

**FINAL MEETING MINUTES
RESTORATION ADVISORY BOARD
NAVAL STATION TREASURE ISLAND
5 February 2008
Meeting Number 134**

Community Restoration Advisory Board (RAB) Members in attendance:

Nathan Brennan, John Gee, 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), Ryan Miya (Department of Toxic Substances Control [DTSC]), Henry Wong (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]), Charles Perry (Navy) Marcie Rash (Tetra Tech), Jim Teo (Shaw)

Public Guests

Loraine Lee (John Stewart Company [JSCO]), Dan Stone (JSCO)

Welcome Remarks and Introductions

James Sullivan (Base Realignment and Closure [BRAC] Environmental Coordinator) opened the 5 February 2008 meeting at 7:07 P.M. at the Casa de la Vista (Building 271) on Treasure Island (TI).

Mr. Sullivan welcomed those in attendance. He noted the RAB usually meets on the third Tuesday of alternate months, but because of venue availability and a state holiday, this February meeting was being held on the first Tuesday. Mr. Sullivan then asked for changes or comments on the agenda. Dale Smith (RAB) asked whether it would be possible to have someone answer questions about the work at Sites 21 and 24. Mr. Sullivan noted that the Navy Remedial Project Manager (RPM) for those projects, Scott Anderson, was unable to attend the meeting, but the consultant doing the work, Pete Bourgeois, and the Lead RPM, Charles Perry, were present to answer questions.

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.

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 continuing their work at the three Solid Waste Disposal Areas (SWDA). Mr. Bourgeois stated Shaw was trying to take as many photos as possible to present to the RAB, and therefore; his presentation was primarily photos. He showed a photo of Shaw installing new curb and gutter, and sidewalks on Bayside Drive, where soil had been excavated. He also showed a photo of a new fire hydrant installed to replace one that was broken.

Mr. Bourgeois noted the residents at 1237A and 1235D North Point Drive had requested concrete pavers rather than sod in their backyards, and he showed a photo of the newly installed pavers and the new fences at both of those residences. Mr. Sullivan added that, prior to the excavation work, there were concrete pavers in some of the backyards as an interim cover over the soil. The original plan was to move the pavers, excavate, and put in new sod. However, since residents requested it and the pavers were available, the excavation was still completed, and then pavers were installed instead of sod. Mr. Bourgeois stated that residents were able to temporarily store their backyard items at the beginning of the project in Conex boxes, and would now be asked to move their items back into their backyards.

Mr. Bourgeois showed a photo of Bayside Drive where old asphalt had been removed for excavation and new asphalt installed. He noted the roadway restoration on Bayside Drive was complete. He then showed a photo of current excavation work between driveways on Westside Drive (SWDA A/B).

Mr. Bourgeois showed a figure of progress made as of 24 January 2008, with different graphics to distinguish areas excavated to a depth of 1 foot, to a depth of 2 feet, and to a depth of 4 feet. Mr. Sullivan added that, on the figures, the buildings with hatch marks were vacant and had been since NAVSTA TI closed in 1997. Ms. Smith asked whether the buildings were unoccupied because the remediation needed to take place. Mr. Sullivan responded yes, that when the original Finding of Suitability to Lease was done for the TI Housing Area, those hatched areas were found unsuitable for leasing and were not leased to the City.

Mr. Bourgeois showed an aerial photo of Westside Drive. He indicated the areas in which the Navy had found radium-emitting items as of 29 January 2008. Mr. Bourgeois stated that most of the items were markers and some were decorative buttons. He noted the items seemed to be in a concentrated area and were found along with construction rubble, so they correlate to the disposal of construction

rubble in those areas. As of 29 January 2008, nine items had been found in the area indicated.

Mr. Bourgeois showed photographs of contractors hauling excavated soil off-site via Perimeter Road. When contractors are using Perimeter Road, entry to the road is closed to residents. Mr. Bourgeois stated that residents have been very cooperative and understanding about the road closures.

Mr. Bourgeois stated that Shaw had conducted radon sampling within vacant housing units. The sampling began on 7 January 2008 and sampling devices were retrieved on 10 and 11 January 2008, allowing for a 3-day exposure duration for the sampling devices. All of the sample results were below the laboratory detection limit of 0.3 picocuries per liter.

Mr. Bourgeois stated that, to date, about 8,010 tons of Class I soil had been removed, and about 6,162 tons of Class II soil had been removed. All of the excavated Class I and II soil will be hauled to California landfills. There are 338 tons of soil containing low-level radiological material in bins at Site 6 awaiting shipment for off-site disposal at an approved landfill, which will be removed later. That material will be transported from the site to a landfill authorized to handle such material.

Mr. Bourgeois stated that the bins of soil are being weighed and measured, and should be transported from NAVSTA TI approximately 18 February 2008. The project is still expected to end in June 2008.

Ms. Smith asked whether any of the construction material found in the excavations could be material from the Golden Gate International Exposition (GGIE). Mr. Bourgeois stated that it did not appear to be from the GGIE, and that most of the material was twisted metal, concrete, and general rubble. Nothing historic has been found. Ms. Smith asked what historic items the Navy had found in previous excavations. Mr. Bourgeois stated that, several months ago, a bayonet and an old rifle were found, but they were in poor shape. Mr. Sullivan added that items related specifically to the Navy had been found in previous excavations, such as Navy porcelain, and some of that was still being found. Ms. Pilram added that Site 12 was the parking lot for the GGIE, and there were no GGIE buildings in that area.

Site 12 (TI Housing) Arsenic in Groundwater Bench Test

Mr. Sullivan reminded the RAB that a presentation about a pilot test to treat arsenic in groundwater was given at the December 2007 RAB meeting. The RAB asked for more information about the initial bench-scale test, so the Navy asked their contractor, Shaw, to give a presentation about that test. Mr. Sullivan introduced Jim Teo (Shaw) to give the presentation. Mr. Teo stated he would be

going over 1) the purpose of the bench-scale test, 2) how the test was actually conducted including materials and methods, 3) the results of the test, and 4) the conclusions drawn based on those test results.

Mr. Teo stated the purpose of the test was to determine whether the procedures the Navy wants to use will reduce concentrations of soluble arsenic in groundwater and concurrently biodegrade a petroleum plume effectively. Currently, there is a plume of groundwater that contains dissolved arsenic, as well as total petroleum hydrocarbons (TPH) such as diesel fuel and motor oil. Specifically, Shaw is testing to see whether bio-sparging will be an effective treatment. Bio-sparging involves adding oxygen into the plume to help the TPH biodegrade and to change the state of the arsenic from dissolved to precipitant. The second objective of the test is to determine whether nitrogen and phosphate must be added to increase the biodegradation of the TPH, and what effect those compounds might have on the arsenic.

To conduct the test, Shaw gathered soil samples from five different locations at Site 12. Samples were collected using a direct-push rig, pushed to about 15 feet below ground surface. In total, about 10 kilograms of soil was collected. Shaw also collected groundwater from a well in the area, designated as well 12MW05. Mr. Teo indicated on a map the location of the soil samples and the well, noting the locations are spread out to include many areas, but also include locations in the middle of the plume.

Mr. Teo stated that the six soil samples were sent to a laboratory in Knoxville, Tennessee. The soil was mixed together to make one homogenized sample so a general test could be done. Shaw then analyzed the groundwater that was collected to determine the arsenic levels. Since the arsenic was slightly lower in this sample than in previous samples, the lab increased the levels of arsenic so a more thorough test could be done. For soil and for groundwater there were three test vessels: 1) control test, 2) test of oxygen and nitrogen (ON), and 3) test of oxygen and nitrogen with phosphate or phosphorous (ONP). Then for each vessel there were three time periods tested: 1) after zero days, 2) after 20 days, and 3) after 40 days. All of the test vessels were put in respirometers and turned during their testing period (20 days or 40 days).

Mr. Teo showed a slide with the results from the tests. He noted the dissolved arsenic concentrations decreased significantly for the control test, and even further for the ON and ONP tests. Mr. Teo also noted that, during the first 20 days of the tests, the arsenic was precipitating. After about 20 days, dissolved arsenic concentrations rose again, possibly because the microbes were running out of nutrients. Mr. Teo noted that arsenic also reduced in the control sample. He hypothesized that this was because there was enough oxygen naturally

mixed into the groundwater samples that oxic conditions were created just as in the other samples.

Mr. Teo showed a slide indicating the ratio of filtered versus unfiltered arsenic concentrations. Filtered is the dissolved arsenic and unfiltered is the precipitated arsenic. A ratio of less than one means there is more precipitated arsenic, which is what the Navy is hoping to achieve. A ratio greater than one means there is more dissolved arsenic, which means there is not enough oxygen present in the groundwater. Mr. Teo showed charts indicating that, especially during the first 20 days, both the TPH and dissolved arsenic levels reduced, meaning the chemistry was working. When the oxygen levels starting running low, the levels rose again. The microbes needed more ONP. Mr. Teo noted that the results for the control and the ON tests were very similar, while the results for the ONP tests were much more successful, indicating the addition of phosphate is very important to the success of the technology.

Mr. Teo stated that the conclusion was that, at day 20 of the test, there was a 40 percent average reduction of dissolved arsenic, and the addition of ONP accelerates TPH degradation rates. It was also concluded that the technology should be tested in the field rather than implemented full scale. Mr. Teo stated the next part of the study is to do the field pilot test. A presentation about that was given at the December 2007 RAB meeting.

Mr. Brennan asked how arsenic levels were raised in the samples. Mr. Teo explained that arsenic was added in the lab to increase the levels to what some of the other samples contained. Ms. Smith asked why the samples that went to the lab had lower arsenic concentrations than previous samples. Mr. Teo explained that it only takes a small amount of oxygen to cause the arsenic to precipitate, and oxygen was likely introduced to the sample vessels.

Mr. Teo added that Shaw was feeding oxygen into the respirometers during the bench-scale test. At given intervals, they would pull two samples from the system and analyze them for filtered and unfiltered arsenic, iron, aluminum, TPH, and nutrients. Ms. Smith asked how they would add oxygen during the field test, since the ground can't be shaken to add oxygen, as the samples could. Mr. Teo stated that practice was to see if the chemistry would work, and for the field, they would do the testing in the ground. Instead of shaking samples, they plan to inject oxygen into the ground.

John Gee (RAB member) asked how the team would remove the arsenic in the field. Mr. Teo explained they would not be removing the arsenic. Mr. Teo gave the background for the project. Microbes were used to biodegrade TPH present from a motor oil spill. When the microbes ran out of oxygen, they started anaerobic respiration, using the arsenic for their electron receptors. That

changed the arsenic from a precipitated form to a dissolved form. The goal is to change the arsenic from a dissolved state back to a precipitated state so that it is not mobile.

Ms. Smith stated she had questioned the goal when the pilot study was discussed at the December 2007 RAB meeting. Ms. Smith stated she did not think this would be a sound solution for addressing the arsenic, and noted that arsenic mobilizes in the presence of salt water.

Mr. Teo stated that Shaw had analyzed arsenic in nearby wells that are influenced by salt water, and they had not seen the high concentrations of dissolved arsenic there. Mr. Teo stated they do not anticipate salt water to be a problem, but said he would look into it.

PCB Remediation, Basewide Transformer Vaults, Field Efforts

Mr. Sullivan reintroduced Mr. Bourgeois to give an update on field work efforts, including polychlorinated biphenyl (PCB) remediation. Mr. Bourgeois showed a slide indicating several areas on NAVSTA TI that were identified as needing further investigation for PCBs during a basewide investigation. Mr. Bourgeois showed photos of soil sampling, cleaning, or encapsulation at the following locations:

- Transformer TX-152 (1) [next to Building 461] – Step-out asphalt sampling was conducted and results were below action levels.
- Transformer TX-152 (2) [next to Building 461] – Soil excavation was done until sample analytical results came back below action levels.
- Transformer TX-151 (EP108-1) [transformer pad next to Site 6] – Conducted step-out soil sampling and all results were below action levels.
- Transformer T-1102 [live transformer near the corner of Avenue M and California Avenue] – Step-out soil samples were collected down to 2 or 3 feet.
- Building 240 [vault inside the building] – Vacuumed to remove dust or paint chips and thoroughly cleaned with biodegradable cleanser, then encapsulated.
- Building 180 [vault inside the building] – Vacuumed to remove dust or paint chips and thoroughly cleaned with biodegradable cleanser, then encapsulated. Work was conducted over the weekend to avoid utility disruption to commercial tenants in other parts of the building.
- Building 3 [interior] – Flooring with peeling paint and non-friable asbestos tiles had to be removed. Then the concrete floor underneath was cleaned with a corrosive cleanser and encapsulated. (The power for all of NAVSTA TI runs through this building and could not be turned off, so a San Francisco Public Utilities Commission employee was present during the work.)

Ms. Smith asked, in relation to Transformer T-1102, whether Shaw had removed the concrete culvert at the site to conduct their soil sample collections. Mr. Bourgeois stated the culvert was not removed. He noted that samples had been collected in that specific area during a previous investigation and did not have PCB detections.

Ms. Smith asked if Shaw had used the corrosive cleanser and had encapsulated the entire floor in Building 3. Mr. Bourgeois stated that they cleaned and encapsulated only the area extending out 5 feet in all directions from the original transformer.

Mr. Bourgeois stated Shaw still needs to do some cleaning and encapsulation at Building 1, but there is an issue with turning off those utilities. Building 1 provides power to Building 180 and other adjacent facilities, so turning off power to Building 1 will affect several tenants. The plan is to do the work over two weekends, since it cannot be completed in one. Mr. Bourgeois stated the schedule for that work is late February or early March 2008.

Year 2007 Project Look Back / 2008 Project Look Ahead

Mr. Sullivan introduced the next topic, stating the purpose is to present the RAB with a recap of the 2007 environmental program accomplishments and a look-ahead at planned activities in 2008. Mr. Sullivan then introduced Charles Perry (Navy), the Lead RPM for NAVSTA TI, to give the presentation.

Mr. Perry reviewed a list of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) field activities that included work at Sites 12, 21, and 24. Mr. Perry then reviewed other field activities including groundwater sampling, radiological investigations, and PCB abatement work. Mr. Perry reviewed a list of 10 CERCLA documents and four other documents completed in 2007. [See the attached presentation for the complete list] Mr. Perry noted that the completion of the Record of Decision (ROD) for Sites 9 and 10 was a significant milestone and thanked the RAB for their input on the documents leading up to the ROD. Mr. Perry then reviewed a list of completed Community Relations work in 2007, including two newsletters, three fact sheets, one information session, and 23 community interviews in support of the Community Relations Plan (CRP) Update.

Mr. Perry then moved to the "look-ahead for 2008." He reviewed upcoming CERCLA field activities for Sites 12, 21, 24, and 27. Mr. Perry also reviewed other planned field work, including quarterly groundwater sampling, further PCB abatement, and some soil sampling at Site 25. Mr. Perry explained the soil

sampling at Site 25, which is a petroleum site, is to address some comments the Regional Water Quality Control Board had on a closure report for the site. The Navy hopes to receive closure on Site 25 sometime after the sampling is complete.

Mr. Perry then reviewed a list of 18 CERCLA documents and four other documents planned for 2008. Mr. Perry also reviewed a list of planned Community Relations work for 2008, including two newsletters, several fact sheets and information sheets, an information session regarding the Housing Area, public meetings, and a completed CRP Update.

Ms. Smith noted the 2006 Groundwater Summaries were on the list to be delivered in 2008 and asked what delayed them. Mr. Perry responded there are new members on the BRAC Cleanup Team (BCT) and there were more questions about the summaries than anticipated. The Navy first had to further fund their contract with the appropriate consultants, and then address the questions.

Community Relations Plan Update 2008

Mr. Sullivan stated that a presentation about the 2008 CRP Update was planned for this February meeting, but did not get listed on the agenda. He introduced Tommie Jean Damrel (Tetra Tech) to give a brief presentation.

Ms. Damrel stated Tetra Tech is in the process of updating the Navy's CRP, which was last rewritten in 2003 and a few sections were updated in 2006. Ms. Damrel stated the purpose of the CRP is to 1) describe the community on NAVSTA TI and San Francisco, 2) identify the current level of community interest in, or concern about environmental activities, 3) describe past community relations activities, 4) outline planned community relations activities; and 5) meet all community relations regulatory requirements for the environmental cleanup program at NAVSTA TI. Ms. Damrel explained that interviews are conducted with community members to identify the current level of interest or concern. Ms. Damrel stated 23 individuals were interviewed from August to November 2008, and noted that two RAB members (Nathan Brennan and Alice Pilram) were interviewees.

Ms. Damrel stated that the completed document will serve as reference material that can be pulled off the shelf. The document will help the Navy to plan activities or communicate quickly in an emergency by listing what media to use to reach the community, the kinds of information people would like to have, and the outline of activities the Navy expects to conduct.

Ms. Damrel listed a few highlights from the recently conducted interviews and how those compare to answers received in 2003.

- In 2003, knowledge of NAVSTA TI was medium; in 2007, it was medium to high.
- In 2003, the majority of people got information from friends and family; in 2007, they got it directly from the Navy.
- In 2003, half of respondents did not have confidence in the regulatory agencies because they did not know them. In 2007, a majority had confidence and saw the regulatory representatives as active participants in the cleanup.

Ms. Damrel stated that, based on the recent interviews, people would like more information about the cleanup progression, duration, and impacts to residents. The top three concerns or interests regarding environmental cleanup at NAVSTA TI include 1) keeping residents/tenants informed 2) timeline/delays and the overall plan for cleanup and transfer, and 3) health effects to current residents from current work or conditions.

Ms. Damrel stated the document would be submitted for RAB review approximately 11 February 2008. Ms. Damrel stated the Navy would like to send the draft document out for review electronically, and the RAB agreed electronic delivery would be acceptable. Mr. Sullivan added that the Navy would greatly appreciate any comments on the document because it is key tool for reaching out to the community.

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:

- Draft Sampling and Analysis Plan for Soil Gas Investigation, scheduled for review 30 March 2008
- Final PCB Summary Report (Phase I and II), 06 February 2008
- Final 2006 Groundwater Status Report, Sites 6A and 25, 25 February 2008
- Draft CRP 2008 Update, 11 February 2008
- Draft Island Times Newsletter No. 14, 11 February, 2008
- Draft Remedial Investigation Report for Site 11, 16 March 2008
- Draft Final Status Survey for Building 343, 14 February 2008
- Draft Final Status Survey for Building 344, 15 February 2008
- Draft Scoping Survey Report for Building 233, 25 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
- Site 27 Sediment Investigation, beginning date to be determined

December 2007 RAB Meeting Minutes

Mr. Sullivan asked for any comments on the December 2007 RAB meeting minutes. Mr. Brennan asked why the first paragraph on page 7 of the minutes read: "San Francisco Bay (Bay)." Mr. Sullivan explained that was an abbreviation, so anytime after, when Bay is written it means San Francisco Bay. Mr. Sullivan stated the Navy would review the minutes to ensure the abbreviation was necessary. Ms. Smith stated she had not yet reviewed the minutes, but would provide comments at a later date. Mr. Sullivan stated the Navy would finalize the minutes, pending any comments from Ms. Smith. Mr. Sullivan added that the Navy is working to get finalized RAB meeting minutes posted to their website.

Co-Chair Announcements

Ms. Pilram stated she had several announcements. The RAB members held a caucus prior to the start of the February RAB meeting to review a RAB application submitted by Chris Grasteit. The RAB elected Mr. Grasteit to the board, so he will be the newest member of the RAB. Mr. Sullivan stated he would notify Mr. Grasteit, who was not present at the February meeting.

Ms. Pilram also stated that the TI Yacht Club is holding their second annual community day, in conjunction with the TI Historical Society. Ms. Pilram stated the event last year was a success. This annual event was scheduled for 10:00 am on Saturday, 16 February 2008. Mr. Pilram also announced that the café on the island is scheduled to reopen. The Job Corps on NAVSTA TI is taking over the operations of the café, and it is expected to be a better community spot for those who live on or visit NAVSTA TI.

Ms. Pilram announced that there would be a photographic collage exhibition in Building 1 in celebration of Black History Month. The exhibition will be held Friday, 08 February 2008 at 6:00 p.m. Ms. Pilram also announced that the Historical Society had several community members take photographs of NAVSTA TI in its current condition. Those photographs will also be displayed in Building 1, at the gallery. Mr. Sullivan noted that the gallery is on the southerly side of Building 1, near the Navy offices.

Mr. Sullivan announced that DTSC representative Henry Wong, who had been working on the NAVSTA TI project for 13 months, was transitioning a new DTSC representative onto the project, Mr. Ryan Miya. Mr. Miya stated he is excited to be joining the team and will encourage open lines of communication

between the community and the BCT. Mr. Miya also stated it will take him some time to get up-to-speed on all of the environmental conditions and work at NAVSTA TI, but he will continue to provide the highest level of service.

Mr. Sullivan made another announcement for those at the RAB who had not received an earlier e-mail. Steve Edde, a former Navy employee who worked on NAVSTA TI for many years, passed away on January 20, 2008. Mr. Sullivan gave some background information about Mr. Edde's education and work experience, and Mr. Edde's great contributions. Mr. Edde will be sorely missed.

BRAC Cleanup Team Update

Mr. Sullivan stated the BRAC Cleanup Team, or BCT, held two meetings since the last RAB meeting; one in January and one in February. Topics of discussion included the Site 12 removal action, the Draft Remedial Investigation for Sites 8, 28, and 29, and an update on PCB abatement. The rest of the topics were administrative, including planning topics for the February 2008 RAB meeting.

Mr. Sullivan stated there was also an update at the February BCT from Michael Tymoff from the San Francisco mayor's office. The presentation was about the plans for redevelopment of NAVSTA TI.

Mr. Brennan stated that the Citizen's Advisory Board was not having a meeting today because it is Election Day, and they do not have meetings on election days. The next meeting is scheduled for 12 February 2008. Mr. Brennan stated the City's Planning Department is going to have the scoping meetings for the Environmental Impact Report for the new development on NAVSTA TI. The first meeting is scheduled for 11 February at the Pier 1 conference room, and the second will be held on 13 February at the Ship Shape Building on NAVSTA TI.

Mr. Brennan also announced that the San Francisco Department of Public Health had received a grant from Caltrans to study pedestrian and bicycle accessibility on the redevelopment plan. A bicycle tour of NAVSTA TI was planned, but cancelled because of rain. Mr. Brennan stated it would be rescheduled soon. Ms. Pilram asked Mr. Brennan if there is still space in the development plan for a museum, adding that the plans formerly designated an area as a museum, and now it is designated as open space. Mr. Brennan stated he believes there is still space for a museum. The developer leaves a certain amount of space designated as open space on the plans, and it is up to the City to determine what to do with that space.

Mr. Sullivan added that the Navy and City have had ongoing talks about the transfer of museum artifacts; currently the artifacts are property of the Navy.

Future Meeting Agenda Items

Mr. Sullivan stated that the next meeting is scheduled for Tuesday, 15 April at the Casa de la Vista. Mr. Sullivan asked if there were items people would like on the agenda. There were no specific requests, so Mr. Sullivan stated that the Navy would present anything topical.

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

- TI RAB Meeting No. 134 Agenda, 05 February 2008
- Dissolved Arsenic Bench-Scale Test Overview, 05 February 2008
- Field Efforts: PCB Remediation, Basewide Transformer Vaults, 05 February 2008
- Field Efforts, SWDA Site 12, 05 February 2008
- 2007 Look Back/2008 Look Ahead Environmental Cleanup Program Activities, 05 February 2008
- CRP 2008 Update, 05 February 2008
- Document Tracking Sheet
- Navy Field Schedule

NAVAL STATION TREASURE ISLAND
ENVIRONMENTAL RESTORATION ADVISORY BOARD MEETING
Tuesday, 5 February 2008
7:00 PM.
Casa de la Vista (Building 271)
Treasure Island

MEETING NO. 134

- 6:50 – 7:00 **RAB Community Member Membership Caucus**
Lead: Alice Pilram, Community Co-Chair
(For RAB Community Members to review membership applications)
- 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 **Site 12 (TI Housing) Arsenic in Groundwater Bench Test**
Lead: Jim Teo, Shaw Environmental & Infrastructure
- 7:45 – 8:00 **PCB Remediation, Basewide Transformer Vaults, Field Efforts**
Lead: Pete Bourgeois, Shaw Environmental & Infrastructure
- 8:00 – 8:15 **Year 2007 Project Look Back / 2008 Project Look Ahead**
Lead: Charles Perry, Navy Lead Remedial Project Manager
- 8:15 – 8:20 **Upcoming Documents and Field Schedule**
Lead: Marcie Rash, Tetra Tech EMI
- 8:20 – 8:25 **December 2007 RAB Meeting Minutes**
Lead: James Sullivan, Navy Co-Chair
- 8:25 – 8:30 **Co-Chair Announcements**
Lead: Alice Pilram, Community Co-Chair
- 8:30 – 8:35 **BRAC Cleanup Team Update**
Lead: James Sullivan, Navy Co-Chair
- 8:35 – 8:40 **Other Public Comment and Announcements**
Lead: James Sullivan, Navy Co-Chair



Dissolved Arsenic Bench- Scale Test Overview

Treasure Island
RAB Meeting
February 5, 2008

Presentation Overview



- **Purpose**
- **Objectives**
- **Materials and Methods**
- **Results**
- **Conclusions**

Purpose and Objectives



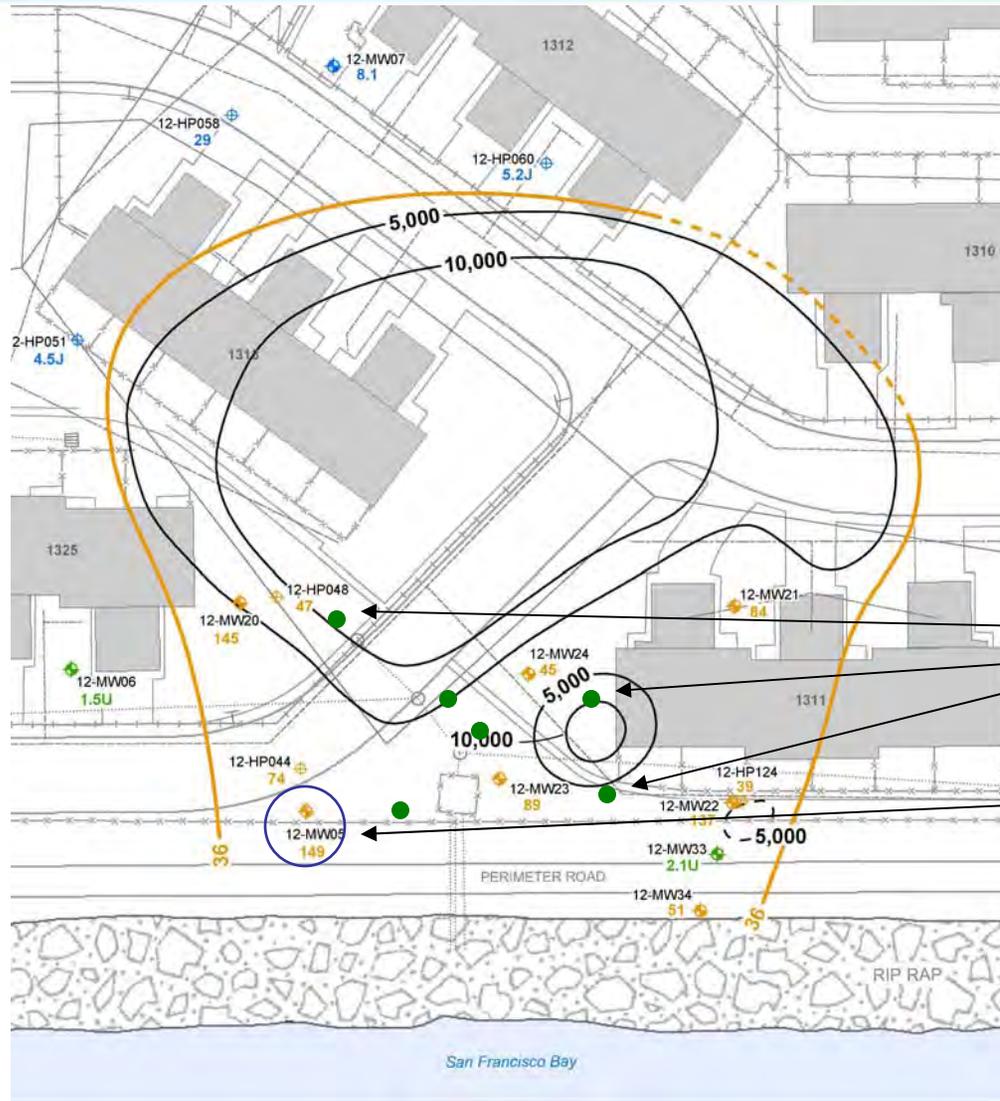
Purpose

- To determine if the “chemistry” of the process works

Objectives

- Determine if the establishment of oxic conditions can minimize dissolved arsenic and iron concentrations in groundwater
- Determine if the addition of nitrogen and phosphate are necessary to increase the rate of hydrocarbon biodegradation and whether it will interfere with the adsorption of As^{5+} species to Fe^{3+} species

Materials and Methods



Legend

- ⊕ Monitoring Well
- ⊕ Hydro-punch Location
- 36 — Arsenic in Groundwater Isoconcentration Contour (µg/L); dashed where inferred
- 10,000 — TPH as Diesel in Saturated Soil Isoconcentration Contour (mg/kg); dashed where inferred
- Soil Boring Location

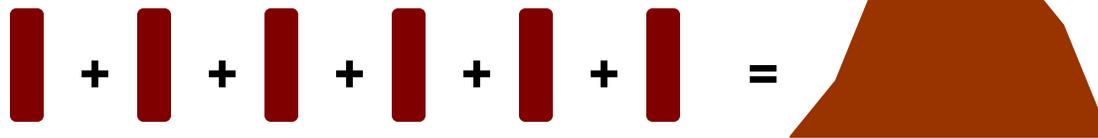
Test Media:

- 10 kilograms soil
- 20 liters groundwater (Arsenic Conc. = 110 µg/L)

Materials and Methods

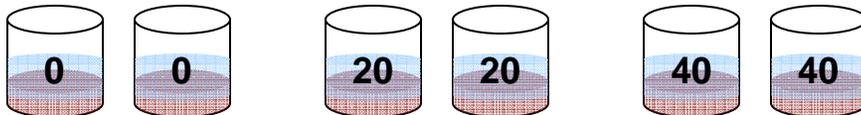


Soil Homogenized

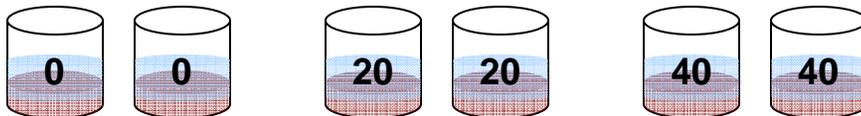


Treatments (each 1 liter vessel = 20 g. soil + 500 mL site water)

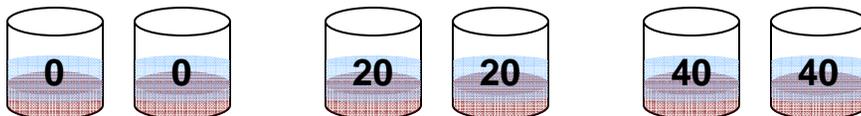
Control



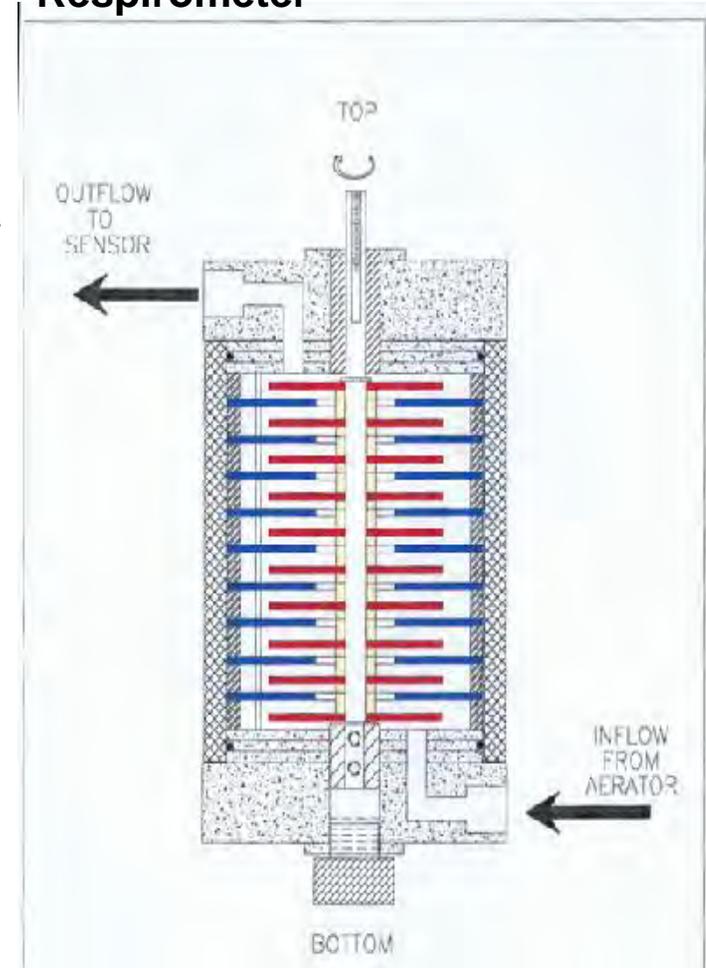
Oxygen + Nitrogen



Oxygen + Nitrogen + Phosphorus



Respirometer



Materials and Methods

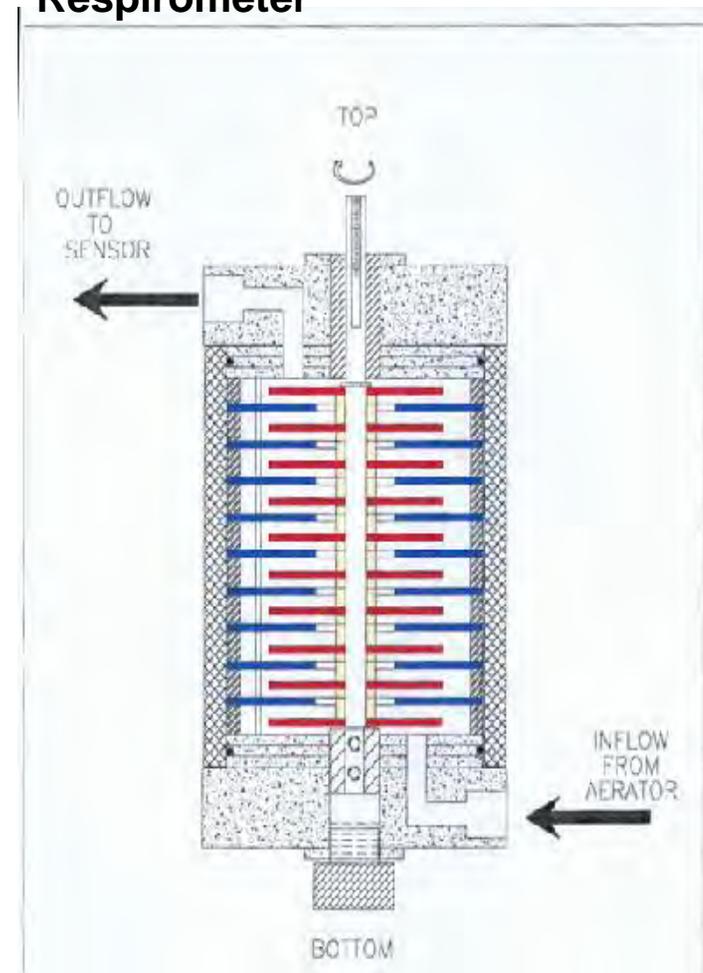


Key Point

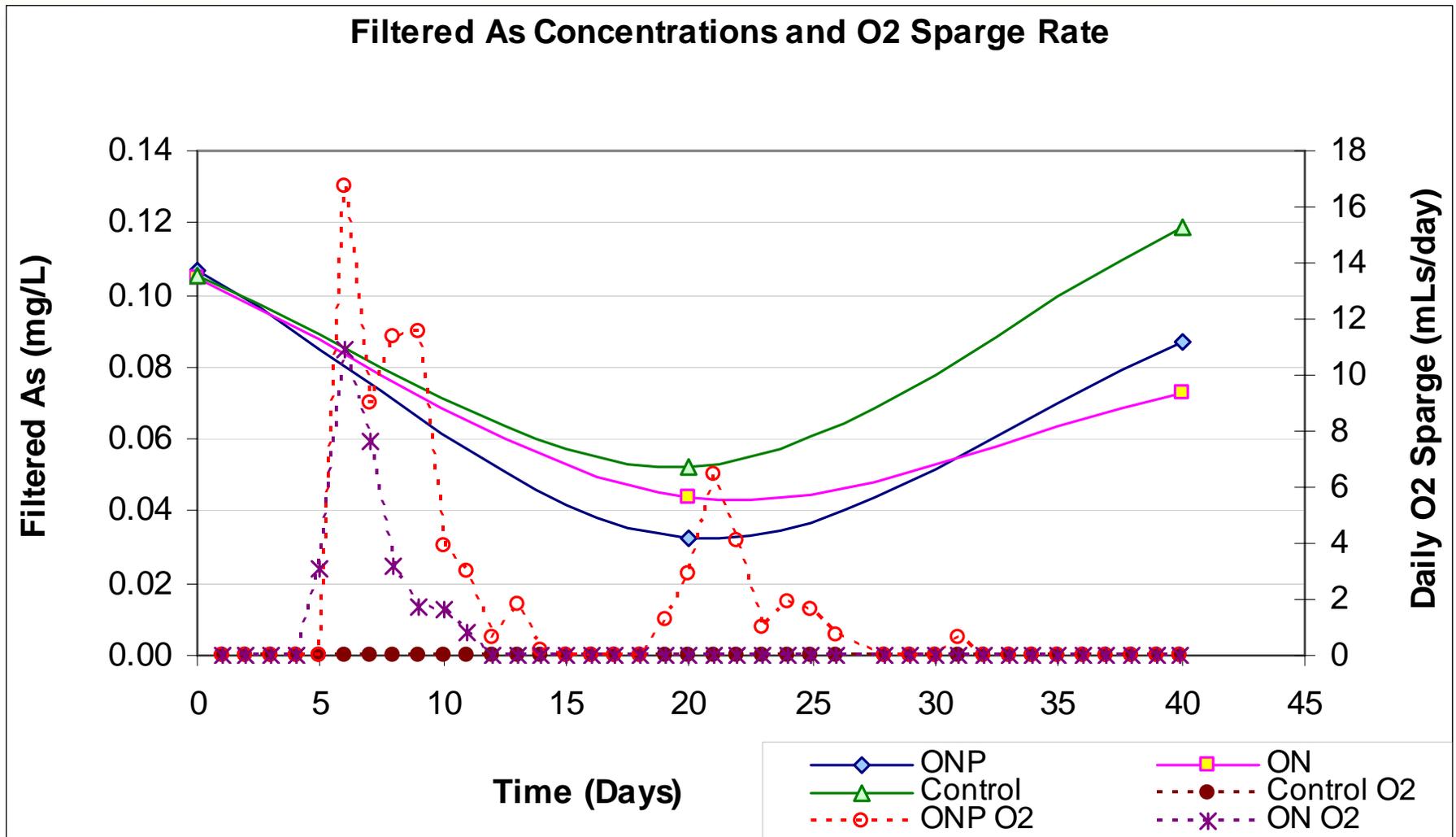
Oxygen distribution is key to whole process

1. Facilitates the precipitation of dissolved arsenic
2. Provides electron receptors for aerobic respiration. If oxygen is not present then microbial respiration will be anaerobic and system will be reducing.

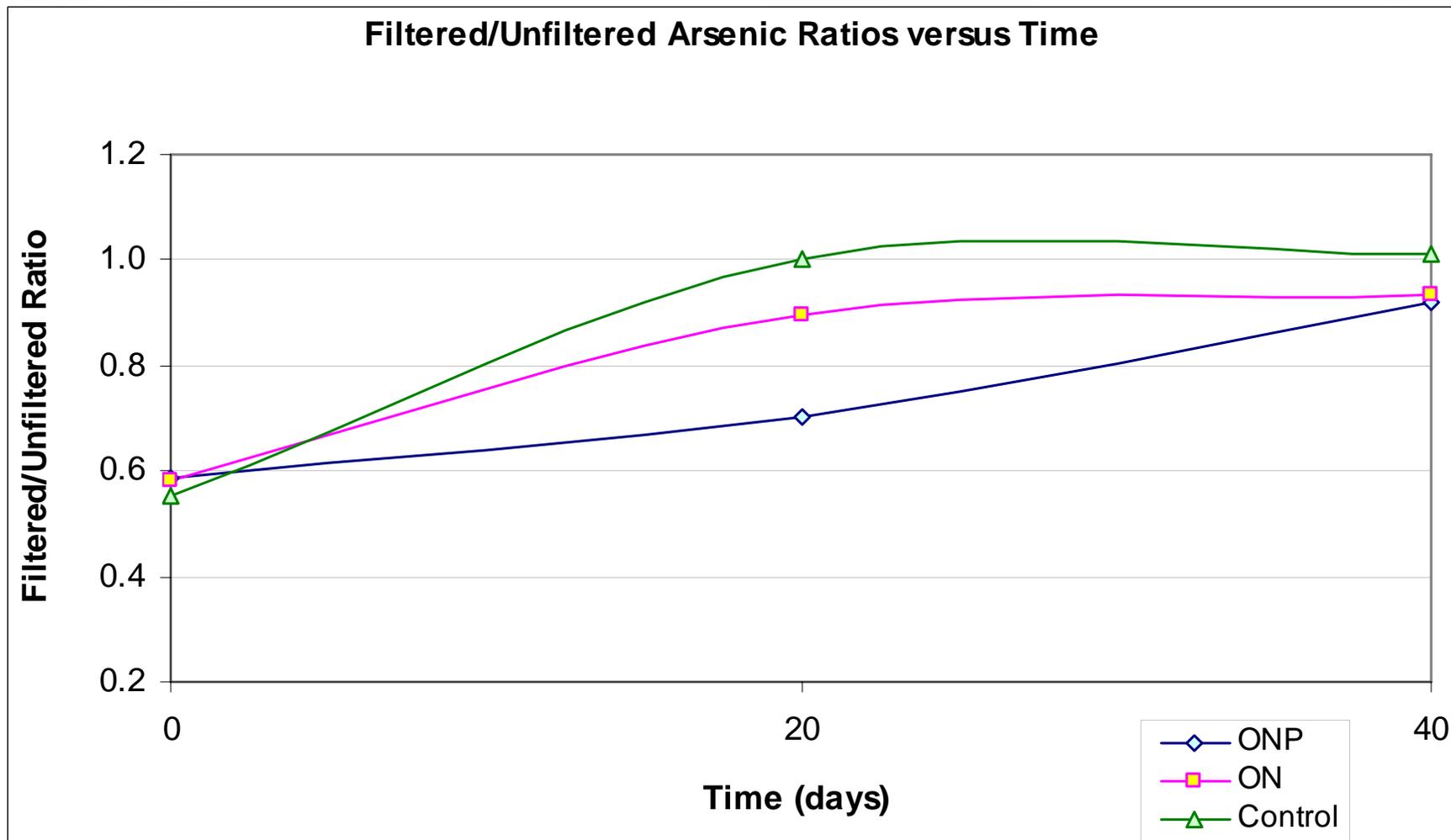
Respirometer



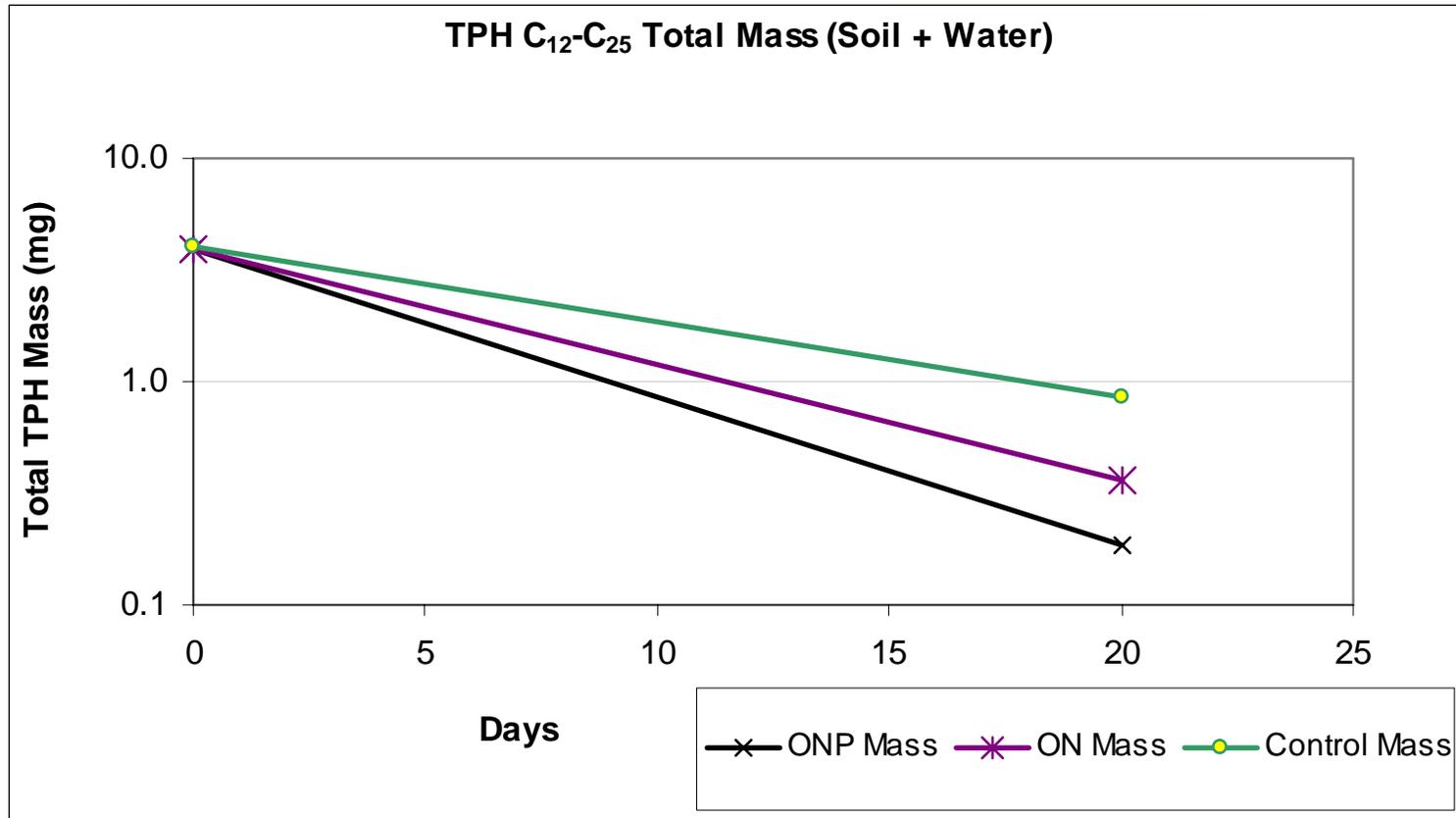
Results - Arsenic



Results - Arsenic

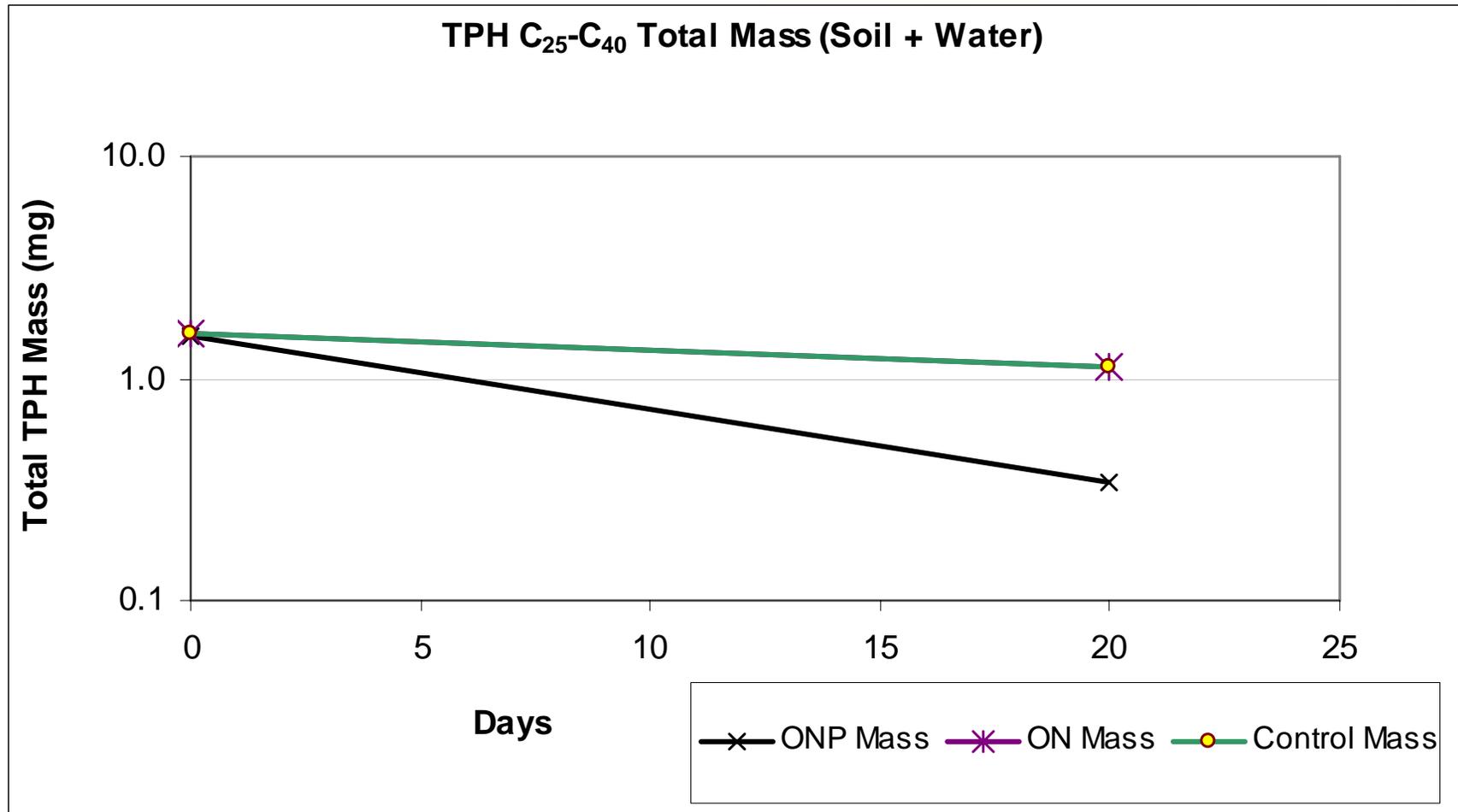


Results – Total Petroleum Hydrocarbons



Note: Similar study completed in 1999 (Site Bioassessment and Treatability Study Results indicated **40% reduction** in diesel range organics for treatment of air sparge + nutrients

Results – Total Petroleum Hydrocarbons



Conclusions



- **Test results at Day 20 showed an average 40 percent decrease in filtered arsenic concentrations in the ON and ONP treatments.**
- **Addition of phosphate, along with nitrogen-based amendments, accelerates petroleum hydrocarbon degradation rates.**
- **Reducing conditions re-established after Day 20 as oxygen no longer sparged into system. Total TPH mass was significantly reduced, however, residual mass remained.**
- **Recommend that this technology be tested in field as part of feasibility study.**



Comments or Questions ?



Field Efforts PCB Remediation Basewide Transformer Vaults

February 5, 2008
NAVSTA Treasure Island
BCT/RAB Meeting

Transformer TX-152 (1)



Transformer Pad Located Near Building 461. Asphalt Sampling has been Completed at this Location.

Transformer TX-152 (2)



Transformer Located Next to Building 461.

2

Transformer TX-152 (2)



Soil Removal from location prior to Sampling

3

Transformer TX-151 (EP108-1)



Transformer Pad Located Next to Site 6 and Water Treatment Plant

4

Transformer T-1102



Transformer Located near Ave. M and California Ave.

5

Transformer T-1102



Soil Removal from Location Prior to Sampling

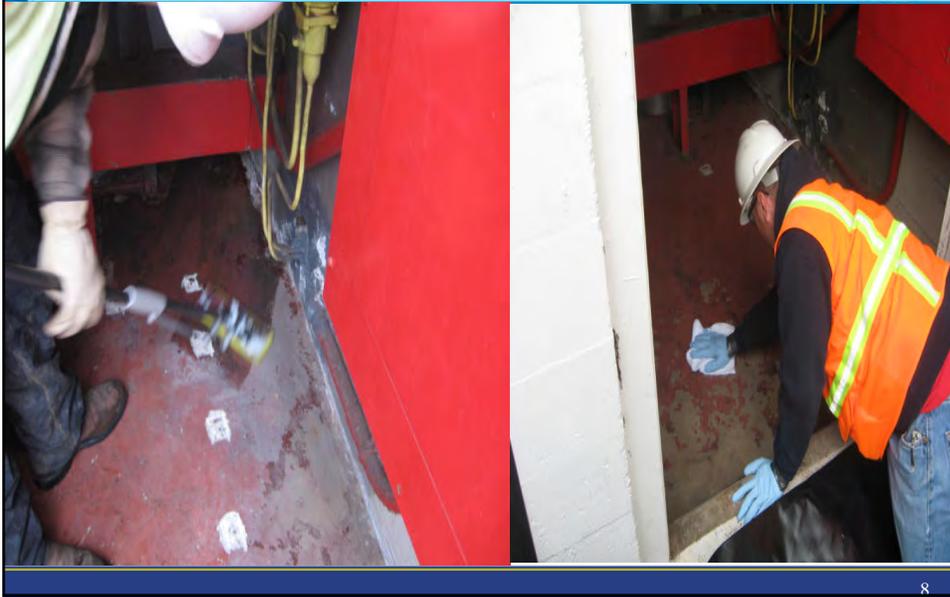
6

Building 240 Vault Cleaning/Encapsulation



7

Building 240 Vault Cleaning/Encapsulation



Building 240 Vault Cleaning/Encapsulation



Building 240 Vault Cleaning/Encapsulation



Completed Vault

10

Building 180 Vault Cleaning/Encapsulation



11

Building 180
Vault Cleaning/Encapsulation



12

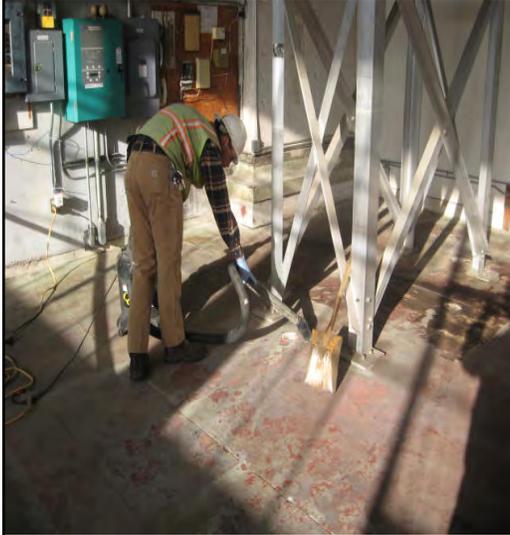
Building 180
Vault Cleaning/Encapsulation



Completed Work

13

Building 3 Cleaning/Encapsulation



14

Building 3 Cleaning/Encapsulation



15

Building 3 Cleaning/Encapsulation



16

Building 3 Cleaning/Encapsulation



17



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

February 5, 2008
NAVSTA Treasure Island
BCT/RAB Meeting

SWDA Restoration



Placement of concrete

SWDA Restoration



SWDA Restoration



Completed Pavers at Building 1237 Unit A Backyard

SWDA Restoration



Completed Pavers at Building 1235 Unit D Backyard

SWDA Restoration



Placement of New Asphalt along Bayside

SWDA A&B Excavation



SWDA A&B Excavation



SWDA A&B Excavation



SWDA A&B STATUS AS OF JANUARY 24, 2008



EXCAVATION DEPTH

- = 1 ft bgs
- = 2 ft bgs

SWDA A&B Excavation



SWDA A&B SOIL DISPOSAL



Trucks Being Loaded with Waste Soil Along Perimeter Road

SWDA A&B SOIL DISPOSAL



RADON SAMPLING



- Radon Sampling begin on January 7 and samples collected on January 10 and 11, 2008 Allowing a 3-Day Exposure Duration.
- All the Sample Results were below the Laboratory Detection Limit of 0.3pCi/L

12

SOIL TRANSPORTATION and DISPOSAL



Class I Soil Removal:

- 356 Loads = Roughly 8,010 Tons

Class II Soil Removal:

- 316 Loads = Roughly 6,162 Tons

**Soil Stockpiled in Cells to be Removed =
Roughly 338 Tons Class I and Roughly 195
Tons of Class II Soil.**

13

BIN STORAGE AT SITE 6



To Date at Site 6:

Class I = 57 Bin's

Class II = 70 Bin's

(Class I & II) = 17 Bin's

Total Soil Stored = Roughly 2,448 Tons

- **Each Bin contains roughly 17 tons of Low Level Radiological Waste**
- **Bins are Currently Being Weighed and Sampled by EMS**
- **EMS will be Removing Bins for Disposal Starting the 18th of February**

14

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, April 15th at 7:00 PM

James.b.sullivan2@navy.mil

15



2007 LOOK BACK/2008 LOOK AHEAD
Environmental Cleanup Program Activities

February 5, 2008
NAVSTA Treasure Island
BCT Meeting



2007 Accomplishments



CERCLA Field Work

Site 12

- ✓ Arsenic Pilot Study - Started December 06
- ✓ PCB Indoor Air Sampling at Halyburton Court - Completed December 06
- ✓ Solid Waste Disposal Areas (SWDAs) Non-time Critical Removal Action - Started February 07

Sites 21 and 24

- ✓ Sites 21 and 24 Treatability Study - Ongoing

3

2007 Accomplishments



Other Field Work

- ✓ Quarterly Groundwater sampling at Sites 6 and 25 - January 07, August 07
- ✓ Radiological Investigation at Bldgs 233, 343, 344
- ✓ PCB Abatement - Started December 07

4

2007 Accomplishments



Completed Final Documents

CERCLA

- ✓ Final Site 21 Remedial Investigation (RI) Report - February 07
- ✓ Final Site 31 Feasibility Study (FS) - February 07
- ✓ Site 12 Action Memorandum - February 07
- ✓ Site 12 Non-Time Critical Removal Action (NTCRA) Work Plan for SWDAs - March 07
- ✓ Site 12 Halyburton Court Indoor Air Evaluation Technical Memorandum - July 07
- ✓ Site 12 Annual Groundwater Monitoring Report - January 08

5

2007 Accomplishments



Completed Final Documents (Continued)

CERCLA (Continued)

- ✓ Final Site 27 Lead Shot Field Screening Level White Paper - January 2007
- ✓ Site 27 Sampling and Analysis Plan (SAP) - January 08
- ✓ Tier 1 Screening Level Risk Assessment (SLERA) for Sites 6, 12, 24, 30, 31, 32, and 33 - March 07
- ✓ Sites 9 and 10 Record of Decision (ROD) - August 07

Other

- ✓ Building 233 Radiological Survey Report - January 07
- ✓ Basewide Radiological Support Work Plan - August 07
- ✓ Site Management Plan - December 07
- ✓ PCB Work Plan - December 07

6

2007 Accomplishments



Community Relations Completed Activities

- ✓ Conducted 23 Interviews for the Community Relations Plan (CRP)
- ✓ Island Times Newsletter, Volumes 12 and 13; each mailed to over 1,100 people
- ✓ Fact sheet - Notification of Soil Remediation Activities
- ✓ One Public Information Session for Site 12 SWDA Removal Action
- ✓ Two updates to the General Environmental Fact Sheet

7

A photograph of a telescope lying on an old, yellowed map. The text "2008 LOOK AHEAD" is overlaid in a blue, serif font. The background is a warm, golden-brown color, suggesting a sunset or sunrise over a landscape.

2008 LOOK AHEAD

Upcoming in 2008



CERCLA Field Work

Site 12

- ✓ Arsenic Pilot Study - TBD
- ✓ SWDA NTCRA - February 07 - Estimated June
- ✓ Removal Action Radiological Soil Disposal - TBD
- ✓ Groundwater Sampling - May

Sites 21 and 24

- ✓ Sites 21 and 24 Treatability Study - Ongoing

Site 27

- ✓ Sediment Investigation - TBD

9

Upcoming in 2008



Other Field Work

- ✓ Quarterly Groundwater sampling at Sites 6 and 25 - January 08
- ✓ PCB Abatement - Ongoing
- ✓ Site 25 Soil Sampling - TBD

10

Upcoming in 2008



CERCLA Related Documents

- ✓ Final Site 32 RI Report
- ✓ Final Site 33 RI Report
- ✓ Final Sites 8, 28, 29 RI Report
- ✓ Final Site 11 RI Report
- ✓ Final 2007 Groundwater Status Report for Site 12
- ✓ Final Site 12 Arsenic Pilot Study Work Plan
- ✓ Final Site 24 RI/FS Report
- ✓ Final Site 21 FS Report
- ✓ Final Sites 21 and 24 Treatability Study Work Plan
- ✓ Final Sites 30 and 31 Proposed Plans
- ✓ Final Soil Gas Investigation SAP

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Upcoming in 2008



CERCLA Related Documents

- ✓ Soil Gas Investigation Results Technical Memorandum
- ✓ Draft Site 12 NTCRA Completion Report
- ✓ Draft Site 24 Proposed Plan/ROD
- ✓ Draft Sites 32 and 33 FS Reports
- ✓ Draft Site 27 FS Report
- ✓ Draft Sites 30 and 31 ROD

12

Upcoming in 2008



Other Documents

- ✓ Final PCB Summary Report - February
- ✓ Final 2006 Annual Groundwater Status Report for Sites 6 and 25
- ✓ Final 2007 Groundwater Status Report for Sites 6 and 25
- ✓ Final Status Survey Reports for Bldgs 233, 343, 344

13

Upcoming in 2008



Community Relations Activities

- ✓ Complete Community Relations Plan (CRP) - April
- ✓ Island Times Newsletter, Volumes 14 and 15
- ✓ Site 12 Radiological Information Sheet
- ✓ Radiological Program Fact Sheet
- ✓ Housing Area Open House/Information Session
- ✓ Public Meetings for Sites 30 and 31 Proposed Plans
- ✓ Continued updates to the General Environmental Fact Sheet

14



Community Relations Plan 2008 Update

February 5, 2008
NAVSTA Treasure Island
RAB Meeting

Outline



- Purpose of Community Relations Plan (CRP)
- CRP Process
- Interview Results
- Recommendations for Community Relations (CR)
- Schedule



CRP Purpose



- Describe the community on NAVSTA TI and the larger community of San Francisco
- Identify the current level of community interest in, or concern about environmental activities
- Describe past CR activities
- Outline planned CR activities that will facilitate two-way communication between the Navy and the community; and
- Meet all CR regulatory requirements for the environmental cleanup program at NAVSTA TI.

CRP Process



- Prior to this update, interviews were last conducted in 2002, site and contact information was last updated in 2006
- The Navy conducted 23 new interviews between August and November 2007
- Used new interview data to gauge the level of interest, areas of interest, and best methods for communication to the community and other interested parties about the Navy's environmental program
- Updated the list of CR activities, site status, and contact information

Interview Results



2002

- The average awareness of the environmental cleanup program was medium.
- A majority of interviewees received information about the environmental cleanup program from work, family and friends.
- At least half of the interviewees did not have confidence in the regulatory agencies, primarily because they were unsure of their role in the cleanup at NAVSTA TI.

2007

- Respondents rated their level of knowledge about the environmental cleanup program as medium to high.
- The majority of interviewees noted they received their information from Navy mailings and speaking directly with the Navy.
- A majority had confidence in the oversight of the regulatory agencies and mentioned seeing them as active participants in the cleanup at NAVSTA TI.

Interview Results (continued)



- There is a moderate level of concern or interest in the environmental cleanup program
- Interviewees requested more information about:
 - Progression of the cleanup
 - Duration of the cleanup
 - Impacts to residents and tenants
- The top three concerns or interests regarding environmental cleanup at NAVSTA TI include:
 - Keeping residents/tenants informed
 - Timeline/delays and the overall plan for cleanup and transfer
 - Health effects to current residents from current work or conditions

Recommendations



- Distributing a community-friendly progress chart and timeline for remaining activities
- Providing regular briefings to local community organizations and at established community meetings
- Posting signs and notices announcing key milestones and contact information at bus stops and at the Ship Shape Building on TI
- Developing an electronic mailing list
- Maintaining several current outreach methods including:
 - The RAB
 - Navy's web page
 - Information repositories
 - Community mailing list

Schedule



- The draft CRP will be submitted to the RAB via email on February 11, 2008
- Comments are due on March 11, 2008
- Planning to finalize the document in early April 2008

**Naval Station Treasure Island
Environmental Cleanup Program
Document Tracking Sheet
February 2008 - July 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						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	Priority Level							
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	✓	✓	✓	✓	✓		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	✓	01/24/08	✓	01/31/08	✓	Field investigation planned for early 2008.
	RPM: Charles Perry																									
	PM: Katie Henry																									
5	Sites 8, 28, and 29 Revised Remedial Investigation Report	104	07/23/07	✓	08/10/07	✓	11/19/07	✓	12/19/07		X		✓		4	03/10/08		03/24/08		03/31/08		04/21/08		05/05/08		Water Board deferred to DTSC by email 1/15/2008.
	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**		TBD**																					
	PM: Jean Michaels																									
7	Soil Gas Investigation SAP	117	02/28/08		03/13/08		03/30/08		04/21/08							05/17/08		05/21/08		05/21/08		06/04/08		06/11/08		
	RPM: James Whitcomb																									
	PM: John Warmerdam																									
Sullivan Consulting Group/Tetra Tech EM Inc. - Non Petroleum Related Documents																										
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	✓	02/06/08	✓	DTSC provided comments on draft on 8/30/2007.
	RPM: Scott Anderson																									
	PM: Christopher Ohland																									
9	2006 Annual Groundwater Status Report, Site 12	CLIN0002	03/02/07	✓	03/05/07	✓	03/26/07	✓	05/02/07	✓	✓	✓	X	✓		12/07/07	✓	NA		01/19/08	✓	01/19/08	✓	01/23/08	✓	EPA deferred to the Water Board's review of the document (dated 26 April 2007).
	RPM: James Whitcomb																									
	PM: Hannah Thompson																									

**Naval Station Treasure Island
Environmental Cleanup Program
Document Tracking Sheet
February 2008 - July 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							
Sullivan Consulting Group/Tetra Tech EM Inc. - Non Petroleum Related Documents (Continued)																										
10	2006 Annual Groundwater Status Report, Sites 6A and 25 RPM: James Whitcomb PM: Hannah Thompson	CLIN0002	04/24/07	✓	05/04/07	✓	06/12/07	✓	07/12/07	✓	✓	x	✓				12/21/07	✓	NA	02/11/08	02/18/08	02/25/08				
11	2007 Annual Groundwater Status Report, Site 12 RPM: James Whitcomb Hannah Thompson	CLIN0002	04/24/08		05/04/08		06/12/08		07/12/08								08/09/08		NA	09/08/08	09/18/08	09/29/08				
12	2007 Annual Groundwater Status Report, Sites 6 and 25 RPM: James Whitcomb Hannah Thompson	CLIN0002	04/24/08		05/04/08		06/12/08		07/12/08								08/09/08		NA	09/08/08	09/18/08	09/29/08				
Shaw Group																										
13	PCB Work Plan RPM: Scott Anderson PM: Pete Bourgeois	FZN1	03/19/07	✓	04/10/07	✓	04/26/07	✓	05/23/07	✓	x	x	✓	✓			10/12/07	✓	10/19/07	✓	TBD	TBD	12/03/07	✓		
14	Site 21 and Site 24 Work Plan RPM: Scott Anderson PM: Pete Bourgeois	FZN1	10/23/07	✓	10/30/07	✓	01/22/08	✓	02/24/08								2	TBD		TBD	TBD	TBD	TBD			
15	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	✓				3	TBD		TBD	TBD	TBD	TBD	EPA deferred comments to DTSC/Water Board via email 1/11/2008.		
Tetra Tech EM, Inc.																										
16	2007 Site Management Plan RPM: Charles Perry PM: Marcie Rash	FZN6	05/24/07	✓	06/15/07	✓	06/22/07	✓	07/25/07	x	✓	✓	✓	NA				NA		NA	12/17/07	✓	12/17/07	✓	12/21/07	✓
17	Community Relations Plan 2007 RPM: James Sullivan PM: Marcie Rash	FZN6	12/05/07	✓	01/28/08	✓	02/11/08		03/11/08									03/25/08		03/25/08	03/25/08	04/01/08	04/07/08			
18	Island Times Newsletter #14 RPM: Charles Perry PM: Marcie Rash	FZN6	02/08/08		02/22/08		03/04/08		03/18/08									NA		NA	03/27/08	04/03/08	04/10/08			

**Naval Station Treasure Island
Environmental Cleanup Program
Document Tracking Sheet
February 2008 - July 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	Date Due	Agency Comments					Priority Level	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		
Tetra Tech EM, Inc. (Continued)																					
19	Fact Sheet: Radiological Program Update	FZN6	TBD	TBD	TBD	TBD							1	TBD	TBD	TBD	TBD	TBD			
	RPM: James Whitcomb																				
	PM: Marcie Rash																				
Barajas & Associates, Inc.																					
20	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																				
21	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																				
22	Site 11 Remedial Investigation Report	24	01/18/08	✓	02/17/08	03/16/08	04/15/08								TBD	TBD	TBD	TBD	TBD		
	RPM: Scott Anderson																				
	PM: Margaret Berry																				
Tetra Tech EC, Inc.																					
23	Final Status Survey for Building 343	21	12/26/07	✓	01/31/08	02/14/08	03/13/08								TBD	TBD	TBD	TBD	TBD		
	RPM: James Whitcomb																				
	PM: Brian Maidrand																				
24	Final Status Survey for Building 344	21	01/02/08	✓	01/31/08	02/15/08	03/13/08								TBD	TBD	TBD	TBD	TBD		
	RPM: James Whitcomb																				
	PM: Brian Maidrand																				
25	Scoping Survey Report for Building 233	21	01/04/08	✓	02/11/08	02/25/08	03/24/08								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.

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

Grey shading indicates the document is finalized.
Blue shading indicates agency review comments are due within the next 60 days or are outstanding.
Yellow shading indicates documents that will be issued draft or final within the next 60 days.

**Naval Station Treasure Island
Navy Field Schedule**

February 2008 -
April 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 14	Start: 03/03/08 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 14	Start: 03/03/08 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 15	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 13	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 4	Start: TBD Finish: TBD	Charles Perry (619) 532-0911	CTO 043	Katie Henry (415) 222-8209	Hannah Thompson (415) 321-1788	
Sullivan								
7	Sites 6 and 25 Groundwater Sampling <i>Sites 6 and 25</i>	Doc 12	Start: 01/28/08 Finish: 1/30/08	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 11	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**

February 2008 -
April 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: 12/05/07 Finish:	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.