

PORT OF OAKLAND

ENVIRONMENTAL
PROTECTION
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Juliet,

June 28, 1999

Ms. Madhulla Logan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Port may want to transfer the case to RWOCB. Derrick Lee knows this case & he has agreed to take it.

SUBJECT: Summary of June 15 Meeting and Supplemental Letter Workplan, Former Cryer Boatyard, Oakland, CA

MJ

Dear Ms Logan:

Thank you for taking the time to meet with Susanne von Rosenberg and myself on June 15. This letter summarizes the required follow-up tasks and investigation activities you described in that meeting. This letter is divided into three sections:

1. Summary of Remaining Issues
2. Supplemental Information to be Provided, and
3. Required Supplemental Investigation Activities/Workplan

The Port requests that you review the workplan as soon as possible. Further mediation regarding the Cryer site is scheduled in the third week of August, and it would be very helpful to have the new data available at that time.

1. Summary of Remaining Issues

Per our discussion, the investigation activities on the Port-owned portion of the property are sufficient to evaluate the potential human health and ecological risks associated with the property. You also indicated that the recommended risk-based remediation (consisting of a minimum of two feet of clean cover fill and riprap along the shoreline to contain the cover fill) is adequate to protect human health and the environment, provided that a thorough risk management plan is developed and implemented as part of the park construction, operation, and maintenance activities.

On the Steam Valve portion of the property you stated that the investigation activities and historical information made available to date did not fully address all potential concerns. The two remaining issues are associated with the quality of the imported fill Steam Valve placed on the site, and the extent of the benzene in groundwater at SV-10 (including the threat of migration to the Estuary if contamination is confirmed).

Shallow Fill

The shallow fill currently present on the Steam Valve portion of the property was brought in to replace contaminated soil that had been removed. To date, Steam Valve has been unable to provide a certificate showing that the imported fill was clean, or that the contaminated soil removed was properly disposed of. As we discussed, the fill placed on the Steam Valve portion of the property was construction fill (Attachment 1 is the certificate showing the grain size distribution for the fill). Steam Valve is in the process of obtaining a certificate from Gallagher and Burke documenting that the imported fill was clean.

Port of Oakland/ Cryer Boatyard - Two sites in one – STID # 6631 and #205
1899 Dennison, Oakland, CA

Cryer Boatyard and Port of Oakland were two separate sites. One parcel divided into two, one owned By the port and the other by the cryers. Now I hear they have come to an agreement, so the Port (the cryer boatyard did not do the RA I asked them for) evaluated the data for the whole site and completed a risk evaluation, both human and ecological risk evaluation. 90% the site is going to be developed as a Park

Slag - They sampled the slag, which is more like a rock now and they found Significant concentrations of metals. They are going to manage it on site with 2 feet of clean fill (which should be managed and discussed in a Risk Management Plan)

Risk Assessment - They did the risk assessment by calculating the risk for each location as opposed to averaging it across the border. In a way this is conservative as they calculated the risk for all the contaminants and then they summed it for each location. The risk did not exceed 10⁻⁵ for any of the location. I asked them to anyway do a average across the border and give a summary.

- **Park Scenario.** There will be one building to conduct classes etc. They evaluated the surface pathway, dermal, inhalation and ingestion for the park scenario.
- **Construction worker scenario-** surface pathway again
- **Indoor inhalation-** This is a complete pathway as they found benzene near the building which they plan to keep (to conduct classes). They evaluated this pathway. Basically they came up with a Tier 2 RBSL;s . I told them that they need to take more samples to delineate the contamination. They really cannot do a risk assessment for a pathway with one sample. They agreed to take more samples

Ecological risk assessment . They compared the concentrations to the catellus site numbers as that was also developed as a Park. Derrick Lee who was present in the meeting wanted them to submit information that justifies comparing the concentrations on site with the catellus. He basically wanted them to compare the geology. For some locations, concentrations on site (location by location) did exceed the catellus numbers. Again, the two feet of clean soil will keep out most of the receptors (burrowing animals) out of the hot zone. I asked them to provide me more information on this.

Also, they need to provide me with RBCA calculations for the Tier 2 they completed for the indoor pathway.

They claimed that they do not think that the 2 feet of soil is necessary in the cryer boatyard property, since they did not find significant contamination in the portion of the property. Also, cyrer boatyard claims that in 1991 they excavated 2 feet of the top soil and filled it with clean soil.. However, there is no documentation available.. With this in mind and also the haphazard way that site investigations (without sample location map, no proper lab reports) were conducted on the cryer boatyard side of the property, I gave them two options:

- 1 take more samples in the fill material (which has never been sampled) to prove that it is clean
- 2 or treat it like port of oakland property and fill it with clean soil.

Ask for more money, I have told doug from the port about it and he aksed us to send a more money letter to him.

At this point, Gaia consulting will provide a workplan and the supplemental information we requested withing two weeks. In the workplan, they will mention the future plans for the site as discussed in the meeting. I mentioned she should make a note about the need for a risk management plan (a comprehensive one) prior to the closure of the site.

Benzene in Groundwater at SV-10

The most recent investigation showed an elevated level of benzene in groundwater at SV-10. The concentration detected is below the ASTM Tier 1 screening level for outdoor air; however, it is greater than the Tier 1 residential screening level for indoor air. While the groundwater samples collected under the building did not show any volatile organic compounds, you stated that with the available information, it cannot be determined whether benzene may migrate underneath the building or towards the Estuary and present a hazard to future building occupants.

2. Supplemental Information to be Provided

You indicated that while the risk evaluation recently provided to you is generally acceptable, there are several informal items that need to be clarified and/or described in greater detail. The risk evaluation report submitted on June 4 must be revised to incorporate the following information:

- Clarification that the benzene screening level presented for park use is not an established PRG, but rather a value developed using the ASTM RBCA guidance;
- Calculations supporting the development of the benzene screening level for indoor air for park use;
- Clarification that risks for the site were calculated in a conservative manner by estimating the potential risk associated with each sample location;
- Calculation of an average site-wide risk for all three scenarios (industrial worker, park use, and construction/maintenance worker);
- Comparison of the site geology to the geology at the Catellus Emeryville and Albany/Berkeley sites to demonstrate that the Catellus park and ecological screening levels used are appropriate to the Cryer site; and,
- Clarification that, with the proposed remediation, the site would not pose an unacceptable risk to human health and the environment.

This revised risk evaluation report will be submitted under a separate cover.

In addition to these changes to the existing risk evaluation, a letter workplan is required for the supplemental investigation at the Steam Valve portion of the property (see section 3). After the completion of the additional investigation, a summary report must be prepared. The summary report must include an updated risk evaluation and remediation approach, if necessary, for the Steam Valve portion of the property. Finally, a detailed risk management plan must be prepared after the remediation approach has been approved for both portions of the property. The risk management plan must describe the risk management procedures for the park construction/ development, and park operation/maintenance.

3. Required Supplemental Investigation Activities/Workplan

In our meeting, you stated that a supplemental investigation is required to address the remaining uncertainties at the Steam Valve portion of the property. You indicated that concerns associated with the quality of the shallow fill present on the Steam Valve portion of the property could be addressed by 1) sampling to establish that the fill is not contaminated, or 2) installing a 2-foot-thick layer of clean fill on the Steam Valve portion of the property as well as the Port-owned portion of the property.

The concern regarding the benzene in groundwater at SV-10 should be addressed by collecting a minimum of four grab groundwater samples. The proposed field investigation procedures and sampling activities are outlined below. Figure 1 shows the proposed sampling locations.

Investigation Area

This investigation workplan addresses the Steam Valve-owned portion of the former Cryer Boatyard, and the potential environmental threat to the Port-owned portion of the former Cryer Boatyard.

Prior Investigations

For information on prior site investigation activities please refer to the Supplemental Site Investigation Workplan (Port of Oakland 1998a) and the Supplemental Site Investigation and Risk Evaluation Report (Port of Oakland 1998b).

Proposed Sampling Activities

If Gallagher and Burke cannot provide a certificate that the imported fill was clean fill, six shallow soil borings will be installed in the open space across the site to evaluate the condition of the imported fill placed by Steam Valve. One soil sample will be collected from each boring. The soil samples will be collected at 1.0 to 1.5 feet bgs. The proposed locations of these borings, which have been labeled SV-15 through SV-20, are depicted on Figure 1. In addition, groundwater grab samples will be collected from four borings. Boring SV-16 will be extended to shallow groundwater and three other borings (SV-21 through 23) will be installed to shallow groundwater. Shallow groundwater is expected to be encountered around 5.5 to 8 feet bgs.

Proposed Sample Analysis

All soil samples will be analyzed for metals (CAM-17) using EPA Methods 6100/7000. The soil samples will also be analyzed for TPH-diesel using EPA Method 8015-modified, and semi-volatile organic compounds (SVOCs) using EPA Method 8270. Three of the six soil samples will be analyzed for PCBs and organochlorine pesticides using EPA Method 8080. Because the soil samples will be collected from shallow fill, they will not be analyzed for volatile organic compounds.

Groundwater samples will be analyzed for TPH-gasoline using EPA Method 8015-modified, and BTEX using EPA Method 602. All groundwater samples will be filtered by the laboratory.

Reporting

After all analytical data are obtained from the laboratory, GAIA will prepare the field investigation summary report. As required, the report will include an updated evaluation of human health and ecological risks associated with the Steam Valve portion of the property. The updated risk evaluation will be prepared using the existing methodology and screening levels. The report will also provide a recommended remediation approach, if necessary.

Schedule

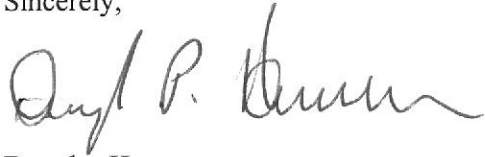
Mobilization will require approximately two weeks after receipt of the County's approval of the workplan and authorization for the additional investigation activities by Steam Valve. The borings will require two days to install, and laboratory analysis will require up to three weeks. Thus, the field investigation summary and risk evaluation report will be submitted to the County within nine weeks of the approval of the workplan.

Ms. Madhulla Logan
June 28, 1999

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The Port appreciates your prompt attention to the workplan. Please call me at 510-272-1184 if you have any questions or need further information.

Sincerely,

A handwritten signature in cursive script, appearing to read "Douglas P. Herman".

Douglas Herman
Assistant Environmental Scientist

encl: Noted

cc w/encl: Mr. Derek Lee - RWQCB
Neil Werner - Port
Michele Heffes - Port
Susan von Rosenberg - GAIA
Chris Noma - Wendel Rosen

ATTACHMENT 1

SUMMARY OF LABORATORY TEST RESULTS

Description: One sample of 3/4-inch aggregate base material, submitted by Gallagher & Burk, Inc.
 Sample No. 6002 - Virgin Aggregate and RAP/Mixed

R-VALUE (CAL-301)

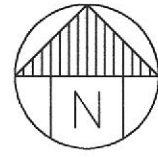
SAND EQUIVALENT (CAL-217)

Sample ID.	R-Value	Expansion Pressure	Caltrans Specs., Sec. 26 Class II AB	Sand Equivalent (Individual)			Average of Three	Caltrans Specs. Sec. 26 Class II AB
				1	2	3		
6002	83	0	78 (minimum)	54	50	55	53	25 (minimum)

GRADING ANALYSIS (CAL-202)

Sieve Size	% Passing Sample No. 6002	Caltrans Specs. Sec. 26 3/4" Class II AB
1"	100	100
3/4"	95	90-100
1/2"	81	--
3/8"	71	--
#4	48	35-55
#8	28	--
#16	18	--
#30	12	10-30
#50	8	--
#100	6.0	--
#200	4.8	2-9

Roadbase Aggregate Base



SCALE: 1"=40'

$\Delta = 55^{\circ}10'38"$
 $R = 34.60'$
 $L = 33.32'$

$S 83^{\circ}39'56" W$
226.08'

ENT
44.40'
MON. DEN. 11007
PORT GPS 11007
N 2110921.789
E 6058088.701

DENNISON STREET

EMBARCADERO

INNER HARBOR

PORT OWNED

LEGEND:











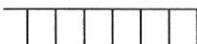


- SV-15  PROPOSED SHALLOW FILL SAMPLING LOCATION
- SV-21  PROPOSED GROUNDWATER SAMPLING LOCATION
- SV-16  PROPOSED SHALLOW FILL AND GROUNDWATER SAMPLING LOCATION
- CORE#1  GAIA BORING LOCATIONS
- SV-10  GAIA BORING LOCATIONS ON STEAM VALVE PROPERTY
- SB-16  GAIA BORING LOCATIONS
- 1A  GeoSolv BORING LOCATION
- 3  SCI BORING LOCATION
- SB-2  CLAYTON BORING LOCATION
- SB-9  SHAWNEE BORING LOCATION
-  DRY DOCK RAIL
-  APPROXIMATE BOUNDARY OF STEAM VALVE OWNED PROPERTY
-  APPROXIMATE BOUNDARY OF PORT-OWNED PROPERTY

FIGURE 1
SITE BOUNDARY & PROPOSED SUPPLEMENTAL SAMPLING LOCATIONS
 FORMER CRYER BOAT YARD - STEAM VALVE OWNED PROPERTY (APPROXIMATE LOCATIONS)