION

John Katahira provided a brief recap of the LAC Meeting #3 held on November 3, 2021 for site visits to PVT Landfill, Waimānalo Gulch Sanitary Landfill, and H-POWER. Due to health and safety reasons, this was a limited meeting because of limitations on the number of attendees at the sites as well as the sites being active facilities. A bus tour of 20 people started at Kapolei Hale, proceeded on to PVT Landfill, Waimānalo Gulch Sanitary Landfill, and ended at H-POWER before returning to Kapolei Hale. The intent of the meeting was for the committee members to learn how each facility operates as well as having a firsthand view of the environmental impacts of each site. John Katahira acknowledged and thanked the tour guides and bus driver from the tour.

John Katahira asked if there were any questions or discussion from the committee members regarding meeting #3. There were no questions or discussion presented at this time.

John Katahira proceeded on to the next agenda item to discuss the Resident Survey Results.

VI. PRESENTATION AND DISCUSSION

1. Resident Survey Results (*Josh Nagashima, ENV PM*)

Josh Nagashima noted that the LAC Meeting #3 video is available on the ENV site where the resident survey is also located. He proceeded explaining that the survey will be online until the end of the month. The main purpose of the survey is to provide a way for residents to be involved and provide comments throughout the process. The survey was described as a Microsoft Forms Survey with about 20 questions. The survey was officially kicked-off on the ENV website on August 27 and is advertised through the website, Facebook, Twitter, and TheBus Ad. There are currently 489 responses.

Josh Nagashima presented the demographics and analysis of the resident survey responses as of December 7th with 476 responses logged at that point. A summary of the results are listed below:

- Majority of the residents are in age groups 36-50 and 51-65;
- Majority of residents are from 96797;
- Majority are 20+ year residents;
- 3.69 out of 5 have knowledge of trash handling on O'ahu;
- 4.47 out of 5 know the importance of reduction, reuse, and recycling in daily life;
- Over 40% of residents have visited WGSL; and
- Residents rated the appearance of WGSL 3.5 out of 5.

Josh Nagashima indicated that all the responses from the survey are posted on the website. He proceeded with highlighting a few of the responses.

- Importance of landfills: H-POWER is dependent on a landfill as a backup disposal site.
- Trash Destination: Only 6% of O'ahu's trash goes directly into the landfill and the remaining trash goes to H-POWER.
- Significance of Criteria: Distance to surface and drinking water was rated the most significant.
- Landfill Location: Location that ranks highest when considering all the criteria received the most responses.
- Landfill Beneficial Use: Majority responded that they would not be open to having a landfill in their community even if it was planned for a beneficial use. A considerable number responded maybe. The City is considering a community benefits package.

There were no questions or discussion from the committee members on the resident survey results. Josh Nagashima emphasized that the City is trying to get community involvement as much as possible and shared the Refuse Division's Facebook, Twitter, and website.

John Katahira proceeded with the presentation items on the agenda. He acknowledged and thanked BWS for their commitment to present in this meeting in light of the recent Red Hill situation. He noted that questions and discussion from the committee members will be taken after BWS and HDR complete their presentations.

John Katahira proceeded to introduce Wesley (Wes) Yokoyama (ENV Director) for a few comments.

Wes Yokoyama thanked the committee members and indicated that the advisory portion of their work will begin today. He described that prior meetings provided background information to assist the LAC in the process. He indicated that LAC member Cynthia Rezentes introduced the concern on groundwater supply and the possible effects from a landfill which prompted ENV to reach out to the BWS for information. He stated that nothing is as important as clean water, but identifies there is also a great need to address solid waste. He understands that there may be conflicting needs on available space but indicated that the criteria and ranking of the sites will ultimately reflect the importance and priorities.

2. Oahu's Groundwater Aquifer and Siting a New Landfill (***Erwin Kawata, Honolulu Board of Water Supply***)

Ernie Lau, BWS Energy and Chief Engineer, opened by thanking ENV for being invited to the meeting. He understands the committee has difficult challenges in siting a new landfill. He noted that this presentation is from the BWS perspective and that their mission is "Water is Life" but understands that waste also needs to be managed. He introduced the BWS team of Erwin Kawata (Head of Water Quality Division), Barry Usagawa (Head of Water Resources Division), and Kathleen Elliott-Pahinui (Head of Communications Office).

Erwin Kawata began with thanking the committee for the opportunity to share BWS' perspectives on siting a new landfill in relation to the groundwater aquifer. He proceeded with the slide presentation and provided the topics for the discussion. He described the basics of O'ahu's groundwater resource using a schematic chart. It was explained that caprock helps to prevent the fresh water

from leaking into the ocean. The water that is held back by the caprock over time builds up to form a groundwater aquifer that is hydrologically connected throughout the entire system and resides under the entire island. It was described that there are various ways to extract water from the aquifer including an inclined shaft that takes water from the surface and deep wells drilled into the formation where water is then pumped out. It was noted that this aquifer formation is one of a kind on island.

Erwin Kawata provided a map of the commission of water resources management hydrologic units and explained it was a way of managing the amount of water drawn from each part of the aquifer. He clarified that the lines dividing the areas are only for administrative purposes and do not represent any actual subsurface boundaries or divide. The entire system is hydrologically connected and water is always moving through the system. It was noted that areas of the aquifer such as Waimalu can produce up to 45 million gallons of water per day and other areas such as Waialae-East produce 2 million gallons per day.

A map of Oahu's groundwater bodies and caprock was presented. It was indicated there is substantial amount of caprock around the island.

Another map showing the UIC (Underground Injection Control) line was presented. It was indicated that the areas below the UIC line are allowed for underground disposal of waste and the areas above the line are designated as the fresh water aquifer. This line is also commonly referred to as the Pass/No Pass Line. It was noted that the line in some areas match where the caprock is located where other areas are directly over the caprock.

Another map showing the BWS facilities including the pumping wells that are tapping the aquifer to provide drinking water was provided for reference.

A map of the potential landfill sites in the uncolored regions was presented. It was indicated that these areas are directly over the drinking water aquifer. One area containing existing wells was pointed out. This area includes the Ewa Shaft which is slated to provide a significant amount of water to Leeward Oahu.

It was stated that landfills have a long history and there is literature provided by EPA that landfill products eventually leak into the environment even with leachate protection technologies. It was noted that WGS� generates about 3.6 MG leachate annually (9,800 gallons per day) which is a sizable amount in BWS' perspective.

Landfill leachate and groundwater data from the WGS� First Semi-Annual 2021 report was presented. BWS analyzed the data to show the concentrations detected in leachates from the ash and groundwater monitoring wells. It was indicated that there were concerns about potential contaminants in landfills that could escape into the environment that were larger in magnitude in comparison to the fresh water wells operated by BWS.

In summary, BWS' position is that Oahu is 100% dependent on its groundwater aquifer for drinking water. Preservation and protection of this resource is

necessary to ensure sustainable aquifer water quantity and quality into the future.

3. Groundwater Protection Measure for Municipal Solid Waste Landfills (**Mike Kaiser, HDR**)

Mike Kaiser described that his presentation would be on the technology adopted by the solid waste industry for groundwater protection for municipal solid waste (MSW) landfills. He noted that in Meeting #1 it was explained that the EPA and the State Department of Health regulate the MSW landfills through the Resource Conservation and Recovery Act and the Hawaii Administrative Rules. He continued explaining that in permitting, design, and operation of a landfill the following criteria need to be met: Site Analysis, Design Criteria, and Operating Criteria. The Design Criteria was described as playing a very important role in the defense of groundwater protection. The Design Criteria includes the Base and Closure Cap Liner Systems, Leachate Management System, and the Groundwater Monitoring Program. The Site Analysis was described as providing the support to the design. For example, a landfill would not be sited in unstable areas that may potentially damage the liner system. Also, when hazardous waste are excluded out of the landfill, it would reduce the likelihood of pollutants getting into the leachate and overall reduces the threat to public health and to the environment.

Mike Kaiser then discussed leachate as it is defined in the solid waste industry. It was explained that leachate is basically wastewater in the solid waste industry. Rainfall percolates through the waste and is captured in the leachate collection. It is then transported to a sump area and is pumped out by riser pipes to be treated and disposed.

A cross section of a typical MSW landfill was presented showing a base liner system with leachate collection pipes, groundwater monitoring well, gas monitoring probe, and a gas monitoring system. The fill sequencing of a landfill was described as filling across the floor to come up to the next level to fill across while adding daily cover soil over the waste. Once an area is filled up to grade, it typically goes through a partial closure. The closure design consists of solid components and geosynthetic membrane and a drainage net.

A proposed base and side slope liner system was presented. The proposed base liner system was described as starting as subgrade, followed with a geosynthetic clay liner, impermeable polyethylene liner, drainage net liner and then doubled with a clay liner, geomembrane liner, drainage net liner and finally topped with a protective soil. It was stated that the City is committed to installing a double liner system in areas above the No Pass Line which meets and exceeds the EPA requirements for a hazardous waste landfill.

A cross section of a leachate collection trench which will run down the middle of a landfill was presented. It was explained that in a double liner system, there will be a primary leachate pipe with the primary liner system. There will also be a secondary leachate pipe and liner system to capture leachate that did not go through the primary system. A leachate pipe will be encased in gravel and then wrapped in geotextile fabric.

A cross section of the leachate collection sump was presented. The sump will also have a primary and secondary. The leachate trenches will connect into the sump and with larger pipes (riser pipes) feed the leachate out of the sump into the exterior of the landfill. Submersible pumps will be installed in the riser pipes and connected to automated equipment. It is required to maintain the leachate levels to 12 inches or less in the sumps. It was noted that there should be no leachate ponding and if the landfill is operating correctly, the only leachate in the landfill should be in the sump area.

The Construction Quality Assurance Testing Plan was presented. It was explained that extensive testing of the geomembrane liner systems is performed at the manufacturer level as well as at a third party owner representative level. The installers also perform quality assurance testing on the liner using pressure and vacuum testing at every inch of seam that is installed. The installers set up mobile laboratories to perform testing on site and it was noted that the third party testers send all samples to an outside laboratory for testing.

Groundwater and leachate monitoring requirements were presented as follows:

- Groundwater monitoring is required at a network of upgradient and downgradient monitoring wells. Leachate monitoring is required at the sumps.
- Some states establish minimum spacing for upgradient and downgradient wells, others leave it up to the enforcement agency to decide based on the groundwater monitoring program.
- Sampling of the wells are typically done quarterly.
- Constituents for analysis are established by the EPA that would be indicative of a release of leachate from a landfill. Site specific indicator parameters are also developed for a site (COD, nitrates, chlorides, pH, etc.).
- Owner is required to do a statistical analysis to confirm elevated detections or anomalies in results.
- Waimānalo Gulch Sanitary Landfill groundwater sampling results have not indicated a release of leachate since the landfill first opened in 1989 (9 wells sampled).

John Katahira opened up for comments and discussion on the material presented thus far.

James Nakatani inquired about the sample of the two wells in BWS' presentation, why there is a difference, and where the analytes of the Honouliuli wells were coming from. Erwin Kawata responded that the analytes shown in the Honouliuli wells are those that are naturally occurring, and the wells are located in the Honouliuli area that are identified as potential new landfill sites. The WGSL data was used for comparative purposes to show what was in the leachate and groundwater testing to illustrate what could potentially be available in a landfill if the leachate system was not operating properly and the potential effect it could have on the wells. It was clarified that WGSL is not in an area to affect the wells but a new site might be in an area where wells are affected. A site at or below the No Pass or UIC line would be ideal from the perspective of protecting the aquifer.

Suzanne Jones inquired on the ability to clean and remove the contaminants from the drinking water in the event of leakage in the aquifer and also to contain any further leakage. Erwin Kawata responded that it is dependent on the type of contaminant,

complexity of the contaminant and the amount of contaminant. He explained that treatment will not be an option if the amount exceeds the ability to treat. He confirmed that Oahu is 100% dependent on groundwater and that there are parts of the aquifer that can produce a substantial amount of water that allows us to sustain for the long term and for the population of the island.

Suzanne Jones commented that in the past, all potential sites were below the UIC but now the LAC is potentially looking at sites above UIC line and would need to have a good understanding of the risks for the future (e.g. 50-80 years down the line and even after the landfill is closed) in the event of a failure in the liner system. Also, need to understand what this means for our drinking water and to the life of our island. She then inquired what the options are in the event of a failure. She also wanted to confirm whether the eliminated sites on the Leeward side were above/below UIC line. Mike Kaiser responded that options are dependent on what constituents are found in the leakage. He explained that assessing the health based risks and performing various analyses to determine course of action may be used. Testing the transport of the constituents can be done to understand how they travel and whether it can be treated through geology and hydrogeology. Ultimately, options are dependent on the type and levels of release. Suzanne Jones further commented that she wants to understand the potential effects if the engineering and technology that will be used will be upheld in the latter years and what type of legacy will be left by the committee when the landfill site is determined. Ernie Lau commented that the technology for Red Hill may have been state of the art at the time but need to make decisions based on a long-term basis. BWS' preference is to protect the water resource in its purist form rather than to treat it or use treatment technology. Mike Kaiser confirmed that the sites eliminated from the State legislation were below the UIC line.

Wesley Yokoyama commented that the areas being proposed are not preferred areas but areas that are left to choose from and which are allowable by regulation, legislation, and by law. Ernie Lau commented that this may be an opportunity to revisit constraints specifically those created by State legislation based on the protection of drinking water discussions.

John Katahira requested ENV to briefly summarize the State Legislation Act 73. Wesley Yokoyama indicated that ENV looked at areas below the no pass line and in combination with Act 73 determined that there are no viable sites. Other options such as shipping were also looked into but are not going to be feasible. He explained that Act 73 was passed in 2020 and the law states that a landfill cannot be placed within a ½ mile of any residences, hospitals, schools, habitable areas/structures or on a zoned conservation land. He stated that this Act eliminated a lot of sites that were studied previously from 2012 and 2017. He explained that the new administration started looking for new sites this year and the four areas were identified after going through the process of reviewing the regulations and legislation.

Cynthia Rezendes requested clarification on whether the UIC and Pass/No Pass Lines are one in the same. She commented that in the past, the Pass/No pass line (BWS) and the UIC line (DOH) did not match up. She also commented that although leachate did not escape into the groundwater monitoring wells at WGSL, the landfill was fined \$2.8M for violations which included leachate being higher than 12 inches at the bottom of the landfill. John Katahira summarized Cynthia Rezendes' comments as requesting clarification on UIC and Pass/No Pass Lines and its differences and to address past events at WGSL.

Barry Usagawa responded that the lines are not the same. He explained both lines are regulatory tools to protect groundwater but from different pathways. UIC is Underground Injection Control and regulates injection wells described as a hole in the ground that is deeper than it is wide. The UIC is more seaward, more conservative, and managed by DOH. It is set by the amount of chlorides in the groundwater at 10,000 mg/L and is in the coastal areas. The Pass/No Pass Line is an estimate of areas of thick caprock and is used to guide decisions around ground disposal primarily around individual wastewater systems such as cesspools.

In response to Cynthia Rezentes' second comment, Josh Nagashima commented that mistakes were made in the past and lessons learned are being reviewed with progresses such as setting consent decrees being put in place. He added that WGSL was originally designed to be single liner system and the newer cells improved to a double liner around 2010 with even newer technology since then. Ahmad Sadri added that there are good references regarding the past events at WGSL on the Honolulu.gov/opala website by searching "landfill status". There are quarterly public meeting notes that contain a lot of information as well as information in respect to the 2010 and 2011 storms that created the flooding at the landfill.

Suzanne Jones inquired whether the heavy rainfall from 2010/2011 was associated with the leachate that almost overflowed at the landfill. She noted that the risks of heavy rain/storm that could potentially overwhelm the leachate system should be considered. Cynthia Rezentes responded that it is not definite if the heavy rainfall had direct relation to the leachate system but emphasized that the leachate violation was significantly out of management control with overages in feet and not less than 12 inches. She added this was in combination with pumps and other issues around the same time. Josh Nagashima commented that the past events are being considered in the design of the new landfill.

Cynthia Rezentes noted a question in the chat from Barry Usagawa to explain how stormwater is managed at the existing and proposed landfills and if there are contaminants to note that could run off the site and/or can infiltrate the groundwater. An explanation on how the runoff would be handled was also added. Mike Kaiser responded that any runoff has to be managed through a NPDES program but the design will have the runoff go into the retention pond and released to the determined release point. He added that during the operation of the landfill, the runoff will need to be treated as leachate if it comes in contact with waste. Suzanne Jones followed up by commenting that in 2010/2011 storms there were a lot of discussion on how to build a retention pond to handle a 100 year storm and recalls it was not feasible for these unusual events. She added that the LAC needs to consider the risks of all types of events. Cynthia Rezentes commented that 6-inches worth of cover is easily washed off and referred to the storm this past weekend which resulted in 1-2 feet of soil and rocks being washed away in Makaha Valley.

John acknowledged that a public comment was made but noted that public comments would not be taken at this time. He added that a response would be provided at a later time.

James Nakatani commented that there is discussion on risks and requested clarification on what exactly could go wrong at the landfill. He asked what the biggest fear for our landfill failures is nation-wide and if there are any examples with double liners not performing. Mike Kaiser responded that one can find information on mainland landfills that are lined to Subtitle D standards that are known to have a release as well as those that did not have a release. He pointed out that what is not known are the factors (e.g.,

design, construction, quality assurance, etc.) associated with releases and the difficulty to pinpoint the source of such releases. In HDR's research, there were no EPA reports found that contained data on all the landfills in one report. The design, installation, quality assurance and operations all factor on the success of the liners. Ahmad Sadri added that SWANA (Solid Waste Association of North America) has a couple of publications with their applied research group on the performance of liner systems and the environmental performance of landfills. He indicated that the reports are still being reviewed to see if it is relevant to the current siting work. Suzanne Jones inquired whether the LAC will be receiving this information. Ahmad Sadri responded that links to the reports will be provided.

John Katahira identified Steven Chang's comment in the chat and read it aloud. The comment indicated that the stormwater overflow was due to the 2010 rainfall event and the exceedance of leachate levels was due to a previous DOH enforcement action.

Steven Chang added that the concern on leachate levels is the moisture at the bottom of the landfill that could create a condition of heat being generated and initiate smoldering solid waste which will potentially damage the liner. He pointed out that the liner will be a plastic membrane as opposed to a clay liner. It is important to prevent creating another source of energy to destroy the liner. Steven Chang described his background as the Program Manager for solid and hazardous waste at the State for 22+ years and was involved with various solid waste recycling activities at the State level.

Josh Nagashima noted that this discussion has prompted a need to be more involved with the design of the liner but that the current design is taking storm events into consideration. He requested the LAC to send him any parameters needed to make their evaluation of the criteria.

Suzanne Jones requested clarification on whether there are 4 potential sites being evaluated. John Katahira clarified that it is 4 areas and within each area there are potential sites. Josh Nagashima confirmed that all 4 areas are located above UIC line and located over groundwater and aquifers. Suzanne Jones sought clarification on whether there would be any sites to evaluate if the LAC considered the criteria of groundwater and aquifer as extremely important. Wesley Yokoyama responded that the LAC has the authority to decide whether the distance to the aquifer and the risks are an overriding factor. He explained that an extension would be requested should the LAC decide to take this route so that alternatives such as an exemption or changing Act 73 law can be visited. He indicated, however, that this is not the preferred route which will require a lot of discussion and communication with the administration. Suzanne Jones commented that it is good to know there are options. John Katahira iterated that the milestone for the LAC is to select a site by 2022, and if there any hurdles that prohibit the timeline, then that's what needs to be considered.

John Katahira thanked BWS for their participation and moved on to the next agenda item.

4. Introduction to Site Evaluation Criteria (*Mike Kaiser, HDR*)

Mike Kaiser presented the Site Evaluation Criteria and briefly described the approach of the meeting schedule. He proceeded with the definitions of objective and subjective criteria. Objective Criteria was explained as being based on unbiased, quantifiable facts and observations, while not being influenced by personal feelings, perceptions, or desires. Subjective Criteria was described as being based on personal opinions,

experiences, knowledge, interpretations, assumptions, points of view, emotions, and judgement. An example for the types of criteria were provided.

A total list of 18 Objective/Subjective criteria was presented. It was indicated that the scoring and the weighting of the scoring will be provided in the next meeting. Josh Nagashima noted that the criteria list is an introductory list and was provided to the LAC and is available on the ENV site. It was clarified that the criteria will be utilizing the Pass/No Pass (BWS) Line. The criteria list will also be finalized by the next meeting. It was requested to send any other criteria suggestions to Josh Nagashima for further consideration. Cynthia Rezentes had an inquiry regarding the example provided for objective and subjective criteria. Josh Nagashima further explained the criteria type differences with regards to the example.

John Katahira sought clarification on the work to be done by the next LAC meeting. It was confirmed that the criteria list will be finalized for LAC #5. Josh Nagashima added that the list will be provided by ENV but the LAC will be the one to perform the evaluation and can provide suggestions to amend the list by the end of December. Suzanne Jones inquired whether the LAC has any input only whether a particular criteria should disqualify sites. Josh Nagashima responded that the current structure involves combined scores but recognizes that there are critical criteria that may influence or eliminate a site. Suzanne Jones further inquired if LAC has any input on establishing a threshold to meet in order for a site to be considered acceptable. Josh Nagashima explained that this can be determined by the LAC.

John Katahira summarized the discussion as follows:

- LAC should provide comments regarding the criteria by Dec 31st.
- City will take the criteria comments and finalize the criteria list that will be presented at the next LAC meeting #5

James Nakatani inquired how the 1,000 feet was established on criteria no. 10. Josh Nagashima responded that 1,000 feet is the general measurement DOH uses when analyzing a site for contamination in response to a release in wells.

VII. ANNOUNCEMENTS (*John Katahira, Facilitator*)

- Next Meeting Date – LAC #5 February 7, 2022, 2pm-4pm (Tentative)

VIII. ADJOURNMENT

John Katahira requested a motion to adjourn the meeting. Ken Kawahara made a motion to adjourn. Suzanne Jones seconded the motion. No objections were noted and John Katahira adjourned LAC Meeting #4 at 12:10 pm.