

**FINAL MEETING MINUTES  
RESTORATION ADVISORY BOARD  
NAVAL STATION TREASURE ISLAND  
18 December 2007  
Meeting Number 133**

**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:**

Agnes Farres (Regional Water Quality Control Board), James Sullivan (Navy), Henry Wong (Department of Toxic Substances Control)

**Other Navy Staff and Consultant Representatives in attendance:**

Pete Bourgeois, (Shaw Environment and Infrastructure [Shaw]), Tommie Jean Damrel (Tetra Tech EM Inc. [Tetra Tech]), Neil Hey (Shaw), Marcie Rash (Tetra Tech), Jim Teo (Shaw)

**Public Guests**

Chris Casarez, Christopher Grasteit (Resident), Loraine Lee (John Stewart Company [JSCO]), Alisa Lin, Bart Rugo (Resident), Jeff Schuhrke

**Welcome Remarks and Introductions**

James Sullivan (Base Realignment and Closure [BRAC] Environmental Coordinator) opened the 18 December 2007 meeting at 7:06 P.M. at the Casa de la Vista (Building 271) on Treasure Island (TI).

Mr. Sullivan welcomed those in attendance and thanked those who participated in the pre-meeting holiday potluck. Mr. Sullivan then asked for changes or comments on the agenda. No changes were requested.

**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. One resident stated she had a question specific to the housing area. Mr. Sullivan stated the first agenda item would be an update on the housing area, and the resident agreed to listen to the update and ask any related questions during that presentation. There were no other public comments.

### **Site 12 (TI Housing Area) Removal Action Update**

Mr. Sullivan introduced Pete Bourgeois (Shaw), who provided an update on the removal action for Site 12, the TI Housing Area.

Mr. Bourgeois stated that Shaw was about 50 percent done with the excavation work, noting excavation work is completed in Solid Waste Disposal Areas (SWDA) 1207/1209 and 1231/1233. Mr. Bourgeois stated Shaw had also done work at Westside Drive, including excavating the area at Building 1325 down to 4 feet, backfilling with clean fill and restoring the area. Mr. Bourgeois showed photos where Shaw has poured concrete for sidewalks, curbs, and patios. In addition, Mr. Bourgeois stated Shaw is laying down sod, noting that access to the grass is restricted with caution tape to allow the sod time to attach to the ground without being disturbed. Because of the rains in December, Shaw has not had to water the sod very much. The Navy has turned over care of the new sod to Rubicon, the firm that does the landscaping for the City of San Francisco on NAVSTA TI. Mr. Bourgeois stated Shaw received many positive comments from residents who are happy with the final restoration of the excavation areas.

Mr. Bourgeois also gave an update on the storage, transportation, and disposal of the soil that has been excavated from Site 12. To date, Shaw had sent 348 truckloads of Class I soil and 276 truckloads of Class II soil off-site for disposal. Class I is California hazardous material, and Class II is California non-hazardous. Mr. Bourgeois stated that additional soil would be transported off-site from Lester Court in the January 2008 timeframe. Mr. Bourgeois noted there would be increased truck activity on Perimeter Road on days when soil is being transported from Lester Court.

Mr. Bourgeois reminded the RAB that there has been some soil with radiological detections excavated at Site 12. To date, just over 100 bins, about 1,700 tons of soil, with low level radiological material is stored at Site 6 and ready for disposal. Mr. Bourgeois stated the Navy has a broker who is dealing with the radiologically impacted soil disposal.

Mr. Bourgeois said excavation work at SWDAs A and B (Westside Drive and Lester Court) began on September 25, 2007. The estimated completion date for those areas is June 2008. Mr. Bourgeois stated that, currently, Shaw is working to complete restoration of patios, sidewalks, and all other concrete on North Point Drive and Bayside Drive in order to get residents back in their units and full access to their areas. The expected completion date for the work on North Point Drive and Bayside Drive is mid to late February 2008.

Chris Grasteit (resident) stated there is a large area between the old lawn and the newly placed sod that is just dirt, and noted that Rubicon is not doing any

landscaping to that area. Mr. Grasteit also noted that the lawn is so wet that, when stepped on, it just sinks, and there are ruts and holes forming. Mr. Bourgeois stated that people should not yet be walking on the lawns, and Shaw put stakes up to prevent disturbing the sod. However, it appears the stakes may have been removed. Mr. Bourgeois stated he spoke to Rubicon, and they said they would come fix the ruts that were created with their lawn mowers. Mr. Grasteit stated he would ask his neighbors not to walk on the lawn, and asked how long they should stay off. Mr. Bourgeois stated they should stay off until there is a stretch of dry weather, to give the sod a chance to attach to the ground.

Mr. Grasteit asked what would be done with the large area that is just dirt. Mr. Bourgeois stated that this was outside the Navy work area, but if Shaw has any leftover sod, they would put it down in that area. Mr. Grasteit and Mr. Bourgeois agreed that both of them would also mention the dirt area to Rubicon and ask them to put down some seed.

Alice Pilram (RAB Community Co-Chair) noted that one of Mr. Bourgeois' slides listed the next RAB meeting schedule as February 19, 2008, but it should be February 12, 2008. Mr. Sullivan confirmed that the date of the next RAB meeting should be listed as February 12, 2008. He noted that the RAB meeting date had changed because the meeting location, the Casa de la Vista, would be undergoing renovation work, and would not be available on February 19.

Dale Smith (RAB member) asked Mr. Bourgeois if there was any soil that could be reused, or if reusing part of the soil was not part of the plan. Mr. Bourgeois stated that soil was chemically profiled prior to excavation, and the concern driving the excavation was lead. The excavated soil was never considered for reuse. Mr. Bourgeois added there is some road base material on Westside Drive that is going to be reused, but nothing else will be reused.

Mr. Sullivan added that the Navy will be focusing on restoration work in the areas where people have been living, and that work is close to complete. The schedule that extends to June 2008 includes the work on the back end of Westside Drive and Lester Court, which is an area that is not waiting for re-occupation. Mr. Sullivan added that Shaw would still be using Perimeter Road and some of the common areas behind North Point Drive, and those areas would continue to have temporary fencing in place.

Mr. Grasteit stated that Westside Drive is still being used for truck traffic. The trucks drivers pull in and block driveways, preventing tenant access in and out of driveways, with up to five or six trucks being there at the same time. Mr. Bourgeois stated that Shaw is almost done in that area, and their trucks should not be there anymore. He added that the trucks they are using are being driven in and out on the other side of Westside Drive because they are being scanned

for radiological materials. Mr. Bourgeois added that there is an air monitoring unit across the street from Mr. Grasteit's building, and the workers may use a truck to visit that location. Mr. Grasteit said he was not sure that the trucks belonged to Shaw. He agreed to let Mr. Bourgeois know the next time he sees the trucks. Mr. Bourgeois agreed to ask his crew about the truck activity to make sure they are not using that area. There were no further questions.

### **Site 12 (TI Housing) Arsenic in Groundwater Pilot Study**

Mr. Sullivan introduced Neil Hey (Shaw) to give the presentation on some additional work to be conducted in the housing area; the Arsenic in Groundwater Pilot Study. Mr. Hey stated he would be going over 1) the purpose of the treatability study, 2) the location for the study, 3) the general nature of the contamination, 4) the technical approach, 5) the planned activities, and 6) the schedule.

Mr. Hey stated the purpose of the study is to evaluate the Navy's approach to reduce the concentrations of soluble arsenic in groundwater. The soluble arsenic may be a result of the residual petroleum hydrocarbons in the area. The goal is to accelerate the biodegradation of the petroleum hydrocarbons. Mr. Hey stated that, if the pilot study is successful, the system will be expanded to a full-scale system to treat the entire area.

Mr. Hey stated the area for the pilot study is in Site 12, between Buildings 1311 and 1313, in front of Perimeter Road. Mr. Hey showed an outline of the general footprint of the area where residual petroleum contamination is present in soil. Mr. Hey explained that there are indigenous organisms that feed on the petroleum contamination. As they feed on it, the petroleum hydrocarbons go through different metabolic processes, turning the contamination into carbon dioxide.

Mr. Hey stated that, as the microorganisms consume the petroleum hydrocarbons, they also consume all of the oxygen in the groundwater. The microorganisms go from an oxidizing environment to a reducing environment. A side effect of that reducing environment is that naturally occurring arsenic in soil may be mobilized into the groundwater. The Navy believes that is what occurred at Site 12. Mr. Hey explained that this mobilization is reversible by adding oxygen back into the groundwater. The oxygen will allow the arsenic to attach back to the soil as it naturally occurred, rather than remaining soluble and mobile in the groundwater.

Mr. Hey explained the Navy took a phased approach addressing the mobilized arsenic as part of the pilot test. In the laboratory, Shaw used a technology called low-flow air sparging, or bio-sparging. In the first phase, Shaw determined that reestablishing oxic conditions in the soil lowered the dissolved species of the

arsenic, which Mr. Hey explained is a good sign. Next, Shaw added a nutrient amendment, similar to standard fertilizer, which accelerated the rate of biodegradation. Shaw checked to make sure adding the nutrient amendment did not interfere with the readsorption of arsenic to soil, and they confirmed that it did not. Based on the results of the lab study, the Navy wants to conduct an in-situ pilot test on site at Site 12, to study low-flow air sparging, since it is one of the most cost-effective methods to deliver oxygen to the groundwater.

Mr. Hey showed a diagram of the planned pilot test. Shaw will install a few wells to a depth of 27 feet. Ambient air will be sparged into the ground to raise the dissolved oxygen levels in groundwater. That will result in abiotic oxidation of arsenic and iron, and hopefully the iron will precipitate out. Then the arsenic will readsorb to the iron hydroxides. Mr. Hey stated that they are also hoping to biodegrade the rest of the petroleum hydrocarbons, because if the petroleum hydrocarbons remain, the arsenic will end up back in a soluble state again in the groundwater.

Mr. Hey explained that, to be effective, pilot testing will last for about 6 months. Prior to that, the Navy will do a design data investigation to finalize the pilot-scale system. That design data investigation will include establishing the current groundwater quality, determining what might influence the sparge wells and then designing the appropriate well layout. Mr. Hey stated they must also decide whether to install the wells using direct-push or standard auger-type installation. Then they must establish the ideal injection and pressure flow rates, and determine if they will need fugitive emissions control for the pilot test. The work for this will take about 2 months, and it will be during the day, during normal work hours. Equipment on site will include a portable air compressor with associated hoses and valving, and a small tank of helium for tracer gas.

Mr. Hey showed a diagram indicating 16 locations for wells; 4 that already exist and 12 that will be added. Wells include sparge test wells, observation wells in the saturated zone, and observation wells in the vadose zone.

Mr. Grasteit indicated on the map the building where he resides, and asked how close to the surface the contaminants are, and if they are really 27 feet down. Mr. Hey explained the contaminants are 5 to 12 feet below grade, so they are going much further down to 27 feet with the air sparging. As the air rises, it spreads out, so it will have a wider radius by the time it gets up to 12 feet below grade.

Mr. Grasteit asked if there would be fencing around the area as a safety precaution. Mr. Hey responded there would be fencing around the area for the entirety of the pilot study. Mr. Grasteit asked if they would move forward after the pilot study and complete the cleanup. Mr. Hey said it would depend on the results of the pilot study.

Mr. Hey stated that, overall, the pilot-scale field test would last for 1 year. That includes 2 or 3 months constructing the system and installing wells. Six months of the pilot study will be active treatment, followed by 3 months of post-treatment monitoring with the system turned off.

Mr. Hey explained the equipment will be on-site for about a year, and will be stored in a Tuff Shed® type container. An air sparge blower and possibly some pure oxygen will be the only items in the container. It will not be operated 24-hours a day, only operated in periodic pulses, and Shaw will do that during the day. The Tuff Shed® will be designed to insulate sound, and the equipment will have sound-dampening features.

Mr. Hey stated the draft work plan was sent out for review on November 7, 2007, and comments are due back this week. The final work plan, with responses to comments included, will be issued around the end of January 2008. Shaw will be in the field doing the design data investigation in March, pilot-scale system construction in May, pilot test from August 2008 through February 2009, followed by post-pilot monitoring from February 2009 to May 2009.

Nathan Brennan (RAB member) stated he recalled an alternative to oxygen mentioned in the plans, such as peroxide, and asked why peroxide was not being used. Mr. Hey stated that hydrogen peroxide was considered, but it is not going to be used because it is very reactive. It could cause a safety issue. Mr. Hey added that hydrogen peroxide could also be much more costly.

Mr. Brennan also asked where the nutrients would be injected. Mr. Hey stated the nutrients would be injected by a direct push system, and it would be a one-time event where a truck comes out over a day or two and injects nutrients midway between all the air sparge injection points. Mr. Hey said those locations are not yet mapped out.

Ms. Smith asked why, on page 2-4 of the work plan, the word “elevated” is in parenthesis. Mr. Hey said he would look into that and review the context to see why it was written that way. Ms. Smith also asked why they will analyze for aluminum. Mr. Hey said it helps understand whether the groundwater is in a reducing state or an oxidizing state. Jim Teo (Shaw) added that the primary reason is to determine the speciation of the arsenic.

Ms. Smith noted that, according to the document, there are protocols set up in the event of equipment failure. She asked what would happen to the vapor capture system, and would the vapors remain contained? Mr. Hey said someone would be on-call to respond immediately to a system shut-down. He added that the vapor capture system is closed and under vacuum, so vapor would not escape.

Ms. Smith noted that this pilot test, similar to one at Former Naval Station Alameda (Alameda Point), is not set up in the most heavily contaminated area, and asked what is the reason. Mr. Hey said they wanted to stay away from occupied residential units until they know whether they will have fugitive emissions. They also wanted to treat the down gradient portion of the plume first as a buffer between the rest of the plume and the San Francisco Bay (Bay).

Ms. Smith asked why they would not just remove the soluble arsenic. Mr. Hey said that would be an area the size of 1 acre at a depth of 12 feet. Ms. Smith stated that there have been many previous discussions about the fact that there is arsenic in the soil, regardless of whether it is naturally occurring, because it is not good for people. She stated that removal seems to be a preferable approach. Mr. Hey stated Shaw was not asked to explore the possibility of removal in the pilot study.

Ms. Smith asked if the Navy was going to try to treat the petroleum. Mr. Hey confirmed that is correct. Ms. Smith asked whether Mr. Hey thought the petroleum would just naturally attenuate, and there would not be a problem with arsenic in groundwater. Mr. Hey stated that, over many years, the petroleum would naturally attenuate and the arsenic condition would reverse itself. Ms. Smith said the plan to let the whole thing run its course amounts to doing a partial job of cleaning up, and not actually remediating the petroleum. Mr. Hey responded that the Navy is trying to reverse the presence of arsenic in groundwater, but the Navy realized the bottom line is they want to accelerate the degradation of the petroleum so the arsenic doesn't go back to a soluble state.

Mr. Bourgeois added that the test is to see if the technology works, and they are not going after the entire petroleum plume. They picked a location of the plume that is not near residents so they won't be affected. After the test, they may expand it to the whole plume. Mr. Sullivan added that, about 8 years earlier, Shaw was brought in to study the possibility of treating the petroleum plume. Based on the location and the depth, it was determined that it was not practical. Ms. Smith said she was familiar with Shaw's work at extracting petroleum at other sites, using some interesting engineering to electrify the petroleum into almost nothing. She asked if this area was too small to use that technology, and Mr. Bourgeois confirmed it is.

Ms. Smith noted that at Alameda Point many residents complained about the noise caused by the blowers, and they are much farther away from residents than they will be at NAVSTA TI. Mr. Hey stated the difference is that, at Alameda Point, they are using positive displacement blowers that are very loud. Mr. Hey said there are other kinds that can be used that are so quiet, it is possible to hold a regular conversation next to one. At NAVSTA TI they may use a regenerative blower, which would be much more quiet. They will also be using lower

volumes and pressures, and cleaning a much smaller area than at Alameda Point, which keeps it quieter. Mr. Hey and Mr. Bourgeois both confirmed they do not want to disrupt residents during any time of the day, and will make every effort to control sound.

Mr. Brennan asked if they needed to lower the pH levels in the water. Mr. Hey explained they might encounter issues with other metals if they do that. Mr. Teo added that this process is not like other, more aggressive technologies where chemical oxidation injections will alter the pH.

### **Sites 8, 28, and 29 (Yerba Buena Island [YBI] Sites) Draft Remedial Investigation Report Update**

Mr. Sullivan stated that the RAB had already received two presentations about the Sites 8, 28, and 29 Draft Remedial Investigation (RI) Report. He noted the draft report had been issued, and he was giving an opportunity for RAB members to comment. There was no formal presentation.

Ms. Smith commented that there is conflicting information in the RI report about whether the fill that makes up NAVSTA TI comes from the Bay or the delta. She stated that she has brought it up multiple times in the past but it has never been adequately resolved. Ms. Smith added that the decisions for Site 29 are based on an inadequate environmental survey conducted in the late 1990s or early 2000. She noted that the survey even identified plant species incorrectly. She added she had commented on it from the very beginning. The poorly done survey dismisses the value of an entire hillside of native plants that are probably endemic and may have special species. Ms. Smith added that the entire survey of both islands was done too quickly, in only 3 hours, and was conducted by a toxicologist with no botany background.

Ms. Smith stated that another person came out and did a decent environmental survey, but he did not identify the species names correctly. For example, he did not know if he was looking at bromus carinatus, and a good biologist would know. She added that the plant list in the back of the initial study is incomplete and does not list all of the plants listed in the body of the document. Ms. Smith added that she is disappointed that this poorly done document has moved its way through the process. Ms. Smith stated that it is poor science, it does not fully characterize the site, the Latin names for native and non-native plants are incorrect, and the whole summary for Site 29 is based on the poorly done study. She said she sort of agreed on the no further action, but did not like basing the decision on poor science. Mr. Sullivan stated the Navy would do their best to address her comments.

Mr. Sullivan added that Site 28 is still on Navy property, while Sites 8 and 29 are now on the California Department of Transportation (Caltrans) property. Ms.

Smith asked if the Navy still has jurisdiction on Sites 8 and 29. Mr. Sullivan stated the Navy is working with Caltrans and will keep the RAB updated on all three sites. Ms. Smith asked what other property the Navy had transferred. Mr. Sullivan stated the Navy had transferred the Job Corps Center on TI, and because it was barracks there were very few environmental issues to deal with. There were some issues with petroleum, and the Navy dealt with those. He added that the only issue that Job Corps had to deal with was lead and asbestos. There were no further questions, so Mr. Sullivan moved on to the next topic.

### **Site 21 and 24 Treatability Study Work Plan**

Mr. Sullivan introduced Mr. Bourgeois to give the presentation. Mr. Bourgeois stated this project is the continuation of some work that has been going on at Sites 21 and 24. He showed a diagram of the current plume of chlorinated volatile organic compounds (CVOC) at Site 24. He noted the diagram of the plume encompasses all of the spots where they are finding elevated levels of CVOCs.

Mr. Bourgeois then showed a diagram of where Shaw will inject the nutrient into the plume, based on where they believe the source area is. Mr. Bourgeois noted there may be a dense, non-aqueous phase liquid (DNAPL) source in the southern area of the plume, near Building 99. Mr. Bourgeois stated Shaw will install several test wells along the southern border of the plume to see if it extends beyond the current known boundary.

Mr. Bourgeois stated Shaw is going to complete a FLUTE study using direct-push techniques to determine if there is DNAPL in the source area. Mr. Bourgeois stated Shaw had completed FLUTE studies before, and the RAB had seen the results, so it will not be something new for them. Mr. Bourgeois indicated the location of several planned reactive barrier wells, stating Shaw plans to install them in order to segregate this source area from the rest of the plume area to make sure potential DNAPL does not transfer into other areas and further contaminate the rest of the plume. Mr. Bourgeois stated the Navy is considering enhanced bioaugmentation in this area, and further evaluation will be conducted when the initial investigation activities are completed.

Mr. Bourgeois then showed a diagram of the plume of trichloroethylene (TCE) at Site 21. The diagram indicates that the wells on the outside edges have very low detections of TCE. Shaw will be doing high pressure injections of SDC-9, a nutrient that feeds microorganisms, as they did before with positive results. Each injection point, shown on the diagram, has a 15-foot radius of influence. Mr. Bourgeois showed another diagram of the contours of the plume, showing the middle of the plume has much deeper contamination, and the edges have much shallower contamination. Therefore, injection points will be much more

shallow along the edges of the plume. Shaw will be working from the outside of the plume towards the middle. When they reach the deeper area, they will do injections in two or three phases, potentially down as far as 18 feet.

Mr. Bourgeois stated that during the initial work, it was difficult to reach contamination located beneath a trailer and deck located on the site. They had injection sites around the structures, but the radius of influence was not large enough. This time, Shaw will be using high pressure injection, which they expect to have a wide enough influence. Mr. Bourgeois stated Shaw and the Navy are currently writing the plan, and they hope to be in the field in early March 2008.

Ms. Smith asked if Shaw was not successful with the previous treatment at Site 21 because of the barriers. Mr. Bourgeois stated that there were areas they could not reach, but using high pressure injections should remedy that. They have found they can achieve a 15-foot radius of influence. Mr. Bourgeois stated they would keep the RAB updated on how it actually works, and the plan would be distributed soon for RAB review. There were no further questions on this update.

#### **TI/YBI Oil Spill Cleanup Overview**

Mr. Sullivan stated that a container ship struck the Bay Bridge on Wednesday, November 7, 2007. There was limited visibility caused by very heavy fog in the area that morning. This resulted in a significant oil spill into the Bay. Mr. Sullivan wanted to give the RAB an update on the Coast Guard's cleanup efforts, some of which are headquartered on TI. Mr. Sullivan noted the headquarters for cleanup was located on NAVSTA TI, at the former Nimitz Conference Center.

Mr. Sullivan stated that more information could be found by visiting the City of San Francisco website ([www.sfgov.org](http://www.sfgov.org)), which includes a link to the Coast Guard's website. Mr. Sullivan showed photos of the cleanup crews collecting oily debris, using water pressure to clean rocks, and using ropes to get down to hard-to-reach areas. He also showed before and after pictures of the shoreline cleanup. Mr. Sullivan said there were some traffic controls in place on Avenue of the Palms while workers cleaned an area of the shoreline at NAVSTA TI, and residents were asked to keep their speed down to a minimum in the area.

Mr. Grasteit said the people in charge of the traffic controls could have given more information and made restrictions more clear. For example, there was one sign that read "slow" but no speed limit was posted. Mr. Grasteit stated he feels the police were heavy-handed with the high number of tickets they issued, and drivers were treated very unfairly. Mr. Grasteit stated he knows that has nothing to do with the Navy, he just wanted to let people know what TI residents were going through during those traffic controls. Mr. Sullivan stated that the Navy

works with City of San Francisco staff, and he would be happy to pass along the feedback.

Mr. Brennan said the news reported on the evening of the RAB meeting that the cost of the spill cleanup is over \$61 million, and may exceed the federal cap for such cleanups. California's United States Senators Boxer and Feinstein may try to address the funding issue.

Mr. Grasteit asked if anyone at the meeting could give him some insight on the power failure that occurred on NAVSTA TI the night before the RAB meeting. He stated he lost power for many hours, and recently has experienced brown outs on five different occasions. He tried to call, but there was no one at the Public Utilities Commission (PUC), and Pacific Gas & Electric (PG&E) did not want to know because it is not under their purview. Mr. Grasteit asked if the electricity on NAVSTA TI belongs to the Navy, the City, or someone else.

Mr. Sullivan responded that the electric utilities on NAVSTA TI are still owned by the Navy. The Navy operated the electrical system prior to base closure. It is still owned by the Navy, but now it is operated by the San Francisco PUC. Mr. Sullivan stated he did not know the contact name and number for the San Francisco PUC, but he would find out and pass along the information.

Lorraine Lee (JSCO) stated she could answer the question about who to contact in a power outage. Ms. Lee stated all housing providers on NAVSTA TI prepared a flier listing the procedures for residents in the event of a power outage. There is an after-hours maintenance number that will direct callers to the maintenance supervisor, and that supervisor will contact the PUC. That works better for the providers than having residents contact the PUC directly. Ms. Lee stated that the flier was handed out to residents in the monthly newsletter put out by JSCO, and she agreed to give Mr. Grasteit another copy.

## **Upcoming Documents and Field Schedule**

### **Documents**

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

- Final Site 27 Sampling and Analysis Plan/Health and Safety Plan, 14 January 2008
- Draft Sites 8, 28, and 29 Revised RI Report, 19 November issued for review, comments due 19 December 2007
- Draft Sampling and Analysis Plan for Soil Gas Investigation, issued for review 19 February 2008
- Final Polychlorinated Biphenyls (PCB) Summary Report (Phase I and II), 01 February 2008

- Final Annual Groundwater Status Report, Site 12, 01 February 2008
- Final Annual Groundwater Status Report, Sites 6A and 25, 15 February 2008
- Draft Site 21 and Site 24 Work Plan, issued 21 December 2007, comments due 01 February 2008
- Draft Site 12 Work Plan for Arsenic in Groundwater Pilot Study, comments due 21 December 2007
- Final 2007 Site Management Plan, 21 December 2007
- Draft Community Involvement Plan 2007, 21 January 2008
- Draft Island Times Newsletter No. 14, 04 February, 2008
- Draft Final Status Survey for Building 343, 05 February 2008
- Draft Final Status Survey for Building 344, 05 February 2008
- Draft Scoping Survey Report for Building 233, 05 February 2008

### Field Schedule

Ms. Rash reviewed field activities scheduled for the next 2 months:

- Site 24 Treatability Study Phase II, beginning 03 March 2008
- Site 21 Pilot Treatability Study, beginning 03 March 2008
- Arsenic in Groundwater Pilot Study at Site 12, beginning 03 March 2008
- PCB Abatement, beginning 17 December 2007
- Site 27 Sediment Investigation, beginning date to be determined

Mr. Bourgeois added that the Navy's broker is awaiting the license prior to handling the radiologically impacted soil. When they have that, they might start work in mid-January 2008. After analytical results are received, they can remove the bins, probably sometime in February 2008.

### **October 2007 RAB Meeting Minutes**

Mr. Sullivan asked for any comments on the October 2007 RAB meeting minutes. Ms. Smith and Mr. Brennan stated they were not present at the October RAB meeting. Ms. Pilram stated she had not yet reviewed them, but would provide comments at a later date. John Gee and Doug Ryan were also present at the October meeting, but were not present at the December meeting to provide comments. It was agreed that the Navy would contact the RAB members who were present at the October meeting, and ask them for any comments on the minutes.

### **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 November and one in December. The only major technical item was the Site 12 removal action update, which is a regular item on the BCT agendas. The rest of the topics were administrative.

Mr. Sullivan stated the Navy is still finalizing the meeting minutes for both of those BCT meetings. Once those December minutes are finalized, they will be compiled with the final BCT minutes for the entire calendar year of 2007 and distributed.

### **Other Public Comment and Announcements**

Mr. Sullivan asked for any public comment or announcements. Mr. Brennan stated the Citizen's Advisory Board, or CAB, had not held any meetings recently, but would likely hold one at the beginning of 2008. Mr. Brennan also stated Caltrans gave a grant to the San Francisco Department of Public Health to study and make recommendations for pedestrian and bicycle inclusion in the development plan for NAVSTA TI. The San Francisco Department of Public Health is working with the Bicycle Coalition, and they plan to have several public meetings. Then they will make recommendations to the CAB, which will be forwarded to the City.

### **Future Meeting Agenda Items**

Mr. Sullivan reminded the group that the Casa de la Vista is not available for the next regularly scheduled RAB meeting on February 19, 2008. The Navy proposed to bump the schedule back to February 12, 2008, and change the pre-RAB meeting conference call to January 30, 2008. No one objected to the date change.

Mr. Sullivan asked if there were items people would like on the agenda. Mr. Brennan requested an update on the Site 12 arsenic in groundwater bench test, including what happened and how it was conducted. The Navy agreed to include that on the February 2008 agenda, and Mr. Sullivan added that anything else topical would be included.

### **December 2007 RAB Meeting Handouts**

- TI RAB Meeting No. 133 Agenda, 18 December 2007
- Field Efforts, Solid Waste Disposal Areas Site 12, 18 December 2007
- Field Efforts, In Situ Bioremediation Sites 24 and 21, 18 December 2007
- Oil Spill Response Operations
- Document Tracking Sheet
- Navy Field Schedule

NAVAL STATION TREASURE ISLAND  
ENVIRONMENTAL RESTORATION ADVISORY BOARD MEETING  
Tuesday, 18 December 2007  
7:00 PM.  
**Casa de la Vista (Building 271)**  
Treasure Island

**MEETING NO. 133**

- 6:00 – 7:00 **Optional Potluck Holiday Social**
- 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: James Whitcomb, Navy Remedial Project Manager, and Pete Bourgeois, Shaw Environmental & Infrastructure,
- 7:30 – 7:40 **Site 12 (TI Housing) Arsenic in Groundwater Pilot Study**  
*(comments due 21 December 2007)*  
Lead: Neil Hey, Shaw Environmental & Infrastructure
- 7:40 – 7:50 **Site 21 and 24 Treatability Study Work Plan**  
*(comments due 11 January 2008)*  
Lead: Pete Bourgeois, Shaw Environmental & Infrastructure
- 7:50 – 8:00 **Site 8, 28 and 29 (YBI Sites) Draft Remedial Investigation Report**  
*(opportunity for comments, comments due 21 December 2007)*  
Lead: James Whitcomb, Navy Remedial Project Manager
- 8:00 – 8:05 **TI/YBI Oil Spill Cleanup Overview**  
Lead: James Sullivan, Navy Co-Chair
- 8:05 – 8:10 **Upcoming Documents and Field Schedule**  
Lead: Marcie Rash, Tetra Tech EMI
- 8:10 – 8:15 **October 2007 RAB Meeting Minutes**  
Lead: James Sullivan, Navy Co-Chair
- 8:15 – 8:20 **Co-Chair Announcements**  
Lead: Alice Pilram, Community Co-Chair
- 8:20 – 8:25 **BRAC Cleanup Team Update**  
Lead: James Sullivan, Navy Co-Chair

8:25 – 8:30 **Other Public Comment and Announcements**

Lead: James Sullivan, Navy Co-Chair

8:30 – 8:35 **Future Meeting Agenda Items**

Lead: Navy and Community Co-Chairs

- Discuss 2008 RAB Meeting Schedule Dates

8:35 **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 January 2008 Meeting

7 :00 pm Tuesday, **12 February 2008**  
**(tentative revised date)**

Casa de la Vista, Treasure Island

No March 2008 Meeting

7 :00 pm Tuesday, 15 April 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: **(1<sup>st</sup> Weds of RAB month)**

Wednesday, 30 January 2008, 7:00 pm. **(note revised date)**

Call-In Number: 1- 888-455-0031

Participant Code: 36297

Next BCT/RPM/Project Team Meeting: 10:00 am. Tuesday 8 January 2008, Tetra Tech EMI, San Francisco CA

Navy Treasure Island Web Site:

[http://www.bracpmo.navy.mil/bracbases/california/treasure\\_island](http://www.bracpmo.navy.mil/bracbases/california/treasure_island)

Navy San Diego Office Address:

JAMES B. SULLIVAN  
DEPARTMENT OF THE NAVY  
BASE REALIGNMENT AND CLOSURE  
PROGRAM MANAGEMENT OFFICE WEST  
1455 FRAZEE ROAD, SUITE 900  
SAN DIEGO, CA 92108-4310



# Field Efforts Solid Waste Disposal Areas Site 12, Old Bunker Area

December 18, 2007  
NAVSTA Treasure Island  
RAB Meeting

# Building 1325 Restoration



**Placement of concrete in front of Bldg. 1325**

# Building 1325 Restoration



**Concrete finish work at Building 1325**

# Building 1325 Restoration



**Concrete work at Building 1325**

# Building 1325 Restoration



**SOD work at Bldg. 1325**

# Building 1325 Restoration



**Asphalt work in Front of Building 1325**

# Building 1325 Restoration



**Final Restoration**

# Building 1205 Restoration



**Concrete work in the front of Building 1205**

# Building 1205 Restoration



**Final Restoration**

# Building 1205 Restoration



**Final Restoration**

# SOIL TRANSPORTATION and DISPOSAL



## Class I Soil Removal:

- **348 Loads = Roughly 7,830 Tons**

## Class II Soil Removal:

- **276 Loads = Roughly 5,382 Tons**

**Soil Stockpiled in Cells to be Removed =  
Roughly 450 Tons Class I and Roughly 340  
Tons of Class II Soil.**

# BIN STORAGE AT SITE 6



## To Date at Site 6:

**Class I = 56 Bin's**

**Class II = 49 Bin's**

**Mixed (Class I & II) = 8 Bin's**

**Total Soil Stored = Roughly 1,695 Tons**

- **Each Bin contains roughly 15 tons of Low Level Radiological Waste**

# PROJECT SCHEDULE



1. 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, February 19th at 7:00 PM

James.b.sullivan2@navy.mil

Naval Station Treasure Island  
Environmental Cleanup Program  
Document Tracking Sheet  
January 2008 - June 2008

Item	Document Title & Information	CTO/DO	INTERNAL DRAFT		DRAFT							Priority Level	RTC		INTERNAL FINAL		FINAL	Comments							
			Internal Draft Due to Navy	Navy Comments Due	Draft to Agencies	Date Due	Agency Comments						Preliminary RTCs to Agencies	Resolve and Concur on RTCs	Internal Final to Navy	Navy Comments Due	Final to Agencies								
							DTSC	Water Board	EPA	TIDA	RAB								OTHER						
<b>SulTech - Non Petroleum Related Documents</b>																									
1	Site 32 Remedial Investigation Report	94	08/18/06	✓	09/17/06	✓	10/20/06	✓	02/14/07	✓	✓	✓	✓	✓	✓	07/27/07	✓	01/18/08	02/15/08	02/29/08	03/07/08	*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	✓	✓	✓	✓	✓		TBD		TBD	TBD	TBD	TBD	* Navy technical review ** Navy legal review			
	RPM: Scott Anderson		02/14/07**	✓	03/30/07**	✓																			
	PM: Jean Michaels																								
4	Site 27 SAP/HSP	43	04/06/07	✓	04/20/07	✓	05/10/07	✓	06/13/07	✓	✓	✓	✓			09/17/07	✓	11/20/07	✓	12/13/07	✓	01/04/08	01/14/08	Field investigation scheduled for January/February 2008.	
	RPM: Charles Perry																								
	PM: Katie Kirchner																								
5	Sites 8, 28, and 29 Revised Remedial Investigation Report	104	07/23/07	✓	08/10/07	✓	11/19/07	✓	12/19/07					4	12/28/07		01/08/08		01/14/08		01/28/08		02/07/08	The Draft RI Report was submitted in March 2006.	
	RPM: James Whitcomb																								
	PM: John Warmerdam																								
6	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																								
7	Soil Gas Investigation SAP	117	01/29/07		02/12/08		02/19/08		03/20/08							04/03/08		04/03/08		04/21/08		05/05/08		05/12/08	
	RPM: James Whitcomb																								
	PM: John Warmerdam																								
<b>Sullivan Consulting Group/Tetra Tech EM Inc. - Non Petroleum Related Documents</b>																									
8	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		02/01/08	DTSC provided comments on draft on 8/30/2007.
	RPM: Scott Anderson																								
	PM: Christopher Ohland																								



**Naval Station Treasure Island  
Environmental Cleanup Program  
Document Tracking Sheet  
January 2008 - June 2008**

Item	Document Title & Information	CTO/DO	INTERNAL DRAFT		DRAFT							Priority Level	RTC		INTERNAL FINAL		FINAL	Comments			
			Internal Draft Due to Navy	Navy Comments Due	Draft to Agencies	Date Due	Agency Comments						Preliminary RTCs to Agencies	Resolve and Concur on RTCs	Internal Final to Navy	Navy Comments Due	Final to Agencies				
							DTSC	Water Board	EPA	TIDA	RAB								OTHER		
<b>Tetra Tech EM, Inc. (Con't)</b>																					
17	Fact Sheet: Radiological Program Update	FZN6	TBD		TBD	TBD	TBD							TBD	TBD	TBD	TBD				
	RPM: James Whitcomb																				
	PM: Marcie Rash																				
<b>Barajas &amp; Associates, Inc.</b>																					
18	Site 30 Proposed Plan	25	12/22/06	✓	03/06/07	✓	03/23/07	✓	06/18/07	✓	✓	✓	✓	✓	1	TBD	TBD	TBD	TBD	TBD	Awaiting DTSC comments on draft. Navy comments on internal draft includes legal review.
	RPM: Charles Perry																				
	PM: Margaret Berry																				
19	Site 31 Proposed Plan	25	01/19/07	✓	03/06/07	✓	03/23/07	✓	06/18/07	✓	✓	✓	✓	✓	1	TBD	TBD	TBD	TBD	TBD	Awaiting DTSC comments on draft. Navy comments on internal draft includes legal review.
	RPM: Charles Perry																				
	PM: Margaret Berry																				
20	Site 11 Remedial Investigation Report	24	01/11/08		02/10/08		03/09/08		04/08/08							TBD	TBD	TBD	TBD	TBD	
	RPM: Scott Anderson																				
	PM: Margaret Berry																				
<b>Tetra Tech EC, Inc.</b>																					
21	Final Status Survey for Building 343	21	12/21/07		01/22/08		02/05/08		03/04/08							TBD	TBD	TBD	TBD	TBD	
	RPM: James Whitcomb																				
	PM: Brian Maidrand																				
22	Final Status Survey for Building 344	21	12/21/07		01/22/08		02/05/08		03/04/08							TBD	TBD	TBD	TBD	TBD	
	RPM: James Whitcomb																				
	PM: Brian Maidrand																				
23	Scoping Survey Report for Building 233	21	12/21/07		01/22/08		02/05/08		03/04/08							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**

January 2008 -  
March 2008

Item	Activity & Investigation Area	DTR #	Field Dates	Navy RPM	CTO/DO	PM	FTL	Complete
<b>Shaw</b>								
1	Site 24 Treatability Study Phase II <i>Site 24</i>	Doc 12	Start: 01/29/08 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 12	Start: 01/29/08 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 13	Start: 03/03/08 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 11	Start: 12/17/07 Finish: TBD	Scott Anderson (619) 532-0938	FZN1	Peter Bourgeois (415) 277-6983	Peter Bourgeois (415) 277-6983	
<b>SulTech</b>								
6	Site 27 Sediment Investigation <i>Site 27</i>	Doc 4	Start: TBD Finish: TBD	Charles Perry (619) 532-0911	STAECRU	Katie Kirchner (415) 222-8209	Hannah Thompson (415) 321-1788	
<b>Sullivan</b>								
7	Site 12 Groundwater Sampling <i>Site 12</i>	Doc N/A	Start: 11/05/07 Finish: 11/16/07	Jim Whitcomb (619) 532-0936	CLIN	Christopher Ohland (415) 321-1795	Hannah Thompson (415) 321-1788	
8	Sites 6 and 25 Groundwater Sampling Sites 6 and 25	Doc N/A	Start: 01/22/08 Finish: 1/25/08	Jim Whitcomb (619) 532-0936	CLIN	Christopher Ohland (415) 321-1795	Hannah Thompson (415) 321-1788	
9	Site 12 Groundwater Sampling <i>Site 12</i>	Doc N/A	Start: 03/03/08 Finish: 03/07/08	Jim Whitcomb (619) 532-0936	CLIN	Christopher Ohland (415) 321-1795	Hannah Thompson (415) 321-1788	

**Naval Station Treasure Island  
Navy Field Schedule**

January 2008 -  
March 2008

Item	Activity & Investigation Area	DTR #	Field Dates	Navy RPM	CTO/DO	PM	FTL	Complete
<b>EMS</b>								
10	Site 12 Removal Action Soil Sampling <i>Site 12</i>	Doc N/A	Start: Finish:	Jim Whitcomb (619) 532-0936				

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 30 days.

Grey shading indicates field activities are complete.