

RAB Minutes

NAS North Island

Restoration Advisory Board

CTO-057

Subject: RESTORATION ADVISORY BOARD MEETING MINUTES

Thursday, December 14, 1995

The twenty-first Restoration Advisory Board (RAB) meeting for Naval Air Station (NAS) North Island was held on Thursday, December 14, 1995 in the Winn Room at the Coronado Public Library from 7:00 p.m. to 8:35 p.m.

Mr. Arno Bernardo, Navy Co-Chair for the NAS North Island RAB, called the meeting to order at 7:00 p.m. (The normal beginning time for the NAS North Island RAB meeting is 6:30; however, due to an error in the agenda that was mailed to RAB members, RAB members voted to begin this evening's meeting one half hour later than usual.) Mr. Bernardo began the meeting with a brief outline of the evening's key topics: an update on the Draft Remedial Investigation/Feasibility Study for Site 9; a discussion on the RCRA Corrective Action; a presentation on the Site 2 field work; a presentation on the Sites 9 and 11 design work; and a presentation on the NELP innovative technology for Site 9. Mr. Bernardo added an additional item to the agenda: selection of new RAB members.

Approval of Meeting Minutes from the November 9, 1995 RAB Meeting

- The November 9, 1995 RAB meeting minutes were accepted and approved.

Update on the Draft Remedial Investigation/Feasibility Study (RI/FS) for Site 9

Mike Anderson, Project Geologist with Jacobs Engineering (JEG), provided an update on the Draft RI/FS for the Chemical Waste Disposal Area (Site 9).

- Mr. Anderson began with an overview of the latest developments of the Site 9 project. He stated that the remedial investigation is approximately 95 percent complete. Mr. Anderson outlined the scope and breadth of the investigation that was conducted at the site. He explained that the investigation occurred in multiple phases; unfortunately, the first phase, conducted in 1988/89, left major data gaps. In 1993, JEG continued the investigation that began in 1988/89 in an attempt to fill the data gaps.
- Mr. Anderson explained that because the geologic data for Site 9 was not

extensive, a geophysical survey was implemented at the site as part of the remedial investigation. A crew was brought in to conduct seismic reflections (a process by which energy is put into the ground and a measurement is taken to determine the length of time the energy uses to return to its point of entry into the ground) to assist the JEG team in delineating the geophysical features of the site. Mr. Anderson showed a picture of one of the vertical cross-sections that resulted from the seismic reflections. He explained several features of the cross-section, including the presence of confining layers under the site. The confining layer, a thick clay layer found at about one hundred feet below the ground surface, confines the chlorinated solvents that are a primary concern at Site 9. Because the chlorinated solvents or dense nonaqueous phase liquids (D-NAPLs) are denser and less viscous than water, they rapidly migrate through the groundwater at the site. Thus, it was decided that the surface of the confining layer needed to be mapped to determine where the chlorinated solvents have gone.

- Mr. Anderson explained that a soil investigation was also conducted as part of the remedial investigation. The investigation involved: collecting soil samples by using a rig that collected continuous soil core; several types of geophysical investigations including a magnetic survey; and an investigation of the stratigraphy of the site. By using the information that was collected through this investigation, a conceptual site model was constructed to guide the rest of the investigation. Mr. Anderson briefly explained the model which illustrates that the groundwater is moving toward San Diego Bay very slowly along a shallow hydraulic gradient. Mr. Anderson also explained that because the recharge of groundwater at NAS North Island is low, the contaminants at the site tend to stay within the site boundaries.
- Mr. Anderson stated that a portion of the investigation was moved offshore near the site because a plume of contamination was tracked right to the shoreline. The investigation went as far as 60 feet offshore in order to further track the plume. Mr. Anderson added that the offshore investigation also involved determining the depth at which groundwater from NAS North Island actually discharges into the bay. Essentially, the purpose of the remedial investigation offshore was to determine if contaminants are reaching the bay floor.
- Mr. Anderson noted that another type of computer modeling was used to determine how long various chemicals would take to arrive at the bay under "no action". According to the model, trichloroethylene (TCE, the major contaminant at the site) would take 50 years to get from the main disposal area to the Bay. In response to a RAB member question, Mr. Anderson noted that the 50-year calculation is based on the velocity of the groundwater.
- In response to another RAB member question concerning steps taken to stop the migration of the contaminants, Mr. Anderson stated that an effort is being made to

put a system in place that will stop the movement of the contaminants.

- Mr. Anderson provided an overview of the contaminants of concern at the site, including: TCE; perchloroethylene (PCE); phenol; and cadmium. Mr. Anderson also provided an overview of the types of groundwater modeling used at the site.
- Mr. Anderson concluded his presentation with a brief discussion of the predredge survey that was conducted in 1994. The purpose of the survey was to classify the sediments as being suitable or unsuitable for ocean disposal. The sampling conducted as part of the survey found no contaminants, except one sample of semi-volatile organic compounds (SVOCs) that did not exceed the contaminant level of concern.

Presentation on the RCRA Corrective Action

Mr. Greg Holmes, Project Manager with the California Environmental Protection Agency's Department of Toxic Substances Control (DTSC), provided an overview of the relationship between the Resource Conservation Recovery Act (RCRA) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) in relation to a Corrective Action.

- Before explaining the similarities between the two regulatory acts, Mr. Holmes explained the purpose of a RCRA Corrective Action. The Corrective Action is associated with the permitting process that is required for the hazardous waste facility located at NAS North Island. North Island's permit is due for renewal and a Corrective Action, a description of the process that is to be used to remediate a site, must be submitted as part of the renewal.
- Mr. Holmes stated that because the terminology associated with the RCRA Corrective Action is similar to that of the more familiar CERCLA requirements, he thought it would help in understanding the RCRA and CERCLA process if a comparison was made between the two regulations. Mr. Holmes provided a diagram of the RCRA Corrective Action and its CERCLA equivalent.

Presentation on the Site 2 Field Work

Mr. Doug Chen, Project Manager with OHM Environmental, provided an update on the field work being conducted at the Old Spanish Bight Landfill (Site 2).

- Mr. Chen explained that the objective of the field work is to contain/cap a portion of the landfill and prevent contamination from migrating off-site. The workplan for the field work states that any material excavated from the landfill can be placed back into the landfill, but no hazardous waste can be taken off of the site. The workplan also requires OHM to provide detailed calculations showing that

the landfill will be stable in an earthquake. (OHM has met this requirement.)

- Mr. Chen stated that one truck will move through Coronado to remove any minor wastes generated through the cleanup of the site.

Presentation on the Sites 9 and 11 Workplan

Mr. Chen also provided an update on the Workplan for the Chemical Waste Disposal Area (Site 9) and the Industrial Waste Treatment Plant (Site 11). The review period for the workplan started on December 14, 1995

- Mr. Chen briefly discussed the workplan. The workplan calls for the implementation of soil vapor extraction at both sites. On-site carbon regeneration, used to remove volatile organic compounds (VOCs), will also be implemented at the two sites. Through carbon regeneration, the VOCs will be converted into liquid-phased solvents. The condensed solvents that result from both processes will be taken off site. One truck per week will be used to take the condensed solvents off-site for recycling.
- Mr. Chen explained that 4,000 gallons of liquid will be recovered and sent off site through the process that is designed for 95 percent VOC removal. It is expected that 2 million pounds of solvent will be removed from the two sites throughout the next 9 months.
- Mr. Chen stated that they are currently in the process of getting a permit from the Air Pollution Control District (APCD). Mr. Chen added that they also need to meet the Ambient Air Quality Standards, the National Emission Standards for Hazardous Air Pollutants, and perform a health risk assessment. He also stated that construction is scheduled to begin at the end of the comment period (approximately January 14, 1996). The permit is expected in mid-March, as is the installation of the treatment system.
- Mr. Holmes added that a separate California Environmental Quality Act (CEQA) comment period for the initial study (currently underway) for Sites 9 and 11 will be scheduled in the near future. Once the 30-day comment period for the initial study is complete, the work at Sites 9 and 11 will begin.

Presentation on the NELP Innovative Technology for Site 9

Mr. Mike Magee, Installation Restoration (IR) Program Manager for NAS North Island, introduced the representatives of the following organizations: EPA's Superfund Innovative Technology Evaluation (SITE) Program, CLEAN SITES, and EG & G. Mr. Magee explained that the participants in the CLEAN SITES Program are EG & G, the SITE Program, the US Navy, regulators, and private companies.

- Ms. Debbie Newberry of CLEAN SITES provided an overview of the CLEAN SITES Program. CLEAN SITES is: a non-profit organization working to accelerate the clean-up of hazardous wastes; a neutral and objective third party that has worked with involved parties at more than 80 sites to achieve voluntary private settlement and cleanup of hazardous waste sites; and a source of expertise on Superfund public policy, regulatory and technical issues.
- Ms. Newberry explained CLEAN SITES' innovative technology program that works to coordinate partnerships, evaluate technology, manage projects, support communication, and improve public policy.
- Ms. Newberry described the groups' cooperative agreement that began approximately four years ago with the US EPA. The cooperative agreement involves the joint (public and private sector) evaluation of full-scale innovative technologies or treatment designed to clean-up contaminated sites on a federal facility. It also allows participants in the program to obtain the necessary information to confidently apply innovative technologies at their sites. Furthermore, the agreement allows for the exchange of technical information within and between the public and private sectors on technology performance and application as well as getting innovative technologies accepted and used at sites for faster, cheaper and better cleanups.
- Ms. Newberry reviewed the goals and objectives of the NAS North Island partnership: evaluating both cost and performance of the NoVOCs™ technology through the full-scale, realistic remediation of a contaminated site; developing specific cost and performance measurements; determining criteria/issues for use at other sites; comparing costs associated with other technologies; and developing additional goals and objectives to meet the needs of all partners. Ms. Newberry provided a visual example of the relationship between the participants in the cooperative agreement with a diagram outlining the various roles that each participant plays in the process.
- Mr. Stan Peterson of EG & G provided an overview of an innovative technology for removing VOCs (compounds that readily transfer from a liquid phase into a gaseous phase), such as TCE. The technology acts primarily below ground except for the off-treatment portion. Mr. Peterson explained that a well will be installed at the site as part of the innovative technology. The air bubbles that form inside of the well cause the liquid-phased VOCs to transfer into gaseous phase VOCs. The process is expected to treat water within approximately 300 feet of the well.
- Mr. Peterson explained that after the transfer to gaseous-phased VOCs is complete, off-site treatment will be implemented. Carbon regeneration is one example of an off-site treatment option.
- Mr. Peterson noted that the described technology has been implemented in France

as well as at Edwards Air Force Base.

- Ms. Newberry concluded the presentation by stating that if the innovative technology is implemented at Area 3 of Site 9, for example, two additional vehicles per week will be coming on to the site.

Selection and Announcement of new RAB members

Mr. Bernardo announced that two individuals applied for RAB membership: Mr. Howard Bacon and Mr. John Machol. Mr. Bacon and Mr. Machol were unanimously accepted as members to the RAB.

General and Closing Questions and Answers/Comments

None.

Mr. Bernardo adjourned the meeting at 8:35 p.m.