

RAB Minutes

NAS North Island

Restoration Advisory Board

Introduction

The forty-first Restoration Advisory Board (RAB) meeting for Naval Air Station (NAS) North Island was held on Friday, October 30, 1997, at the Coronado Public Library from 5:30 p.m. to 8:30 p.m.

Ms. Dorothy Marron, Community Co-Chair, called the meeting to order at 6:35 p.m. and welcomed RAB and community members.

RAB attendance: A. Bernardo, A. Clark, W. Crawford, L. Ewen, Alice Gimeno, L. Hunter, S. Kaupp, R. Mach, D. Marron, A. Van Rooy {L. McCauley excused}

Public attendance: M. Bonsavage, N. Clements, B. Collins, J. Kozakowski, V. Mayer, D. McCullar, R. Mello, R. Phillips, M. Pound, R. Ringor, P. Willis

APPROVAL OF MEETING MINUTES FROM SEPTEMBER 25, 1997 RAB MEETING

Ms. Ewen suggested that "the November RAB meeting" be changed to December, since there will not be a November meeting. The minutes were approved as amended.

1998 BUDGET PRESENTATION - Bill Collins

The 1998 budget for NAS North Island environmental studies and investigations is only \$6.5 million instead of \$10.2 million, since Congress has funded less. Ms. Ewen asked if the reduced funds could be the result of having completed some programs. Mr. Collins pointed out the ranking of the sites on North Island, now referred to as NBC [Naval Base Coronado].

Mr. Pound gave a brief explanation of the system used to rank sites and will supply a handout that will be included in the next RAB mailing. He said that the site rankings are based on three factors, taking the contaminant concentrations present in different media. For example, for human health a sample would be evaluated for surface soil sediment, surface water and groundwater.

Mr. Crawford asked how the NAS North Island budget integrated with NAB (Naval Amphibious Base). Mr. Collins replied that the budget was only for North Island, and that NAB had its own budget, even though it is now the same command. The bases are being handled separately. NAB's

sites are not ranked in the top 10, or even the top 100.

In addition to the 1998 budget, there is a project list for fiscal years 1999 and 2000. The goal is to clean up the sites until they have eliminated the need for the RAB .

Ms. Hunter inquired about the destination of the "radioactive investigative derived waste disposal". Mr. Collins said that he would find out. She also questioned whether the million gallon concrete tanks were scheduled for replacement. Mr. Collins told the RAB that those tanks would not be in this program, that their removal would be a military construction project, and would have to be funded by Congress. This process takes about 5 years. The Navy is now evaluating whether to restore or replace these tanks. Mr. Van Rooy explained that there are actually two projects - one for the diesel tanks and one for jet fuel tanks. Ms. Hunter stated that preventing any problems that these tanks might cause tanks was consistent with the goal of eliminating the RAB. Mr. Mach added that a third party investigator has been contracted to perform a thorough analysis on why the liner failed. It is the only liner available for this type of tank and was used successfully in Washington state. Mr. Van Rooy stated that the tanks are custom covered - they were originally built above ground and then covered. Mr. Mach said that the cost to replace the underground fuel farm with one above -ground is about \$50 million. Ms. Hunter asked for and received the phone number of the North Island fuel pump director.

Ms. Hunter described a handout she brought concerning lobbying efforts regarding 2 new Hawaiian cruise ships to be built by NASSCO.

THERMATRIX DIOXIN TESTING RESULTS - Bill Collins

Mr. Collins handed out a paper discussing PCB's and the testing, and another paper, technical in nature, showing why the Thermatrix system won't create dioxins.

COMMUNITY CO-CHAIR NOMINATIONS

Ms. Hunter nominated Dorothy Marron. Mr. Mach stated that nominations will be open at next month's RAB meeting, when elections will be held.

TAPP UPDATE - Arno Bernardo

The DoD (Department of Defense) has selected the NAS North Island RAB as the pilot for TAPP. TAPP training is being done for the Navy, Army and Air Force, and the NAS North Island staff participated in the trainings, explaining the process this RAB went through. In case of a problem, the RABs have an appeals process all the way to the Secretary of the Navy. DoD has requested feedback from this RAB, which will be done early in 1998. Ms. Hunter mentioned a bill she had heard about that would eliminate the RABs, by eliminating "any non-federally mandated committee". Mr. Mach said that TRC's are required, so were this to happen the RAB could be renamed TRC.

There was some discussion about outreach. Ms. Hunter mentioned that many people have the impression technical knowledge is a prerequisite for joining the RAB. Mr. Mach said that last time a flier was placed in the Coronado Eagle and Journal. Mr. Bernardo added that it was the responsibility of the Public Affairs Office to do outreach. It was agreed that outreach would take place after the first of the year.

SITE 5 NATURAL ATTENUATION PRESENTATION - Bill Collins/Michael Pound

Background: NAS North Island chose to do one particular demonstration for NTI - NELP

Technology 2. Site 5 is on a portion of the golf course. It used to be a municipal landfill until the early 1960's. After it was closed, some soil and grass was added to make a golf course. One area had municipal trash and another had incinerator trash. A third area, where chemical were disposed of in trenches, had some residual compounds, particularly a lot of chlorinated hydrocarbons. There is toluene, for example, which is commonly found in fuels. It serves as a good food source for the microbes. The State gave permission to run this pilot study.

The soil is showing signs of natural degradation. There is a problem with the groundwater, but it does not appear to be moving. Because of this, there is time to conduct this demonstration to determine whether this is an effective form of remediation. Parsons has contracted to do the work. After much work, the plans were sent to the state and to the Water Board, and the Navy has received approval. Ms. Hunter asked if the Regional Board signed off on this. Mr. Collins replied that they had no comment, saying that the DTSC was in charge. If this doesn't work, the information is still valuable, since this method can then be written off. The RAB will be kept informed.

Field data collection will be conducted by installing 8 new groundwater monitoring wells around this teardrop-shaped area (6 on the perimeter, 2 in the center). There will be sampling for many different compounds, but the bottom line is whether dechlorinated compounds are decomposing, whether they are degrading into other compounds that over time become safer. In the short run the compounds can degrade into something more toxic, but eventually these too are destroyed. Ms. Hunter inquired about the depth. Mr. Kozakowski said that the chemicals were found on top of the clay bed, but not below. Ms. Marron asked if these compounds eat through clay, but was told that it does not in these concentrations, and that Site 5 is not as contaminated as Site 9.

Groundwater samplings will be taken quarterly. Wells were being installed at the time of the September RAB meeting. An initial report should be available in December, definitely in time for the January RAB meeting. A draft technical report will be given to the Navy in August of 1998, and the study should be complete by October. At that time, we will know whether natural attenuation is effective for DCE, TCE and toluene. Ms. Hunter queried what would be done with the final soil. Mr. Collins replied that they will want to study it to see how it attenuates. It is possible that attenuation can be used for some chemicals, but others may require treatment by pump or soil gas system.

Mr. Kaupp brought up the point that it may require monitoring what bacteria is a function of fertilizing the golf course, and Mr. Collins said things like the irrigation schedule and the compounds added would indeed have to be taken into account. This study will go on while people are still using the surface as a golf course. Ms. Hunter asked why that part of the golf course couldn't be put aside in order to clean up the site. Only a small part of the teardrop-shaped area is on the golf course. The rest is on the flyway where planes come in. Mr. Kaupp thought it important to place a well on the edge of the fertilized area.

Ms. Hunter raised some concerns. In response to her question about what goes into the ponds, Mr. Collins informed the RAB that the contamination is lower than the bottom elevation of the ponds, and that the ponds are upstream. She expressed concerned that the groundwater was moving, and Mr. Kozakowski said that the groundwater is either not moving, moving very slowly or being degraded so quickly that it's not getting to the slough..

Mr. Collins showed a list of chemicals which they will test for. He then introduced Michael Pound to do the technical attenuation presentation.

Mr. Pound told the RAB he was with the Technical Services Division and is involved in evaluation of natural attenuation of chlorinated solvents at 16 other sites at 4 other bases. He explained that two factors are evaluated: 1) that the groundwater plume is stable or shrinking and 2)measuring

geochemical parameters indicating whether or not biological attenuation is taking place.

The absence of oxygen is required (anaerobic conditions). Microbes in the subsurface "breathe" in the chlorinated solvents. As they breathe it out, they strip off one of the chlorines. This is known as halorespiration. There is a hierarchy to which compounds are stripped first. As the compounds become less chlorinated, there is the possibility for aerobic biodegradation, which occurs when microbes that breathe oxygen can also use these compounds and strip them, creating methane, ethene, ethane and then CO₂ and water. In response to a question from Ms. Hunter, Mr. Pound explained that chlorinated hydrocarbons were dangerous because the hydrocarbon acts as a biologic reactive molecule. Mr. Mach used the analogy of a gun as the whole molecule and the chlorine as the bullet.

Mr. Pound described the first site where this process was used, at Camp Pendleton. With attenuation, the plumes do not migrate as predicted. It is important to develop a long-term monitoring plan to see if attenuation continues to work. Ms. Hunter expressed concern that the plume could grow without ever hitting one of the monitoring wells. Mr. Collins explained that the slough is runoff from the base and golf course.

There was some discussion on the effect of duck droppings on the golf course ponds. Mr. Kaupp commented that phosphorous and nitrogen are necessary for the bacteria to eat enough carbon. Ms. Hunter asked why it was necessary to do this test if there is already information. Mr. Mach said that they wanted to find out whether it would work on the circumstances present at NAS North Island. Ms. Hunter asked about the cost of the natural attenuation contract. Mr. Collins reported it was about \$350,000. Ms. Ewen asked if that was cheaper, and Mr. Collins replied that it was, and that if it works it has the potential to allow more money to go into the more difficult cleanup sites. Mr. Mach added that it is obvious that natural attenuation is taking place on Site 9, given the amount of methane coming out.

Ms. Hunter opined that there is a need to restrict watering on the golf course, that cleanup of an environmental hazard is more important than golfing.

PUBLIC COMMENTS AND QUESTIONS

Mr. Mach reported that Site 4 cleanup is done and that there should be a closeout report around February. Ms. Hunter described a couple of handouts she had brought. One was an article about the failure of a model predicting radiation leaks at Hanford, another was the Environmental Health Coalition's response to the Air Toxics notification to Coronado, and the third was the response to her request about the mercury spill. She is expecting more information.

Agenda items for the next meeting include a consultant presentation on Air Toxics Health Risk Assessment.

The next RAB meeting will be held Thursday, January 15, 1998.