

**MOFFETT FEDERAL AIRFIELD
RESTORATION ADVISORY BOARD MEETING**

MEETING MINUTES

**CITY OF MOUNTAIN VIEW POLICE/FIRE ADMINISTRATION BUILDING
1000 Villa Street
Mountain View, California**

THURSDAY, DECEMBER 14, 1995

I. INTRODUCTIONS AND MEETING OVERVIEW

Mr. Stephen Chao, Navy co-chair, opened the meeting of the Moffett Federal Airfield (Moffett Airfield) Restoration Advisory Board (RAB) and reviewed the following agenda items for this meeting:

- Meeting Overview
- Minutes Approval
- Remedial Project Manager's Meeting Report
- Subcommittee Reports
- Risk Assessment Presentation
- Community Co-Chair and Vice Co-Chair Elections
- Agenda/Schedule for January RAB Meeting

Mr. Paul Lesti, community co-chair, thanked all the members of the RAB for their support and hard work. He commented that he enjoyed serving as community co-chair and would assist his successor.

II. MEETING MINUTES APPROVAL

Mr. Lesti solicited comments on the minutes for the November 9, 1995, RAB meeting. The minutes were approved without amendment.

III. REMEDIAL PROJECT MANAGER'S MEETING REPORT

Mr. Michael Gill, U.S. Environmental Protection Agency (EPA) provided a report on the remedial project manager's (RPM) meeting held December 13, 1995.

Mr. Gill stated that the Navy completed its latest quarterly sampling event. Approximately 70 wells were sampled. He indicated the investigation at the Wash Rack site was completed. Mr. Gill noted that a report will be issued in March 1996 that interprets the data collected as a result of this sampling.

Mr. Gill also reported that those present at the RPM meeting discussed the iron curtain pilot study. He explained that the iron curtain will be installed in the area located near the water tower. He stated that water will be passively remediated. Mr. Gill further explained that the process involves the mixing of groundwater containing volatile organic compounds (VOCs) with iron to form nontoxic products.

Mr. Peter Strauss, MHB Technical Associates (consultant to the Silicon Valley Toxics Coalition [SVTC]) asked which aquifer would be tested. Mr. Gill stated that the A1 aquifer would be tested. Mr. Strauss asked Mr. Gill to state the concentrations of contaminants detected in groundwater samples from the test area. Mr. Tim Mower, PRC Environmental Management, Inc. (PRC), stated that approximately 1,300 to 1,500 parts per billion (ppb) of trichloroethene (TCE) were detected.

Mr. Gill provided an update for the RAB on the site-wide ecological assessment underway. He explained that the Navy is working to develop toxicity reference values around the bay region. These data may be used for other ecological assessments in the bay area. Dr. James McClure, Harding Lawson Associates (consultant to the MEW companies) and the Technical, Historical, and Educational (THE) subcommittee chair, asked whether the Navy will publicize this work. Mr. Gill replied that the Navy will publish the results in the journal of the Society of Environmental Toxicity and Chemistry.

Mr. Gill stated that three additional issues were discussed at the RPM meeting: 1. Building 191; 2. community involvement post-record of decision (ROD); and 3. financial assurance. Mr. Gill explained that the federal facilities agreement (FFA) has language regarding the continuation of the environmental remediation in the event of a financial impediment.

Mr. Gill announced that a public meeting will be held on January 16, 1996, in the Mountain View City Council Chambers, 500 Castro Street, Mountain View, from 7:00 p.m. to 9:00 p.m. The purpose of the meeting will be to discuss the revised proposed plan for cleaning up two landfills at Moffett Federal Airfield. He noted that the revised proposal is to cap the landfills with a standard,

multilayer cap. Mr. Michael Young, PRC, stated that he will mail the proposed plan to the THE subcommittee members the week of December 18.

Mr. Gill reported that Ms. Sandy Olliges, National Aeronautics and Space Administration (NASA), provided an update of NASA activities. Mr. Gill noted another item of discussion included quality assurance project plan (QAPjP) updates. He explained that a QAPjP must be approved prior to a remedial investigation (RI). He noted that the Navy will update its basewide QAPjP and has agreed to adopt changes requested by EPA.

Ms. Leslie Byster, SVTC, stated that Mr. Gill sent comments to Mr. Chao regarding questions concerning the data generated for the site-wide ecological assessment (SWEA). Ms. Byster asked Mr. Gill whether these concerns were addressed by the Navy. Mr. Gill replied that he spoke with the Navy, but that these concerns have not yet been addressed. Ms. Byster asked Mr. Gill how much of the cleanup work is dependent on the completion of the ecological assessments. Mr. Gill responded that areas of higher human health risk overlap with the ecological assessments. He cited the Lindbergh Avenue storm drain channel as an example. Lindbergh Avenue is an area that has a high concentration of polychlorinated biphenyls (PCBs) and NASA has conducted a significant amount of excavation in that area.

Mr. Chao noted that the Navy may be able to reconfigure the SWEA report so that the Navy's rationale may be made more clear. He also stated that he will strive to accelerate the cleanup process. Mr. Strauss asked how the cleanup schedule dates were created. Mr. Gill responded that Congress imposes certain completion dates for closing or realigning bases. Congress stipulated that a draft final feasibility study must be completed within 3 years from the date the base was listed for closure. The original completion date was December 1, 1994. The Navy has received three 6-month extensions so the current completion date is June 1, 1996.

IV. SUBCOMMITTEE REPORTS

Dr. McClure, THE subcommittee chair, stated that it is important for RAB members to comment on the responses to comments for the proposed plan for cleaning up the landfill.

Dr. McClure noted that the THE subcommittee discussed the toxicity reference values for the ecological risk assessment. He stated that the subcommittee members had two concerns. First, that there is a potential that an effort to meet the current statutory deadline would cause the Navy to rush

through the process. The second concern noted by Dr. McClure is the issue of the likelihood that the Navy will apply the numbers developed to the other sites.

Ms. Robin Parker, City of Sunnyvale, asked how the public comments would be received at the public meeting. Mr. Young stated that all comments will be considered and these comments may be presented verbally at the public meeting or in writing. He stressed that all public comments will undergo at least four different reviews as the ROD is prepared.

Mr. Strauss noted that five air cargo transport firms have expressed interest in Moffett Field. Ms. Cynthia Sievers asked whether an environmental impact report (EIR) will be conducted. Ms. Olliges stated that there will be an EIR conducted and that public hearings will be held. Mr. Lesti asked when NASA anticipates issuing the EIR. Ms. Olliges responded that hearings should be held by the end of January 1996.

V. RISK ASSESSMENT PRESENTATION

A. Human Health and Ecological Risk Assessment, Dr. Michael J. Wade.

Dr. Michael Wade, Department of Toxic Substances Control (DTSC), provided a general overview of risk assessment. He explained that risk assessment involves the process of evaluating potential health risks from exposure to chemicals in the environment. He noted that his objective in delivering this presentation was to acquaint the RAB with general terms and concepts related to risk assessment.

During his presentation, Dr. Wade described the four elements in conducting a risk assessment:

1. Data Evaluation and Identification of Chemicals of Concern (COC)
2. Exposure Assessment
3. Toxicity Assessment
4. Risk Characterization

Dr. Wade stated that the toxicologists throughout the state are concerned that risk assessments share some degree of consistency. He stressed that the armed services are not given any special breaks, and that the military bases must be cleaned up to at least industrial levels.

Mr. Thomas Harney stated that there are naturally occurring substances that are hazardous such as arsenic and beryllium, which are common at many California sites. Dr. Wade noted that arsenic represents a background risk of one in one hundred thousand throughout the state of California.

Mr. Strauss asked whether the Navy screens chemicals based on detection frequency. Dr. Wade responded that use of detection frequency for screening is conducted on a site-specific basis. Mr. Strauss asked whether there is any state guidance regarding future receptors. Dr. Wade noted that he prefers to always include a resident in the calculations. He stressed that if a site is not going to be cleaned up to a residential level, that deed restrictions are negotiated. He announced that DTSC is working on creating a computer risk assessment model, CALTOX, with 40 different exposure pathways.

Ms. Byster asked if Dr. Wade could explain how synergism and exposure to multiple chemicals and pathways are addressed in risk assessments. Dr. Wade explained synergistic and antagonistic interactions generally are not addressed in the risk assessments. Exposures to multiple chemicals and multiple pathways are addressed. Mr. Strauss asked what is the state of California's duration of exposure for residential calculations? Dr. Wade responded that the current duration is 30 years, previously it had been 70 years.

B. Data Collection and Evaluation, Ms. Theresa Lopez.

Ms. Theresa Lopez, PRC, discussed data collection and evaluation as part of the Moffett Federal Airfield station-wide RI. She explained that various pathways are considered in calculating risks and hazard indices. Ms. Lopez discussed three exposure scenarios: residential, occupational, and recreational.

Ms. Lopez stated that there may be several pathways to be considered in calculating a residential exposure scenario including soil ingestion, dermal contact with soil, particulate inhalation, inhalation of volatile chemicals, ingestion of groundwater, and dermal contact with groundwater. Mr. Bob Moss asked what is the standard body weight used by risk assessors. Ms. Lopez responded that risk assessors use 15 kilograms (kg) for a child and 70 kg for an adult.

Ms. Lopez explained that the pathways considered in calculating risks in occupational and recreational exposure scenarios include soil ingestion, dermal contact with soil and surface water, particulate inhalation, and inhalation of volatile chemicals from soil and surface water.

Ms. Lopez explained that the exposure parameters are used to estimate the amount of chemical exposure. These exposure parameters are receptor-specific. She noted as an example, the exposure calculated for residential receptors is 350 days per year for 30 years.

Ms. Lopez stated that reference doses, which are derived based on an assumption of a threshold mechanism of actions are used for calculating noncarcinogenic health effects (the hazard index). For carcinogens, cancer slope factors, which are derived based on a non-threshold mechanism of action, are used for calculating carcinogenic risks.

Ms. Sievers noted that the information is overwhelming and asked if the risk assessment presentation could be continued. Mr. Lesti stated that risk assessment may be included in the January agenda.

VI. SCHEDULE FOR ELECTION OF COMMUNITY CO-CHAIR AND VICE CO-CHAIR AND ADJOURNMENT

Mr. Lesti announced that no quorum was present and therefore the vote to elect a new community co-chair and new vice co-chair would be held on January 11, 1996. Mr. Lesti did entertain nominations from the RAB. Mr. David Glick nominated Mr. Moss for community co-chair, Mr. Strauss seconded the motion.

Mr. Lesti closed the meeting at 9:10 p.m.