

MEETING MINUTES

Meeting Subject: Results Reporting Meeting for Phase I Steam Tunnels (POI 38) SA	Meeting Date/Time: 12 June 1996/0915-1130 Meeting Date/Time: 17 June 1996/1515-1420 Originator: M'balia Tagoe						
Attendees: (¹Part Time, ²by Phone) <table border="0"> <thead> <tr> <th data-bbox="201 541 269 573"><u>Navy</u></th> <th data-bbox="678 541 886 573"><u>CLEAN II Team</u></th> <th data-bbox="992 541 1068 573"><u>Other</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="201 590 594 657">Content P. Arnold (RPM) Keith Forman (NTC Interim BEC)</td> <td data-bbox="678 583 932 657">Jerald Bailey¹ (Day 2 only) M'balia Tagoe</td> <td data-bbox="992 583 1414 722">Alice Gimeno (DTSC)² Martin Hausladen (USEPA)¹ (Day 1 only) Corey Walsh (RWQCB)² (Day 2) Aaron Yue (DTSC)²</td> </tr> </tbody> </table>		<u>Navy</u>	<u>CLEAN II Team</u>	<u>Other</u>	Content P. Arnold (RPM) Keith Forman (NTC Interim BEC)	Jerald Bailey ¹ (Day 2 only) M'balia Tagoe	Alice Gimeno (DTSC) ² Martin Hausladen (USEPA) ¹ (Day 1 only) Corey Walsh (RWQCB) ² (Day 2) Aaron Yue (DTSC) ²
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Additional Distribution (In Addition to Attendees) Jan Corbett (SWDIV RTM)							

The meeting was held to present the results of the Phase I Site Assessment (SA) for POI 38 and to solicit advance comments on the proposed recommendations for further action at this POI. The meeting was held over two days (12 June 1996 and 17 June 1996) at the NTC Environmental Office and was attended by SWDIV, NTC, BNI, and regulatory agency personnel. Before the meeting began, Mr. Aaron Yue was introduced by Ms. Alice Gimeno as the new Department of Toxic Substances Control (DTSC) representative overseeing NTC environmental restoration work. It is expected that Mr. Yue will take over this role from Ms. Gimeno completely by mid-July.

The meeting began at 0915 and ended at 1130 on Day 1. On Day 2, the meeting began at 1515 and ended at 1420.

Description of Discussion:

The meeting began with Ms. M'balia Tagoe providing a brief description of the work that was performed and the results of the data evaluation. The Phase I SA involved sediment sampling in the NTC steam tunnels and direct-buried steam line vaults to evaluate the presence or absence of elevated levels of metals. Data evaluation was conducted following the decision rules presented in the Final Work Plan for the POI 38 Phase I SA effort. Based on the results of the data evaluation, two metals of potential concern, copper and lead, exist at elevated levels (above project-specified action levels) at specific locations within the NTC steam distribution system.

Ms. Tagoe then presented the recommendations for further action to be proposed in the draft Phase I SA report. These recommendations included soil and groundwater sampling both near areas of breached tunnel and vault integrity, where a migration pathway might exist, and at locations not adjacent to areas of breached tunnel and vault integrity, that might represent localized conditions in that area. The intent of this approach was to compare these results to help determine whether or not the elevated levels of copper and lead identified within the tunnel are adversely impacting the surrounding subsurface environment and to evaluate the possibility that elevated levels of metals observed within the tunnel are actually attributable not to the steam system, but to the surrounding subsurface environment.

At the end of this brief presentation, questions of clarification on specific results and sample locations were asked by regulatory personnel. After further discussion, meeting attendees agreed that the collection of soil samples would not be necessary during the second phase of fieldwork. The main concern with the steam tunnels is the potential for groundwater to have been adversely impacted and, potentially, ultimately impacting the bay. Therefore, only groundwater samples will be collected near cracked sample locations at the impacted tunnel section and vault locations. These samples will be analyzed for copper and/or lead depending upon which metal of potential concern was identified at that location. Also, samples of groundwater in the vicinity of these tunnel sections and vaults but not directly adjacent to the locations of tunnel and vault cracks will be collected and analyzed for copper and lead. Should the results of groundwater sample analysis at the tunnel and vault crack locations exceed the project-specified action levels, the results from these tunnel crack locations will be compared to the results from the non-tunnel/vault samples that represent localized levels of copper and lead in groundwater in the vicinity of the tunnels and vaults.

The following decision rules will be applied for data evaluation during the POI 38 Phase II SA:

- If the results of samples collected directly adjacent to tunnel and vault cracks are below the project-specified action levels, then no further action will be recommended.
- If the results of samples collected directly adjacent to tunnel and vault cracks are above the project-specified action levels, then the results of samples from non-tunnel/vault groundwater sampling locations will be evaluated to compare localized levels of copper and lead to groundwater samples collected adjacent to cracked areas. If the results of samples collected from non-tunnel/vault areas are also above the project-specified action levels, then no further action will be recommended. This recommendation would be appropriate since levels identified near the cracked tunnel and vault locations would be attributable not to migration of tunnel/vault contamination to the subsurface, but to localized levels for the area.
- If the results of samples collected directly adjacent to tunnel and vault cracks are above the project-specified action levels and the results of samples collected from non-tunnel/vault areas are below the project-specified action levels, then further action will be recommended for those tunnel/vault areas. Further action recommended will consist of a transport model to evaluate the potential for elevated levels of lead and/or copper in groundwater to exceed the California Enclosed Bays and Estuaries Plan Standards at the groundwater/surface water interface, given the distance from impacted groundwater to the Boat Channel or the bay (whichever is closest).

Specific locations for Phase II SA samples were identified by the meeting attendees.

Finally, a section discussing the further analyses to be performed on the sediment collected during the Phase I SA, for the purposes of waste characterization, will be included in the draft report.

Other Issues

During the discussion of analytical results, a concern was expressed that the source of the elevated levels of metals within the tunnels will likely not be identified at the completion of the CTO-0114 investigation work. Should the sediment be identified as a hazardous waste, it will be removed; however, if the source of this waste has not been identified, there will be no way to avoid similar conditions developing over time after the initial removal is implemented. A suggestion presented to help resolve this concern was that further inquiries be made into the age and composition of the steam piping in the specific areas where elevated levels were measured. Ms. Content Arnold took the action to obtain further information.

At the end of the meeting, Ms. Tagoe informed the group that the report would be issued by 19 June 1996 with all comments due 14 days later on 3 July 1996.