

MEMORANDUM

TO: Treasure Island Restoration Advisory Board and Jim Sullivan-NSTI
FROM: Paul V. Hehn, Treasure Island RAB - Technical Subcommittee Chair
DATE: January 21, 1997
RE: Comments on Document:
DRAFT "Remedial Investigation Report"
Phase IIB RI Report

The following are my comments on the above referenced document. I have divided my comments into three sections. The first section is on general comments that apply to all sites reviewed for the entire RI report. The second section covers specific comments for each individual RI site investigation results that are presented in the report. In section three are some conclusions and recommendations for improving the report, and for what I feel are additional items for follow-up or for additional work that will be needed to improve the report or to complete the RI phase so that the site can move into the Feasibility Study (FS) phase.

DOCUMENT:

**DRAFT - REMEDIAL INVESTIGATION REPORT
PHASE IIB REMEDIAL INVESTIGATION**

General Comments and Concerns

1. The validity of the results of the TPH as diesel (TPHd) analysis that resulted from the immunoassay versus the laboratory data is in question due to the high percentage (up to 40%) false negatives detected when the two results are compared. This comparison has only been done on 20 to 25% of the overall

samples as requested in the work plan. This brings up the serious question of how many of the other immunoassay results for TPHd that are reported as non-detect (ND) results but were not checked at the laboratory are true, and how many are just false negatives when TPHd is really present at some unknown quantity? The TPHd results and impacts throughout all of the sites for which TPHd is tested might be seriously underreported! There are similar concerns for the false negatives for TPHg and for Oil and Grease but they are not as common as the TPHd results for all sites investigated.

2. Many of the sites investigated have not been fully nor completely characterized. Many areas that should have received some sampling, investigation and testing did not get any investigation. Many of these sites are identified in the specific sections reviewed below. At this time, this facility does not appear to be ready to go to the Feasibility Study (FS) phase.
3. Why is there so much low-level beryllium located through the entire site? Does the beryllium result from the imported fill material that was placed on the site, or does it result from the wide spread impacts from past operations?
4. At what point, if any, do impacts from inorganics (such as iron, aluminum and manganese) cross-over from being "essential nutrients" to a level of concern as contaminants? Some high levels of some of these inorganics are located at a number of sites at concentrations that are much higher than the soil and groundwater results for other samples at the same site. Should some of these be considered at concentrations were they need to be addressed?
5. It is very confusing that the TDS concentrations are expressed in $\mu\text{g/L}$ rather than the normally presented mg/L for TDS. I would suggest that all tables and references for TDS be switched to the more common mg/L . Otherwise it looks like the TDS concentrations are much higher than they really are.
6. By using the evaluation of the Chemicals of Concern (COC) for the total depth of soil samples collected (often 0 to 7 feet bgs), rather than from specific depths, were the concentrations for all samples collected from that location averaged together? If so, this could result in a dilution of the higher concentrations that might mislead and lend less importance to the higher concentrations that occur at specific depths and might need remediation.
7. The general premise on which the Ambient Metals Screening Criteria is based seems flawed based on the following: 1) the Ambient Metals levels as presented

in Appendix F depends on the average levels for metals detected at "impacted" sites since that is what is being investigated and sampled. It would be more appropriate if the metal values were screened against background levels of metals from non-impacted sites on both TI and YBI. This would give a truer measure of what is anomalous and what is not compared to these true background sample results. Have enough soil samples (or any?) been collected from non-impacted site such that a comparison to true background concentrations could be made? This comparison to true background levels for metals could help establish true areas of concern or areas that need further investigation. 2) The background metals screening criteria seems flawed. Just because not more than 10% or more of the site concentrations did not exceed the background concentrations should those that did not exceed the background be ignored? What about the 10% or less that did exceed the background concentration? These could be located in areas of local high concentrations of metals such as localized impacts from past operations or activities. These localized "hot spots" may require additional investigation, evaluation or remediation but should not just be ignored.

8. On many of the sites, the rationale for recommendations for "No Action" is not developed to the point where it can be understood why this recommendation was made. An example is at IR Site 17 (Tanks 103 & 104) where the recommendation is for "No Action" for soil even when TPH impacts are present. Why? Not explained well or fully developed argument. For this Site 17 it also should be mentioned that the final recommendation should await the result of the additional investigation being completed here prior to reaching this conclusion.
9. Overall, all of the tables of soil and groundwater results and all other tables should be presented in a more readable and user friendly format. It is still very hard to use these tables to compare and contrast data such as groundwater data from the same well overtime and over several sampling events. Requires to much switching back and forth between tables on separate pages. This is the same recommendation made in comments for revisions to the quarterly groundwater sampling reports that I submitted to the Navy in 1995.
10. Analysis for MTBE should be run for all groundwater samples from all sites for a period of one year to determine if this is a contaminant of concern anywhere petroleum hydrocarbons have been detected in groundwater.

Comments on Specific Sites and Sections

Chapter 5 - Medical Clinic (IR SITE 01)

- In the introduction, it mentions the contaminated soil was removed from the site. Where did it go? Please fill me in.
- Section 5.2 - The conceptual model looked at the site workers as potential receptors for exposure to contaminated soil. It should be updated to assess all future potential uses of the site. What about residential, groundwater, all other receptors or possible impacts from future development at the site. It may be much different than its current use. Need to reevaluate the site and the results of the past work and investigation.
- Section 5.6 - What is an elevated level of silver concentrations in the soil. It needs to be defined and mentioned in the text here.
- Section 5.6 - The section and past work concludes that no additional remedial action is necessary to protect human health or the environment. Does this apply no matter what that future use is? What will be discovered below the concrete slab identified here? Are there potential impacts below? Has it even been tested? If not how do we know? May require additional sampling and analysis?
- Table 5-5 - Is the concentration of silver left in the soil at this site protective of all future uses of the site, even residential? If not, more work may be needed.

Chapter 6 - PCB Equipment Storage Area (IR SITE 03)

- Section 6.1 - Expand on the methods on how PCB can migrate through asphaltic materials to further explain the process.

Chapter 7 - Old Boiler Plant (IR SITE 05)

- Section 7.2 - Potential future exposure to asbestos should also mention any type of future redevelopment activities.
- Section 7.3 - Leaching of contaminants does not take into account any future uses of the site when it may no longer be entirely paved.

- Section 7.4.1 - Discuss how successful the GPR was in locating the boundaries of the former burial areas. Were all of the sites identified on the air photos located by the GPR? Are some still missing or need to be located?
- Section 7.4.2 - Mentions "several" soil and groundwater samples were selected for off-site laboratory analysis. How many? Should mention here.
- Section 7.5.2 - Site 05 is indicated as adjacent and downgradient from Site 17. Should this be upgradient or is the gradient to the east?
- Section 7.6.2 - Field screening results indicate that TPH was detected in off-site analysis but not in field screening samples. How much difference and why the difference? Why not detected in the field screening?
- Section 7.7.2.2 - Since only the soils from 0 feet to maximum depth tested are used, does this dilute the average soil concentrations being considered?
- On all site maps indicate where Anomaly I & II are located.
- What is the source of the various TPH constituents detected
- Why was "No Action" recommended for the soil when significant impacts in the soil. Is this protective of all future uses at the site? The soil at this site **NEEDS** to be addressed.
- Final decision on impacts needs to await the results of the groundwater modeling and further investigation at Site 17.

Chapter 8 - Pesticide Storage Area (IR SITE 07) and Bus Painting Shop (IR SITE 10)

- Section 8.4.1.2 - Text should say how the groundwater samples were field screened (using immunoassay? PID? Or ?).
- Section 8.4.1.2 - Why was only one sample analyzed for SVOCs and TPH - extractable when TPH was detected on site and considering the number of false negatives for TPHd at other sites? More checks should have been made of the results from this site.
- Figure 8-4 which shows the immunoassay results should also show the results of the laboratory check samples for the same sample as a way to compare results.
- Format problem in the section of 8.6.1 for Pesticides/PCBs.

- Section 8.6.1 - What and where is the source of the SVOCs detected in the 11 soil samples from the seven different borings?
- Section 8.6.1 - Where in the text or the Appendix does it discuss the characterization of TPH as severely weathered diesel and how the chromatograms were interpreted to reach this result? If it is not included, it should be.
- Section 8.6.1 - The locations of the former ASTs should be located on the figures for this chapter.
- Section 8.6.1 - Section at end of TPH part should say which samples analyzed by immunoassay were lower than the concentrations for TPH analyzed by the off-site laboratory and how much lower they were.
- Section 8.6.2 - The results of the groundwater sample analysis should be summarized in this section.
- Section 8.6.2.1 - Why were no samples analyzed for TPHg or BTEX for any of these samples?
- Section 8.6.2.1 - If the chromatograms are going to be referenced as the means for the interpretation of the TPH as weathered diesel, copies of the chromatograms that were used should be included in the appendix for reference and interpretation by others.
- Section 8.6.2.1 - In the comparison of the off-site laboratory analysis and the immunoassay results, it is stated that low concentrations for TPHd or TPHm were detected at concentrations of 0.06 mg/L (60 µg/L) to 0.49 mg/L (490 µg/L). I would not consider a concentrations of 490 µg/L a low concentration. If the immunoassay cannot detect these concentrations for TPHd that are normally considered significant, then this is a big problem with the immunoassay method. The immunoassay is best used to screen only and should have more check samples run to verify the results.
- Section 8.6.3 - The samples collected from the Catch Basins resulted in very high concentrations of TEX, SVOCs, pesticides, TPHm, TPHd and TPHg as presented in Table 8-7. This area definitely needs more investigation work done to determine the extent of this impact, if the storm sewers leak downgradient this could have a significant impact on soil and groundwater. This is also the type of material that may be going into the Bay! The results of

the samples collected from these catch basin samples should be listed in the text in this section and also listed on the map!

- Section 8.7.4 - Tough to see the shading on Tables 8-11 through 8-13 in the Draft Report. Hope the final report is easier to read.
- Section 8.8 - This section assumes that ecological risk assessment is not necessary since the current habitat is poor. What will happen to this scenario if some of the optional uses for this site are implemented? Some reuse plans call for either a golf course or a nature and wildlife area. If these alternative uses are completed, then the habitat will become significantly better and the ecological risk assessment much more important. Better to keep the long view of the potential site reuses in mind and complete the ecological risk assessment with an eye for these future uses. This needs to be completed!
- Section 8.9.1 - I disagree with the conclusion that the soil sampling has adequately delineated the extent of pesticide and herbicide contamination. It appears that it is open ended to the north, west and south of various portions of Site 7. Additional delineation is recommended.
- Section 8.11 - Conclusions and Recommendations concludes that based on the perceived current and future uses at the site, no further action is required at this site and no further investigation of the extent is required. I think that the future potential uses of the site have NOT been considered nor have the impacts to soil and groundwater been adequately assessed. And what about those very high concentrations in the catch basins?

Chapter 9 - Army Point Sludge Disposal Area ,YBI (IR SITE 08)

- Even though bedrock is indicated to be at shallow depth, an attempt should be made to drill down to groundwater to check for impacts. This may be due to seepage in the bedrock due to the highly fractured nature of much Franciscan Formation bedrock in the SF Bay area. Groundwater should be sampled.
- Section 9.4.1.1 and 9.4.1.2 - VOCs, SVOCs, TPH chlorinated herbicides should have been tested during the previous Phase I work and should ALL be tested during the Phase II work. Many different things could have found their way into this sludge disposal area. Other analysis should be done.

- Section 9.4.2 - It is unclear whether the drilling refusal was due to the bedrock or to drilling into the buried foundations, Do we know?
- Sections 9.8.4 - Risk to the peregrine falcon assessed for this one area should also be combined with risks at all others sites that are used by the falcons to determine the cumulative effects not just the effect from one site.
- Section 9.9.2 - The concerns for VOCs and TPH also need to be addressed at this site.
- I do not think that the Phase II work for this site met its objective. Were the vertical and lateral extent of contamination define? No. Was it determined that the problems in the soil were a result of the sludge or other source? No. Was the area checked for other possible contaminants that might be in the area or could have been also disposed of at this site such as VOCs, SVOCs, TPHd or chlorinated herbicides? No, because no other analysis were done.

Chapter 10 - Foundry (IR SITE 09)

- Problems located in floor drains need to be tracked, determine extent of impacts and remediated.
- Extent of arsenic in groundwater in Well 09-MW-01 needs to be determined and remediated.
- It needs to be established with the Regional Water Quality Control Board if it is okay to leave 250 $\mu\text{g/L}$ (0.25 mg/L) of TPH in groundwater ?
- Again, who decides what constitutes "low" concentrations in groundwater? I would not consider a concentration of TPHd of 780 $\mu\text{g/L}$ (0.78 mg/L) as a low concentration. This may require remediation to remove.
- The final conclusion for recommendations and conclusions for this site should await the results of remaining toxicity testing and groundwater modeling. After these results are received, the results of the assessment at this site should be reevaluated.
- There is also the problem of remaining source in the ground as TPHd (38,000 mg/kg) and TPHm (12,000 mg/kg) as detected in the soil samples.

Chapter 11 - YBI Landfill (IR SITE 11)

- Table 11-3 - Comparison of immunoassay and laboratory results indicated for sample location 11-F, Sample #199KK003A as a false positive when it should be a false negative.
- The discussion and the figures for this site would really benefit from a cross section to understand what is going on.
- Section 11.4.2 - Why was one soil sample taken from location 11-SB02 instead of a boring? Explain.
- If Well 11-MW-03 is not representative of the majority of the fill material at site 11, why was it used for the aquifer slug test? What will this do for or to the groundwater modeling for this site? This site may need to have a different, more representative well tested and then the modeling redone to reflect the changes and differences between the two wells?
- What is the source of the PAHs detected?
- Are there particular depths within the soil sections that have higher concentrations of contaminants? For instance with higher concentrations of TPH? Need to look at the distribution of higher concentrations in cross-sections for different contaminants to determine the distribution .
- This site has lots of problems to be dealt with. Strongly consider it for both feasibility study AND for remediation.

Chapter 12 - Old Bunker Area (IR SITE 12)

- There seems to be a difference between the areas of bunkers shown on Figure 12-1 and the size, location and number of bunkers shown on some of the older photos of TI. I recall more bunkers shown on some of the photos. The location, number and size of the bunkers needs to be verified against the photos to be sure that all location of the bunkers have been checked and investigated during the Phase II work. There may also may be other slit trenches associated with these other bunkers? Were the locations of the bunkers undated after the new photos supplied by the USEPA?
- On Figure 12-1 - It is hard to discern which of the trench locations indicated on the map are those identified from past photos vs. those found in which rubbish was located.

- Figure 12-2 - Add locations of historic features located on Figure 12-1 on to Figure 12-2 to aid in determining which of the sites were tested and which were not tested. This addition of the historic features would also be helpful on Results Map 12-4.
- Section 12.4.1.3 - Why were there no soil samples collected from the hydraulic punch borings?
- Section 12.4.2 - Even though it was perceived that the extent of soil impacts were determined, it would have been good to sample soils from the other borings to be sure there were no surprises in areas that were not anticipated.
- Section 12.6.1 - This section should mention how many actual sites were sampled for each type of former use. If only one site per type of use then that would not be enough to adequately characterize the site. All of the areas of former bunkers, landfills and slit trenches need to be sampled.
- Section 12.6.2 - Hydraulic Punch Data Summary should actually summarize and reiterate the total number of hydraulic punch locations done at Site 12.
- Significant differences noted again between the results of the immunoassay and the laboratory data for TPHd!
- Lots of contaminants noted in the area of 12-HP076 but there is no groundwater monitoring well located nearby to determine impacts to groundwater. There should be one.
- What are the results of the previous testing done in the Radiation Testing Area? The results should be summarized in this section. Anything of concern?
- The extent of impacts in the Rubbish Disposal Area are not fully defined upgradient and cross gradient. Also lots of significant impacts. Needs further work to complete.
- It is hard to discern the difference between boring and monitoring wells on the maps. Suggest different symbols, different patterns or colors, font or bold pattern to make it easier to tell which are which.
- Why are the metals samples for groundwater samples unfiltered instead of filtered? The filtered groundwater samples are a much better test of what is just the water.

- Other metals in addition to the antimony, arsenic and lead also need to be considered as COCs considering the broad dispersion and the residential nature of the site.
- Overall, there are broad area of significant impacts to soil and groundwater with chromium, copper. Lead, mercury, zinc and TPH through out this site especially near the rubbish disposal area, the UST, the bunkers and the northwest shoreline. Even with this broad range of impacts from many areas, the investigation for this site is inadequate and definitely not complete! Large areas in the middle of the site which also had former bunkers and disposal trenches have not been sampled at all! With the broad range of impacts, this site needs to be looked at VERY carefully. Also, since this area has current residential housing and will probably used for future housing in at least the near future, these numerous and significant impacts can not be ignored. This site need considerably more work done on it before it is ready to go to feasibility. Lots of work left to do here!

Chapter 13 - Tanks 103 and 104 (IR SITE 17)

- Was the 20,000-gallon release from these tanks before or after the installation of the berm?
- Where were the line leaks that were a result of the 1989 earthquake?
- Section 13.3 - Even though vertical migration pathway excludes leaching currently, what about before the paved berm was installed? What about after reuse when the area may not be paved in the future? Still not a problem?
- Section 13.4.1 - Assumes that the area of the soil contamination limited to area within the berm. Did the large release happen before or after the berm was built?
- This area has had additional follow-up work done since the time of this report. Any conclusions about this site should await the results of this additional work.
- Again, 40% false negatives between immunoassay and the laboratory analysis!

- High concentrations for TPHd and TPHm through this site. Why is TPHd not considered a COC for this site? Need to consider the TPH, the mercury and nickel for this site.
- If this site has been adequately characterized, why was more work proposed and is on going?
- Soil was recommended for "No Action" even with high concentrations of TPHd present in the soil. Why? The basis and the rationale for this decision are not well discussed or developed. Also need to wait for the results of the additional testing being completed.

Chapter 14 - Vessel Waste Oil Recovery Area (IR SITE 21)

- Phase I work detected VOCs (chlorinated solvents). Why were no soil samples collected from the area of the suspected chlorinated solvents? Would have helped to locate possible source.
- Even when VOCs were detected in 26 of the 29 groundwater grab samples collected!
- And phenols detected in all 24 soil samples collected.
- This site should not qualify as a petroleum hydrocarbon only site for consideration by the RWQCB since this is a mixed waste site when combine the TPH, VOCs and metals.
- Metals in unfiltered water samples included chromium, copper, lead, mercury, nickel and zinc.
- It is concluded that no COCs exist for soil at this site but no soil samples were collected from the areas with the highest VOC concentrations!
- More work on the location and concentration of impacts to soil need to be addressed at this site before it goes to FS.
- The largest problem at this site are the VOCs. Considering the close proximity to the Bay, these impacts are probably getting into the Bay! Even before the results of the groundwater modeling are completed, it would be difficult to believe that the VOCs are not moving the 25 to 50 feet from locations of high concentration and moving into the Bay.

Chapter 15 - Fifth Street Fuel Releases and Dry Cleaning Facility (IR SITE 24)

- Section 15.9 - TPH not considered as a COC because physically separated from chlorinated solvents. However, the impacts are only located approximately 100 feet apart. Not much separation. Considering the mobility of chlorinated solvents in groundwater, it could very easily get a mixed VOC/TPH plume in this area influenced by tidal action.
- Section 15.9.3 - There is some heavy duty skating being done in this section. Especially in the discussion on why concentration maps do not signify a contaminant problem! This entire paragraph really does not make any sense!
- Why were only 7 soil samples collected from 15 hydropunch locations? No soil samples were collected, even from the area immediately downgradient from area of highly VOC impacted soils. O&G and TPHd only sampled along the pipeline route. More soil and groundwater need to be tested for TPH in this area since potential from the pipeline may be more wide spread. This site has been poorly sampled.
- Significant problem with solvents at this site but only very limited soil information was collected. Not enough information collected for this site.
- There is the potential for a large VOC problem to exist beneath the building. Has this been sampled? What happens if and when the building is removed?
- How can it be assumed that chlorinated solvents in soil are not a problem or COCs when no soil samples were collected! Additional investigation is necessary.
- Soil Boring 24-SB02 located less than 100 feet from the Bay in area of tidal action. Probable impacts to the Bay and mixing zone.
- Most groundwater samples analyzed for VOCs only and nothing else. Need to know more of what is in the groundwater for other constituents.
- Section 15.11 - Why does it follow that because the highest concentrations were detected in the shallow and intermediate groundwater zone, advection and biodegradation are the dominant processes affecting distribution of contaminants? This statement does not make sense.
- The site is recommended for no further study of contamination even though NO soil samples were collected! This is not appropriate. The concentrations

and extent of impacts in the soil need to be determined. The investigation is not done at this site.

Chapter 16 - West Side On-and Off-Ramps (IR SITE 28)

- Section 16.7.1.3 - Cannot ignore the higher concentrations for metals in the soil only because 10% or fewer exceed the naturally occurring concentrations in soil. This would ignore local hot spots of high concentrations. This also depends on how the “naturally occurring” concentrations were determined. If it uses the data in Appendix F, then these concentration are not naturally occurring but a combination of results of analysis from samples collected from the already known to be impacted sites. These results may be elevated due to the nature of the impacted site which could result in a “higher than natural” average concentration.
- Wide spread and broad based lead and zinc impacts in the soil to the north of the bridge. What about to the south of the bridge? The area to the south of the bridge and the beaches below the bridge in the seal haulout area may also be impacted. These need to be sampled.
- How far do paint chips blow off of the bridge and in what directions based on the constant winds into the Bay? The area of dispersion needs to be established and these areas sampled.
- Groundwater somewhere on the west side of the bridge needs to be sampled. Fractured Franciscan Formation could permit metals to leach down into groundwater over the 50+ years since the bridge was built. This may be a slow process but there has been enough time for impacts to groundwater at 50+ feet to happen. Needs to be tested.
- What are possible health risks from zinc? It was concluded that no concern for zinc. This needs to be proven.

Chapter 17 - East Side On- and Off-ramps (IR SITE 29)

- It needs to be established how much dispersion of paint flakes containing lead and other metals are spread by prevailing winds blowing through this area. This could disperse the paint flakes in a much broader area than the area immediately under the bridge.

- How much of the lead detected in the soil and groundwater for adjacent Site 11 is a result (all or in part) from activities associated with the bridge over the last 50+ years? This also need to be checked for IR Site 28. This especially important since more than 30% of the soil samples collected from this site exceeded the USEPA PRGs for lead.
- Section 17.5 concludes that the Franciscan Complex bedrock serves as a groundwater boundary for the movement of groundwater (and hence contaminants) into the deeper subsurface. Yet in Section 17.5, it concludes that groundwater present at YBI is the result of infiltration through discrete fractures or upper weathered portions of the bedrock. This issue is also discussed again in Section 17.10 on fate and transport which concludes that it IS a boundary to groundwater and therefore leaching of contaminants into the groundwater is NOT a problem. Which is it? Which scenario is being used for the groundwater modeling? This needs to be resolved and tested.
- Even though the depth to groundwater at YBI is estimated to be 60 feet bgs, if slow infiltration through fractures in the Franciscan bedrock is occurring (a likely source of the limited groundwater at YBI), how much leached metals could reach groundwater over the course of the 50+ year history of the bridge activities? This needs to be assessed by drilling several deeper groundwater monitoring wells on YBI and collecting samples in the vicinity of both bridge ramps and other YBI IR sites such as site 11. It cannot be assumed that nothing has gotten into the groundwater over that length of time.
- Leachate tests need to be run for the other metals detected at this and others site on YBI (and TI?) other than just for lead. Do any of the other metals leach to groundwater over time and how much? This could represent a long term problem on all metal sites even if there is not currently much in the way of metals in the groundwater. Should be determined as to how it could effect future use when different area that are now paved may not be in the future and could become future sites for potential leaching problems.
- The point of knowing about the dispersion of lead in the soil and groundwater is also alluded to in Section 17.10 on the fate and transport of lead. The section concludes that lead will not degrade in the soil and groundwater, and will persist indefinitely in the environment. This is a compelling reason to

know where it is, how much is there, the leachability of it and to identify hot spot of concern for the future reuse of any of these sites.

- This chapter concludes that Site 29 be further evaluated in the feasibility study to determine if remedial action is necessary. I would conclude that this is another site that is not ready to go to feasibility but needs additional site characterization prior to going to the FS to answer the questions above.

CONCLUSIONS AND RECOMMENDATIONS

- Based on my review of this Phase II RI Draft Report, I would conclude that many of the site investigated are not ready to go into the FS Phase. There are too many questions and holes in the data that have not been answered in this report.
- I would recommend that the report not go to draft final until the results of the additional investigation at Site 17 and 5(?) and the groundwater modeling are concluded and reviewed by all parties to assure completeness and agreement on the results and conclusions.
- I would recommend that all of the data be reevaluated to determine what can be used of the existing data and what needs to be enhanced with additional work. This should be critically reviewed and discussed to be sure all questions are covered. Each and every site needs to go through this process.
- The effects of tidal influence on the distribution and dispersion of contaminants should be reviewed and determined on each site that is within approximately +200 feet of the Bay.
- The overall presentation of the data for completeness, usability, reader friendliness and clarity should be reviewed and improved.
- The focus of this entire Phase IIB work should be to determine the types, levels, and extent of all impacts to soil and groundwater through out both TI and YBI. It is very important to keep the focus of the work on the ultimate goal of turning over the former Naval Station in a manner in which all future uses by the City and County of San Francisco can be accommodated since it will be known what kinds of problem are there, what can and has been done to correct these problems, and to know the extent of any problems that might be left on site that will not be remediated. If all these things are known, the City can go

ahead with reuse plans for the site knowing what to expect in all cases. There will be no (or limited) surprises when redevelopment takes place and no surprises will be dug up, excavated or drilled into that could be harmful to residents, construction workers, or industrial workers on the site. Currently, I feel that too much of the results of the investigation are focused on the risk factors associated with current site conditions such as current buildings, paved areas and past activities. Not enough attention and forward thinking about what the impacts that have been detected will mean to future site uses and occupants.

- I believe that this review process should be an interactive process with the Navy, the regulators and the RAB members. I for one would be willing to sit down with all parties at RAB meetings, interim meetings or at special meetings to go over other ideas, plans, concerns, and solutions to try to correct the short comings of the current Phase II RI Report. I believe that this is a critical report and investigation to the success of the transition of Naval Station Treasure Island and therefore deserves the best efforts and the best results that can be achieved at this point to move the facility into the FS stage and to transition to the City and County of San Francisco.

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