



Meeting Summary

Hunters Point Naval Shipyard Community Informational Meeting

August 24, 2011

MEETING TIME/DATE: Wednesday, August 24, 2011, 6:00 p.m. to 8:00 p.m.

MEETING LOCATION:: Asian Pacific American Community Center (APACC)
2442 Bayshore Boulevard, San Francisco, CA 94124

MEETING TOPIC Overview of Cleanup at Parcel E-2

I. Welcome/Introductions

Keith Forman (U.S. Department of the Navy [Navy]) introduced himself and welcomed participants to the Hunters Point Naval Shipyard (HPNS) Community Meeting. He also introduced Matt Robinson (Community Involvement Manager) and the regulatory agency representatives who work on HPNS, including Ryan Miya (California Department of Toxic Substances Control [DTSC]), Craig Cooper (U.S. Environmental Protection Agency [EPA]), Jackie Lane (EPA) and Ross Steenson (California Regional Water Quality Control Board [Water Board]). Mr. Forman noted he represents the Navy at HPNS and oversees the cleanup program at HPNS. The regulatory agency representatives ensure that the cleanup is done effectively and is protective of human health and the environment.

The purpose of this meeting was to provide an overview of the cleanup activities on Parcel E-2, where the HPNS landfill is located. Specifically, the meeting answered the following questions:

- What is the history of Parcel E-2?
- What do we know about Parcel E-2?
- What do we know about the landfill?
- What cleanup actions have already taken place?
- What's next?

II. Ground Rules

Mr. Robinson provided an explanation of the meeting's ground rules. Participants were asked to respect other participants, speak one at a time, and to raise hands for questions/comments. Mr. Robinson also noted there is time for everyone to ask their questions. It was explained that if a long or detailed response is warranted, the question will be recorded as an action item so that the topic can be adequately addressed in the future.

III. History and Overview of Parcel E-2 Cleanup

Mr. Forman provided an overview of the cleanup activities at Parcel E-2. Following is a summary of the presentation.

What is the history of Parcel E-2?

Parcel E-2 is located in the southwest portion of HPNS near Yosemite Slough. Parcel E-2 faces Candlestick Park. Parcel E-2 comprises approximately 48 acres of the 450 acres of land and 490 acres of San Francisco Bay that make up HPNS. Parcel E-2 was created in the 1940s by filling in the San Francisco Bay using soil, bedrock, and construction debris. The landfill was created by 1955 and was operated as a landfill by the Navy starting in 1965.

Mr. Forman presented a series of slides showing the fill history at Parcel E-2 from 1946 to 1986. The slides showed that the only filled area in 1946 consisted of what is now called the East Adjacent Area. This area was filled during the shipyard expansion in the early 1940s. Filling began from the west (non-Navy property). By 1965, Navy operations at the landfill had begun and consisted primarily of filling in the eastern portions of Parcel E-2. Navy operations at the landfill were nearly complete in 1969, with only a narrow channel remaining. By 1974, the Navy's placement of waste at the landfill was completed and a soil cover (2 feet thick) had been placed and compacted over top of the waste.

What do we know about Parcel E-2?

Mr. Forman presented an investigation timeline for cleanup of Parcel E-2. The timeline showed the Navy has performed several early cleanup actions (referred to as "removal actions"). From 1976 to 1986, the Navy leased HPNS to other corporations who worked at the property. The Navy tracked those industries and is cleaning up contaminants left behind. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, provides the framework for the investigation and cleanup of sites at HPNS. The process begins with investigating the historic activities that occurred at the site, and then identifying the location and size of the remaining contamination that resulted from those historic activities.

The Navy undertook landfill gas investigations and installed a monitoring system from 2002 to 2004. Currently, the Navy is in the field removing polychlorinated biphenyls (PCBs) in the identified hot-spot areas. The PCB fluids were used in transformers and braking systems and also stored at the shipyard. Some of these PCBs were spilled in the past at the shipyard; however, PCBs are no longer used. The bus tours this weekend will show the progress of this cleanup.

Mr. Forman presented a map that indicated Parcel E-2 is divided into four areas to help evaluate the site. These areas include the landfill area, the panhandle area, the shoreline area along the Bay, and the adjacent area to the east of the landfill. Some high lead levels, along with PCBs, have been found in the east adjacent and panhandle areas. Parcel E-2 also includes land that is closest to Candlestick Park, the Bay, and slough. This area will be turned into a wetland.

From 1998 to 2008, the Navy performed investigations, which included sampling soil, soil gas and groundwater, as well as investigating trenches. Mr. Forman presented a map that showed some of the sites where the Navy performed these environmental investigations that included

124 soil borings, 40 investigation trenches, 103 groundwater monitoring wells, and 32 soil gas monitoring probes. Environmental samples were collected from these borings, trenches, groundwater monitoring wells, and soil gas monitoring probes resulting in 1,113 soil samples, 754 groundwater samples, and over 3,000 soil gas samples.

What do we know about the landfill?

The Navy continues to monitor portions of Parcel E-2 on a regular basis. While collecting environmental samples, the Navy has also obtained new data on the type of waste in the landfill. The waste includes construction debris, such as wood, steel, concrete, and soil; municipal-type trash, such as paper, plastic, glass, and metal; and industrial waste, such as sandblast waste, low-level radioactive material, paint sludge, solvents, and waste oils containing PCBs. The landfill was a potential disposal area for wastes resulting from the decontamination of ships used during atomic testing. The Navy also deposited very large construction debris in this area to expand the size of the base. In addition, large chunks of concrete with rebar and sandblast waste were disposed of in the landfill. In 1974, the Navy ended waste disposal in the landfill and covered the landfill with a minimum of 2 feet of soil.

What cleanup actions have already taken place?

The Navy has already performed several removal actions at Parcel E-2 to address contamination. From 1997 to 1998, a groundwater extraction system was installed and the Navy determined the groundwater was safe enough to be pumped in the sanitary sewer system. A gas removal system was installed to keep gas within the boundaries of the landfill. This is a feature found in almost every landfill.

In 2000, a fire smoldered underneath the landfill. As a result, the Navy installed a better cap and methane collection system to help control the fire and prevent future fires. Along the shoreline, PCBs, gas/oil spills, metal fragments, tires, and other debris have been found. Metal slag (molten metal) was removed during a removal action from 2005 to 2007. During the removal the Navy discovered some low levels of radioactive chemicals were also present. As a result, the Metal Slag Area Removal Action resulted in removing of 8,200 cubic yards of contaminated soil and sediment, including 119 cubic yards of material with levels of radioactive chemicals. This soil was excavated and disposed of offsite. While the shoreline was being rehabilitated, a silt curtain was placed along the shoreline.

The PCB Hot Spot Area Removal Action (2005 to 2007) included removing 44,500 cubic yards of contaminated soil, including 511 cubic yards of material with levels of radioactive chemicals. The Navy also removed approximately 1,500 cubic yards of debris from the excavation. The soil and debris excavated from the southwest portion of Parcel E-2 was disposed off site. The first phase of the removal action was completed in 2007. The Navy backfilled the area with 53,400 cubic yards of clean imported soil (18,300 cubic yards were obtained from Bay Area Rapid Transit District (BART) and 35,100 cubic yards were imported from elsewhere).

The second phase of PCB Hot Spot Removal Action is ongoing. To date, the Navy has excavated approximately 25,500 cubic yards of material and imported 35,000 cubic yards (about 2,000 truckloads) of clean imported soil for backfill. The Navy has also removed approximately 2,000 cubic yards of debris from the shoreline and filling with clean backfill.

There are low levels of radiological debris within the landfill. The debris is scanned for radiological impact before it is taken off site for disposal. This site is similar to other landfill areas in the Bay Area. Glow-in-the-dark paint is the most commonly found source for radiological contaminated debris. The Navy continues to use glow-in-the-dark paint on ships, but it no longer contains radium. The metal wires in the debris will be recycled and the profits will go back to the federal government. A battery storage/disposal area along the eastern edge of the landfill was excavated as part of the ongoing PCB Hot Spot removal action. Battery parts along with over 4,000 cubic yards of lead-contaminated soil were removed and that hole is still open.

Mr. Forman then showed a series of before and after pictures of the PCB Hot Spot sites along the shoreline and the debris that was removed. In summary, the landfill has been investigated with radiation surveys, soil samples, trenches, and groundwater samples. The Navy has discovered the landfill contains waste similar to other landfills around the Bay – municipal-type waste, with some amounts of industrial waste and low-level radiation, primarily glow-in-the-dark dials, which can be safely contained under the engineered cap. Finally, the proposed closure of the landfill is consistent with EPA's national policy, is similar to other landfill closures around the Bay, and will be protective of human health and the environment.

What's Next?

The Navy is proposing to remove hot spots from the landfill and close the landfill. The Navy must be proactive in protecting human health and the environment for the site to be turned over to the City's Redevelopment Agency. The Proposed Plan for Parcel E-2 will be released on September 7, 2011. The Proposed Plan will be discussed at an upcoming public meeting on September 20, 2011. More information about the landfill and the activities the Navy is planning to conduct prior to closure will be presented during the meeting. Public comments can be submitted during the meeting. The Record of Decision (ROD) is scheduled to be released in summer 2012. The ROD is the document that will summarize the final remedy that is selected.

IV. Open Forum Public Comments

Mr. Forman facilitated a 30-minute open forum where questions and answers were discussed. Meeting participants were asked to limit their questions to one question at a time. Following is a summary of the open forum discussion at the meeting.

Marlene Tran – Are local contractors hired to do the work?

Keith Forman – Yes, the Navy hires local contractors. The Navy hires local people to do the work and have a robust program to encourage contractors to use local people and local unions. The Navy also tracks contributions to the local economy, such as where the Navy contractors buy their tires, ice, and supplies. The Navy encourages them to use local business for those types of incidentals. The number of community people working on HPNS varies throughout the year based on the current projects at HPNS.

Marlene Tran – How many local people have been hired to work on HPNS?

Keith Forman – It varies based on the time of year and which projects are currently in the investigation phase. When the Navy is in the investigation phase, the Navy is able to employ more local people. During

the reporting phase of the CERCLA process, the actual report writing does not require many workers. In 2011 the Navy spent an estimated \$800,000 on local labor for work at HPNS.

Marlene Tran – How have the living organisms in San Francisco Bay around the landfill been affected by the landfill?

Keith Forman – The Navy has studied the San Francisco Bay and actually owns the portion of the San Francisco Bay that is immediately adjacent to Parcel E-2. The first step is to clean up the source of the contaminants before they can enter the San Francisco Bay. In terms of impacts to organisms in the San Francisco Bay, organisms within the top 2 feet of sediment have the potential to be impacted by historical contaminants, but the Navy has not seen contaminants in water samples collected from the San Francisco Bay. This part of the San Francisco Bay floor is covered with approximately 1 centimeter of sediment per year. As a result, some of the historical contaminants are deeper than the top 2 feet of sediment, where most organisms are found.

Ryan Miya – There are still plans to do more sampling and removal actions in the San Francisco Bay and these areas will be included as part of Parcel F investigations. The PCBs near the shoreline have the potential to build up and bioaccumulate in the environment; therefore, the regulators appreciate the Navy's removal of the source area on land because it prevents more PCB contamination from migrating into the San Francisco Bay.

Marlene Tran – Is there a fence around the area to prevent illegal dumping and fishing?

Keith Forman – There is a fence line around the entire site and a double fence line around many portions of the site. The Navy dedicates budget to security and repair of those fences. The Navy has to repair these fences almost daily. The damage to the fences appears to be the result of people cutting the fences so they can steal items from HPNS rather than for illegal dumping. For example, the Navy had an irrigation system on the landfill, which had copper wiring and thieves cut the fence to remove all the wiring. They have also had problems with people stealing fire extinguishers from the buildings on HPNS.

Raymond Tompkins – Mr. Tompkins commented that this presentation should have been given on HPNS. There is a lot of emotion about Parcel E-2, and he believes it would be far more appropriate to do a public meeting at HPNS prior to the September 20, 2011 Proposed Plan meeting. He feels the public needs additional time to review big documents.

Keith Forman – Even though the Proposed Plan document is 28 pages, the Navy is including two fact sheets along with the Proposed Plan to help highlight the major points of the Proposed Plan.

Raymond Tompkins – Given the San Francisco Bay will rise about 6 feet, how will water pressure affect the landfill cap?

Keith Forman – The Navy has been told to accommodate sea-level rise up to 10 feet in the design detail of the landfill cap, which comes after the conceptual decision outlined in the Proposed Plan and ROD. Following the ROD, the Navy will begin preparation of the conceptual design.

Raymond Tompkins – For the September 20, 2011 community meeting presentation on the Parcel E-2 Proposed Plan, is the Navy still proposing a presumptive remedy? If so, Mr. Tompkins requested the Navy e-mail those sections of the proposed plan to him.

Keith Forman – The regulations regarding presumptive remedy are discussed in the Proposed Plan. If Mr. Tompkins still has questions or needs more information following his review of the Proposed Plan, then Mr. Forman requested he contact him with his additional questions.

Lindsay Dillon – Why are fewer samples taken from within the landfill than from around it as was indicated on the Parcel E-2 landfill map of the sampling locations, which was shown during presentation?

Keith Forman – The main portion of the landfill is capped and therefore, the Navy does not like to compromise that landfill cap unless necessary. The Navy has a good idea of what is in the landfill and what contamination is migrating from the landfill into other parts of HPNS. The Navy has done extensive sampling and monitoring around the edges of the landfill that is adjacent to the San Francisco Bay. Therefore, data points collected from within the landfill would actually provide the Navy with less information than samples collected adjacent to the landfill. In addition, due to all of the construction debris within the landfill, it is hard to collect samples; drill rigs encounter refusal and no samples are collected when the rig hits that debris. The Navy has a good idea of what is in the landfill because prior studies advanced trenches along the landfill boundaries and logged the different layers and types of debris that were found within the landfill.

Lindsay Dillon – Where does the waste go that Navy removes?

Keith Forman – The Navy is required to characterize all waste removed from HPNS in order to determine where the waste should go. The low-level radiation waste goes to landfills in Idaho or Utah. The rest of the waste from HPNS typically goes to landfills in the Bay Area.

Lindsay Dillon – Is this information publically available?

Keith Forman – Yes it is. The Caretaker Site Office on Treasure Island maintains the waste manifests. The office gets audited and must keep these manifests for a certain amount of time.

Marlene Tran – It appears that historically, the Navy was thoughtless in their actions which resulted in contaminated sites. Is the Navy currently repeating the same actions?

Keith Forman – It does historically appear that the Navy was thoughtless in their actions with respect to how hazardous waste was handled. However, at the time, the Navy handled the waste in a manner considered acceptable. The Navy now uses safer products in industrial operations and some of the former industrial products, such as PCB-containing oils have been banned. In addition, the Department of Defense has also improved dramatically on how it runs bases, characterizes waste, and recycles.

Raymond Tompkins – On Parcel E-2, the characterization of radioactive material is incorrect. When they had the RAB [Restoration Advisory Board] meeting in 1996 and 1997, they stated the Navy dumped radiated bodies in the landfill.

Keith Forman – This issue is often confused. The Navy had a Naval Radiological Defense Laboratory (NRDL) on the Base, which did animal testing. Research was done largely on Parcel E. Two types of experiments were conducted. One type was irradiated testing, which is ionizing radiation like x-rays you receive at the doctor or dentist. Although you could become sick if you get too much of it, you are not radioactive after you turn off the ionizing radiation. The other experiments would inject radioisotopes via IVs and shots into animals in order to study the effects on the body. The animals eventually died and were containerized in drums and then shipped off the base. This information is discussed in Section 6 of the Historical Radiological Assessment (HRA).

Raymond Tompkins – For the next presentation it would be helpful to make the distinction between the two types of radiation. In the 1990s, they collected one core sample per acre. Did they do a comparative analysis after the ground fire with the core samples? If so, will they present that data?

Keith Forman – No, there is no radiation data included in the Parcel E-2 Proposed Plan presentation. Samples to conduct a before and after comparison do not exist, because samples were not collected after the fire. The fire would not have an effect on the radiological contamination.

Raymond Tompkins – Could heat increase the volume of radioactive material in the landfill?

Keith Forman – No, but the Navy conducted a radiation scan over the entire landfill surface and along the perimeter and found extremely low levels of radiation that are within the background levels found at HPNS.

Raymond Tompkins – I am concerned that the fire went on for 3 months, which could have caused a chemical reaction and that chemical reaction would act as a vacuum. I'm concerned about the possibility that there is a synergetic effect of the fire with the radiation contamination.

Keith Forman – Mr. Forman indicated he has no knowledge of a problem that exists or synergetic effects of the fire on the landfill waste.

Sudeep Rao – What are the dimensions of the landfill if we were to look at the landfill site in three dimensions? It would be nice to see a map of the landfill in 3-D during the Proposed Plan meeting.

Keith Forman – Those types of figures are included in the Proposed Plan; however, the Navy does not have those figures tonight. The landfill covers approximately 2 acres. The landfill is shallow along the edges with an average thickness of approximately 10 feet and at the deepest point, the thickness is up to approximately 32 feet deep.

Marlene Tran – How much has this cleanup of HPNS cost the taxpayers and how much will it cost to finish cleanup at HPNS?

Keith Forman – The Navy has roughly spent between \$700 and \$750 million dollars to date. It is estimated to cost \$400 million to complete the environmental work at HPNS. The total cleanup will therefore cost \$1.1 billion to \$1.2 billion to clean up HPNS.

Marlene Tran – Can contractors and people from the local neighborhoods bid on the jobs at HPNS?

Keith Forman – There are 12 prime contractors working at HPNS, and some have subcontractors that employ contractors and people from the local community. Young Community Developers and City Build offer classes to people, train them in various trades, and work with the Navy to find job openings with the Navy contractors to fill some of these jobs. In addition, much of the field work is done with local union labor.

Raymond Tompkins – Would you consider hosting a job fair with the 12 prime contractors in the community so people can get information and apply for potential job openings?

Keith Forman – In the past, the Navy has done a job fair and Mr. Forman indicated he thinks it is a good idea to have one again. However, it is not fair to hold a job fair when there are not any jobs available. The Navy will look to see if there will be upcoming job openings at the end of this year. Mr. Forman added that the Navy is committed to hiring local people but there needs to be jobs available before the Navy will host a job fair.

Mike McGowan – I was at a Community Advisory Committee subcommittee meeting where the focus was jobs. These public meetings hosted by the Navy are not job meetings; these are

informational meetings concerning environmental cleanup at HPNS. People need to be aware that there are other ways to get job information.

Keith Forman – In the past, the Navy has had entire meetings the agenda devoted to jobs and hiring within the Navy.

Sudeep Rao – There is a Bayview Technology event in December that provides a forum for employers, and maybe the Navy can participate. I will send the event information to the Navy.

Raymond Tompkins – What is the Navy’s position on the current city policy regarding the reuse of HPNS and how is the Navy incorporating that into their cleanup plans?

Keith Forman – The Navy does not incorporate San Francisco policy or adhere to city-level ordinances because the Navy is a federal entity. The Navy has “put its best foot forward” and they are held by people in the community to a high standard.

Raymond Tompkins – What is the Navy leaving behind for the master developer to cleanup?

Keith Forman – The Navy has to clean up the contamination according to the regulator’s standards. The Navy is held to the Conveyance Agreement, Federal Facilities Agreement, and CERCLA. The City, in the Conveyance Agreement, generated the redevelopment plan and the Navy must clean up the parcels to comply with that redevelopment plan. The Navy will clean up each area of the base according to what is the proposed reuse on that parcel.

Raymond Tompkins – So what will remain for the developer?

Keith Forman – The Navy will clean up to the standards required by the redevelopment plan unless there is an early transfer; however, there is no early transfer currently scheduled for the HPNS parcels.

Marlene Tran – I think the community should be allowed to ask about jobs and I would like to encourage City Build people to do more outreach for jobs and training products.

Keith Forman – The Navy will provide Ms. Tran with contact information for City Build and will also consider meeting with City College to discuss additional training opportunities.

Action Items

1. The Navy will provide Marlene Tran with contact information for Ian Fernandez at City Build to obtain information about job and training programs.
2. The Navy will look into meeting with the Chancellor of City College to discuss additional vocation training opportunities.