Melody Calisay

From:	**"Melody Calisay" <mcalisay.HEER.EMD>**
To:	**Michael.Mercado@poh01.usace.army.mil, rsy@hawaii.rr.com**
Date sent:	**Thu, 08 Sep 2005 10:00:49 -1000**
Subject:	**Kakaako Makai District- Parking Garage and Mixed use Site**
Copies to:	**DBernstein.heer.emd, BBrooks.heer.emd, ccallahan@eha.health.state.hi.us, MCalisay.heer.emd**

Hi Mike and Ryan:

As discussed with Ryan over the phone, I don't think there is a need for HDOH, HCDA, Army Corps of Engineer, and Environet to meet. Instead, I will be writing a memorandum in response to Environet questions/issues about dioxin. This memorandum will be reviewed/concurred by our Toxicologists (Barbara Brooks and Clarence Callahan).

Please let me know if you have further questions or concerns. Thanks...

Melody G. Calisay
HEER Office

113295

Melody Calisay

Subject: **RE: Request for meeting to discuss HDOH comments on the Draft Work Plan for the Kaka**
Date sent: **Thu, 1 Sep 2005 13:16:34 -1000**
From: **"Mercado, Michael POH" <Michael.Mercado@poh01.usace.army.mil>**
To: **"Melody Calisay" <mcalisay@eha.health.state.hi.us>**

Please call or e-mail me this afternoon so that we can confirm or reschedule tomorrow's meeting.

Thanks,

MICHAEL F. MERCADO
Environmental Engineer
Phone: (808) 438-3242
Fax: (808) 438-6930

From: Mercado, Michael POH
Sent: Wednesday, August 31, 2005 9:43 AM
To: 'Melody Calisay'; Davis Bernstein
Cc: 'Teney Takahashi'; Ryan Yamauchi; 'Dr S.R. Spengler'; Tran, Uyen POH; Shirakata, Gary N POH
Subject: Request for meeting to discuss HDOH comments on the Draft Work Plan for the Kaka'ako Phase I Parking Garage / Mixed Use Site Environmental Site Investigation

Melody / Davis,

Will you be available this Friday to discuss our responses to the HDOH comments on the Draft Work Plan for the Phase I / II Environmental Site Investigation for Kaka'ako? It would also be beneficial if HDOH's Risk Assessor could attend.

The HCDA, Environet and the USACE are currently available anytime on Friday 2 September.

Please call or e-mail me a preferred meeting time or if the HDOH cannot meet on Friday please contact me with a several proposed alternate meeting dates.

Thanks,

MICHAEL F. MERCADO
Environmental Engineer

Bldg. 252, CEPOH-EC-E
Ft. Shafter, Hawaii 96858-5440

Phone: (808) 438-3242 Fax: (808) 438-6930
E-Mail: Michael.Mercado@poh01.usace.army.mil

Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Bernstein, Davis

From: Edwards, Howard [HEdwards@ene.com] **Sent:** Mon 11/21/2005 9:15 AM
To: mezquita.marlon@epa.gov
Cc: Douglas.Carolyn@epa.gov; dbernstein@eha.health.state.hi.us; mcalisay@eha.health.state.hi.us; Jones.Gail@epamail.epa.gov
Subject: Response to Comments: East Kapolei Agricultural Property
Attachments: Response to QA comment.pdf(243KB)

Marlon,

Attached is the "Response to Comments Memorandum" regarding QA Office's recent comments to the Sampling Analysis Plan (SAP) for East Kapolei Agricultural Property, Phase II Site Assessment. A hard copy of the revisec for East Kapolei Agricultural Property is being sent over for you review. (The SAP will be tabbed for you convenie

For your Convenience, I have pasted the test of the "Response to Comment Memorandum".

Marlon, let me know if you got this.

Howard Edwards
START Quality Assurance Officer

<<Response to QA comment.pdf>>

****

November 21, 2005

MEMORANDUM

SUBJECT: Revisions of *Sampling and Analysis Plan (SAP) for East Kapolei Agricultural Property, Phase II Site Assessment* in response to U. S. E.P.A. Quality Assurance Comment's on the August 2005 Draft SA SAP also includes some revision based upon Hawaii Department of Health comments received by START in late October 2005.

FROM: Howard Edwards, START Project Manager

Ecology and Environment, Inc.

THROUGH: Carolyn Douglas, U.S. EPA Project Manager

Brownfields Team, SFD-1-1

TO: Gail E. Jones, Environmental Scientist and

Marlon Mezquita, PE

U.S. EPA Quality Assurance Office, PMD-3

Based on the comments from Gail E. Jones and Marlon Mezquita of the Quality Assurance Office as indicated in the October 13, 2005 Memorandur

Carolyn Douglas, E & E has revised the Sampling and Analysis Plan (SAP) for East Kapolei Agricultural Property, Phase II Site Assessment.

EPA QA
Comment # 1
[Section 4.1.2, Property Sections] This section states that, for
each 60-acre to 80-acre property section, all 50 discrete samples will be homogenized into one composite sampl
Given that this is a very unusual practice, it is recommended that additional rationale be provided that describes t
theory behind this approach/sampling strategy. Additionally, it would be helpful to include or reference scientific
literature supporting this type of sampling approach.

E&E Action to Comment # 1
The sampling design has been modified based upon objective clarifications and comments. Additional rationale v
supplied in section 4.1.2 and in the DQO document. References have been added to the SAP. Attached are two
abstracts for papers published by US Army Corps of Engineers for a project where multiple-increment sampling
designs were used and evaluated.

EPA QA
Comment # 2
[Appendix A, Sec. 3.0, Contamination Indicators] It is not clear what the final recommendation from this discussic
indicator chemicals is, please revise the text to be more conclusive.

E&E Actions for Comment # 2
Section 3.0 was modified to indicate that the use of any single COPC or single analytical method would not be
appropriate for providing necessary data to resolve the study questions.

EPA QA
Comment # 3
Table 3-1, COPC Action Levels and Data Quality Indicator Goals-Soil] It is important to understand the capabiliti
the field techniques being proposed, e.g. the CALOX, and XRF. Therefore, it is recommended that field analytica
method detection limits be also included in this table.

E&E Actions for Comment # 3
Sections 3.1 was modified to include a Table 3-2 that indicates field analytical detection limits and DQIs that migh
apply if field analytical data is generated to supplement definitive data.

EPA QA
Comment # 4
Fifth column, Decision Rules state that, "the average concentration" will be compared to site Action Levels in orde
evaluate the need for further actions. However, since it is statistically possible that the sample average may und
represent the "true" site average concentration, a protection against "false negative" decisions is needed. There
EPA generally recommends the use of a more conservative 95% Upper Confidence Limit of the average (95% U
lieu of the sample average.

E&E Actions for
Comment # 4
Objectives, the DQO document, the DQO Summary Table and sampling design has been modified to generate 9
UCL values for each decision unit.

EPA QA.

Comment # 5
[Section 4.1.1, Newly Identified Areas of Potential Contamination]
The proposed sampling decision tree logic is not sufficiently explained, e.g., it is not clear why a 100 sq.ft. area
requires 4 discrete sampling points, yet a 5,000 sq.ft. area only require 20 discrete sampling points, as opposed t

200? (5000x4/100 = 200). It is recommended that some mathematical relationship be established. For example simple correlation between quadrupling the area vs. doubling the number of samples can be established, e.g, a ft area = 100 sqft = 4 samples, a 20x20 ft area = 400 sqft = 8 samples, a 40x40 ft area =1,600 sqft = 16 samples a 80x80 ft area = 6,400 sqft = 32 samples.

E&E Actions for
Comment # 5
Sections 4.1.1 was modified to have three 10-increment samples location for any newly identified area. The char based on the clarification of objectives and design requirements. The use of three 10-increment samples can prc 95% confidence that 90% of the population in an identified area is below or above a limit. It will also provide popu variance information for the area.

EPA QA
Comment # 6
[Section 9.1.2, Assessment of Sample Variability] This section describes the quality assurance and quality contrc (QA/QC) sampling approach. However, the acceptance criteria needs to be included, for example, include comp criteria for replicate samples, duplicate

samples, and co-located samples. Also, this sampling plan needs to include a strategy for assessing the overall standard deviation (or standard error) to be used in the DQO decisions.

E&E Actions for
Comment # 6
Section 9.1.2 has been modified. The acceptance criteria for field duplicate samples and co-located samples are specified in Table 3-1 and Table 3-2. Table 3-1 and Table 3-2 are now referenced in Section 9.1.2. The strategy assessing the overall standard error in relation to the DQO decisions is addressed in revised Section 9.7.4 and is generally addresses throughout the DQO document and the SAP.

EPA QA
Comment # 7
[Appendix A, Section 5.0, Decision Rule] This section proposes the use of the "non-statistical average" as the representative value upon which environmental decisions will be made. However, the entire Section 6, Limits on Decision Errors is all about establishing statistical confidence limits on environmental decisions. It is recommend that Section 5 be revised to be made consistent with Section 6.

E&E Actions for
Comment # 7
Section 5.0 of Appendix A has been revised and modified based upon the comments to reflect sampling design modifications. The sampling design was modified to generate a statistical average data and standard deviation da order to predict sampling error and confidence limits. The use of three 50-increment samples can provide 95% confidence that 95% of the population in a property section is below or above a limit.

EPA QA
Comment # 8
[Appendix A, Sec. 6, Limits on Decision Errors, All tables] This
discussion on statistical decision errors and statistical specifications does not provide a clear connection to the fir proposed sample density of

50 samples per area (property section) of concern. It is recommended that it be revised with additional rationale explaining how these DQOs relate to the final proposed sampling design.

E&E Actions for
Comment # 8
The connection between the "Limits on Decision Error" and the proposed sampling density is now discussed in S

7, under the heading "Specific Design Optimization Based Upon Decision Error Limits Goals". Step 7 was revise additional explanations on how the sample density was derived. Tables and language in Section 6 of Appendix A also modified based upon QA Office comments.

Calisay, Melody G

From: Morris.M.Atta@hawaii.gov
Sent: Friday, March 03, 2006 10:26 AM
To: Russell.Y.Tsuji@hawaii.gov; Eric.T.Hirano@hawaii.gov; Calisay, Melody G
Cc: Charlene.E.Unoki@hawaii.gov; Dickey.H.Lee@hawaii.gov; Gary.D.Moniz@hawaii.gov; Robert.J.Fernandez@hawaii.gov; Robert.M.Medeiros@hawaii.gov; Roger.H.Masuoka@hawaii.gov
Subject: Re: Fw: Aloun Mixing site security breach

I contacted HPD regarding the break-in and they will be sending some officers to check out the site. I informed them of the highly dangerous nature of the contamination on the site and advised them not to enter the property without coordinating with us and DOH. They will be contacting us shortly and will probably want someone from DLNR & DOH there also. If we cannot find anyone in-house that is Hazmat trained to enter the property and secure the fence/gate, we may need to hire the environmental consultant (Clayton Environmental) to do that for us. I am awaiting HPD's guidance on securing the area for now and for ensuring that there is no one on the premises.

Morris M. Atta
Special Projects Coordinator
DLNR, Land Div.
(808) 587-0410 / (808) 587-0455 [fax]
morris.m.atta@hawaii.gov

NOTICE: The information in this message (including attachments, if any) is privileged and confidential and is only intended for the recipient(s) listed above. Any review, use, disclosure, distribution, or copying of this message is strictly prohibited except by, or on behalf of, the intended recipient(s). If you received this message in error, please notify me by return email and delete this message and any copy of it from your system. Thank you!

Eric T Hirano/DLNR/StateHiUS

03/02/2006 12:55 PM

To Dickey H Lee/DLNR/StateHiUS@StateHiUS, Roger H Masuoka/DLNR/StateHiUS@StateHiUS, Robert M Medeiros/DLNR/StateHiUS@StateHiUS, Gary D Moniz/DLNR/StateHiUS@StateHiUS, Robert J Fernandez/DLNR/StateHiUS@StateHiUS
cc Charlene E Unoki/DLNR/StateHiUS@StateHiUS, Russell Y Tsuji/DLNR/StateHiUS@StateHiUS, Morris M Atta/DLNR/StateHiUS@StateHiUS
Subject Re: Fw: Aloun Mixing site security breach Link

FYI

We should standby if Land needs our assistance but because of the contamination in the area, we'll need guidance from DOH and DOA.

Thanks!!!

Morris M Atta/DLNR/StateHiUS

To Russell Y Tsuji/DLNR/StateHiUS@StateHiUS, Charlene E Unoki/DLNR/StateHiUS@StateHiUS, Eric T Hirano/DLNR/StateHiUS@StateHiUS

03/02/2006 11:53 AM

cc

Subject Fw: Aloun Mixing site security breach

Heads up everyone! We got a vandal (possibly homeless trespass) problem at the Ewa Pesticide Mixing Plant location. DOH wants us to re-secure the place ASAP because of the health hazards from high level of dioxin contamination on the site. Melodie, however, told me to hold up until they determine what kind and level of protection will be required of anyone entering the site. We need to prepare for ancillary issues such as what if someone is still on the site using it for shelter or other activities. We probably will need HPD assistance if that is the case (we need to call HPD about the stolen/abandoned van anyway.) At a minimum, we are looking at getting someone (properly protected) to tow the van away and repairing the security fence and gate.

Morris M. Atta
Special Projects Coordinator
DLNR, Land Div.
(808) 587-0410 / (808) 587-0455 [fax]
morris.m.atta@hawaii.gov

NOTICE: The information in this message (including attachments, if any) is privileged and confidential and is only intended for the recipient(s) listed above. Any review, use, disclosure, distribution, or copying of this message is strictly prohibited except by, or on behalf of, the intended recipient(s). If you received this message in error, please notify me by return email and delete this message and any copy of it from your system. Thank you!

----- Forwarded by Morris M Atta/DLNR/StateHiUS on 03/02/2006 11:35 AM -----

"Calisay, Melody G" <melody.calisay@doh.hawaii.gov>

03/02/2006 11:13 AM

To <morris.m.atta@hawaii.gov>

cc "Callahan, Clarence A" <clarence.callahan@doh.hawaii.gov>, "Bernstein, Davis" <davis.bernstein@doh.hawaii.gov>, "Kawaoka, Keith E" <keith.kawaoka@doh.hawaii.gov>, "Calisay, Melody G" <melody.calisay@doh.hawaii.gov>

Subject FW: Aloun Mixing site security breach

Morris:

As per our phone call, attached is the photo taken at East Kapolei-Pesticide Mixing and Loading area. As what we discussed, the site is highly contaminated and should be secured to keep the public from entering the area.

Thanks.

Melody

-----Original Message-----
From: Callahan, Clarence A
Sent: Wednesday, March 01, 2006 5:19 PM
To: Kawaoka, Keith E; Bernstein, Davis; Calisay, Melody G
Subject: FW: Aloun Mixing site security breach

Hey guys,

Looks like the program is "generating revenue." All we need to do is put up a used car sign.

Clarence

Clarence A. Callahan, Ph.D., Acting Supervisor
Site Discovery, Assessment, and Remediation Section

-----Original Message-----
From: Robert.A.Boesch@hawaii.gov [mailto:Robert.A.Boesch@hawaii.gov]
Sent: Wednesday, March 01, 2006 4:07 PM
To: Callahan, Clarence A
Cc: qingl@hawaii.edu
Subject: Fw: Aloun Mixing site security breach

Clarence,

This is the breach in the fence at the old Oahu Sugar mixing/loading site.

Bob Boesch
----- Forwarded by Robert A Boesch/DOA/StateHiUS on 03/01/2006 03:46 PM -----

Qing Xiao Li <qingl@hawaii.edu>

02/28/2006 02:47 PM

To Robert Boesch <Robert.A.Boesch@hawaii.gov>
cc Dan Paquin <paquin@hawaii.edu>
Subject Fwd: Aloun Mixing site security breach

Bob,

I would like to draw your attention to the attached photo. Dan periodically visits the Eva pesticide mixing site. He visited there last Friday (2/24) and found the fence was broken. There was a van in the site, etc. Please see attached photo.

Qing

Qing X. Li
Professor
Molecular Biosciences and Bioengineering
University of Hawaii
Tel: +1-808-956-2011
Fax: +1-808-956-3542

----- Message from Dan Paquin <paquin@hawaii.edu> on Mon, 27 Feb 2006 07:08:25 -1000 -----

To: "Qing X. Li" <qingl@hawaii.edu>
Subject: Aloun Mixing site security breach

Dr. Li, I took pictures of the Aloun Mixing site on Friday morning. Someone had broken in, per the attached photo. Looks like a toursit van had been stolen and then stripped inside the enclosure. I know we worked with Bob Boesch, originally. Would you want to contact him, and/or DOH, Aloun Farms, etc, etc? Dan

Calisay, Melody G

From: Morris.M.Atta@hawaii.gov
Sent: Friday, March 17, 2006 11:47 AM
To: Calisay, Melody G
Cc: Russell.Y.Tsuji@hawaii.gov; Charlene.E.Unoki@hawaii.gov; Barry.W.Cheung@hawaii.gov
Subject: Re: FW: Aloun Mixing site security breach

Hi Melody,

This is in response to your request for a brief follow-up on the matter of the security breach at the Aloun pesticide mixing site. On 3/3/06, our Departmental employee (Bob Medeiros) met with a representative from our environmental consultant (Nakai) and closed and installed a new lock and chain on the gate. Other the the presence of the vacant van, everything appeared intact based on a cursory visual inspection of the site from the exterior of the fence by our Departmental employee. We left everything inside, including the van, undisturbed for health and safety concerns. We contacted the Police Department about the possible stolen van on the site, and they informed us that they will not subject their officers to the risk of contamination at this time and said that they would investigate the van we notify them when the site is eventually remediated.

Please call me if you have any further questions.

Morris M. Atta
Special Projects Coordinator
DLNR, Land Div.
(808) 587-0410 / (808) 587-0455 [fax]
morris.m.atta@hawaii.gov

NOTICE: The information in this message (including attachments, if any) is privileged and confidential and is only intended for the recipient(s) listed above. Any review, use, disclosure, distribution, or copying of this message is strictly prohibited except by, or on behalf of, the intended recipient(s). If you received this message in error, please notify me by return email and delete this message and any copy of it from your system. Thank you!

"Calisay, Melody G" <melody.calisay@doh.hawaii.gov>

03/02/2006 11:13 AM

To <morris.m.atta@hawaii.gov>
cc "Callahan, Clarence A" <clarence.callahan@doh.hawaii.gov>, "Bernstein, Davis" <davis.bernstein@doh.hawaii.gov>, "Kawaoka, Keith E" <keith.kawaoka@doh.hawaii.gov>, "Calisay, Melody G" <melody.calisay@doh.hawaii.gov>
Subject FW: Aloun Mixing site security breach

Morris:

As per our phone call, attached is the photo taken at East Kapolei-Pesticide Mixing and Loading area. As what we discussed, the site is highly contaminated and should be secured to keep the public from entering the area.

Thanks.

Melody
-----Original Message-----

From: Callahan, Clarence A
Sent: Wednesday, March 01, 2006 5:19 PM
To: Kawaoka, Keith E; Bernstein, Davis; Calisay, Melody G
Subject: FW: Aloun Mixing site security breach

Hey guys,

Looks like the program is "generating revenue." All we need to do is put up a used car sign.

Clarence

Clarence A. Callahan, Ph.D., Acting Supervisor
Site Discovery, Assessment, and Remediation Section

-----Original Message-----
From: Robert.A.Boesch@hawaii.gov [mailto:Robert.A.Boesch@hawaii.gov]
Sent: Wednesday, March 01, 2006 4:07 PM
To: Callahan, Clarence A
Cc: qingl@hawaii.edu
Subject: Fw: Aloun Mixing site security breach

Clarence,

This is the breach in the fence at the old Oahu Sugar mixing/loading site.

Bob Boesch

----- Forwarded by Robert A Boesch/DOA/StateHiUS on 03/01/2006 03:46 PM -----

Qing Xiao Li <qingl@hawaii.edu>

02/28/2006 02:47 PM

To Robert Boesch <Robert.A.Boesch@hawaii.gov>
cc Dan Paquin <paquin@hawaii.edu>
Subject Fwd: Aloun Mixing site security breach

Bob,

I would like to draw your attention to the attached photo. Dan periodically visits the Eva pesticide mixing site. He visited there last Friday (2/24) and found the fence was broken. There was a van in the site, etc. Please see attached photo.

Qing

Qing X. Li
Professor
Molecular Biosciences and Bioengineering
University of Hawaii
Tel: +1-808-956-2011
Fax: +1-808-956-3542

----- Message from Dan Paquin <paquin@hawaii.edu> on Mon, 27 Feb 2006 07:08:25 -1000 -----

To: "Qing X. Li" <qingl@hawaii.edu>
Subject: Aloun Mixing site security breach

Dr. Li, I took pictures of the Aloun Mixing site on Friday morning. Someone had broken in, per the attached photo. Looks like a toursit van had been stolen and then stripped inside the enclosure. I know we worked with Bob Boesch, originally. Would you want to contact him, and/or DOH, Aloun Farms, etc, etc? Dan

Calisay, Melody G

From: Calisay, Melody G
Sent: Friday, March 03, 2006 10:44 AM
To: Callahan, Clarence A; Kawaoka, Keith E; Bernstein, Davis; Brooks, Barbara A
Cc: Calisay, Melody G
Subject: Oahu Sugar Former Mixing and loading Site

Clarence:

I will be going out to the site with DLNR after my meeting with Jason. Please see email below.

FYI. Thanks.

Melody
-----Original Message-----
From: Morris.M.Atta@hawaii.gov [mailto:Morris.M.Atta@hawaii.gov]
Sent: Friday, March 03, 2006 10:26 AM
To: Russell.Y.Tsuji@hawaii.gov; Eric.T.Hirano@hawaii.gov; Calisay, Melody G
Cc: Charlene.E.Unoki@hawaii.gov; Dickey.H.Lee@hawaii.gov; Gary.D.Moniz@hawaii.gov; Robert.J.Fernandez@hawaii.gov; Robert.M.Medeiros@hawaii.gov; Roger.H.Masuoka@hawaii.gov
Subject: Re: Fw: Aloun Mixing site security breach

I contacted HPD regarding the break-in and they will be sending some officers to check out the site. I informed them of the highly dangerous nature of the contamination on the site and advised them not to enter the property without coordinating with us and DOH. They will be contacting us shortly and will probably want someone from DLNR & DOH there also. If we cannot find anyone in-house that is Hazmat trained to enter the property and secure the fence/gate, we may need to hire the environmental consultant (Clayton Environmental) to do that for us. I am awaiting HPD's guidance on securing the area for now and for ensuring that there is no one on the premises.

Morris M. Atta
Special Projects Coordinator
DLNR, Land Div.
(808) 587-0410 / (808) 587-0455 [fax]
morris.m.atta@hawaii.gov

NOTICE: The information in this message (including attachments, if any) is privileged and confidential and is only intended for the recipient(s) listed above. Any review, use, disclosure, distribution, or copying of this message is strictly prohibited except by, or on behalf of, the intended recipient(s). If you received this message in error, please notify me by return email and delete this message and any copy of it from your system. Thank you!

Eric T Hirano/DLNR/StateHiUS

03/02/2006 12:55 PM

To Dickey H Lee/DLNR/StateHiUS@StateHiUS, Roger H Masuoka/DLNR/StateHiUS@StateHiUS, Robert M Medeiros/DLNR/StateHiUS@StateHiUS, Gary D Moniz/DLNR/StateHiUS@StateHiUS, Robert J Fernandez/DLNR/StateHiUS@StateHiUS
cc Charlene E Unoki/DLNR/StateHiUS@StateHiUS, Russell Y Tsuji/DLNR/StateHiUS@StateHiUS, Morris M Atta/DLNR/StateHiUS@StateHiUS
Subject Re: Fw: Aloun Mixing site security breach Link

FYI

We should standby if Land needs our assistance but because of the contamination in the area, we'll need guidance from DOH and DOA.

Thanks!!!

Morris M Atta/DLNR/StateHiUS

03/02/2006 11:53 AM

To Russell Y Tsuji/DLNR/StateHiUS@StateHiUS, Charlene E Unoki/DLNR/StateHiUS@StateHiUS, Eric T Hirano/DLNR/StateHiUS@StateHiUS

cc

Subject Fw: Aloun Mixing site security breach

Heads up everyone! We got a vandal (possibly homeless trespass) problem at the Ewa Pesticide Mixing Plant location. DOH wants us to re-secure the place ASAP because of the health hazards from high level of dioxin contamination on the site. Melodie, however, told me to hold up until they determine what kind and level of protection will be required of anyone entering the site. We need to prepare for ancillary issues such as what if someone is still on the site using it for shelter or other activities. We probably will need HPD assistance if that is the case (we need to call HPD about the stolen/abandoned van anyway.) At a minimum, we are looking at getting someone (properly protected) to tow the van away and repairing the security fence and gate.

Morris M. Atta
Special Projects Coordinator
DLNR, Land Div.
(808) 587-0410 / (808) 587-0455 [fax]
morris.m.atta@hawaii.gov

NOTICE: The information in this message (including attachments, if any) is privileged and confidential and is only intended for the recipient(s) listed above. Any review, use, disclosure, distribution, or copying of this message is strictly prohibited except by, or on behalf of, the intended recipient(s). If you received this message in error, please notify me by return email and delete this message and any copy of it from your system. Thank you!

----- Forwarded by Morris M Atta/DLNR/StateHiUS on 03/02/2006 11:35 AM -----

"Calisay, Melody G" <melody.calisay@doh.hawaii.gov>

03/02/2006 11:13 AM

To <morris.m.atta@hawaii.gov>

cc "Callahan, Clarence A" <clarence.callahan@doh.hawaii.gov>, "Bernstein, Davis" <davis.bernstein@doh.hawaii.gov>, "Kawaoka, Keith E" <keith.kawaoka@doh.hawaii.gov>, "Calisay, Melody G" <melody.calisay@doh.hawaii.gov>

Subject FW: Aloun Mixing site security breach

Morris:

As per our phone call, attached is the photo taken at East Kapolei-Pesticide Mixing and Loading area. As what we discussed, the site is highly contaminated and should be secured to keep the public from entering the area.

Thanks.

Melody
-----Original Message-----
From: Callahan, Clarence A
Sent: Wednesday, March 01, 2006 5:19 PM
To: Kawaoka, Keith E; Bernstein, Davis; Calisay, Melody G
Subject: FW: Aloun Mixing site security breach

Hey guys,

Looks like the program is "generating revenue." All we need to do is put up a used car sign.

Clarence

Clarence A. Callahan, Ph.D., Acting Supervisor
Site Discovery, Assessment, and Remediation Section

-----Original Message-----
From: Robert.A.Boesch@hawaii.gov [mailto:Robert.A.Boesch@hawaii.gov]
Sent: Wednesday, March 01, 2006 4:07 PM
To: Callahan, Clarence A
Cc: qingl@hawaii.edu
Subject: Fw: Aloun Mixing site security breach

Clarence,

This is the breach in the fence at the old Oahu Sugar mixing/loading site.

Bob Boesch

----- Forwarded by Robert A Boesch/DOA/StateHiUS on 03/01/2006 03:46 PM -----

Qing Xiao Li <qingl@hawaii.edu>

02/28/2006 02:47 PM

To Robert Boesch <Robert.A.Boesch@hawaii.gov>
cc Dan Paquin <paquin@hawaii.edu>
Subject Fwd: Aloun Mixing site security breach

Bob,

I would like to draw your attention to the attached photo. Dan periodically visits the Eva pesticide mixing site. He visited there last Friday (2/24) and found the fence was broken.

There was a van in the site, etc. Please see attached photo.

Qing

Qing X. Li
Professor
Molecular Biosciences and Bioengineering
University of Hawaii
Tel: +1-808-956-2011
Fax: +1-808-956-3542

----- Message from Dan Paquin <paquin@hawaii.edu> on Mon, 27 Feb 2006 07:08:25 -1000 -----

To: "Qing X. Li" <qingl@hawaii.edu>
Subject: Aloun Mixing site security breach

Dr. Li, I took pictures of the Aloun Mixing site on Friday morning. Someone had broken in, per the attached photo. Looks like a toursit van had been stolen and then stripped inside the enclosure. I know we worked with Bob Boesch, originally. Would you want to contact him, and/or DOH, Aloun Farms, etc, etc? Dan

Calisay, Melody G

From: Globerson, Alex -- EMI [Alex.Globerson@ttemi.com]
Sent: Friday, December 15, 2006 12:43 PM
To: Calisay, Melody G
Cc: Brodersen, Jason -- EMI
Subject: RE: modeling of the data

Thanks so much, Melody. We'll use this information and add it to either the text of the report or attach it as appendix as you had suggested today in our phone conversation.

Have a great weekend.

Alex Globerson
Geologist

Tetra Tech EMI - HONOLULU
707 Richards Street, Suite 300
Honolulu, HI 96813
(office) 808-441-4786
(fax) 808-836-1689

alex.globerson@ttemi.com

-----Original Message-----
From: Calisay, Melody G [mailto:melody.calisay@doh.hawaii.gov]
Sent: Friday, December 15, 2006 10:36 AM
To: Globerson, Alex -- EMI
Cc: Brodersen, Jason -- EMI; Grange, Fenix; Bernstein, Davis
Subject: FW: modeling of the data

Hi Alex:

Attaches is the mathematical modeling that Xenobiotic used to convert the Calux results to GC/MS values.FYI.

Melody

-----Original Message-----
From: George Clark [mailto:georgeclark@dioxins.com]
Sent: Friday, October 06, 2006 6:11 AM
To: Calisay, Melody G
Cc: Andrew Chu; Tina Ginter; George C. Clark
Subject: modeling of the data

Dear Melody,

Here is the conversion using the modeling we have done. I will send you the papers we have written tomorrow. I am sorry about the delay in getting this to you. If your toxicologist would like to talk to me have him give me a call.

Cheers,

George C.

George C. Clark, Dr.P.H.

President
Xenobiotic Detection Systems
1601 East Geer St. Suite S
Durham, NC 27704
USA

phone: 919-688-4804
fax: 919-688-4404
email: GeorgeClark@dioxins.com

Calisay, Melody G

From: Globerson, Alex -- EMI [Alex.Globerson@ttemi.com]
Sent: Friday, December 15, 2006 10:06 AM
To: Calisay, Melody G
Cc: Brodersen, Jason -- EMI
Subject: DOH TO13 East Kapolei

Good morning, Melody.

I just listened to a voicemail message from Jason and he stated that he discussed the East Kapolei project with you recently. From his message he stated that you would like us to proceed with the report preparation and for the time being not include the Calux discussion. Additionally he stated that you would like to be able to review the draft report by January. This schedule and alteration to the discussion within the report will work out fine and we will continue working on the draft.

Please feel free to contact us if you have any questions as to how the project is proceeding. And have a great weekend if we don't hear from you prior to the end of today.

Alex Globerson
Geologist

Tetra Tech EMI - HONOLULU
707 Richards Street, Suite 300
Honolulu, HI 96813
(office) 808-441-4786
(fax) 808-836-1689

alex.globerson@ttemi.com

Calisay, Melody G

From: Brodersen, Jason [Jason.Brodersen@ttemi.com]
Sent: Friday, June 29, 2007 8:37 AM
To: Brewer, Roger C
Cc: Newman, Laura; Globerson, Alex; Calisay, Melody G
Subject: RE: East Kapolei Report Submittal:

Thanks Roger - Alex is making the final changes per your suggestion (we do concur). Laura will do the final review and we'll send it over.

Jason Brodersen, R.G. | Geologist
Tetra Tech EM Inc.
135 Main Street, Suite 1800 | San Francisco, CA 94105
Direct: 415.222.8283 | Main: 415.543.4880

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

-----Original Message-----
From: Brewer, Roger C [mailto:roger.brewer@doh.hawaii.gov]
Sent: Friday, June 22, 2007 8:47 AM
To: Brodersen, Jason; Calisay, Melody G; Bernstein, Davis
Cc: Grange, Fenix; Newman, Laura; Globerson, Alex
Subject: RE: East Kapolei Report Submittal:

I suggest starting off with a clear statement that reported levels of arsenic, dioxins and other pesticide-related contaminants in the field area do not exceed HDOH action levels for residential land use. Assuming of course that this is your interpretation of the data... Then go into a discussion why this is a valid conclusion.

Roger

-Original Message-----
From: Brodersen, Jason [mailto:Jason.Brodersen@ttemi.com]
Sent: Thursday, June 21, 2007 9:19 PM
To: Brewer, Roger C; Calisay, Melody G; Bernstein, Davis
Cc: Grange, Fenix; Newman, Laura; Globerson, Alex
Subject: RE: East Kapolei Report Submittal:

X-Priority: 3
Importance: Normal
Content-Type: text/plain; charset="ISO-8859-1"
Content-Transfer-Encoding: 8bit

Yep, that's the same line of thought we are thinking and I believe that's the intent of the current text (we do reference the new pesticide guidance as well). Perhaps we are good to go?

Jason Brodersen
Tetra Tech Honolulu
(808) 441-6600

-----Original Message-----

From: "Brewer, Roger C" <roger.brewer@doh.hawaii.gov>
Subj: RE: East Kapolei Report Submittal:
Date: Thu Jun 21, 2007 5:40 pm
Size: 5K
To: "Brodersen, Jason" <Jason.Brodersen@ttemi.com>, "Calisay, Melody G" <melody.calisay@doh.hawaii.gov>, "Bernstein, Davis" <davis.bernstein@doh.hawaii.gov>
cc: "Grange, Fenix" <fenix.grange@doh.hawaii.gov>, "Newman, Laura" <Laura.Newman@ttemi.com>, "Globerson, Alex" <Alex.Globerson@ttemi.com>

I suggest referring to the line of thought in the recent HDOH pesticide guidance update (attached). The target was for TEQ dioxin as measured by GC/MS to fall below our upper action level of 390ppt in all 59 DUs. HDOH is confident that CALUX consistently overestimates TEQ dioxins in comparison to standard GC/MS methods so we agreed that it can be used to screen fields. If the DU passes using CALUX data then no further testing is required. If it doesn't HDOH recommends retesting the sample using GC/MS.

For the East Kapolei fields, all of the DUs passed the action level of 390ppt based on CALUX data except DU32 (736 ppt), DU36 (446ppt) and DU39 (424ppt). GC/MS data for DU32 (101ppt) and DU39 (59ppt) verified that TEQ dioxin levels in these DUs are below our action level of 390ppt. Sample DU36 was not retested using GC/MS, since we were still formulating our guidance at the time. Based on the paired CALUX-GC/MS data collected in the same field, however, it is reasonable to conclude that GC/MS-based TEQ dioxin levels in DU32 are well below the HDOH target action level of 390ppt.

I think this is a reasonable approach. Let me know if you want to go over this in more detail.

Roger

-----Original Message-----
From: Brodersen, Jason [mailto:Jason.Brodersen@ttemi.com]
Sent: Thursday, June 21, 2007 3:37 PM
To: Brewer, Roger C; Calisay, Melody G; Bernstein, Davis
Cc: Grange, Fenix; Newman, Laura; Globerson, Alex
Subject: East Kapolei Report Submittal:

Hi Melody, Roger, and Davis -

We've completed the data validation and updated the final report (attached) based on Melody's comments (attached). The sole comment that we don't feel comfortable addressing or are not entirely sure how well we can change text is Comment 7/9 which relate the Calux vs GC/MS comparison and statistics.

* Calux statistical evaluation: Given the lack of correlation between our Calux and GC/MS results, there doesn't appear to be justification to conduct a statistical evaluation of the Calux results.

We concur that Calux overestimates dioxin calculations. We are not confident that the data can be adjusted per their formula because the regression analysis provided by them is not at all consistent with the regression analysis conducted by Roger. I don't believe that presenting the information provided by Xenobiotic is defendable since our duplicate evaluation does not match their summary or regression curve. We did include an in-text figure demonstrating the current regression analysis to support the over estimation.

* GC/MS statistical evaluation: The overall selected sampling strategy for the site is based on the 59 decision units which gives the user a 95% confidence when compared to a screening level on a pass/fail basis. We were hoping that there would be good correlation between Calux and GC/MS so that we could use the Calux results, but that does not appear to be the case per above. So that leaves us with 25 GC/MS samples to evaluate. We cannot make a 95% confidence statement per the EPA and DOH guidance from only 25 samples, since 59 is the required number to reach 95%. Melody's suggestion of being 95% sure that 89% of the samples are below 100 ppt does not impact the screening levels, nor does it appear to help with the conclusion. The mean result of the GC/MS results is within the "medium" risk range for dioxin and none of the samples exceed 390. We can then state that we have approximately 90 percent confidence (because of only 25 samples) that GC/MS samples are wi
thin the "medium" risk range, but is that helpful?

* I don't believe we can now designate the entire 400 acres as one decision unit and average the results together for one result. If that was the case, then a site with several exceedences of a screening level for 59 samples could just average them out to a result below the screening level. It kind of goes against the theory of the 59 units to begin with.

I believe our best argument for use of the Calux and GC/MS results is simply that all but three of the Calux results were in the "medium" risk range and that two of the three above the risk range have GC/MS duplicates that are within the "medium" risk range. But statistically, can we then say with a 95th percent confidence that the entire property is within the "medium" risk range? I don't think so. We also have a strong argument in that all of the 25 GC/MS values are within the "medium" risk range. Text has been updated with this language.

Perhaps a conference call with all of us would be in order to resolve the strategy for best presenting the dioxin results or if you don't concur with our evaluation. Once we resolve this we can PDF all of the figures and attachments (they didn't change from the draft submittal).

Thanks - Jason.

<<FINAL_East Kapolei Affordable Housing Project _Site Assessment Report.pdf>> <<07-160.PDF>>

Jason Brodersen, R.G. | Geologist

Tetra Tech EM Inc.

707 Richards Street, Suite 300 | Honolulu, HI 96813

Direct: 808.441.6602 | Main: 808.441.6600

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

Melody Calisay

Subject: **Date sent: Wed, 16 Mar 2005** 14:07:30 -0500
From: **"Edwards, Howard" <HEdwards@ene.com>**
To: **"Melody Calisay \(E-mail\)" <mcalisay@eha.health.state.hi.us>**
Copies to: **"Davis Bernstein \(E-mail\)" <dbernstein@eha.health.state.hi.us>**

Melody:
I have an additional question regarding the proposed sampling!

** For the Data Quality Objectives we have the following as one of the primary study questions:

--What is the areal and vertical extent of the elevated COPCs associated with OSC Pesticide Mixing and Loading Area? What is the COPC concentration distribution and the estimated volume of contaminated soil?

For soils within the fenced facility, this question can be mostly resolved by using the data currently available. There are evident data gaps! However, further resolution of the contamination within the fenced area would add to the sampling Brownfields' project cost and likely add very little toward the Brownfields' project goals!

In order to reduce sampling and analytical cost, we would like to suggest that the further investigation of the OSC Pesticide Mixing and Loading Area to be addressed in this SAP be limited to the areas outside of the fence, and exclude any additional investigation within the fenced area other than a few six foot boring samples. (This would cut the estimated sample number, analytical costs, and associated field costs in half.) Does DOH have an alternative suggestion?

In order to reduce analytical cost, we would further like to suggest that the analysis method used to define extent of contamination be limited to dioxins analysis only or dioxin. Elevated dioxins was present when ever other elevated analytes were present. (This would reduce the analytical cost per sample from greater that $1,000 {for five methods} to approximately $ 500-600 {for dioxins}. For collected samples from 20-30 locations at three depth intervals the analytical cost saving would be great) Does DOH have an alternative suggestion?

Note that all other collected sample would be analyzed for the full list of COPCs.

Howard Edwards
Ecology and Environment, Inc.
350 Sansome, Suite 300
San Francisco, Ca. 94104
415-981-2811

Melody Calisay

Date sent: **Wed, 10 Nov 2004 13:41:22 -0800**
From: **Jones.Gail@epamail.epa.gov**
Subject: **Re: Soil Sampling for East Kapolei**
To: **Melody Calisay <mcalisay@eha.health.state.hi.us>**

Melody,

First, a few questions:

1. What is a TMK? You said there were 5 parcels ranging in size from approx. 31 acres up to 200 acres. Are each of these considered a TMK?

2. The proposal is to composite 50 sampling points per TMK. Does this include the smaller parcels, or only the two 200 acre parcels? How was the grid size determined? How uniform in shape are the sites?

3. You said that "an equal amount of soil will be collected from each sampling point, and thoroughly homogenized." What is the sample size? How will you ensure that it is "an equal amount?" How will the samples be thoroughly homogenized? It is recommended that a mechanical mixing device be used, as 50 samples could comprise a lot of dirt.

4. You mentioned analyzing for dioxins, pesticides, and arsenic. Which pesticides? Is dioxin necessary at this stage? Could you analyze for some other indicator, such as pentachlorophenol? Is the cost of these analyses the reason for the high composite rate?

5. Now, about this 50:1 composite ratio. My overall feeling is that this may not tell you very much. It might be OK if you are sure (very, very, very sure) that there is uniform distribution across the site. However, I would think that this is unlikely, given application, wind variability, and other factors. So, what would a 50:1 ratio tell you? If you got a "non-detect" or low-level hit, does that mean the site is clean or requires only minimal remediation? Or did you dilute a 'hot spot' to the point where you have a false negative result? Since the redevelopment plan is for housing, can you tolerate false negatives?

The information you provided is very limited, so please take that into account when you review the following suggestions. You said that AMEC conducted a Phase I and provided their recommendations based on those findings. However, you did not include the Phase I findings, so I don't know what the rationale was for their recommendations. With that in mind, I have two suggestions. (These may be modified as more information becomes available.)

1. Decrease the composite ratio. Divide the larger parcels into 4 to 6 areas, collect perhaps 10 samples and composite within each area. This will give you a composite ratio of 10:1 and a total of 4-6 samples.

2. Use a random number generator and collect (perhaps) up to 10 discreet samples.

Using either of these scenarios would hopefully allow you to identify

potential 'hot spots' or be more confident that the site is uniform. However, these should probably be viewed as screening level samples. Considering your proposed reuse of the property, I'm not convinced (given the information provided) that compositing is an acceptable approach. At some point, you'll probably need to collect a fair number of discreet samples to ensure that the property is suitable for housing.

Hope this helps. Please call if you questions or would like to schedule a scoping session. If you're not quite ready for a "formal" scoping, we can do a preliminary one.

Gail E. Jones
Quality Assurance Office (PMD-3)
U. S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

phone: 415-972-3807
fax: 415-947-3564
email: jones.gail@epa.gov

Melody Calisay <mcalisay@eha.health.state.hi.us>
To: Gail Jones/R9/USEPA/US@EPA
cc: DBERNSTEIN.HEER.EMD@eha.health.state.hi.us, MCALISAY.HEER.EMD@eha.health.state.hi.us
11/05/2004 12:29 PM
Subject: Soil Sampling for East Kapolei

Hi Gail,

The State of Hawaii-DOH would like to request your technical opinion on soil sampling for East Kapolei, one of our Brownfields sites.

The site is a former sugarcane field with total area of 543 acres. It is divided into 5 parcels where approximately, 0.6 acre of one of the parcels was formerly used for pesticide mixing and unloading area. Analyses results of soil samples collected from the pesticide mixing and unloading area indicated elevated levels of dioxin up to 330 ppb TEQ and As.

The site is the no. one priority site of the Department of Hawaiian Homelands. DHHL is planning to built 600 houses in this site. AMEC Earth and Environmental conducted the Phase I and recommended the following:

1. Assess the human health risk associated with the former

sugarcane land. To do so, there is a need to determine the mean concentration of the contaminants in the site. Amec recommended collecting one composite sample per TMK (two parcels have an area of 200 acres each, and three parcles with an area of 31 to 65 acres each). Composite samples will consist of a minimumof 50 points collected on an evenly spaces grid for each TMK. Each sample boring will be collected from 0-6" depth. An equal amount of the soil will be collected from each sampling point, and thoroughly homogenized with the 50 points. The composite samples will be obtained after mixing, and analyzed for dioxin, pesticides and As.

My question is, do you think one composite sample of 50 borings in a 200 acres land could be considered a representative sample? what do you think is a good number of sampling poins or the size of a decision unit for residential housing?

2. For the former pesticide mixing and unloading area, AMEC gave three options for remediation. However, I believe that there is a need to delineate the extent of the contamination before conducting any remedial activities. Any suggestion on the number of samples to be collected to fully characterized the site will be appreciated.

Thank you very much for your time and hope to hear from you.

Melody G. Calisay
DOH-HEER Office

Calisay, Melody G

From: Edwards, Howard [HEdwards@ene.com] **Sent:** Fri 12/16/2005 12:43 PM
To: dbernstein@eha.health.state.hi.us; mcalisay@eha.health.state.hi.us
Cc:
Subject: FW: East Kapolei Agricultural Property
Attachments:

FYI

We should have the Final SAP for the East Kapolei Agricultural Property approved by the end of the year.

Howard

-----Original Message-----
From: Mezquita.Marlon@epamail.epa.gov
[mailto:Mezquita.Marlon@epamail.epa.gov]
Sent: Friday, December 16, 2005 11:50 AM
To: Edwards, Howard
Cc: Douglas.Carolyn@epamail.epa.gov
Subject: RE: East Kapolei Agricultural Property

Hi Howard,

Yes, I've completed my QA review and find that the document has been vastly improved. However, there are still a few items that need to be corrected. I am hoping we can deal with these via email, and upon receipt of correction pages, I would be happy to write up the QA approval memo. Below, please find the remaining items:

1) [Section 6.2.1, Surface Soil Samples from Property Sections, Compositing Procedure] Paragraph one and two. This section states that from the original 50 incremental samples, 5 jars will be combined/composited in a mixing container, then "an appropriate sized sample" will be transferred from the mixing container into a separate compositing container. The text does not define criteria for determining what would be considered an "appropriate sized sample". It is recommended that either sample size selection criteria be provided, or an specific volume be defined, e.g., 10 oz. will be transferred?

2) [Appendix A, DQO Worksheet, Section 6, Limits on Decision Errors, Tables - Decision Error] Both tables. Second row, True Nature of Decision Errors, first column should read, " .... or are biased low."

3) [Appendix A, DQO Worksheet, Section 6, Limits on Decision Errors, Tables - Decision Error] Both tables. Second row, True Nature of Decision Errors, second column should read, " ... or are biased high."

4) [Appendix A, DQO Worksheet, Section 6, Limits on Decision Errors, Table - Decision Error Limit Goals] Both tables. Second row, Third column, Decision Error Probability Goals, should read, "10%" instead of "Gray Area."

5) [Appendix A, DQO Worksheet, Section 6, Limits on Decision Errors, Table - Decision Error Limit Goals] Both tables. First column, the percentages need to be revised such as to correctly set up the DQO Decision Performance Goal Diagram (DPGD) See DQO Guidance EPA QA/G-4, Section 6, including Figure 6-3 for an example DPGD. It is suggested that four distinct decision points be established, e.g., 60%, 75%, 100%, and 125% of AL. However, QA/G-4 recommends that at a minimum only two decision points are needed to establish the width of the gray region.

6) [Appendix A, DQO Worksheet, Section 6, Limits on Decision Errors, Table - Decision Error Limit Goals] Both tables. Fourth Column, rows one through four, due to the nature of the stated null hypothesis, "The contaminant concentrations in soils are greater than or equal to action levels." It is recommended that the order of decision error types be reversed, e.g., "row 1 = False Acceptance, row 2 = False Acceptance, row 3 = False Rejection, and row 4 = False Rejection" Please see EPA QA/G-4, Figure 6-3, Example DPGD.

7) [Appendix A, DQO Worksheet, Section 7, Optimized Design for Obtaining Data] Specific Design Optimization Based Upon Decision Error Limit Goals, paragraph 3. Please revise text to read, "A need for approximately 150 incremental samples is derived using either Students t test or the Wilcoxon test."

Paragraph 7. Please revise text to read, "A need for not more than 30 incremental samples is derived using either Students t test or the Wilcoxon test."

I will be back in the office on Monday December 19, 2005. If you have any questions regarding this review, please do not hesitate to call me at (415) 972-3808. Thanks, Marlon

"Edwards, Howard" <HEdwards@ene.com>
To: Marlon Mezquita/R9/USEPA/US@EPA
cc: Carolyn Douglas/R9/USEPA/US@EPA
12/15/2005 03:28 PM
Subject: RE: East Kapolei Agricultural Property

Marlon

Is there any word on the status of your review of the revised SAP for East Kapolei Agricultural Brownfield property.

Howard Edwards
Ecology and Environment, Inc.
350 Sansome, Suite 300
San Francisco, Ca. 94104
415-981-2811

-----Original Message-----
From: Mezquita.Marlon@epamail.epa.gov
[mailto:Mezquita.Marlon@epamail.epa.gov]
Sent: Monday, November 21, 2005 3:00 PM
To: Edwards, Howard
Cc: Douglas.Carolyn@epamail.epa.gov; Jones.Gail@epamail.epa.gov
Subject: East Kapolei Agricultural Property

Howard,

I picked up the revised document from the Emergency Response Center on the 8th floor. Thanks,

~~~~~~

Marlon Mezquita,
Quality Assurance Office
U.S. EPA Region 9, PMD-3
75 Hawthorne Street
San Francisco, CA 94105
Phone: (415) 972-3808
Fax: (415) 947-3564
email: Mezquita.Marlon@epa.gov
R9 QA Web Page: www.epa.gov/region09/qa

~~~~~~

Melody Calisay

From: **"Melody Calisay" <mcalisay.HEER.EMD>**
To: **jones.gail@epamail.epa.gov**
Date sent: **Fri, 05 Nov 2004 10:29:29 -1000**
Subject: **Soil Sampling for East Kapolei**
Copies to: **DBernstein.heer.emd, MCalisay.heer.emd**

Hi Gail,

The State of Hawaii-DOH would like to request your technical opinion on soil sampling for East Kapolei, one of our Brownfields sites.

The site is a former sugarcane field with total area of 543 acres. It is divided into 5 parcels where approximately, 0.6 acre of one of the parcels was formerly used for pesticide mixing and unloading area. Analyses results of soil samples collected from the pesticide mixing and unloading area indicated elevated levels of dioxin up to 330 ppb TEQ and As.

The site is the no. one priority site of the Department of Hawaiian Homelands. DHHL is planning to built 600 houses in this site. AMEC Earth and Environmental conducted the Phase I and recommended the following:

1. Assess the human health risk associated with the former sugarcane land. To do so, there is a need to determine the mean concentration of the contaminants in the site. Amec recommended collecting one composite sample per TMK (two parcels have an area of 200 acres each, and three parcles with an area of 31 to 65 acres each). Composite samples will consist of a minimumof 50 points collected on an evenly spaces grid for each TMK. Each sample boring will be collected from 0-6" depth. An equal amount of the soil will be collected from each sampling point, and thoroughly homogenized with the 50 points. The composite samples will be obtained after mixing, and analyzed for dioxin, pesticides and As.

My question is, do you think one composite sample of 50 borings in a 200 acres land could be considered a representative sample? what do you think is a good number of sampling poins or the size of a decision unit for residential housing?

2. For the former pesticide mixing and unloading area, AMEC gave three options for remediation. However, I believe that there is a need to delineate the extent of the contamination before conducting any remedial activities. Any suggestion on the number of samples to be collected to fully characterized the site will be appreciated.

Thank you very much for your time and hope to hear from you.

Melody G. Calisay
DOH-HEER Office