

MINUTES  
NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH  
RESTORATION ADVISORY BOARD (RAB)  
AND COMMUNITY MEETING  
City of Seal Beach Fire Station # 48  
July 20, 2016

*Participants:*

*Bettencourt, Phillip/Community Member*  
*Cummings, Esther/Friends of Seal Beach National Wildlife Refuge (NWR)*  
*Hoaker, Pete/Friends of Seal Beach NWR*  
*Kovacs, Robert/Geosyntec*  
*Lee, Larry/RAB Member*  
*Lieberman, Tara/Richard Brady & Associates*  
*Niou, Stephen/California Department of Toxic Substances Control*  
*Reese, Brenda/Remedial Project Manager (RPM), Naval Facilities Engineering  
Command Southwest (NAVFAC SW)*  
*Smith, Gregg/Public Affairs Officer, NAVWPNSTA Seal Beach*  
*Smith, Patti/Friends of Seal Beach NWR*  
*Tamashiro, Pei-Fen/RAB Navy Co-Chair, NAVWPNSTA Seal Beach*  
*Thorpe, Darwin/RAB Member*  
*Vesely, Gene/RAB Member*  
*Vance, Carolyn/Friends of Seal Beach NWR*

*WELCOME*

Pei-Fen Tamashiro commenced the meeting at 6:00 pm at the City of Seal Beach Fire Station # 48 by welcoming all participants. Attendees were asked to introduce themselves and to sign-in and collect handouts at the front table. P. Tamashiro then introduced Brenda Reese, RPM, to present an overview of the Project Highlights

*Brenda Reese presented an update on site work on the Defense Environmental Restoration Program (DERP) which consists of the Installation Restoration Program (IRP) and Munition Response Program (MRP). The current status of the sites was discussed in detail by B. Reese:*

- *Site 7, Station Landfill – Semiannual Landfill Cover Inspections and Maintenance*
- *Site 40, Concrete Pit/Gravel Area – Annual Long Term Monitoring*
- *Site 70, Research, Testing, and Evaluation – Remedial Action Operating*
- *Site 74, Skeet Range – Feasibility Study/Proposed Plan*
- *Site 75, KAYO-SB Ag Well – Navy Legal Investigation for Potentially Responsible Parties (PRPs).*

*She concluded by briefly discussing the MRP Remedial Investigation status.*

Questions and answers discussed during the Project Highlights are summarized below.

**Question:** *At the AOC 2, do you have any idea when the drop tower will come down?*

**Answer:** *Because the tower is within the AOC, we first need to close the AOC. We need to go through the investigation phase first. Of the three sites, there is a good possibility that AOC 2 will be closed before the other sites. We did find small items there, so we need to make sure that there are no other munitions constituents on site. We hope that after this round of sampling, which should be finished by the end of February, and after communications with the regulators, which may take up to a year, we should be able to close the site. We are hoping this will happen before the end of 2017/ the beginning of 2018. We will work with NAVWPNSTA Seal Beach Public Works and the U.S. Fish and Wildlife Service to determine the best way take the tower down. There is some concern that the tower may be a perching point for predator birds. (The field work for the project has been postponed to Fall 2017 since the RAB meeting.)*

**Question:** *Are you going to investigate all three sites at once, or the easiest first?*

**Answer:** *They will occur at the same time because it is the most economical that way. They can mobilize once, and coordinate sampling between the sites. The field investigations will occur simultaneously, but we may be able to accelerate the closure for AOC 2.*

**Question:** *What is the latest report on material coming out of the shooting range?*

**Answer:** *It has been about a year since the renovation finished (August 2015), and monitoring occurred in February 2016 and May 2016. During monitoring we found some small pieces of fragments, but we are not finding many new bullets out there. In each of the two monitoring events, we only found 1 or 2 new bullets along Case Road. The amount of output away from the range has been reduced significantly. We have started looking into what could be the cause of the additional items. We are looking into the maintenance cycle of the range, such as raking the impact zone, monitoring more frequently, and also looking into shots from shot gun rounds. We are also looking into restricting where they can shoot shotguns from inside the range. The road will still be closed most of the time due to safety concerns when the range is hot. For monitoring purposes, it is also easier if the road is closed. Are there any concerns about the road closure?*

**Response:** *No, we just go around.*

**Question:** *On item 9 at Site 70, the remedial action objective (RAO) will be achievable in 15 years based on funding?*

**Answer:** *The total operation will take 50 years to achieve the RAO. The 15 years specified is the time required for treatment based on a computer modeling result. After the first 15 years, natural attenuation is supposed to take care of the degradation of the contaminants till it reaches the RAO.*

**Question:** *Is the range closed to Navy operations during cleanup operations?*

**Answer:** *During the cleanup activities, we will coordinate with the range to make sure the workers are safe to carry on the cleanup activities.*

**Question:** *Is the range only open to Navy personnel?*

**Answer:** *At this point, yes. There have been discussions with outside agencies requesting to use the range, especially law enforcement agencies. We are considering this, but they will have to abide by Navy's operation rules. We are still in discussions, and no decision has been reached.*

**Question:** *On Site 75, who is the end user of these waters? Is this in the Seal Beach water system?*

**Answer:** *The groundwater at the site was never used for potable water. It was used for agriculture irrigation until the well was closed.*

**Question:** *Has the Navy been absolved of responsibility for the contamination?*

**Answer:** *The Regional Water Quality Control Board (RWQCB) concurred with our conclusion that the contamination found at Site 75 was not caused by the Navy's operations. RWQCB is working with the Potentially Responsible Parties (PRPs) to continue to delineate the contamination.*

**Question:** *In the wildlife refuge, will the diving activities disturb the existing grass or the grass growth?*

**Answer:** *The divers will be briefed of the constraints. The contractor, diving team, and underwater geophysical survey team will meet with Kirk Gilligan of the United States Fish and Wildlife to discuss these concerns. The impact to eel grass and sea turtles will be mitigated during the diving operation. We are also planning on conducting an eel grass survey before we start fieldwork to get a better idea of the distribution of eel grass so that we can strategize about how to dive around and to choose the most suitable geophysical survey method during the investigation. If the water is shallow enough, we may consider using a floatation device on the water to prevent disturbing the eel grass.*

**Question:** *On Site 40, how many monitoring wells are currently active? Also, I am curious about indoor air sampling, how it is done and where.*

**Answer:** *We are going to do an entire presentation on this site coming up next. Your questions should be answered during that presentation.*

**Question:** *At Site 70, when was the last emulsified vegetable oil (EVO) injection?*

**Answer:** *The last EVO inject at Site 70 was done two years ago.*

**Question:** *Will the plume reduce in size or dissolve?*

**Answer:** *The purpose of the in-situ treatment is to treat contaminants in place. We inject EVO, and it attaches to the formation soil particles in the aquifer. When groundwater flows through, it starts dechlorinate the solvents. This will diminish the plume size over time. We may see some migration of contaminants because when you inject EVO it may push some contaminants out. We have not really seen too much pushed out based on the amount of EVO injected so far. Most has been absorbed and not much has been pushed out.*

**Question:** *Has anyone found natural petroleum seeps outside of the Site 70 area?*

**Answer:** *There are some gas stations (UST Sites) up gradient of Site 70. In our monitoring report, MTBE was detected at Site 70. This is an additive in gasoline, so this is a UST problem from upgradient of the site. However, the concentrations are not high enough, and the shallow zone is not a drinking water source, so there is not much of a concern.*

**Comment:** *In Long Beach, at Site 9, north of Seal Beach Boulevard, there is a very similar thing occurring. Seeps can come from 15 miles away, there is a lot of petroleum underground.*

**Answer:** *We did not see a significant amount of petroleum caught up in Site 70 groundwater.*

**Question:** *On the Active Sites map, there are two sites shown that have not been discussed.*

**Answer:** *Yes, those are two UST sites (UST 229 and UST 500) that have been closed over the last couple of years. The map will be updated next time.*

P. Tamashiro thanked the community members for the comments and questions and said the Navy will continue to report out to the community of the status report for all of the active sites. P. Tamashiro then presented the Site 40 Long Term Monitoring Update.

*P. Tamashiro reviewed the site location and history, a summary of remedial action and monitoring activities, and then provided details on the soil vapor monitoring, risk analysis, air sampling and upcoming activities.*

Questions and Answers discussed during the Site 40 Presentation are summarized below:

**Question:** *In terms of soil vapor monitoring, are there still concentrations trapped in the vadose zone? Are there standards for determining that risk?*

**Answer:** *You are referring to the risk assessment. Yes, some solvents are trapped in the vadose zone in vapor form. That's why we collected vapor samples to evaluate if vapor intrusion was occurring at levels exceeding regulatory thresholds.*

**Question:** *Is that below or above the lower explosive limit (LEL) of 50,000 parts per million (PPM)?*

**Answer:** *You are referring to LEL and upper explosive limit (UEL) for methane? The LEL is 5%, the UEL is 15%. There are some areas where methane is 40%, this is too rich to be considered an explosion hazard. During our annual monitoring, we would walk around the site to determine if there is any leakage of vapors around the site, especially at locations near utility openings or cracks on the ground. We have not detected such leakages. Most vapors are trapped in the ground without an exposure pathway.*

**Question:** *When you have drought conditions like we do now, is the plume less likely to move?*

**Answer:** *The drought conditions change the groundwater table elevations but not the gradient. That is the same with Site 70. Groundwater flow pretty much follows the same pattern even when groundwater level has dropped a foot or two in the drought condition.*

**Question:** *In 2014, the soil vapor monitoring, I am curious about methane at 40.6% by volume. What does that mean?*

**Answer:** *Methane was trapped in the soil formation above the groundwater table. The 40.6% was measured from a vapor monitoring well tapped into the ground. However, when the measurement was taken from the ambient level, or the breathing zone, methane gas was not detected, which meant that the methane gas dissipated very quickly once it left the vapor monitoring well. Eventually, we will have to try to release the methane gas in the ground, but at this point, no one is exposed to the methane gas trapped in the ground. The methane gas is a by-product of the groundwater treatment.*

**Question:** *The locomotives are gone, have you cleaned the road bed or tracks?*

**Answer:** *We have gradually started removing the tracks from the station.*

**Question:** *There is not a plan to deal with the soils under the roadbed?*

**Answer:** *No, not at this point.*

**Question:** *The buildings, are they in an industrial area, are they used for Navy purposes? Or only industrial purposes? Are they eligible for training or use for storage?*

**Answer:** *The site is in an industrial and non-explosive administrative area of the base. This area will most likely not be used for military operations.*

**Question:** *Because it is a non-explosive district?*

**Answer:** *The area is not for explosive operations, and the Navy will most likely not introduce explosives operations or allow military operations in this area. The only occupied building on the site is used as a warehouse and office space and will likely continue to be used for these purposes.*

**Question:** *So you would not introduce spark generating operations?*

**Answer:** *No, there is no such plan. The environmental office review all projects on this base related to land use change. We will most likely advise against any spark generating activities being brought into this area.*

**Question:** *Do the buildings contain sprinklers?*

**Answer:** *There is an emergency sprinkler system in the building.*

**Question:** *Is this water suitable for irrigation purposes or firefighting, or is it harvested?*

**Answer:** *No, the shallow aquifer at Site 40 does not produce enough for it to be used for irrigation or firefighting.*

**Question:** *Have you noticed or smelled methane on the site?*

**Answer:** *No, we have not smelled anything. The methane was introduced from injections in 2000.*

*ANNOUNCEMENTS*

P. Tamashiro announced that the next RAB meeting will likely be in January of 2017.

*RAB COMMUNITY CO-CHAIR ELECTION*

P. Tamashiro requested non-RAB community members to exit the meeting room, so the RAB community members can elect their next chairperson. After the ballots were tallied, Mr. Phillip Bettencourt was elected as the new RAB Chair. Mr. Bettencourt thanked the fellow RAB members for their votes.

*ADJOURNMENT*

P. Tamashiro adjourned the meeting at approximately 7:10 p.m.

Note: This is a meeting summary, not an actual transcript.