

**DRAFT NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD
MEETING SUMMARY**

Building 1, Suite 140, Community Conference Room
Alameda Point
Alameda, California

June 4, 2002

ATTENDEES

See attached list.

MEETING SUMMARY

I. Approval of Minutes

Michael John Torrey, Community Co-Chair, called the meeting to order at 6:42 p.m.

Mr. Torrey asked for comments on the May 7, 2002, Restoration Advisory Board (RAB) Meeting Minutes. The minutes were approved, with the following corrections:

- George Humphreys stated that first sentence of the last paragraph on Page 5 should be revised to "Mr. Humphreys stated that he felt that areas of the original island should be sampled...."
- Mr. Humphreys also stated that on Page 2, the last sentence of the second full paragraph should be revised to "the lifestyle of those who live in an urban area..."
- Elizabeth Johnson stated that the definitions of "EDC" and "PBC" in the second paragraph on Page 5 should more clearly reflect that EDC means economic development conveyance and that PCB, which means public benefit conveyance, is transferred at no cost for development for public use, such as parks, but that use of developed areas may involve a charge to residents.

II. New RAB Membership

Lyn Stirewalt reviewed the standard procedures for inducting new RAB members. Following receipt of an application for membership, the Membership Committee meets to discuss the application and schedules a meeting with the prospective RAB member. At that meeting, the candidate will be informed of the responsibilities associated with becoming a RAB member and has an opportunity to ask questions. At the conclusion of this process, RAB members vote on the application.

The RAB has recently received three applications for membership from Jim and Jean Sweeney and Carl Nelson. Because Mr. and Mrs. Sweeney are members of the Alameda Annex RAB and have known some of the Alameda Point RAB members for several years, RAB members decided that it was unnecessary to complete the full process and unanimously voted to induct Mr. and Mrs. Sweeney to the Alameda Point RAB.

Mr. Nelson did not attend the RAB meeting, as was expected, and RAB members decided to follow normal procedures with his application for membership. The Membership Committee will be meeting to discuss his application.

III. Co-Chair Announcements

Mike McClelland, Department of the Navy (Navy), made the following announcements:

The draft work plan for the basewide groundwater-monitoring program will be available for review on June 12, 2002. The review period will be 60 days.

The draft final polynuclear aromatic hydrocarbon (PAH) work plan will be submitted on June 7, 2002.

Mr. Torrey, Community Co-Chair, made the following announcements:

James Flint, City Manager, sent a letter to the Mayor and City Council Members recommending that the City of Alameda (City) adopt a resolution authorizing the City Manager to apply to the U.S. Department of Housing and Urban Development Supporting Housing Program in conjunction with the Alameda Point Collaborative for funds for the mandatory construction of 39 new affordable housing units. The letter will be included in the mid-monthly mailing.

There will be a conference at the Oakland City Marriott on June 7, 8, and 9, 2002, regarding various military cleanup issues. Attendance for this event is at capacity, but Dale Smith will be in attendance and will give the RAB an overview of the conference at the July 2002 RAB meeting.

Various correspondence and documents were distributed to the RAB.

IV. Sites 4 and 5 Pilot Six-phase Heating Study

Rudy Millan, International Technology Corporation (IT), gave a presentation on the pilot studies for six-phase heating being conducted at Sites 4 and 5. The presentation included information on project goals, technology, overall strategy, project timeline, and progress to date. A handout was provided.

Six-phase heating is the selected remedy for extraction of dense, nonaqueous-phase liquid (DNAPL) from groundwater at Sites 4 and 5. DNAPL has low solubility, is heavier than water, and very difficult to extract. The goal of this removal action is to remove all DNAPL in excess of 10 parts per million (ppm) and prevent rebound beyond 10 ppm. Recent sampling efforts to fully delineate DNAPL plumes at these sites have determined that three of the original seven plumes that were the focus of this removal action no longer have concentrations of DNAPL above 10 ppm and therefore do not warrant action. The remaining four plumes (Plumes 4-1 through 4-3 and 5-1 through 5-4), however, are larger than previous estimates indicated.

Six-phase heating is an aggressive technology that addresses the source of volatile organic compounds by using electrical currents to heat the ground, forcing the constituents to volatilize and rise to the surface as vapor, where they can be safely captured by a vacuum system and properly disposed of. Therefore, if the target constituent does not have a reasonably low boiling point, then this type of remediation would not be effective. If the constituent impacting groundwater and the geologic composition of the ground are conducive to the technology, most removals can be completed within 3 months. This technology is used

to target sources and is similar to steam stripping operations. The electrodes that are placed into insulated shafts that are installed into the ground, and lead down to active areas at the target depth.

Ingrid Baur asked what the active depth for the electrodes would be at Sites 4 and 5, and if the heat would affect living organisms in the affected area. Mr. Millan stated that at Site 5, the active depth is 30 feet below ground surface (bgs), and at Site 4 it is 45 feet bgs. In general, the only organisms living in the ground at these sites are bacteria, which will repopulate very quickly. In addition, many of them are drawn to the constituents and therefore, are very desirable for their role in aiding natural degradation processes.

Kurt Peterson asked if this removal was the same removal that the RAB was informed of previously at Building 5. Mr. McClelland responded that it is the same site, but this removal targets DNAPL impacts to groundwater, while the previous removal was for radium impacts to soil.

Dale Smith asked what the previous uses of the two sites were. Mr. Millan stated that Building 5 was used for aircraft maintenance, including dismantling, cleaning, repainting, plating, and so on. Site 4 was used mainly for plating and machine shops.

The overall strategy of the removal action is to accurately define the extent of the DNAPL (in a three-dimensional manner), perform pilot tests at two representative areas, use that pilot test data to design the full-scale implementation, and implement the full-scale removal action for DNAPL reduction. Because DNAPL has a higher density than water and tends to sink through soil and water particles, defining the vertical extent of plumes is more important for DNAPL than it is for most other chemicals.

Many health and safety precautions have been taken to ensure the safety of the workers and residents of Alameda who may be near the heating systems. The locations of both pilot test sites (Plumes 4-1 and 5-1) have been fenced off, and a laser perimeter alarm is also in place. If the perimeter is breached, the system will automatically shut down. A low-permeability layer was considered for capturing volatilized constituents, but will not be used.

Ms. Baur asked if there were any safety precautions to prevent birds from landing on the site and being harmed by the electrodes. Mr. Millan said that even if a bird were to do so, it is unlikely that it would be harmed because the electrodes are double-insulated.

Ms. Smith asked what sort of containment measures would be used in place of the underground, low-permeability layer. Mr. Millan stated that a soil vapor extraction system would be installed to capture anything that is volatilized.

Mr. Humphreys asked if there would be enough pressure generated to cause bulges or ruptures of the soil surface. Mr. Millan responded that wells would be installed to bleed off any excess pressure to avoid that outcome.

Lea Loizos asked if groundwater-monitoring wells would be used along the perimeter of the pilot study and full-scale removal areas to monitor any changes in groundwater resulting from operation of the system. Mr. Millan stated that three wells have been installed outside of the perimeter, in addition to several wells inside of the removal area that will be used to monitor any changes.

Ms. Smith asked for clarification on whether there would be a need to install heating equipment inside any of the buildings. Mr. Millan stated that most sites are outside of buildings, but there are two sites that will require installation of systems inside of buildings. One of those sites is a shallow plume,

located beneath Building 5, while the other is a deeper plume, located beneath a portion of a building in Site 4 that has a raised floor. The latter is expected to present a greater challenge.

At Plume 4-1, near the east gate entrance to Alameda Point, there are several utility lines that run underground at the site where the six-phase heating equipment will be installed. There have been some concerns raised by utility companies that the high temperatures will damage utility lines, so a low-temperature approach will be pilot-tested at that site. It is expected that at about 70 degrees Centigrade, biological reactions will be stimulated that will serve the same function as the extreme high temperatures will serve at the other sites. If successful, this approach will take longer to complete the removal, but should result in the same level of effectiveness. If it is not successful, then another remedial alternative will be considered.

The full-scale application of the technology will entail use of multiple electrode clusters at each plume and similar design parameters used in the pilot studies. Information gathered from pilot studies will be used to enhance the technology for full-scale implementation. There will be a 3-month active duration that may be shorter if simultaneous treatment is possible. If energy and power-converter availability becomes problematic, the duration may be extended. The project should be completely finished within 1 year.

To date, delineation of the plumes is about 90 percent complete and three of the original seven plumes have been eliminated from the study. The two pilot systems have been built, and one of the pilots (at Site 4) is scheduled to commence immediately. That system was altered slightly because of a thick clay layer. Sheet pile is being used in the upper zone as a conductor. If this approach is successful, the full-scale systems will be constructed the same way, because it is significantly less expensive.

Ms. Smith asked what will happen if the expected volatilization does not occur. Mr. Millan stated that either in situ chemical oxidation or biodegradation would be considered. If neither of those alternatives is successful, other alternatives will be investigated.

High-tech monitoring equipment will be used to ensure that utility lines are not damaged as a result of the system. If the temperature reaches 70 degrees Centigrade, the system will automatically shut off until the temperature reaches a safe level again.

The six-phase heating technology was designed by Battelle Laboratories. In response to Mr. Peterson's question about how long the technology has been in use, Mr. Millan stated that the technology has been available for nearly 10 years, but has only been widely accepted in the last 2 to 3 years. If successful, this removal action will constitute the largest application of six-phase heating ever conducted.

Because six-phase heating targets the source of a plume, the success of the removal action is measured by rebound. Three months after conclusion of the removal action, the location of the plume center will be sampled again. If there is no evidence of rebound, then the removal action is considered to be successful and future remediation should not be necessary. If, however, there is evidence of rebound, additional remediation may be warranted.

Mr. Peterson asked what percentage of the DNAPL is expected to be removed by this technology. Mr. Millan explained that the technology targets small areas that are considered to be the sources of each plume. In mass, a high percentage will be removed, but only a small fraction of the area of the plume will be treated.

Mr. Humphreys asked if IT would be generating its own power for the system. Mr. Millan stated that they will.

Ms. Stirewalt asked Mr. Millan for clarification about his title, affiliation, and responsibilities. Mr. Millan stated that he is a project manager for IT and will conduct oversight of the project.

Mr. Peterson asked if DNAPL plumes extend beneath roads. Mr. Millan responded that it appears that at least one of the plumes extends beneath a road surface and that, if necessary, the removal action may intrude on the road temporarily.

Ms. Loizos asked for clarification about which data will be used to create figures for documents addressing the removal action and if the plume information being presented is based on assumptions. Mr. Millan stated that new data currently are being used to create updated versions of the figures included in the presentation packet. Initially, figures showing the approximate extent and location of the plumes were largely based on assumptions. However, the new figures and decisions regarding removal actions are based on detailed data collected in an effort to fully delineate the extent of each plume.

Ms. Smith asked how plumes that extend beneath buildings would be delineated. Mr. Millan stated that in cases where it is necessary, they would drill through the floors of buildings. The pilot studies are being conducted at locations with relatively easy access, but the full-scale systems will be placed above the suspected source regardless of roads, buildings, or other structures.

Doug DeHaan asked if the previous pilot studies conducted in the same areas had been successful. Mr. Millan stated that it appears that the steam study was at least moderately effective, and may be the reason that three of the initial seven plumes are no longer present at elevated concentrations.

The Navy expects to complete the pilot studies by the end of August 2002 and to complete the plume delineation by the end of September 2002. Design of the full-scale system is scheduled to begin in July 2002 and construction should begin in September 2002. Implementation of the full-scale system is expected to run from November through December 2002.

Mr. McClelland stated that Glenna Clark is the Navy's Remedial Project Manager for this study, and that RAB members may contact her with additional questions or concerns.

IV. Lead-based Paint (LBP) Removal Action Update

Jim Helge, Tetra Tech EM Inc. (TtEMI), gave a presentation regarding the removal action for LBP in the vicinity of the water and antenna towers. The presentation included information on the history of the towers, the emergency removal action previously conducted, the non-time critical removal action planned for the site, and the tentative project schedule. A handout was provided.

Records and the results of an aerial photo review indicate that the water towers were installed between 1940 and 1947, and that the base, including the area surrounding the towers, was paved by 1947. Navy records indicate that the antenna towers were installed in 1953. Following sampling efforts that indicated high levels of lead in soil in the vicinity of the towers, two towers were removed (one water and one antenna). The three remaining towers located in the eastern portion of Alameda Point south of the West Housing Area, which are no longer in use, are the focus of the non-time critical removal action (NTCRA) planned for Fall 2002.

Prior to 1978, the towers were coated with LBP. The Navy conducted sandblasting to remove peeling and chipping paint caused by weathering over time. In the process, some of the paint chips and blasting debris fell to the ground and were deposited into the soil. Later sampling events indicated elevated levels of lead in soil in the nearby residential area. As a result, the Navy conducted an emergency removal action (removal of concrete footings and placement of sod) to protect human health until a full-scale remedy could be conducted.

The objective of the removal action to be conducted in the fall of 2002 is to remove the source of the lead (paint on the towers) and to remove soil impacted by lead at concentrations above the action level (199 milligrams per kilogram [mg/kg], determined using the Department of Toxic Substances (DTSC) Leadsread Model). An engineering evaluation (EE)/cost analysis (CA) was prepared to evaluate the following three alternatives for removing the source of lead: spot LBP abatement and repainting, complete LBP abatement and repainting, and spot abatement and tower removal. In addition, the EE/CA also evaluated the following alternatives for excavation and disposal of lead-impacted soil: excavation and on-site disposal (disposal at Site 1 or soil stabilization and disposal at Site 1) and excavation and off-site disposal (disposal at a Class I or II landfill).

Each alternative was evaluated based on its effectiveness, implementability, and cost. The first alternative for source removal, spot abatement and repainting, does not effectively remove the source and would require repetition about every 10 years. The second alternative, complete LBP abatement and repainting, would be prohibitively expensive. On-site disposal alternatives for excavated soil may not coincide with the schedule for Site 1 and may require storage of the excavated soil for several years. Therefore, evaluations resulted in the decision to proceed with spot abatement and tower removal and off-site disposal. The type of off-site disposal (Class I or II landfill) will be dependant on the results of a waste characterization study to be completed following excavation. The towers will be cut into sections small enough to be hauled away using trucks and disposed of at a steel recycling plant. Spot abatement will be conducted at the portions of the towers that will be cut to avoid the risk of paint being chipped off and falling to the ground or vaporized and entering the atmosphere.

Spot abatement and disassembly of the towers is scheduled to begin in late 2002. Soil excavation will commence following removal of the towers, and the project should be completed by spring of 2003. The Navy is waiting for approval of the aggressive schedule by the agencies.

Mr. Humphreys expressed concern that the timeline appeared to indicate that soil removal would be conducted during the wet season, when the ground would likely be saturated. Mr. Helge stated that it was likely that saturation would be an issue, but the schedule was dependent on when funding would be available.

Rezsina Jaulus stated that she was concerned that there appeared to be gaps between the edge of removal areas indicated on the figures and the side of the housing units. She asked when the final determination on soil removal areas would be made and if there would be an opportunity for community input. Mr. Helge stated that removal areas were already confirmed, but that each round of removal would be followed by confirmation samples. If any confirmation samples indicate that there is lead present above action levels, the removal would be expanded to include all soils impacted above action levels. No elevated concentrations would be left when the removal is complete.

Bert Morgan asked if the towers would be encapsulated during removal to avoid dispersal of paint chips. Mr. Helge reiterated that spot abatement would be conducted prior to disassembly to prevent LBP from impacting the soil.

In reply to a question from Mr. Torrey, Mr. Helge stated that the Navy has confirmed that the towers are empty.

Mr. Peterson asked Marcia Liao, DTSC, if she felt that the action level of 199 mg/kg was protective of human health by the state's standards. Ms. Liao stated that she was uncertain of the details of the standards used by DTSC. Mr. Helge responded that the maximum concentration allowed by the U.S. Environmental Protection Agency (EPA) is 400 mg/kg and that DTSC's maximum allowable concentration in school areas is 255 mg/kg.

There was a brief discussion about the time allowed for review of documents. Mr. McClelland stated that the schedules are available in the Site Management Plan (SMP), located in the RAB information repository, and that he would make an effort to remind RAB members about when documents would be submitted for review.

Ms. Baur asked if the Navy has sought clearance from the Historic Preservation Society to remove the towers. Mr. Helge stated that the Navy conducted an archaeological survey of Alameda Point, including cultural resources, and has received approval for the removal.

Mr. Peterson asked if the residents in the area of the removal will receive additional notification. Ms. Jaulus stated that the previous communication problems have been resolved and the Navy has kept residents informed of the activities in the area. Mr. McClelland added that the work plan for the removal will be drafted and will require agency approval, following the standard community and agency comment period.

Ms. Sweeney asked if Building 613, the former location of a family services clinic is still housing a daycare center. Ms. Jaulus stated that currently, the building houses only administrative offices, but that long-term plans include a child daycare center. In addition, the Red Cross will be moving into that building the week of June 10, 2002. Ms. Jaulus also stated that the open grassy area near Building 607 might be used as a play area for children.

Ms. Loizos recommended that a technical review meeting be held to facilitate review of the work plan. Luann Tetirick and Ms. Smith volunteered to participate.

Mr. DeHaan asked if samples would be collected from beneath the paved areas. Mr. Helge stated that it is highly unlikely that any lead could be beneath the tarmac because it was installed less than 10 years after the towers were installed and painted. In that time, the paint would not have been weathered enough to be chipping and the sandblasting that distributed most of the paint chips did not occur until after the area was paved.

Ms. Liao stated that EPA and DTSC are still discussing this issue, and no final determination has been made about whether samples from beneath the tarmac will be required.

Ron Rinehart, Pacific States, stated that the risks attributable to the lead present in soil are very minimal. Mr. Rinehart stated that it is his understanding that a child would have to eat the lead-impacted dirt every day for the next 30 years to be at risk for cancer. Or, for inhalation pathways evaluated in risk assessments, residents would have to breathe air opaque with dust every day for 30 years to be at risk for cancer. Mr. Rinehart emphasized that the amount of lead in soil in the residential area should not be considered an immediate threat, although the removal action is warranted to prevent any long-term consequences.

V. Base Realignment and Closure Cleanup Team (BCT) Activities

Mr. McClelland provided the following report on BCT activities for May 2002.

The BCT monthly Tracking Meeting was held on May 21, 2002. The results of the revised risk assessment for Sites 14 and 15, which included new PAH data, were reviewed. The BCT concluded that a no further action record of decision would be appropriate for both sites.

There was a lengthy discussion about a new document the Navy is preparing, the Supplemental Environmental Baseline Study (SEBS). It will serve mainly as an internal tracking device for the Navy to assist in the transfer process. The SEBS is expected to be submitted for review in late August 2002.

The BCT also planned on revising the SMP at that meeting; however, because previous agenda items exceeded their allotted time, that revision was postponed. Changes to the SMP may occur based on funding and project status. Revisions to dates will be negotiated with the agencies. Mr. McClelland offered to send copies of the SMP to those RAB members who have not received their copies.

VI. Community and RAB Comment Period

Ms. Baur asked Ms. Johnson for an update on the City's negotiations for early transfer. Ms. Johnson stated that the City is in the process of trying to schedule a meeting with the Navy the first week in July 2002. The master developer is preparing a presentation for that meeting. Ms. Baur also asked if any progress had been made on the decision about whether the RAB will remain intact if early transfer is successful. Ms. Johnson stated that there will be an active effort to keep the community involved. Mr. McClelland stated that the Navy would continue their involvement and responsibility for restoration of the western portion of the base. The City and their developers will be required to meet all of the same Comprehensive Environmental Response, Compensation, and Liability Act requirements as the Navy, including those pertaining to community involvement. However, Mr. McClelland noted, they are not at a point where they can present their plans for community involvement. Ms. Smith stated that Treasure Island has experienced some early transfer and the RAB has stayed actively involved in the process. RAB members asked the Mayor for a seat on the Redevelopment Council and were afforded the opportunity to attend the meetings, raise issues, and participate in discussions, but not vote. That position has been very successful. Mr. McClelland reminded RAB members of the presentation given by the Mare Island RAB co-chairs, who described a high level of RAB involvement following early transfer.

Mr. Torrey asked if the interviews for the Community Involvement Plan (CIP) are still being conducted. Tracy Craig, TtEMI, stated that work on the CIP was stopped temporarily because of funding, but recently has been resumed. Interviews are still being conducted and should be completed within the next several weeks. The internal draft version of the CIP is expected to be submitted to the Navy in early July 2002, and the RAB should receive the draft version of the document for review in September 2002.

Patrick Lynch stated that noise from the dual vapor extraction system at Building 397 continues to be a problem. He also stated that he felt that the hay bales that were used as a sound barrier around the fuel pump were a significant fire risk. Mr. Lynch also stated that a motorized scooter operator recently had hit what appeared to be a speed bump on West Tower Avenue and suffered injuries to his face and head. Mr. Lynch stated that he believes that the object the resident hit was not a speed bump, but a poorly backfilled excavation site.

Mr. Lynch also stated that during the presentation regarding PAHs at the April 2002 RAB meeting, EPA characterized the Navy's response to the discovery of the elevated levels of PAHs as immediate and

resulted in a time-critical removal action (TCRA). Mr. Lynch stated that he disagrees with that characterization. He passed out a figure said to indicate the sampling locations where elevated PAHs were found and the housing units that were occupied at that time. Mr. Lynch stated that most of the residences within the area of the TCRA were unoccupied at the time the elevated PAHs were found. He stated that the Navy allowed tenants to move into these housing units prior to completion of the TCRA, which posed an unnecessary risk.

Mr. Lynch also stated that he believes the discovery of PAHs at Estuary Park occurred in November 1995, but that he saw no indication that the Navy or the regulators were aware of that discovery until he brought it to their attention at a RAB meeting in February of 1998.

Mr. Lynch recalled that the Navy responded by issuing a fact sheet that stated that the conditions at Estuary Park were safe. Mr. Lynch stated that Al Dewitt, a former resident of the Estuary Park area, recently was treated for stomach cancer, a disease from which his father passed away. Mr. Lynch reminded the RAB that Sophia Serda had stated at a previous RAB meeting that stomach cancer is among the physical ailments that have been attributed to PAHs.

Mr. McClelland stated that the hay bales at Building 397 have been removed. Mr. Lynch stated that there should be a permit issued by the City's fire department that would prohibit use of combustible materials near equipment, including plywood, which is commonly used at such sites. Mr. McClelland will discuss the matter with IT.

Ms. Sweeney stated that the East Bay Regional Park will be hosting a tour of the Least Tern colony on June 30, 2002, from 11 a.m. to 3 p.m. Reservations are required for attendance and can be made by calling 521-6887. The cost per person is \$6.00, and the group will meet at Crab Cove prior to departure.

The meeting was adjourned at 8:52 p.m.

ATTACHMENT A

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING AGENDA
JUNE 4, 2002

(One Page)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

4 JUNE, 2002 6:30 PM

ALAMEDA POINT – BUILDING 1 – SUITE 140

COMMUNITY CONFERENCE ROOM

(FROM PARKING LOT ON W MIDWAY AVE, ENTER THROUGH MIDDLE WING)

<u>TIME</u>	<u>SUBJECT</u>	<u>PRESENTER</u>
6:30 - 6:35	Approval of Minutes	Michael-John Torrey
6:35 - 6:45	Co-Chair Announcements	Co-Chairs
6:45 - 7:15	Sites 4 & 5 Pilot Six-Phase Heating Study	Rudy Millan (IT)
7:15 - 8:05	Lead-based Paint Removal Action Update – Water and Antenna Towers	Jim Helge (TtEMI)
8:05 - 8:15	BCT Activities	Mike McClelland
8:15 - 8:20	Focus Group Signups	Jo-Lynne Lee
8:20 - 8:30	Community & RAB Comment Period	Community & RAB

RAB Meeting Adjournment

8:30 - 9:00 Informal Discussions with the BCT

ATTACHMENT B

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING SIGN-IN SHEETS

(Four Pages)

**ALAMEDA POINT
RESTORATION ADVISORY BOARD
Monthly Attendance Roster for 2002**

Date: May 7, 2002

Please initial by your name

COMMUNITY MEMBERS	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Ingrid Baur	X	X		X		IB						
Clem Burnap												
Ardella Dailey		*			X	AD						
Nick DeBenedittis												
Douglas deHaan		X	X		X	DD						
Tony Dover	X		X									
George Humphreys	X	X	X	X	X	GH						
James D. Leach	X	X	*	*	X	JDL						
Jo-Lynne Lee	X	**	X		**							
Lea Loizos	X	X	X	X		LL						
Bert Morgan	X	X	X	X	X	BM						
Ken O' Donoghue												
Kurt Peterson				X	X	KP						
Kevin Reilly	X	X			X	KRR						
Bill Smith (attending for Mary Sutter)	X	X	X	X								
Dale Smith (attending for Mary Sutter)				X	X	DS						
Lyn Stirewalt	X	X	*		*	LS						
Mary Sutter												
Luann Tetirick		X	X		X	LT						
Michael John Torrey	X	X	X	X	X	MJT						

* Denotes excused absence

COMMUNITY MEMBERS	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Dana Kokubaun												
Golden Gate Audubon Society												
Betsy P. Elgar												
Debbie Collins	X	X										
REGULATORY AND OTHER AGENCIES	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Anna-Marie Cook	X	*	X	X	X							
David Cooper	X	X	X									
Elizabeth Johnson	X	X		X	X							
Marcia Liao			*	X	X	X myk						
Laurent Meillier												
Patricia Ryan	X	X	X	X	X	JP						
Sophia Serda												

* Denotes excused absense

U.S. NAVY	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Glenna Clark												
Andrew Dick	**			X	X							
Steve Edde		X	X									
Greg Lorton												
Mike McClelland	X	X	X	X								
Tom Pinard	X	X		X	X							
Rick Weissenborn	X			X	X							
TETRA TECH EMI	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Courtney Colvin	X	X	X		X	<i>TC</i>						
Tracy Craig	X	X	X			<i>TC</i>						
Marie Rainwater												
Leah Waller	X	X	X									
Corinne Crawley				X								
GPI	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Michael Stone	**	**	**	**	**							
Jack Clemes												

* Denotes excused absence

OTHER	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Charlene Washington-EBCRC												
Janet Argyres-Bechtel					X							
Bart Draper-Bechtel												
Stephen Quayle-Bechtel												
Bruce Marvin - IT, Aquifer Solutions	X											
Rezsing Jaulus-Alameda Point Coll.				X		<i>RF</i>						
Eric Johansen - Bechtel					X							
Ron Rinehart, Pacific States			X	X	X	<i>RE</i>						
Aidan Barry - APCP					X	<i>AS</i>						
Bill Howell - 3-D Environmental					X	<i>BH</i>						

* Excused absence

** Attended but did not sign roster

* Denotes excused absence

ATTACHMENT C

NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS

James Flint, City Manager. 2002. Letter Regarding a Resolution Authorizing the City Manager to Apply to the U. S. Department of Housing and Urban Development Supportive Housing Programs. From James Flint, City Manager. May 15.

DNAPL Removal Action, Six-phase Heating at Alameda Point. 2002. Presented by Rudy Millan, Project Manager, IT Corporation. June 4.

Lead in Soil and Lead-based Paint Removal Action, Parcels 79, 98, 105, 106, and 107. 2002. Presented by Jim Helge, Tetra Tech EM Inc. June 4.

Installation Restoration Site 25 Polynuclear Aromatic Hydrocarbon Sampling Locations. Provided by Patrick Lynch. June 4, 2002.

**James Flint, City Manager. 2002. Letter Regarding a Resolution Authorizing the City
Manager to Apply to the U. S. Department of Housing and Urban Development
Supportive Housing Programs.**

(Three Pages)

CITY OF ALAMEDA
Memorandum

May 15, 2002

To: The Honorable Mayor and
Councilmembers

From: James M. Flint
City Manager

Subject: Recommendation to adopt a Resolution Authorizing the City Manager to
Apply to the United States Department of Housing and Urban Development
Supportive Housing Programs

Background

As required by the federal Base Closure and Community Redevelopment and Homeless Assistance Act of 1994, the ARRA worked with the Alameda County Department of Housing and Community Development and an organized group of homeless service providers, known as the Alameda County Homeless Providers Base Conversion Collaborative (Alameda Point Collaborative) to determine a fair share of housing and commercial space at NAS Alameda to accommodate the homeless.

In January 1999, the ARRA directed staff to finalize an agreement with the Alameda Point Collaborative regarding the relocation of 97 units from East Housing. On February 22, 2000, the Alameda Reuse and Redevelopment Authority, Community Improvement Commission, the Housing Authority, the City of Alameda, the County of Alameda and the Alameda Point Collaborative agreed to a Memorandum of Understanding (MOU) which outlined roles and responsibilities associated with the elimination of 125 barracks units in the East Housing area, relocation of 58 housing units to West Housing and the development of 39-units of family housing within the Catellus project area.

The MOU obligates the ARRA, the CIC, the City and the Housing Authority to develop the 39-unit affordable housing project that will be owned by the Housing Authority who will in return, provide a long-term lease to Operation Dignity. As part of moving this project forward, two Request for Qualifications (RFQ's) were developed and released on April 10, 2002. These RFQ's were released to developers/consultants for the development of the housing as well as to architects for the design of the new units.

Re: Resolution #4-I CC
5-21-02

Discussion

The ARRA/City is obligated to begin construction of the 39 units on a 2.5 acre site located on the FISC property by September 2003. The City has notified the Collaborative of its intent to demolish the existing housing and of the Collaborative's obligation to raise its \$1 million contribution to the project. Given the need to raise significant amounts of money for the 39-unit project, staff is researching various funding sources typically used for affordable housing development. The Federal Department of Housing and Urban Development, as it has for the past five years, released its SUPERNOFA (Notice of Funding Availability) where it allocates the majority of its grant funding. In addition, within this fiscal year, the 2002 HUD Appropriations Act specifies that 30 percent of HUD funding must be awarded to permanent housing projects.

The SUPERNOFA process is coordinated through the Alameda County Housing and Community Development Department and it has recently released a Request for Proposals for permanent housing projects. Those agencies and jurisdictions interested in applying for funds through the Supportive Housing Program must apply during this once- a- year process. Grants up to \$500,000 may be applied for with \$400,000 as the maximum allocation for capital costs and up to \$100,000 available for operations.

As mentioned, APC has an obligation to raise \$1,000,000 within a two-year time period. It has come to staff's attention that APC is moving forward with an application to apply for the grant funds for this project. Historically, this funding from HUD is utilized by non-profits in similar type developments including those previously developed at Alameda Point. Additionally, the non-profit agencies involved in the development of this project (39 unit project) have extensive experience in applying for and administering McKinney funds.

Staff believes that the 39-unit project itself will be very competitive as there are few permanent housing projects for formerly homeless people in the pipeline in Alameda County. Staff further believes that the application for funding should be submitted as a joint application with APC, and APC has indicated its willingness to submit a joint application. A joint application for the 39-unit project would be viewed by funding agencies as a much stronger application and recognized as a collaborative proposal. Award of these grant funds for the project will assist in raising additional funds as well as assist in funding operational needs, often a more difficult aspect of fundraising for affordable housing projects. If the joint application is funded by HUD as hoped, it is proposed to split the \$400,000 construction grant 75%/25%, with the ARRA receiving \$100,000 of the grant to apply to apply towards its construction obligation.

The SUPERNOFA process requires authorization from the governing body of the applying entity by resolution of its Board of Directors prior to submittal. The deadline for submitting

Dedicated to Excellence, Committed to Service

Honorable Mayor and
Councilmembers

May 8, 2002
Page 3

an application is May 20, 2002. However, Alameda County HCD staff has indicated to City staff that it will allow submittal of the required resolution after the deadline of May 20th.

Fiscal Impact

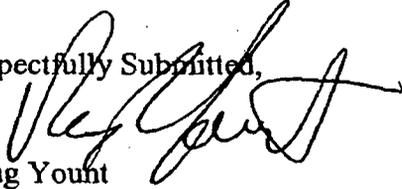
There is no fiscal impact to the City of Alameda. The Housing Authority of the City of Alameda will own the site and development. The MOU also provides that other funds may be used to finance the project as necessary or convenient; however, no General Funds may be used. In 1999, the estimated cost to construct the property was \$5.7 million with the following identified sources of funds:

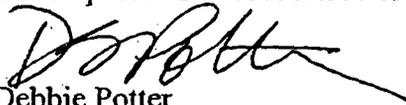
- \$1 million from the Collaborative
- \$2 million from Catellus Land Sale Proceeds
- \$2.7 million from Catellus Inclusionary Fee

Recommendation

The City Manager recommends that the attached resolution be adopted which will allow the City to submit an application in conjunction with the Alameda Point Collaborative to further the City's obligation to raise its share of the necessary funds to construct the 39-unit project at the FISC site.

Respectfully Submitted,


Doug Yount
Development Services Director

By: 
Debbie Potter
Base Reuse and Redevelopment Mgr.

JF/DY/DP:la

cc: Housing Commission

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**Dense, Nonaqueous-phase Liquid Removal Action, Six-phase Heating at Alameda Point.
2002.**

(20 Pages)

DNAPL REMOVAL ACTION

Six Phase Heating at Alameda Point

June 4, 2002

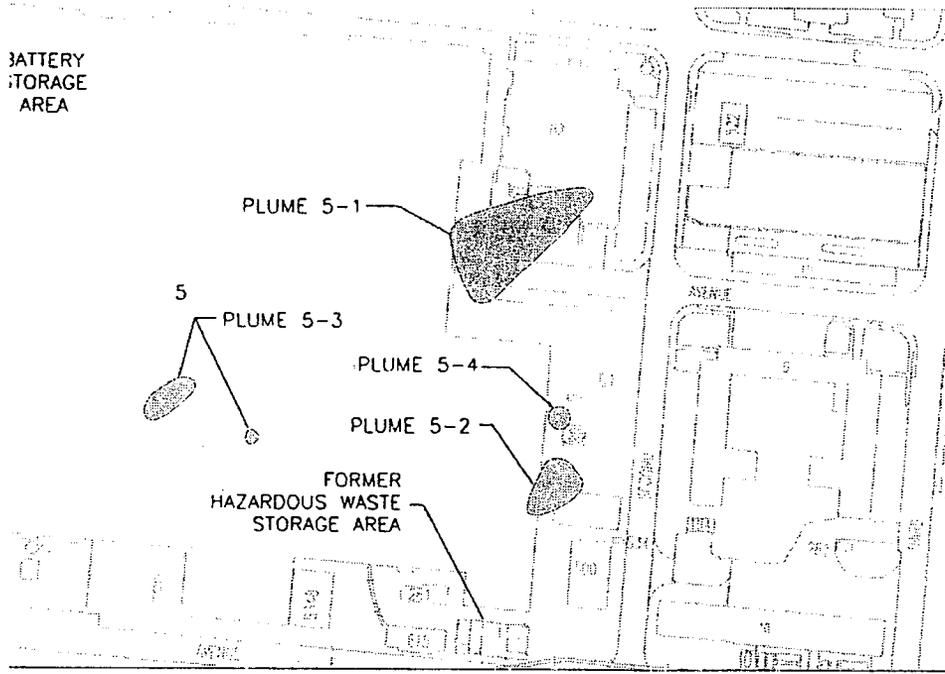
Agenda

- Project Goals
- What is Six Phase Heating?
- Overall Strategy
- Project Timeline
- Progress To Date

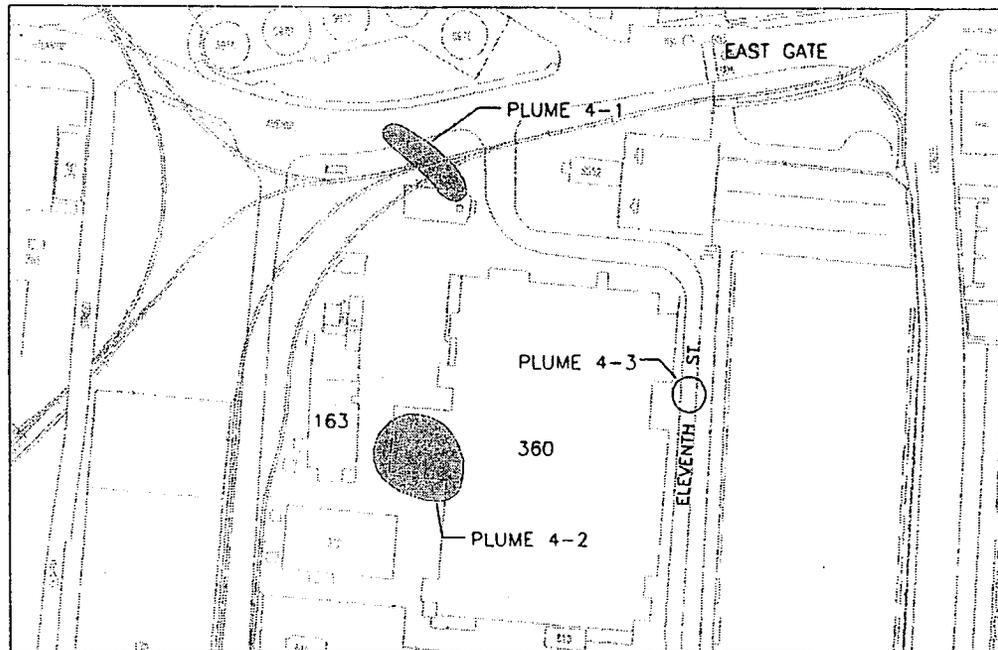
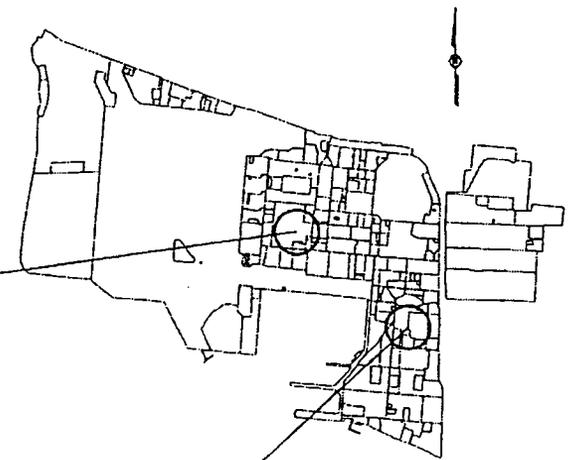
Project Goals

- Address the Potential DNAPL at Seven Discrete Areas Within Alameda Point
- Remove All DNAPL (as evidenced by dissolved concentrations in excess of 10 ppm)
- Prevent Rebound beyond 10 ppm

BATTERY STORAGE AREA

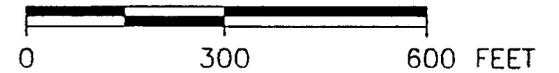


IR SITE 5



IR SITE 4

INSET SCALE



DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 2
PLUME LOCATION MAP

ALAMEDA POINT CTO-060
ALAMEDA, CALIFORNIA

Contaminants of Concern

(As determined by the EECA)

- TCE
- *cis* 1,2 DCE
- *trans* 1,2 DCE
- 1,1 DCA
- 1,1 DCE
- 1,1,1 TCA

What is Six Phase Heating?

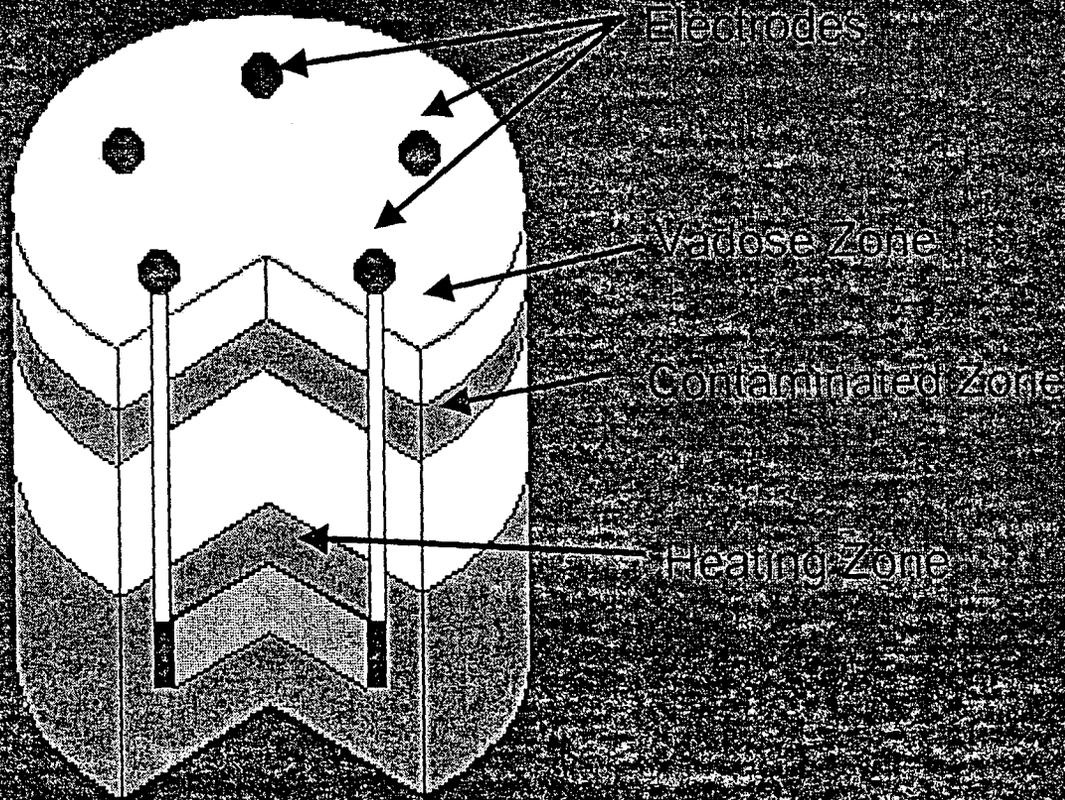
- An Aggressive Remedial Technology
- Addresses Volatile Compounds
- Heats The Ground by Applying Electrical Current
- Characterized by Short Timelines
- Can Remove Hard-to-Reach Contaminants

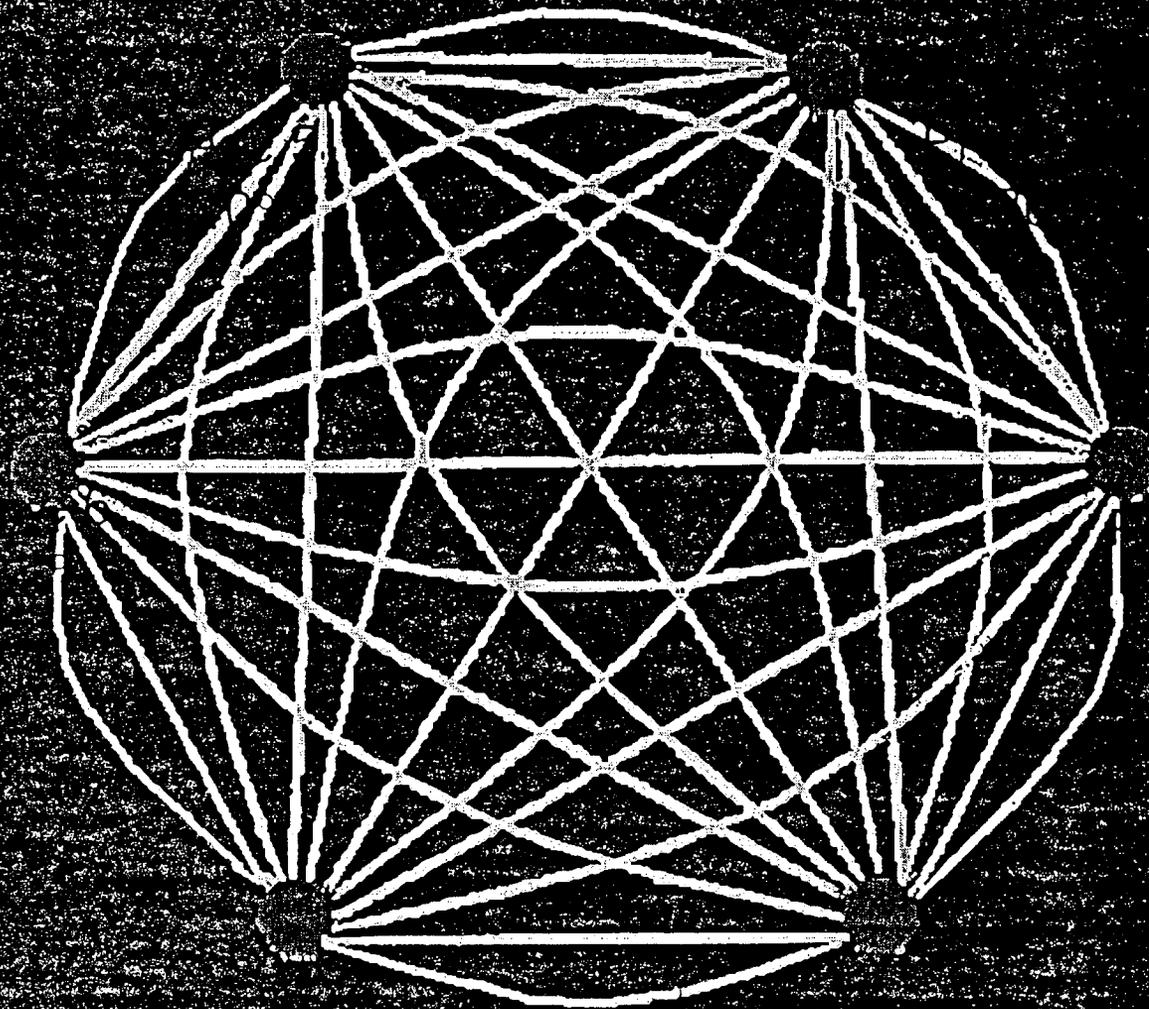
Typical SPH Application

- Treats entire plume
 - dissolved
 - adsorbed
 - vapor
 - NAPL
- Aimed at Removal to Closure Goals

Six Phase Heating

- Vapor Extraction
- Addition of Heat
 - Increases Vapor Pressure
 - Increases Henry's Coefficient
- Steam Bubbles Provides Transport Medium
- In Effect: In-Situ Steam-Stripping





Overall Strategy

- Accurately define full extent of DNAPL in seven distinct areas
- Perform Pilot Tests at two representative areas
- Use Pilot Test Data to design application of SPH to full extent of DNAPL
- Deploy Full Scale Application of SPH

Definition of Extent

- Three-dimensional
 - Lateral
 - Vertical
- Stratigraphy
 - Cone Penetrometer
- Distribution of Contaminants
 - Water Samples
 - Soil Samples

Two Pilot Tests

- Plume 4-1
 - Single Array of Combination Electrode/Wells
 - 20-foot Combination Electrode/Well Spacing
 - State of the Art Technology
- Plume 5-1
 - Single Array of Electrodes
 - ²⁰~~10~~-foot Electrode Spacing
 - ~~Low-perm Barrier~~
 - Separate Vapor Extraction Points

Full-Scale Application

- Multiple Electrode Clusters at Each Plume
- Incorporate Design Parameters From Pilots
- Incorporate Enhancements If Successful During Pilot Tests
- Plan: a 3-month Active Duration
 - Possibly shorter if simultaneous treatment is practicable
 - May have to be extended depending on energy and power-converter availability

Project Timeline

- Completion of Pilots August 02
- Extent Fully Defined Sept 02
- Start of Full-Scale Design July 02
- Start of Full-Scale Construction Sept 02
- Start Full-Scale Heating Nov 02
- Completion of Remediation December 03

Summary

- SPH is most expeditious approach
- This will be the largest application to date
- Two Pilot Tests
- Potential for improving the technology
- 20-month time horizon

Lead in Soil and Lead-based Paint Removal Action, Parcels 79, 98, 105, 106, and 107.

(15 Pages)

Lead in Soil and Lead Based Paint Removal Action

Parcels 79, 98, 105, 106, and 107
Alameda Point
Alameda, California



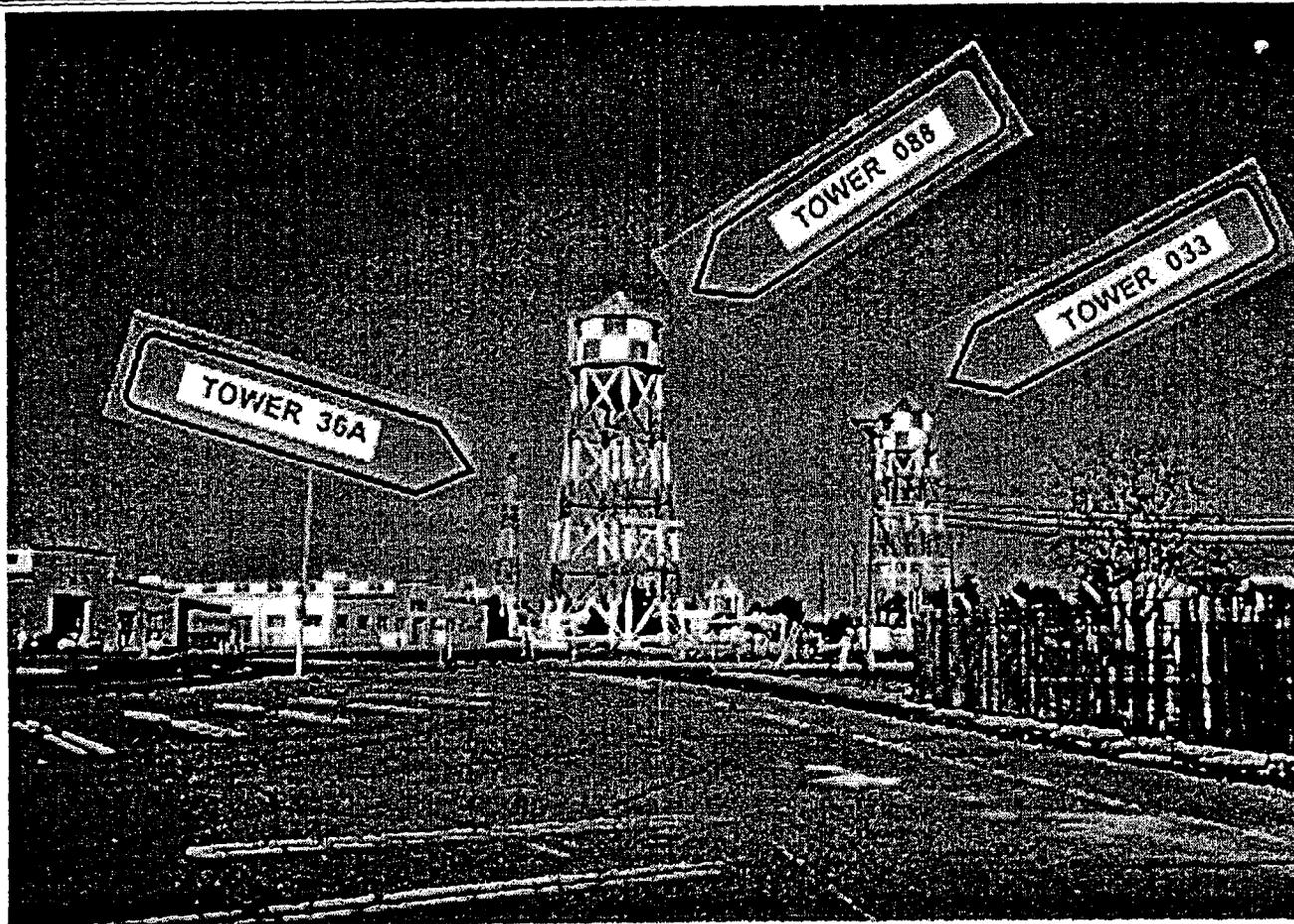
Tetra Tech EM Inc.

Overview

- History of Water Towers and Antennae
- Emergency Removal Action (Sod Placement)
- Non-Time Critical Removal Action (Soil and LBP abatement)
- Project Schedule



View of Existing Towers



Tetra Tech EM Inc.

Development History of the Towers

- The Towers were installed between 1940 and 1947 to supply water to the NAS Alameda housing and operations.
- **Aerial Photograph Review**
 - » 1937 - no towers visible
 - » 1940 - one water tank at NAS; no asphalt pavement
 - » 1947 - three water tanks; pavement at the base
- **Navy Building Records**
 - » 1953 - communication antennas installed



Issues: Lead on Three Existing Towers and Contaminated Soil

- Prior to 1978 - Towers were coated with lead based paint (LBP) for its rust inhibiting properties
- The Navy conducted sand blasting operations to remove peeling and flaking paint
- Paint chips and blasting debris fell to the ground and entered the soil



Emergency Removal Action at Parcel 98

- October 2001 - the Navy conducted an Emergency Removal Action at Parcel 98
 - » concrete footings from former antenna 36B were removed and the resulting holes were filled.
 - » Sod was placed over the lead contaminated soil to reduce potential public exposure.



Objective of Removal Action

- Remove the source of the lead contamination. (Paint on the Tower)
- Remove soil contaminated with lead in concentrations that could present a risk to the public.



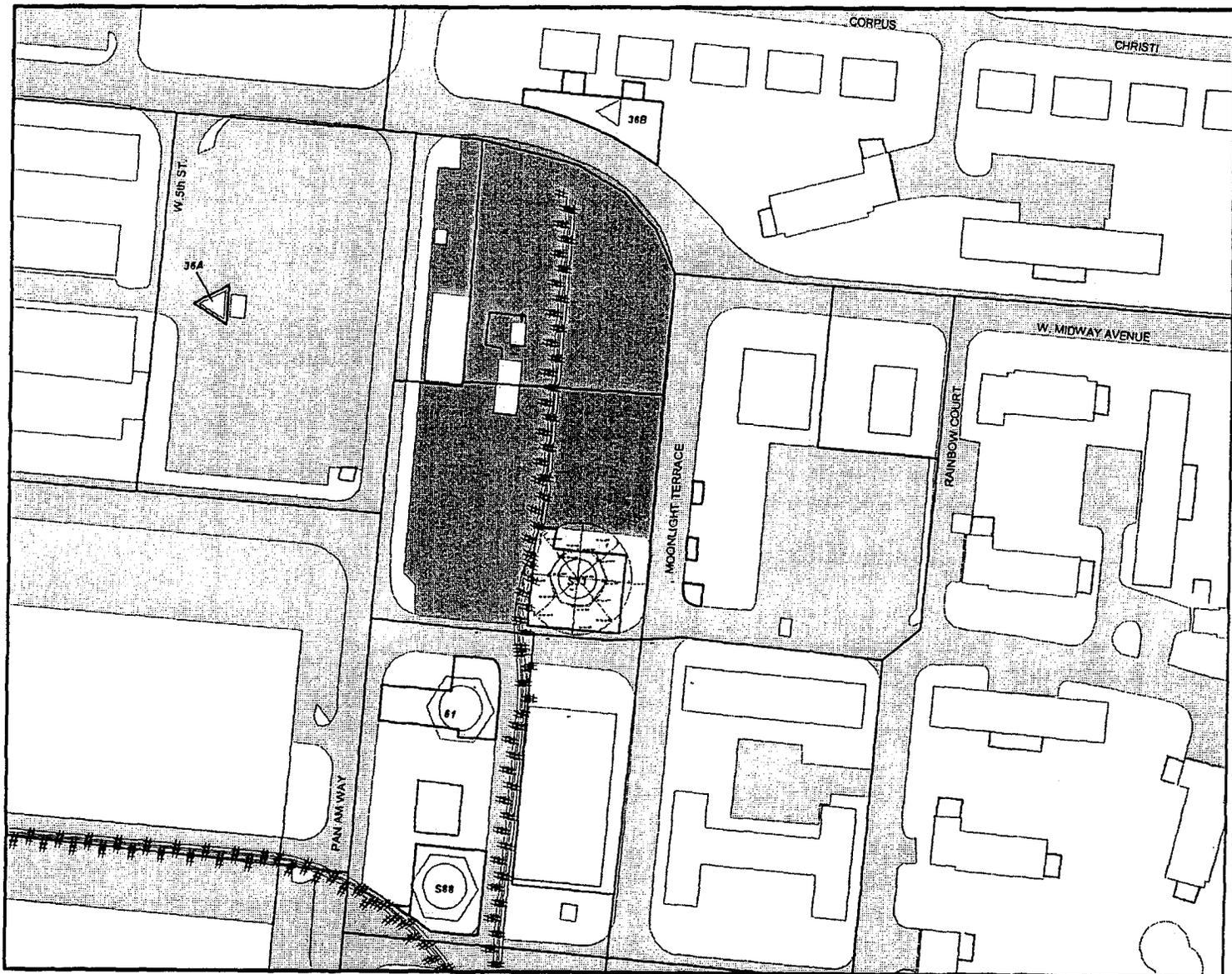
Soil Screening Level

The Navy determined a removal action objective (RAO) to protect the public using DTSC Leadsread model (risk based model)

Navy's RAO = 199 milligrams per kilogram (mg/kg) of lead in soil.



Tetra Tech EM Inc.



LEGEND

- POINT TYPE**
- SAMPLE LOCATION
 - ◻ OFFSET SAMPLE LOCATION
- BOUNDARIES**
- ▤ ENVIRONMENTAL BASELINE SURVEY (EBS) PARCEL
 - ▨ LAND COVER
 - ▧ PROPOSED EXCAVATION
- SITE FEATURES**
- ▩ FENCE LINE
 - ▬ RAILROAD
 - ▭ BUILDING
 - ▭ ROADS
 - ▭ UNPAVED LAND



REMOVAL AREAS
 ALAMEDA POINT
 ALAMEDA, CALIFORNIA
 NOVEMBER 19, 2001

LBP Tower Abatement Alternatives

- Spot LBP abatement and repainting
 - » Physical LBP removal & encapsulation
- Complete LBP abatement and repainting
 - » Blasting LBP removal and repaint
- Tower removal
 - » Spot abatement, disassembly, disposal without abatement



Lead Contaminated Soil Alternatives

➤ Excavation and On-Site Disposal

- Excavation; on-site disposal at CERCLA Site 1 landfill
- Excavation; ex-situ soil stabilization; on-site disposal at the CERCLA Site 1 landfill

➤ Excavation and Off-Site Disposal

- Excavation; off-site disposal at a Class II landfill
- Excavation; off-site disposal at a Class I landfill





Instrument & Control Technologies, Inc.

the Group

TC-1 Company Info TC-2 Company Info

MENU

CRITICAL TEMPERATURES
TI-1 - TI-21

TI-22 - TI-30 TI-31 - TI-39 TI-40 - TI-48

CURRENT TRANSDUCERS

OVERVIEW

SETPOINTS FLOWS DRIP SYSTEM ALARMS

System Enable/Disable

ENABLE DIS-AB

TI-22 - TI-48 THERMOCOUPLE DATA VALUES (DEG. CELSIUS)

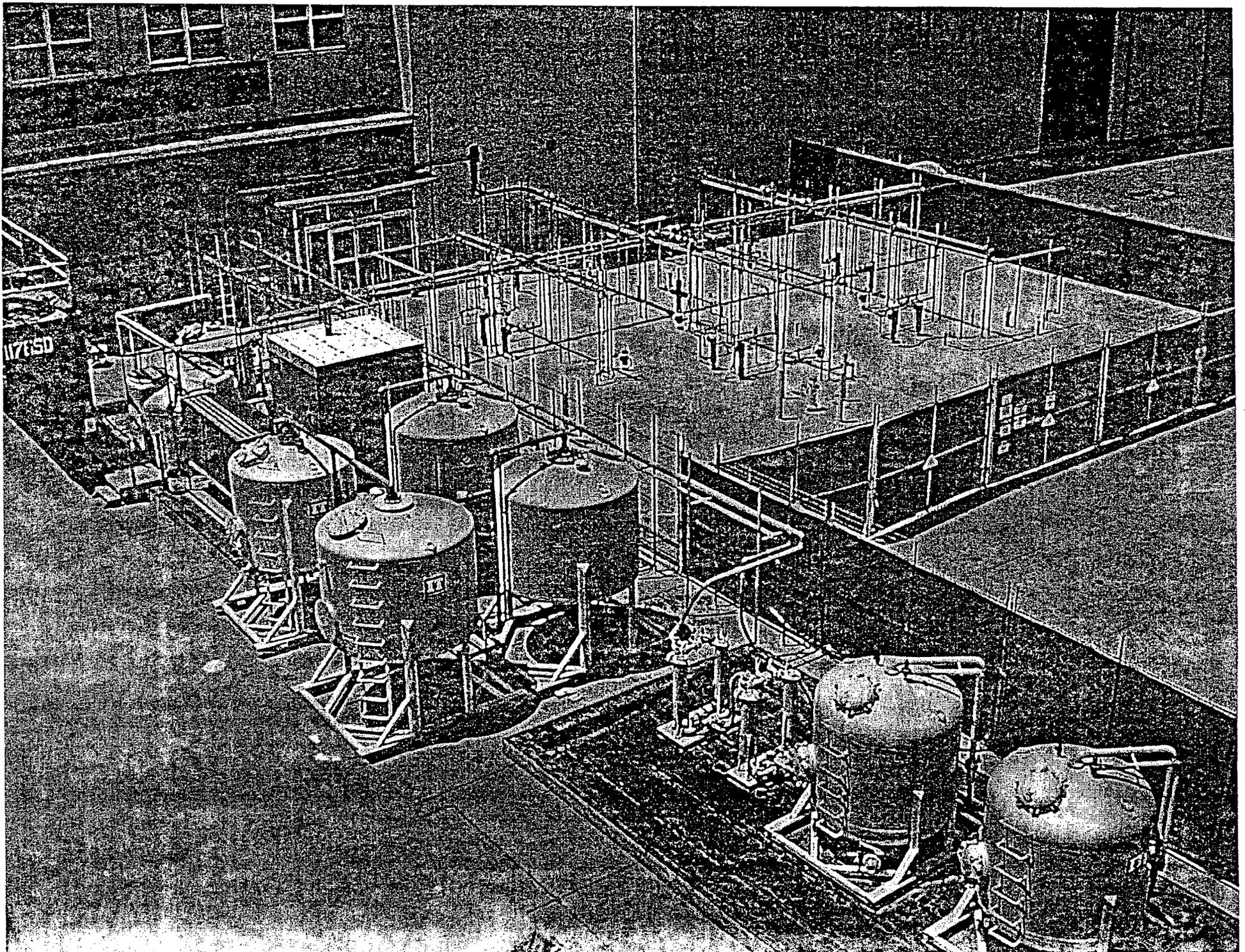
TI-22	18.1	TI-31	18.0	TI-40	18.2
TI-23	17.8	TI-32	18.1	TI-41	18.1
TI-24	17.6	TI-33	18.0	TI-42	18.1
TI-25	18.1	TI-34	18.5	TI-43	18.1
TI-26	127.6810	TI-35	18.7	TI-44	18.2
TI-27	18.3	TI-36	18.9	TI-45	18.3
TI-28	18.4	TI-37	18.9	TI-46	127.6810
TI-29	18.5	TI-38	18.6	TI-47	127.6810
TI-30	19.7	TI-39	18.1	TI-48	127.6810

CRITICAL TTR TC-49 - TC-78

CURRENT TRANSDUCERS TI-1 - TI-15 DATA VALUES (AMPS)

TI-1	0.0	TI-9	0.0
TI-2	0.0	TI-10	0.0
TI-3	0.0	TI-11	0.0
TI-4	0.0	TI-12	0.0
TI-5	0.0	TI-13	0.0
TI-6	0.0	TI-14	0.0
TI-7	0.0	TI-15	0.0
TI-8	0.0		

TREND TREND



Progress to Date

- Definition of Extent 90% Complete
 - Three Plumes Eliminated
- Two Pilot Systems Built
- One Pilot System to Start Imminently

**Installation Restoration Site 25 Polynuclear Aromatic Hydrocarbon
Sampling Locations, Provided by Patrick Lynch.**

(One Page)

**ATTACHMENT C – RESTORATION
ADVISORY BOARD MEETING HANDOUT
MATERIALS**

**INSTALLATION RESTORATION SITE 25
POLYNUCLEAR AROMATIC HYDROCARBON
SAMPLING LOCATIONS**

**04 JUNE 2002 RESTORATION ADVISORY BOARD
(RAB) MEETING SUMMARY**

**THE ABOVE IDENTIFIED ATTACHMENT IS NOT
AVAILABLE.**

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NAVFAC SOUTHWEST TO LOCATE THIS
ATTACHMENT. THIS PAGE HAS BEEN INSERTED
AS A PLACEHOLDER AND WILL BE REPLACED
SHOULD THE MISSING ITEM BE LOCATED.**

QUESTIONS MAY BE DIRECTED TO:

**DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132**

TELEPHONE: (619) 532-3676



TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. N68711-00-D-0005

Document Control No. TC . A021 . 10074

TO: Mr. Ron Fuller, Code 02R1.RF
Contracting Officer
Naval Facilities Engineering Command
Southwest Division
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517

DATE: 04/03/03
DO: 021
LOCATION: Alameda Point, Alameda, California

FROM: [Signature]
Michael Wanta, Contract Manager

DOCUMENT TITLE AND DATE:

Restoration Advisory Board Meeting Summaries for 2002, April 2, 2003

TYPE: [] Contractual Deliverable [] Technical Deliverable (DS) [X] Other (TC)

VERSION: NA REVISION #: NA
(e.g., Draft, Draft Final, Final)

ADMIN RECORD: Yes [X] No [] CATEGORY: Confidential []

SCHEDULED DELIVERY DATE: NA ACTUAL DELIVERY DATE: 04/03/03

NUMBER OF COPIES SUBMITTED TO NAVY: 0/3C/4E
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E = enclosure

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Table with 3 columns: NAVY, TETRA TECH, OTHER. Rows include M. McClelland (06Camm), Diane Silva (05G.DS)*, Courtney Colvin, and a Date/Time Received box.