

**FINAL MEETING MINUTES
RESTORATION ADVISORY BOARD
NAVAL STATION TREASURE ISLAND
15 April 2008
Meeting Number 135**

Community Restoration Advisory Board (RAB) Members in attendance:

Nathan Brennan, , Alice Pilram, Dale Smith

Regulatory Agency, City of San Francisco (City), and U.S. Department of the Navy (Navy) RAB Members in attendance:

James Sullivan (Navy), Paisha Jorgensen (San Francisco Bay Regional Water Quality Control Board [Water Board]), Ryan Miya (Department of Toxic Substances Control [DTSC]),

Other Navy Staff and Consultant Representatives in attendance:

Pete Bourgeois, (Shaw Environment and Infrastructure [Shaw]), Tommie Jean Damrel (Tetra Tech EM Inc. [Tetra Tech]), Kevin Hoch (Tetra Tech) Charles Perry (Navy) John Warmerdam (Tetra Tech)

Public Guests

Lorraine Lee (John Stewart Company [JSCO]), Marc McDonald (Treasure Island Development Authority [TIDA]), Dan Stone (JSCO)

Welcome Remarks and Introductions

James Sullivan (Base Realignment and Closure [BRAC] Environmental Coordinator) opened the 15 April 2008 meeting at 7:03 P.M. at the Casa de la Vista (Building 271) on Treasure Island (TI).

Mr. Sullivan welcomed those in attendance. He noted all of the RAB handout materials could be found on the back table, and stated most people received a meeting packet in the mail. Mr. Sullivan then asked if there were any comments concerning the agenda. There were none.

Public Comment and Announcements

Mr. Sullivan stated two public comment periods were included on the agenda to provide members of the public an opportunity to comment on the Navy's environmental program at Naval Station TI (NAVSTA TI), one at the start of the meeting and one near the end. Mr. Sullivan noted that, in addition to the two public comment periods, attendees were invited to ask questions or make comments at any time during the meeting. There were no public comments. Mr. Sullivan stated he would like to make an announcement. He introduced the new member of the Treasure Island Base Realignment And Closure [BRAC] Cleanup Team (BCT), Mr. Paisha Jorgensen. Mr. Sullivan stated Mr. Jorgensen is the new

representative for the San Francisco Bay Regional Water Quality Control Board (Water Board) and welcomed him to the team.

PCB Abatement Field Activity Update

Mr. Sullivan introduced Pete Bourgeois (Shaw), who provided an update on the Polychlorinated Biphenyl (PCB) field activities. Mr. Bourgeois reminded the RAB that he had presented the PCB investigation at the February 2008 RAB meeting, and this would be an update to that previous presentation. The locations being investigated or remediated are the electrical transformer vaults in Building 240, Building/Hangar 3, Building 180, and Building 1. Some samples taken in transformer vault areas had elevated detections, though still very low levels, of PCBs. The steps in the workplan for each location included thoroughly washing the floors, doing an acid-etch on the floors, and then laying down a 6-10 millimeter thick epoxy sealant. The sealant does not have an indication from the manufacturer about how long it will last, so the Navy decided to put on a second coating in Building 1 and Building 3, due to the foot traffic associated in these specific locations. The second coating was done in a different color so it could be determined what the wear pattern for this material is. So the first (bottom) layer was grey, and the second (top) layer was maroon. The second layer was put on about two weeks after the first layer.

Mr. Bourgeois stated there were problems with the epoxy in two locations; Building 240 and building 180. At Building 240 the epoxy was applied during the rainy season, which may be the cause for some bubbling they discovered upon inspection. Those areas that had bubbled were cut out, cleaned and etched, primed, and more epoxy sealant was applied. Shaw has been back to the site several times to ensure the epoxy has set, and there are no further problems with it bubbling.

Mr. Bourgeois stated they found a similar problem in Building 180, over a larger area than at Building 240, though the bubbling of the epoxy here was due to some excess oil underneath that wasn't adequately cleaned. The area of epoxy that had bubbled and cracked was cut out, then the area was cleaned, sealed, primed, and a new epoxy layer was applied.

Mr. Bourgeois stated Shaw also went back to Building 1 to inspect the epoxy and it was in good condition. However, they applied a second layer in the maroon color to make it easy to see the wear patterns on the floor and to ensure the epoxy was lasting. Mr. Bourgeois added that Buildings 1 and 3 are the only areas of this investigation that are still regularly used, the other Buildings are not used and should not have a wear pattern. Mr. Bourgeois stated that the two layers of epoxy total a thickness of about 12 millimeters, which is fairly thick.

Mr. Bourgeois stated Shaw took air samples in Building 1 after the remediation was completed, and they are being analyzed for PCBs. The data takes about 30 days to come back from the laboratory, and should be given to Shaw around the end of April. Once the data has been validated it will be added to the Final field Activity Report. Mr. Bourgeois stated the final report would go through a standard document review, which includes being submitted to the RAB for review and comment.

Mr. Sullivan asked Mr. Bourgeois what the status was on soil work for PCBs. Mr. Bourgeois stated that Shaw has completed all of the PCB soils work. The final report will include photos and analytical data, and a description of the work conducted.

Site 12 (TI Housing Area) Removal Action Update

Mr. Bourgeois also provided an update on the removal action for Site 12, the TI Housing Area. Mr. Bourgeois stated Shaw is still conducting excavation work at Solid Waste Disposal Areas (SWDA) A&B. Mr. Bourgeois stated Shaw has completed their work at Bayside Drive and Northpoint Drive, and the temporary fencing in those areas has been removed.

Mr. Bourgeois showed a photo of hydroseeding work at SWDA 1207/1209 at Bayside Drive. The common areas around unoccupied buildings were all hydroseeded, and occupied areas were covered with sod. Shaw is watering the hydroseed and sod areas to keep them wet and healthy so grass will attach well and grow. Dale Smith (RAB member) asked why some of the areas got sod instead of being hydroseeded, and asked if sod was placed after hydroseeding failed. Mr. Bourgeois stated none of the hydroseeding had failed; it was actually growing quite well. However, Shaw put down sod in areas of occupied or previously occupied housing buildings.

Mr. Bourgeois showed a photograph of Bayside Drive, where work has been completed. The photograph showed new curbs, asphalt, and grass or hydroseed that Shaw had installed. In addition, the photograph showed that fencing had been removed from parking spaces and residents are able to park in their parking spaces again. Mr. Bourgeois also showed photographs in front of Buildings 1211 and 1213, noting these are buildings that had residents and were restored with patios and sod in addition to sidewalks and new grass, patios, and fencing for their backyards. He then showed a photograph of Northpoint Drive where hydroseed had been laid out, but that had not grown into grass yet.

Mr. Bourgeois then showed a photograph of temporary fencing behind 1235 and 1237A that leads into the parking lot behind Building 461. Mr. Bourgeois stated

Shaw is using this area to store bins and equipment used for the excavation on Westside Drive.

Mr. Bourgeois summarized the photographs, stating temporary fencing was removed from Bayside Drive and Northpoint Drive on March 27, 2008. Shaw continues to water the hydroseed in those areas and will do so until grass is established. Mr. Bourgeois noted that T posts holding up yellow rope and caution tape have been put in the ground in several areas to keep people from walking in areas where the grass is not yet established. When the grass is growing, Shaw will remove those posts and attached rope and tape. Mr. Bourgeois added that Shaw used drought-resistant hydroseed, as requested by the City of San Francisco (City). It is expected to grow no taller than six inches and will need to be watered only once every two weeks. Ms. Smith asked if there were any problems with people walking on the hydroseed. Mr. Bourgeois stated there were some problems, but the grass was starting to reestablish. Once the grass is established, it will be fine for people to walk on.

Mr. Bourgeois showed a figure of the status of work on Westside Drive as of March 20, 2008. The figure showed areas that had been excavated to depths of from one foot to four feet. Areas near Buildings 1319, 1321 and 1323 had been excavated to the 4-foot mark. Mr. Bourgeois added that 4-feet is the deepest excavation depth, but some deeper potholes had been dug in areas where radium-containing items were found. Mr. Bourgeois stated there may be some further excavation in those pothole areas.

Mr. Bourgeois showed the area where Shaw has soil stockpiled, with the piles put on plastic that is 20 millimeters thick to separate it from soil underneath that is not part of the excavation. Mr. Bourgeois indicated that the stockpiled soil is going to be radiologically scanned. Because it is partially wet from the tidal influence at NAVSTA TI, it has to be laid out to dry before it can be scanned.

Mr. Bourgeois stated that, to date, about 8,865 tons of Class I soil had been removed, and about 7,352 tons of Class II soil had been removed. All of the excavated Class I and II soil will be hauled to appropriate landfills, including Kettleman City. There are 3,200 tons of soil containing low-level radiological material at Site 6 awaiting shipment for off-site disposal at an approved landfill. To date, about 77 bins of that soil has been removed from NAVSTA TI by licensed contractors and taken to an appropriate landfill. Mr. Bourgeois added that there is a separate contractor, EMS, working for the Army that brokers the disposal of the low-level radiological waste. The Army is the entity that deals with disposal of low-level radiological waste at all military facilities.

Ms. Smith asked who contracts with New World Technology (NWT). She stated she had received a report from NWT about how they were going to determine

what kind of radiation they might encounter, but did not understand how the company fit into the overall project. Mr. Bourgeois stated NWT is a subcontractor to Shaw and is responsible for the radiological scans of soil prior to disposal. EMS is the soil broker for the removal of the low-level radiological impacted soil and has a separate contract with the Army to broker this soil off-site. Mr. Bourgeois added that NWT had used a gamma spectrometer machine and spent a few days to read every single item Shaw had found to determine if there is any other radiological isotope other than radium-226 present. Mr. Bourgeois stated there was nothing other than radium-226 detected.

Mr. Bourgeois stated the anticipated completion date was still June 2008, but that could change based on what else is discovered at the site. Marc McDonald asked when Shaw would be done with the hydroseeding. Mr. Bourgeois responded he did not know the exact date, but that Shaw was trying to keep it watered and let it establish before they turn it over to the City and their landscaping contractor, Rubicon, to maintain. He added that Shaw has turned over responsibility for the sod areas to Rubicon, but Shaw still waters the sod if it starts looking brown. Mr. Bourgeois stated as long as he has water trucks on the site, he will continue to water the sod and hydroseed areas to help absorb some of the expense the City will have for watering.

Mr. McDonald then asked about the potholes that Mr. Bourgeois had mentioned. Mr. Bourgeois stated the potholes were dug next to Buildings 1319 and 1321, in the areas where Shaw had found most of the small, radium-containing items. Mr. Bourgeois stated they decided to dig potholes from the four-foot depth down another foot to a five-foot depth to see if they found additional radium-containing items. Mr. Bourgeois stated they had found some elevated readings in some areas and were currently discussing the next steps with the Navy. Mr. Bourgeois added that below five feet, they would likely encounter water, and that would change how they could do the work. Mr. Sullivan clarified that only certain areas were being dug down to five feet, not the entire footprint of the excavation.

Ms. Smith asked why the Navy decided to go down to five feet in only those certain areas that Mr. Bourgeois had indicated on the map. Mr. Bourgeois stated those were the areas where they found radium-containing items. Ms. Smith asked about the direction of the groundwater in the area. Kevin Hoch (Tetra Tech) stated groundwater typically flows toward the San Francisco Bay, and Mr. Bourgeois indicated that direction on the map. Ms. Smith asked what they will do if they keep finding elevated readings at five-foot depths. Mr. Bourgeois stated that had not been determined, and it would be difficult because of the tidal influence at that depth. However, since the potholes are only about two feet in diameter, they may be able to dig deeper in those small excavations.

Mr. McDonald asked for clarification on the difference between stockpiles and bins. Mr. Bourgeois stated that typically the Class I and Class II soils are stockpiled and the low-level radiological waste is put in bins. Mr. Bourgeois added that they do not have enough bins to hold all of the low-level radiological waste, so as the bins are emptied and hauled off-site, they are refilled from the stockpiles of low-level radiological waste.

Mr. McDonald asked about the completion date of June, and if that date is when everything will be done. Mr. Bourgeois stated the completion date is when Shaw will have completed their effort. Mr. Sullivan added the completion date is when the current scope of work will be completed. However, the radiological work could change that scope and that schedule. Mr. Sullivan added that there is additional scanning work being conducted on Northpoint Drive, Bayside Drive, and at Building 1325 on Westside Drive. The Navy decided to do a radiological scan in a buffer area beyond the extent of the excavation to ensure the removal action met its objectives. That additional work is being conducted, and the Navy will work with the BCT to determine what additional effort, if any, may be necessary when they have the data and can do additional work on the radiological risk assessment document.

Mr. McDonald asked if the Navy would know by the June 2008 RAB meeting what the path forward would be, and what the completion date would be. Mr. Sullivan stated that was possible, but he could not be sure. He stated that the Navy would at least have additional information to report at the June meeting. Mr. McDonald stated that, on behalf of TIDA, he would appreciate the BCT moving the project forward as expeditiously as possible. He noted that the project is significantly financial impacting TIDA financially.

Site 12 (TI Housing) Soil Gas Sampling and Analysis Plan

Mr. Sullivan stated the Navy is also working on a Remedial Investigation (RI) report for Site 12, and part of that is conducting soil gas sampling. He introduced John Warmerdam (Tetra Tech) to give a presentation about the sampling.

Mr. Warmerdam stated the Navy was preparing documents, including a Sampling and Analysis Plan and a Health and Safety Plan in order to be able to go out in the field and conduct the work. Then he discussed some background information about Site 12. He stated that Site 12 has been well investigated over the past 15 years, but only in the past four or five years have experts nationally been paying more attention to soil gas in general. Mr. Warmerdam explained that soil gas consists of volatile chemicals in soil or groundwater that rise to the surface of the soil and possibly into a building where people could inhale that gas.

In response to the increased awareness of soil gas, the Navy conducted a weight-of-evidence analysis of existing data at the site. That included reviewing the existing soil and soil gas data, the frequency of detection for different compounds, and the levels of those detections. Based on that review, the Navy concluded it is unlikely there will be a significant risk associated with soil gas. However, to be conservative, the Navy has decided to take additional soil gas samples to verify that there is not a significant risk to human health from exposure to soil gas at Site 12.

Mr. Warmerdam explained that previously risk was calculated in indoor air based on soil concentrations and groundwater concentrations. Mr. Warmerdam stated that method involves making an estimation from a known quantity in soil or groundwater to an unknown quantity in air, and it not the most accurate method for predicting soil gas concentration and risk. It is also difficult to accurately describe a soil gas plume with that method.

Mr. Warmerdam explained that Site 12 is unique because volatile organic compounds (VOC) are diffuse and sporadic, making it difficult to determine where to begin taking samples. He noted that groundwater is relatively free of VOCs, so the Navy is testing locations where the soil has elevated levels of VOCs. Mr. Warmerdam stated that they will bring a mobile laboratory out to the site so samples can be analyzed immediately. Getting immediate results will provide them the flexibility and ability to react quickly to take step-out samples near detections.

Mr. Warmerdam stated that the VOCs the Navy will be analyzing for are based on data collected across Site 12. They plan to look at VOCs that have exceeded screening levels in soil or soil gas. Mr. Warmerdam said the current scope of work plans for collection of 120 samples. The plan begins with 28 samples at locations where the highest levels of VOCs were detected, and if those samples are above screening levels, they will collect step-out samples to try to bound the area of contamination.

Mr. Warmerdam showed a diagram of what a soil gas sampling probe looks like. The team will use a Geoprobe to punch a hole that is 1 ½ inches in diameter and about five feet deep, insert the probe, surround it with sand, and seal it with bentonite around the remainder of the soil column. There will be a fitting on top where a syringe can be inserted and a sample extracted. Mr. Warmerdam showed a map of the locations where VOCs have been detected in soil at levels above screening levels. He noted that some of those areas are in the SWDAs and have already been removed. Mr. Warmerdam then showed a slide illustrating where previous soil sample locations are, whether VOCs had been detected, and whether the levels were elevated. Those with detections of VOCs above screening levels are where the Navy will begin the soil gas sampling. Mr.

Warmerdam showed slides with different exposure units (EU) that define the areas the Navy is working in at Site 12.

Mr. Warmerdam stated the sampling is expected to occur in July 2008, and results will be ready in September 2008. The results will be used in the risk assessment and RI report. Mr. Brennan asked if the date for results means that is when the actual report would be submitted. Mr. Warmerdam said yes, that the report with all of the validated sample results will be out in September. Ms. Smith asked if any samples would be sent off to a laboratory. Mr. Warmerdam said they currently do not plan to send any samples to a different laboratory because the mobile laboratory on-site will be fully licensed and can do the same work that a fixed laboratory would do.

Paisha Jorgensen (Water Board) asked how far the initial bounding samples would be. Mr. Warmerdam stated they would be 15 feet from the center soil gas sample.

Mr. Sullivan stated that exposure units (EUs) were created with the help of the BCT to break up Site 12 into manageable areas because it is the largest CERCLA site (also known as the Comprehensive Environmental Response, Compensation, and Liability Act) at NAVSTA TI. The human health risk assessment will be calculated based on each of those EUs. The human health risk assessment is a key part of the RI report, so this sampling is an important part of moving forward with the Site 12 RI.

Mr. Brennan asked for clarification that the EUs are subsets of Site 12, and asked if they are on a grid. Mr. Sullivan stated they are subsets of Site 12, and they do have defined boundaries, but not on a grid. They are defined as a reasonable area that a person might generally habitate within at Site 12, as opposed to someone just wandering over the entire site. Ms. Smith asked if the EUs are contiguous. Mr. Sullivan stated they are contiguous, with no space between and no overlap.

Mr. Jorgensen stated he does recall some VOC issues in groundwater, and asked if they are co-located with VOC issues in soil. Mr. Warmerdam stated he did not recall the issues with VOCs in groundwater, though he believes there were very few detections and at extremely low levels. Mr. Warmerdam stated he would look it up and get back to Mr. Jorgensen about where and at what levels VOCs were found in groundwater.

Site 27 Clipper Cove Sediment Sampling

Mr. Sullivan reintroduced Charles Perry (Navy) to give an update on field work efforts at Site 27, Clipper Cove. Mr. Perry stated he would talk about the limited field effort conducted in the near-shore area at the former skeet range, Site 27.

Mr. Perry showed a map of the site, noting it is fan-shaped based on the typical skeet-range pattern of skeet being released over the range and shooters from the shoreline shooting out in a fanned area.

Mr. Perry stated the Navy conducted a hydrographic survey to look at the depth of sediment in Clipper Cove. During the most recent field work, the Navy focused on the near-shore area because the other areas in the cove have greater than two feet of deposition on top of any contaminants of concern. Those two feet of deposition are protective of diving ducks, which forage for food in Clipper Cove.

The purpose of the recent investigation was to see if there is a pathway in the near-shore area for diving ducks who are foraging to ingest possible contamination. The area was divided into a grid that has ten grid cells, and the Navy collected three cores of sediment at different depths in each grid, resulting in 12 samples per grid. In addition, a small clamshell dredge was gathered in the center of each grid to check for the presence of worms, mussels, and other organisms diving ducks might feed on.

Mr. Perry showed a photo of the barge that the Navy used to collect samples. They used a barge rather than a boat to provide a more stable platform to do the sample coring. Mr. Perry also showed photos of the field team using sieves to look for lead shot, or lead shot that has broken down. Initially, they were concerned that the lead shot might be difficult to differentiate from pebbles, but it was easy to differentiate. Mr. Perry stated the team took the samples back to the office as well to do a quality control check to make sure no lead shot had been missed.

Mr. Perry stated the intention was to identify grids that had more than one lead shot, and move those grids forward to the Feasibility Study (FS) step. Lead shot was found in 7 of 30 locations, none was found in the top foot of sediment. When lead shot were found, the lowest in a grid was 1, and the maximum was 45. Mr. Perry stated the Navy is still conducting the final quality control to make sure they did not miss any lead shot, and also needs to get laboratory results for sediment samples they collected.

Mr. Perry stated the Navy would present the data when is it ready, possibly to the BCT at the May 2008 meeting, and to the RAB at the June 2008 meeting. The results will be incorporated into the FS for Site 27.

Mr. Sullivan gave a brief update on the Draft Final Status Survey Reports for Buildings 233, 343, and 344. He indicated the locations of the buildings on a map, and stated Building 344 is actually a small concrete vault immediately north of Building 343.

Mr. Sullivan explained the surveys are radiological surveys, and they are being conducted based on an Historical Radiological Assessment (HRA). He stated the HRA evaluated all of the historical radiological activity that may have occurred at NAVSTA TI, and makes recommendations. That HRA recommended conducting these surveys.

Building 233 was a radiological training school, and the location where, in 1950, there was a radium salt spill. For Building 233, the survey included investigating the drain system. Forty-two locations in the sewer lines were examined, including sink drains, shower drains, and vents. Only two sediment samples had the presence of residual radioactivity, so samples were collected downstream and there was no indication of residual radioactivity. The conclusion of the report will be that detectable residual radioactivity appears to be limited to the drain lines where they are attached to the building.

Building 343 was also a radiological training school and was used for instrument training. When the building was decommissioned radiological samples were taken. However, the HRA recommended a further status survey for one room, Room 101, within the building. Alpha, beta, and gamma data were collected, and the conclusion is that Building 343 meets the criteria for unconditional release, which will be the recommendation in the Final Status Survey Report.

Building 344 is a concrete vault that is partial below ground. Alpha, beta, and gamma data were collected and it was determined that Building 34 also meets the criteria for unconditional release. There were some elevated readings during the survey, but those may be attributable to accumulation of radon gas at the measurement location.

The Draft Final Status Survey Reports for all three buildings will be distributed to the RAB and the BCT for review and comments will be addressed. Buildings 343 and 344 will be recommended for unrestricted use, but the Navy is still determining the best path forward for Building 233.

Mr. McDonald asked about the building north of 344, whether it is under investigation and if it is available for unrestricted use. Mr. Sullivan explained that is Building 342, and it is not currently under investigation. He noted that there may not be any restrictions on its reuse once Buildings 343 and 344 are

released. Mr. Sullivan also noted Building 342 was a hydraulic training school and was part of a petroleum investigation that has been completed.

Upcoming Documents and Field Schedule

Documents

Reading from the Document Tracking Sheet, Kevin Hoch (Tetra Tech) presented the following documents that are or would become available in the next 60 days:

- Draft Sampling and Analysis Plan for Soil Gas Investigation, scheduled for review 2 May 2008
- Draft Site 31 Record of Decision, 05 June 2008
- Final CRP 2008 Update, 25 April 2008
- Draft Island Times Newsletter No. 14, 23 April, 2008
- Draft Remedial Investigation Report for Site 11, 2 May 2008
- Final Status Survey for Building 343, comments due 7 May 2008
- Draft Final Status Survey for Building 344, 25 April, 2008 comments due 25 May, 2008
- Draft Scoping Survey Report for Building 233, 25 April, 2008 comments due 25 May, 2008

Field Schedule

Mr. Hoch reviewed field activities scheduled for the next 2 months:

- Site 24 Treatability Study Phase II, beginning date to be determined
- Site 21 Pilot Treatability Study, beginning date to be determined
- Arsenic in Groundwater Pilot Study at Site 12, beginning date to be determined

February 2008 RAB Meeting Minutes

Mr. Sullivan asked for any comments on the February 2008 RAB meeting minutes. Ms. Smith noted that, on page 7 of 12, readers are referred to the attachment, but we do not typically attach handouts to the minutes, so she suggested that be removed. Mr. Smith also stated that on page 10 of 12, under Co-Chair Announcements it should read "Mr. Grasteit", rather than "my Grasteit". The RAB moved to approve the minutes as amended, and the board was in favor. The February 2008 RAB minutes will be finalized.

Co-Chair Announcements

There were no co-chair announcements.

BRAC Cleanup Team Update

Mr. Sullivan stated the BRAC Cleanup Team, or BCT, held two meetings since the last RAB meeting; one in March and one in April. The meetings were fairly routine, and topics of discussion were similar to the topics at the RAB meeting.

They included the Site 12 removal action and the proposed soil gas sampling, and the Site 27 sediment investigation. Mr. Sullivan stated the group had also discussed the possibility of holding a meeting for the Proposed Plans for Sites 30 and 31, but that date had to be deferred while work continues on those documents.

Other Public Comments and Announcement

Mr. Brennan stated that the Citizen's Advisory Board (CAB) is back to holding monthly meetings. They have met three times since the last RAB meeting. Some of the redevelopment plan details have changed, such as having ferries dock outside the seawall instead of digging an area inside the seawall for docking. Mr. Brennan stated the presentations are posted on the CAB website for everyone to view. CAB meetings are typically on the first Tuesday of each month, in the Mayor's Conference Room on the 3rd floor of City Hall at 6:00 p.m. They also plan to have a meeting on TI before the end of the year.

Future Meeting Agenda Items

Mr. Sullivan stated that the next meeting is scheduled for Tuesday, 17 June at the Casa de la Vista. Mr. Sullivan asked if there were items people would like on the agenda. Mr. Brennan requested an update on Building 233 and the path forward for that building. As a follow-up question, Mr. Brennan asked whether the radiation in the sewer lines was diluted away. Mr. Bourgeois stated that radiation does not dilute out, it will either be present, or it will not be there; it doesn't really wash away. If it settles that will be the highest point of detection.

April 2008 RAB Meeting Handouts [attached when minutes are finalized]

- TI RAB Meeting No. 135 Agenda, 15 April 2008
- Field Efforts, Solid Waste Disposal Areas Site 12, Old Bunker Area 15 April 2008
- Field Efforts, PCB Work, 15 April 2008
- Site 12 Soil Gas Investigation, 15 April 2008
- Lead Shot Investigation at Clipper Cove, Site 27, Former Skeet Range, 15 April 2008
- Draft Final Status Survey Reports for Buildings 233, 343 and 344, 15 April 2008
- Document Tracking Sheet, 15 April 2008
- Navy Field Schedule, 15 April 2008

NAVAL STATION TREASURE ISLAND
ENVIRONMENTAL RESTORATION ADVISORY BOARD MEETING

Tuesday, 17 June 2008

7:00 PM.

Casa de la Vista (Building 271)

Treasure Island

MEETING NO. 136

- 6:15 - 7:00 **Optional Site Tour for RAB Members (meet at Casa de la Vista)**
(non-members can attend if empty seats on the van are available)
Lead: James Sullivan, Navy Co-Chair
- 7:00 - 7:05 **Welcome Remarks and Introductions**
Lead: James Sullivan, Navy Co-Chair
- 7:05 - 7:10 **Public Comment and Announcements**
Lead: James Sullivan, Navy Co-Chair
- 7:10 - 7:30 **Site 12 (TI Housing) Removal Action Update**
Lead: Pete Bourgeois, Shaw Environmental & Infrastructure
- 7:30 - 7:45 **Building 233 Radiological Survey Overview**
Lead: James Sullivan, Navy Co-Chair
- 7:45 - 7:50 **Upcoming Documents and Field Schedule**
Lead: Kevin Hoch, Tetra Tech EMI
- 7:50 - 8:00 **April 2008 RAB Meeting Minutes**
Lead: James Sullivan, Navy Co-Chair
- 8:00 - 8:05 **Co-Chair Announcements**
Lead: Alice Pilram, Community Co-Chair
- 8:05 - 8:15 **BRAC Cleanup Team Update**
Lead: James Sullivan, Navy Co-Chair
- 8:15 - 8:20 **Other Public Comment and Announcements**
Lead: James Sullivan, Navy Co-Chair
- 8:20 - 8:25 **Future Meeting Agenda Items**
Lead: Navy and Community Co-Chairs
- Site 21 and 24 Treatability Studies Update
 - Site 12 Arsenic in Groundwater Study Update
 - Site 27 Clipper Cove Update
 - Sites 30 and 31

8:25-8:30 **Closing Remarks/End of Meeting**
Break/Informal Discussion for 30 minutes after the meeting
This is an opportunity to informally discuss issues

Next Regular Meetings: No July 2008 Meeting

7 :00 pm Tuesday, 19 August 2008
Casa de la Vista, Treasure Island

No September 2008 Meeting

7 :00 pm Tuesday, 21 October 2008
Casa de la Vista, Treasure Island

Next Treasure Island Citizen's Advisory Board (CAB): See the web site for latest dates and times for future meetings: <http://www.sfgov.org/treasureisland>

Next Interim RAB Community Member Conference Call: **(1st Weds of RAB month)**

Wednesday, 6 August 2008, 7:00 pm.

Call-In Number: 1- 888-324-9601

Participant Code: 55430

Next BCT/RPM/Project Team Meeting: 10:00 am. Tuesday-Wednesday, 8-9 July 2008, Tetra Tech EC, San Diego CA

Navy Treasure Island Web Site:
http://www.bracpmo.navy.mil/bracbases/california/treasure_island

Navy San Diego Office Address:
JAMES B. SULLIVAN
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Field Efforts Solid Waste Disposal Areas Site 12, Old Bunker Area

April 15, 2008
NAVSTA Treasure Island
RAB Meeting

SWDA Restoration



Placement of Hydro-seed at SWDA 1207/1209

SWDA Restoration



Placement of Hydro-seed at SWDA 1231/1233

SWDA Restoration



Completion of the SWDA 1207/1209 Bayside Dr. Work

SWDA Restoration



Completion of the SWDA 1207/1209 Bayside Dr. Work

SWDA Restoration



Completion of SWDA 1231/1233 North Point Dr. Work

SWDA Restoration



Temporary Fencing was removed from both Bayside Drive and North Point Drive on March 27, 2008.

Shaw continues to water the Hydroseed and backyards in both areas, until the grass has established itself.

SWDA Restoration



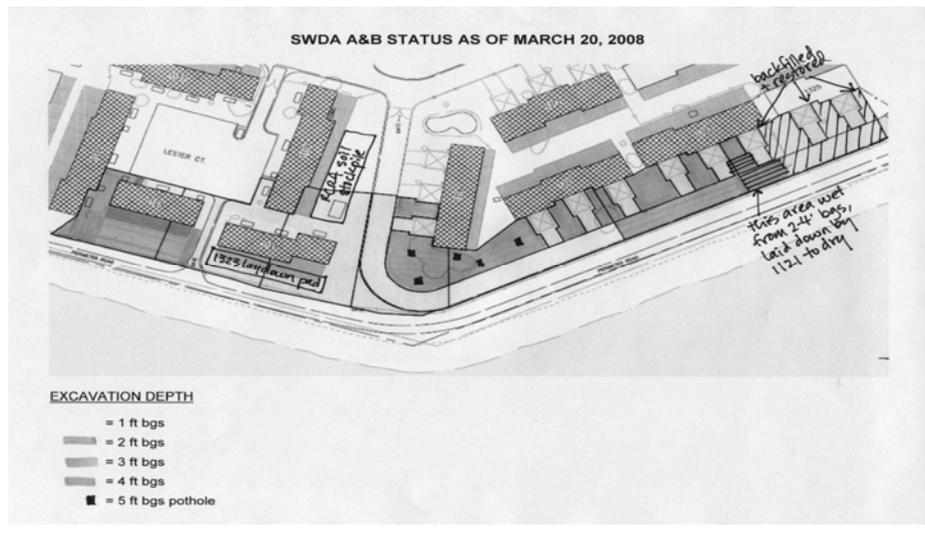
Hydroseed Areas Roped Off to Protect From Foot Traffic

SWDA Restoration



Hydroseed Areas Roped Off to Protect From Foot Traffic

SWDA A&B Excavation



SOIL TRANSPORTATION and DISPOSAL



Class I Soil Removal:

394 Loads = Roughly 8,865 Tons

Class II Soil Removal:

377 Loads = Roughly 7,352 Tons

BIN STORAGE AT SITE 6



To Date at Site 6:

(Class I & II) = 116 Bin's

Total Soil Stored = Roughly 2,100 Tons in Bins

Stockpiled Soil with Low Level RAD Waste = Roughly 1100 tons

Each Bin contains roughly 18 tons of Low Level Radiological Waste

Bins are Currently Being Weighed and Sampled by EMS

EMS has Removed 77 Bins for Disposal Starting on the 20th of February

SWDA Restoration



**Project Duration: Updated Current Forecast:
Excavation Work at SWDA A&B Started on
September 25, 2007 with an Estimated
Completion Date of June 2008**

**Next Navy RAB Meeting:
The Casa De la Vista
Tuesday, June 17th at 7:00 PM
James.b.sullivan2@navy.mil**

Field Efforts PCB Work



April 15, 2008
NAVSTA Treasure Island
RAB Meeting

PCB Work



Placement of Second Layer of Epoxy at Building 3

PCB Work



Areas that Needed Repair and Placement of Epoxy at Building 240

PCB Work



Areas that Needed Repair and Placement of Epoxy at Building 180

PCB Work



Second Layer of Epoxy at Building 1



Draft Final Status Survey Reports for Buildings 233, 343 and 344

Presented by: Navy BEC, James Sullivan
NAVSTA TI RAB MEETING
April 15, 2008



Building 233





Building 233

- 42 investigation points in the sewer lines, the nearest manhole, sink drains, floor drains, a shower drain, urinal drain traps, and wall vents
- Six sediment samples were collected
- Only the two sediment samples collected from the common drain line header outside the building indicated the presence of residual radioactivity.
- The sediment sample collected from the manhole downstream of the drain line did not indicate the presence of residual radioactivity.
- Therefore, detectable residual radioactivity appears to be limited to the drain lines from where they tie into the common header to the building.
- Navy evaluating next steps.

3



Building 343



4



Building 343

- The analysis of collected field data shows that the residual radioactivity at Building 343, Room 101 meets the stated release criteria, and that Building 343, Room 101 is ready for unconditional unrestricted use pending approval from the regulatory agencies.

5



Building 344



6



Building 344

- The analysis of collected field data shows that the residual radioactivity at Building 344 meets the stated release criteria and that the building is ready for unconditional unrestricted use pending approval from the regulatory agencies.
- A small area, located in close proximity to an air handling system, with elevated scan readings was identified.
- Supplementary measurements and offsite g spectroscopy analyses of solid samples were taken.
- The cause of the elevated readings has been speculated to be due to preferential accumulation of radon gas at the measurement location.

7



Conclusions

- Next Steps:
- Review of the three Draft Final Status Survey Reports by the BCT and RAB
- Address comments and finalize documents
- Navy to propose no further investigation at Buildings 343 and 344. Buildings would be clear for unrestricted use
- Navy evaluating next steps at Building 233
- Questions

8



Site 12 Soil Gas Investigation

Presented by: John Warmerdam, TTEMI
NAVSTA TI RAB MEETING
April 15, 2008



Background

- Soil, soil gas, and groundwater at Site 12 have been sampled extensively over the past 15 years.
- The ongoing investigation has led to removal actions at several areas on the Site.
- The potential for volatile chemicals to migrate from soil and groundwater into soil gas, and then into indoor air has recently been identified as a concern at many installations.
- A weight-of-evidence (WOE) analysis performed by the Navy indicates that soil gas is unlikely to pose significant risk.
- The Navy has elected to perform a limited soil gas investigation to verify that this pathway does not pose a significant risk on Site 12.



Soil Gas Investigation

- A typical approach for calculating soil gas concentrations is to estimate from existing soil and groundwater concentration levels.
 - May not be the most accurate method
 - May not appropriately describe the size and location of a soil gas plume
- Volatile organic compounds (VOCs) in soil at the site are diffuse and sporadic, which can complicate the process of selecting initial locations for soil gas sampling.
- At Site 12, soil gas levels are expected to be most elevated in areas with elevated levels of VOCs in soil (GW is relatively free of VOCs).

3



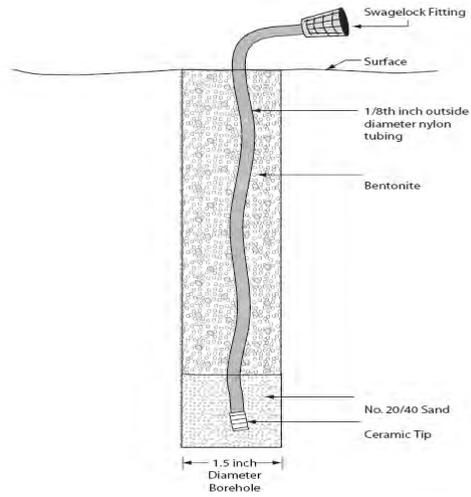
Soil Gas Sampling

- On-site mobile lab will be used.
 - Allows flexibility in sampling plan
 - Provides quick feedback
- VOC analyte list is limited to those chemicals previously detected in soil and soil gas across the site at levels that exceed soil gas screening values (2005 RWQCB for soil and 2007 DTSC for soil gas)
- Up to 120 soil gas samples will be taken at locations where VOC concentrations are expected to be highest.
 - Initial sample locations (28) include areas of highest VOC detections in soil
 - Step-out sampling will be performed adjacent to locations that exceed 2007 DTSC soil gas screening criteria

4



Soil Gas Sampling Probe



5



Elevated Soil Concentrations



6



EU-4

Color Key:

Green – Non-detect

Yellow – Detection LT screening level

Orange – Detection at 1-10x screening level

Red – Detection GT 10x screening level



7



EU-8



8



EU-15



EU-17





Conclusions

- Soil gas sampling should occur in July
- Results should be ready in September
- Questions

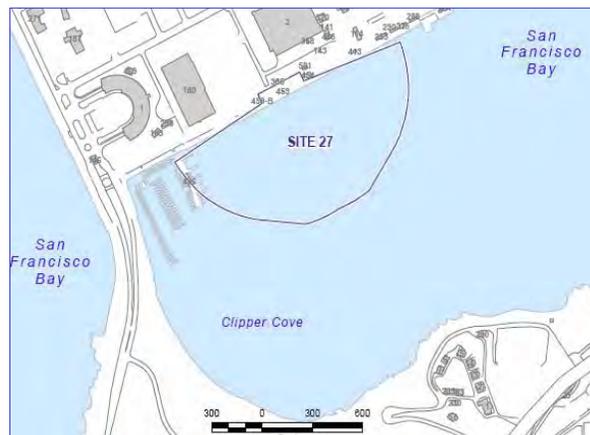


Lead Shot Investigation at Clipper Cove Site 27, Former Skeet Range

Presented by: Navy RPM, Charles Perry
NAVSTA TI RAB MEETING
April 15, 2008



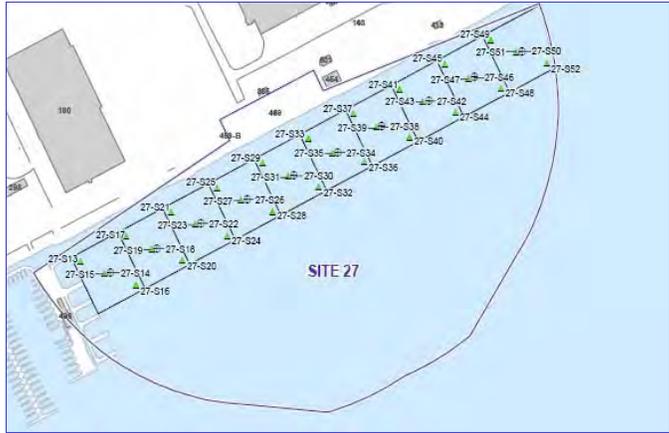
Lead Shot Investigation



Site 27 Location



Lead Shot Investigation



Site 27 Sample Locations



Lead Shot Investigation



Collection of Sediment Cores and Grab Samples



Lead Shot Investigation



Core sample Processing

5



Lead Shot Investigation



Residual Lead Sample Collection

6



Lead Shot Investigation

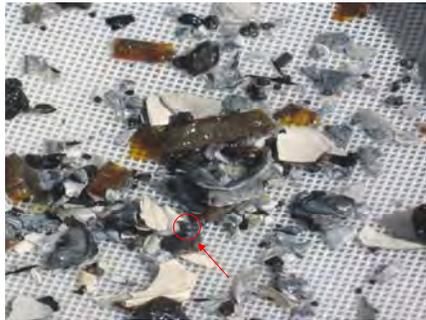


Sieving for Lead Shot

7



Lead Shot Investigation



Lead Shot Detected

8



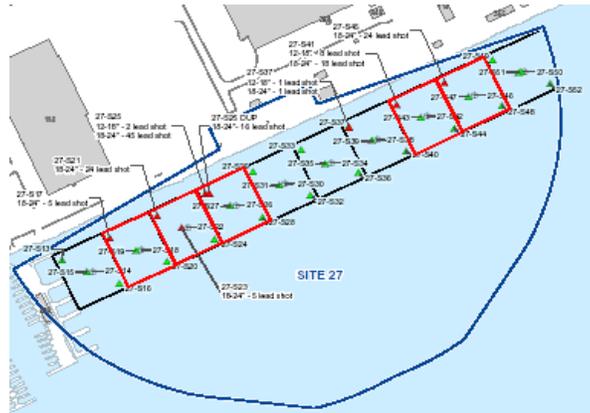
Lead Shot Investigation



Processing Biomass Samples



Lead Shot Investigation Area



Red Grid = More than One Lead Shot Per Six Inch Sample



Investigation Results

- Lead shot was found in 7 of 30 sample locations.
- No lead shot was found within 1-foot of the surface; most was found in the 18-24 inch samples.
- The minimum number of shot detected in a 6-inch subsample was 1; the maximum was 45.
- Biomass was mainly segmented worms.

11



Next Steps

- Final QC of lead shot samples for official count
- Obtain laboratory data for lead, total organic carbon, and grain size
- Present full results at May/June BCT meeting
- Incorporate results into Feasibility Study – add new alternatives and update evaluation

12

**Naval Station Treasure Island
Environmental Cleanup Program
Document Tracking Sheet
April 2008 - September 2008**

Item	Document Title & Information	CTO/DO	INTERNAL DRAFT		DRAFT							RTC		INTERNAL F I N A L		F I N A L	Comments							
			Internal Draft Due to Navy	Navy Comments Due	Draft to Agencies	Agency Comments					Priority Level	Preliminary RTCs to Agencies	Resolve and Concur on RTCs	Internal Final to Navy	Navy Comments Due	Final to Agencies								
						Date Due	DTSC	Water Board	EPA	TIDA								RAB	OTHER					
SulTech - Non Petroleum Related Documents																								
1	Site 32 Remedial Investigation Report	94	08/18/06	✓	09/17/06	✓	10/20/06	✓	02/14/07	✓	✓	✓	✓	✓	07/27/07	✓	TBD	TBD	TBD	TBD	*Other* agency comments provided by US Fish and Wildlife.			
	RPM: Scott Anderson																							
	PM: Christopher Ohland																							
2	Site 33 Remedial Investigation Report	103	09/07/06	✓	10/16/06	✓	TBD		TBD						TBD		TBD	TBD	TBD	TBD	TBD pending resolution at Site 32.			
	RPM: Scott Anderson																							
	PM: Kevin Hoch																							
3	Site 24 Remedial Investigation Report/ Focused Feasibility Study	92 /123	12/22/06*	✓	01/31/07*	✓	04/30/07	✓	07/02/07	✓	✓	✓	✓	✓	03/17/08	✓	04/01/08	✓	TBD	TBD	TBD	* Navy technical review ** Navy legal review		
	RPM: Scott Anderson		02/14/07**	✓	03/30/07**	✓																		
	PM: Jean Michaels																							
4	Sites 8, 28, and 29 Revised Remedial Investigation Report	104	07/23/07	✓	08/10/07	✓	11/19/07	✓	12/19/07	✓	X	✓	✓		05/02/08		05/16/08		05/23/08	06/13/08	07/27/08	Water Board deferred to DTSC by email 1/15/2008.		
	RPM: James Whitcomb																							
	PM: John Warmerdam																							
5	Site 21 Feasibility Study	144	TBD*		TBD*		TBD		TBD						TBD		TBD		TBD	TBD	TBD	* Navy technical review ** Navy legal review		
	RPM: Scott Anderson		TBD**																					
	PM: Jean Michaels																							
6	Soil Gas Investigation SAP	117	04/11/08	✓	04/25/08		05/02/08		06/02/08						06/12/08		06/19/08		06/19/08	01/26/08	06/30/08			
	RPM: James Whitcomb																							
	PM: John Warmerdam																							
Sullivan Consulting Group/Tetra Tech EM Inc. - Non Petroleum Related Documents																								
7	PCB Summary Report (Phase I and II)	CLIN0001	09/12/06	✓	01/27/07	✓	02/09/07	✓	03/09/07	✓	✓	✓	✓		12/18/07	✓	12/21/07	✓	01/18/08	✓	02/01/08	✓	02/04/08	✓
	RPM: Scott Anderson																							
	PM: Christopher Ohland																							
8	2006 Annual Groundwater Status Report, Sites 6A and 25	CLIN0002	04/24/07	✓	05/04/07	✓	06/12/07	✓	07/12/07	✓	✓	x	✓		12/21/07	✓	NA		04/11/08	✓	04/15/08		04/22/08	
	RPM: James Whitcomb																							
	PM: Hannah Thompson																							
9	2007 Annual Groundwater Status Report, Site 12	CLIN0002	05/22/08		06/01/08		07/29/08		08/29/08						09/26/08		NA		10/26/08		11/05/08		11/16/08	
	RPM: James Whitcomb																							
	Hannah Thompson																							

**Naval Station Treasure Island
Environmental Cleanup Program
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April 2008 - September 2008**

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							DTSC	Water Board	EPA	TIDA	RAB								OTHER			
Sullivan Consulting Group/Tetra Tech EM Inc. - Non Petroleum Related Documents (Continued)																						
10	2007 Annual Groundwater Status Report, Sites 6 and 25 RPM: James Whitcomb Hannah Thompson	CLIN0002	05/22/08	06/01/08	07/10/08	08/10/08							09/06/08	NA	10/06/08	10/16/08	10/27/08					
Shaw Group																						
11	Site 21 and Site 24 Work Plan RPM: Scott Anderson PM: Pete Bourgeois	FZN1	10/23/07	✓	10/30/07	✓	01/17/08	✓	02/15/08	✓	X	✓	✓			TBD	TBD	TBD	TBD	TBD	DTSC comments received via email 4/11/2008.	
12	Site 12 Work Plan for Arsenic in Groundwater Pilot Study RPM: Scott Anderson PM: Pete Bourgeois	FZN1	09/27/07	✓	10/29/07	✓	11/15/07	✓	12/21/07	✓		X	✓		1	TBD	TBD	TBD	TBD	TBD	EPA deferred comments to DTSC/Water Board via email 1/11/2008.	
Tetra Tech EM, Inc.																						
13	Community Relations Plan 2007 RPM: James Sullivan PM: Marcie Rash	FZN6	12/05/07	✓	01/28/08	✓	02/11/08	✓	03/14/08	✓	✓	✓	✓	✓		NA	NA	04/11/08	04/18/08	04/25/08		
14	Island Times Newsletter #14 RPM: Charles Perry PM: Marcie Rash	FZN6	02/18/08	✓	04/16/08		04/23/08		05/07/08							NA	NA	05/14/08	05/21/08	05/28/08		
15	Fact Sheet: Radiological Program Update RPM: James Whitcomb PM: Marcie Rash	FZN6	TBD		TBD		TBD		TBD							TBD	TBD	TBD	TBD	TBD		
Barajas & Associates, Inc.																						
16	Site 30 Proposed Plan RPM: Charles Perry PM: Margaret Berry	17	12/22/06	✓	03/06/07	✓	03/23/07	✓	06/18/07	✓	✓	✓	✓	✓		03/07/08	✓	TBD	TBD	TBD	TBD	
17	Site 31 Proposed Plan RPM: Charles Perry PM: Margaret Berry	17	01/19/07	✓	03/06/07	✓	03/23/07	✓	06/18/07	✓	✓	✓	✓	✓		03/07/08	✓	TBD	TBD	TBD	TBD	

**Naval Station Treasure Island
Environmental Cleanup Program
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April 2008 - September 2008**

Item	Document Title & Information	CTO/DO	INTERNAL DRAFT		DRAFT							RTC		INTERNAL FINAL		FINAL	Comments			
			Internal Draft Due to Navy	Navy Comments Due	Draft to Agencies	Agency Comments					Priority Level	Preliminary RTCs to Agencies	Resolve and Concur on RTCs	Internal Final to Navy	Navy Comments Due	Final to Agencies				
						Date Due	DTSC	Water Board	EPA	TIDA								RAB	OTHER	
Barajas & Associates, Inc. (Continued)																				
18	Site 30 Record of Decision	17	04/29/08	03/06/07	06/12/08	07/12/08								TBD	TBD	TBD	TBD	TBD		
	RPM: Charles Perry																			
	PM: Margaret Berry																			
19	Site 31 Record of Decision	17	04/22/08	05/22/08	06/05/08	07/05/08								TBD	TBD	TBD	TBD	TBD		
	RPM: Charles Perry																			
	PM: Margaret Berry																			
20	Site 11 Remedial Investigation Report	24	01/18/08	04/18/08	05/02/08	06/01/08								TBD	TBD	TBD	TBD	TBD		
	RPM: Scott Anderson																			
	PM: Margaret Berry																			
Tetra Tech EC, Inc.																				
21	Final Status Survey for Building 343	21	12/26/07	01/31/08	04/07/08	05/07/08								2	TBD	TBD	TBD	TBD	TBD	
	RPM: James Whitcomb																			
	PM: Brian Maidrand																			
22	Final Status Survey for Building 344	21	01/02/08	01/31/08	04/25/08	05/25/08									TBD	TBD	TBD	TBD	TBD	
	RPM: James Whitcomb																			
	PM: Brian Maidrand																			
23	Scoping Survey Report for Building 233	21	01/04/08	31/13/08	04/25/08	05/25/08									TBD	TBD	TBD	TBD	TBD	
	RPM: James Whitcomb																			
	PM: Brian Maidrand																			

✓ Production or review of document is complete.

X Received notification of no comments or comments deferred to other agency.

Grey shading indicates the document is finalized.

Blue shading indicates agency review comments are due within the next 30 days or are outstanding.

Yellow shading indicates documents that will be issued draft or final within the next 60 days.

Abbreviations:

CTO = Contract Task Order

DHS = Department of Health Services

DO = Delivery Order

DTSC = Department of Toxic Substances Control

EU = Exposure Unit

HSP = Health and Safety Plan

NA = Not Applicable

PCB = Polychlorinated Biphenyls

PM = Project Manager

RAB = Restoration Advisory Board

RPM = Remedial Project Manager

SAP = Sampling and Analysis Plan

TBD = To Be Determined

TIDA = Treasure Island Development Authority

Water Board = Regional Water Quality Control Board

**Naval Station Treasure Island
Navy Field Schedule**

April 2008 -
June 2008

Item	Activity & Investigation Area	DTR #	Field Dates	Navy RPM	CTO/DO	PM	FTL	Complete
Shaw								
1	Site 24 Treatability Study Phase II <i>Site 24</i>	Doc 11	Start: TBD Finish: TBD	Scott Anderson (619) 532-0938	FZN1	Peter Bourgeois (415) 277-6983	David Cacciatore (925) 288-2299	
2	Site 21 Pilot Treatability Study <i>Site 21</i>	Doc 11	Start: TBD Finish: TBD	Scott Anderson (619) 532-0938	FZN1	Peter Bourgeois (415) 277-6983	Dan Leigh (925) 288-2193	
3	Non-Time Critical Removal Action <i>Site 12</i>	Doc N/A	Start: 02/26/07 Finish: 06/30/08	Jim Whitcomb (619) 532-0936	10	Peter Bourgeois (415) 277-6983	Peter Bourgeois (415) 277-6983	
4	Arsenic in Groundwater Pilot Study <i>Site 12</i>	Doc 12	Start: TBD Finish: TBD	Scott Anderson (619) 532-0938	FZN1	Peter Bourgeois (415) 277-6983	Peter Bourgeois (415) 277-6983	
5	PCB Abatement <i>Baswide</i>	Doc N/A	Start: 12/17/07 Finish: TBD	Scott Anderson (619) 532-0938	FZN1	Peter Bourgeois (415) 277-6983	Peter Bourgeois (415) 277-6983	
SulTech								
6	Site 27 Sediment Investigation <i>Site 27</i>	Doc	Start: 03/17/08 Finish: 03/21/08	Charles Perry (619) 532-0911	CTO 043	Katie Henry (415) 222-8209	Hannah Thompson (415) 321-1788	✓
7	Soil Gas Investigation <i>Site 12</i>	Doc 6	Start: July TBD Finish: TBD	Jim Whitcomb (619) 532-0936	CLIN	Hannah Thompson (415) 321-1788	Hannah Thompson (415) 321-1788	
8	Site 12 Groundwater Sampling <i>Site 12</i>	Doc N/A	Start: 05/05/08 Finish: 05/09/08	Jim Whitcomb (619) 532-0936	CLIN	Hannah Thompson (415) 321-1795	Hannah Thompson (415) 321-1788	

**Naval Station Treasure Island
Navy Field Schedule**

**April 2008 -
June 2008**

Item	Activity & Investigation Area	DTR #	Field Dates		Navy RPM	CTO/DO	PM	FTL	Complete
EMS									
9	Site 12 Removal Action Soil Sampling <i>Site 12</i>	Doc N/A	Start: Finish:	12/05/07 TBD	Jim Whitcomb (619) 532-0936	NA	Dawn Roarty (916) 919-4785	Salem Attiga (925) 939-0687	

CTO - Contract Task Order

DO - Delivery Order

DTR # - Denotes document tracking reference. The number listed corresponds to the associated documentation listed on the Document Tracking Sheet

FTL - Field team lead

N/A - not applicable, there is no associated documentation listed on the DTS.

RPM - Remedial Project Manager

TBD - To Be Determined

✓ Field work is complete.

Yellow shading indicates field activities that will start or finish within the next 60 days.

Grey shading indicates field activities are complete.