

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

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

October 1, 2002

ATTENDEES

See attached list.

MEETING SUMMARY

I. Co-Chair Announcements

Michael John Torrey, Community Co-Chair called the meeting to order at 6:30 p.m. Mr. Torrey began the meeting with a moment of silence for the late Mayor of Alameda, Ralph Appezato. Following the moment of silence, Mr. Torrey announced that he would be unable to attend most of the meeting because of another commitment. Prior to leaving, he reminded Restoration Advisory Board (RAB) members that the 2002 Northern California Opportunities in Contracting Conference is scheduled for October 8, 2002, and stated that he would attempt to return before the meeting adjourned.

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

- Matt Kelly is visiting from the Navy's Southwest Division. Mr. Kelly is sitting in for Anne Klimek, the Navy's Environmental Business Line Team Leader.
- The polynuclear aromatic hydrocarbon (PAH) and data gap sampling (DGS) investigations have resulted in the designation of three new Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites. Elevated PAHs resulted in the designation of Site 30, Marina Village Housing, and Site 31, Miller School. DGS revealed a chlorinated hydrocarbon groundwater plume east of Site 1. This area will now be referred to as "Site 32", the Northwestern Ordnance Storage Area.
- Mr. McClelland has received the RAB's request for Technical Assistance for Public Participation grant funds, and the application is being processed.

The following upcoming deliverable dates should be noted:

- The Operable Unit (OU)-5 Draft Final Remedial Investigation [RI] Report will be finalized on October 8, 2002.
- The OU-5 Draft Feasibility Study (FS) is scheduled for submittal in November 2002.
- The OU-3 Revised Draft FS is due on October 14, 2002, followed by a 60-day review period.

- The deadline for comments on the OU-3 Ordnance and Explosive Waste [OEW] and Geotechnical Characterization Report has been extended from October 9 to October 16, 2002, because of a request from the Department of Toxic Substances Control (DTSC).
- The comment period for the Sites 14 and 15 Draft RI Report ends on October 14, 2002.
- Comments on the Sites 5 and 14 Soil Removal Action Report are due on October 19, 2002.
- Comments on the work plan for the removal of the water and antenna towers are due on October 19, 2002 (Tower removal is expected to begin within 2 weeks).
- The Navy's response to comments on the Sites 9, 11, 16, and 21 chemical oxidation pilot study work plan will be submitted the week of October 9, 2002.

At the September 2002 RAB meeting, a question was raised regarding two apparently conflicting statements in the executive summary (ES) of the Draft Sites 14 and 15 RI Report. Leah Waller, Tetra Tech EM Inc. (TtEMI), provided the following explanation. The first statement referred to is located on the first page of the ES and lists the constituents that exceeded preliminary remediation goals (PRG) at Site 15. It is true that antimony, arsenic, and manganese do exceed PRGs; however, the following two paragraphs indicate that the elevated levels are attributable to background concentrations. Therefore, the sentence on Page 3 of the ES that states that no "site-related" chemicals exceed PRGs in groundwater is not in conflict with the earlier statement. Additional text will be added to the ES to clarify the differences between chemicals that exceed PRGs that are attributable to background versus those that are site activity-related.

Various correspondence and documents were distributed to the RAB.

II Approval of Minutes

Mr. McClelland asked for comments on the September 10, 2002, RAB Meeting Minutes. The minutes were approved with the following corrections:

- Jean Sweeney stated that the odd-numbered pages in the U.S. Environmental Protection Agency (EPA) memorandum, The Role of Background in the CERCLA Cleanup Process, was incomplete in the mid-monthly mailing. The complete attachment will be included in the October 2002 mid-monthly mailing.
- Elizabeth Johnson stated that the presentation on early transfer had been rescheduled for the November 2002 RAB meeting. Mr. McClelland noted that change was made shortly after the September RAB meeting.
- George Humphreys stated that the correction he made to the August RAB minutes at the September RAB meeting should be revised from "...proposed for early transfer by the City of Alameda's (City) developer." to "...proposed for early transfer."
- Mr. Humphreys also stated that in the last paragraph on Page 7, the statement "Ms. Shirley stated that the UXO issue is separate from the risk assessment issue, but that if the community feels that it is a great enough cause for concern, they should take action to have the landfill removed" should be revised to reflect that Ms. Shirley was

implying that the community should put pressure on the Navy to take action, not to take action themselves.

- Mr. Humphreys also stated that the last paragraph on Page 7 did not accurately describe his question about the feasibility of conducting seismic analysis on the landfill. He clarified that his concerns were that dredge materials from the Seaplane Lagoon used as fill material between the surface of the landfill and the cap would be subject to liquifaction in the event of an earthquake. In addition, Mr. Humphreys feels that it would not be possible to conduct seismic stability analysis on the landfill cap without knowing exactly what is beneath it.

III. Installation Restoration Sites 1, 14, 15, and 32

The Navy Remedial Project Managers gave brief updates on the sites within the boundaries of the proposed golf course area, Sites 1, 14, 15, and 32. Handouts were provided. Glenna Clark began the presentation with an overview of Sites 14 and 15. Site 14 was operated as a firefighter training school through 1987. Burning of waste fuel occurred within a bermed area. All unburned fuel was captured in a sump that was later removed with the entire bermed area. Other site features included Building 528, a maintenance shop, Corrective Action Area (CAA)-2, and Generation Accumulation Points (GAP)-9 and -11. GAP-9 was used for temporary storage of maintenance wastes associated with Building 528. At Building 528, hazardous waste was generated by maintenance activities that included heavy equipment and vehicle maintenance. In addition, solvents were commonly used. Flammable liquids, solvents, maintenance waste, and oils used for cleaning small arms were stored at GAP-11. The primary concern at Site 14 is the concentrations of volatile organic compounds (VOC) in groundwater. The highest concentrations of vinyl chloride (VC); 1,1-dichloroethane (DCA); total 1,2-dichloroethene (DCE); and trichloroethene (TCE) were detected at Well M101-A. Of those VOCs, VC is the most widely spread.

The current status at Site 14 is as follows. No further action (NFA) has been recommended at CAA-2 under the petroleum program. Total petroleum hydrocarbons are no longer a concern. The removal action for dioxins in soil at the berm/sump area has been completed, and NFA has been recommended. Because confirmation samples collected after excavation of soil in the initial removal area indicated that dioxins were still present above action levels, the Navy decided to remove the entire berm area to 2 to 4 feet below ground surface (bgs). The sump was removed and overexcavated. After completion of the final round of the removal action, no further significant risks from soil exist. Remedial action is recommended for DCA, DCE, TCE, and VC in groundwater, which all exceed their maximum contaminant levels (MCL).

Site 15 is the former transformer storage area, used for storage of electrical equipment, oil-filled transformers, and machinery. A nontime-critical removal action (NTCRA) was conducted in 1995 to remove lead- and polychlorinated biphenyl (PCB)-impacted surface soil. Results of the DGS investigation indicated that no significant lead and PCB concentrations exist at Site 15, so the NTCRA for further removal of soil was cancelled by the Base Realignment and Closure Cleanup Team (BCT).

Currently, all necessary remediation has been completed, and no significant risks associated with soil or groundwater exist. Therefore, the entire site is recommended for NFA.

The remedial action objective (RAO) for the Site 14 FS is to prevent human ingestion of groundwater containing VOCs at concentrations above the state MCLs. The three general response actions evaluated

are: (1) no action, (2) land use controls, and (3) active remediation. The active remedial alternative evaluated is chemical oxidation.

Ms. Sweeney asked for clarification about chemical oxidation. Rick Weissenborn, Navy, explained that chemical oxidation is an in situ form of remediation in which the injection of one type of chemical into the ground is used to destroy the chemical of concern. Pilot studies using this process currently are underway at Sites 9, 11, 16, and 21.

Patrick Lynch asked if the Navy's inability to confirm elevated levels of lead and PCBs at Site 15 could be related to removal of a submerged sewer line in the Oakland Inner Harbor (Harbor) conducted by the Army Corps of Engineer (ACOE) to accommodate the deepening of the channel. Ms. Clark stated that she could not say the events were related. There was a brief discussion about the presence of fuel lines and sewer lines beneath Sites 14 and 15 and the Harbor. Ms. Johnson, City of Alameda (City), stated that she would investigate the issue further and report back to the RAB.

Kevin Reilly asked if the VOC plume extends beneath the Harbor. Ms. Clark responded that results of the DGS investigation indicate that the plume extends beyond the eastern site boundary, toward the Harbor.

Lea Loizos asked how the decision was made to conduct an FS for remediation of groundwater, given that it was not evaluated in the risk assessment in the RI. Ms. Clark stated that because human ingestion of groundwater is not a current use and is unlikely based on planned reuse, it was not evaluated in the risk assessment. However, a potential risk would be associated with groundwater if evaluated for the human ingestion pathway. An FS was recommended, because groundwater could pose a risk under the unrestricted reuse scenario.

Mr. Humphreys asked if VC is present in the soil gas above the groundwater plume. Craig Hunter, TtEMI, stated that VOCs are not present in soil gas. Ms. Loizos asked if a reason had been determined for the absence of VOCs in soil gas above the plume. Mr. Humphreys stated that VC is not a material that would have been used during site operation but that it would most likely have degraded from TCE.

Ms. Sweeney asked for clarification about the function of the sump. Ms. Clark stated that it is a device used to collect waste oil runoff that was not burned during fire training activities. Ms. Sweeney also asked if a well had been found at GAP-9 in Site 14. Ms. Clark stated that the Navy had installed the well to monitor groundwater at that location.

Ms. Sweeney asked if the fuel line that runs just outside of the boundaries of Site 14 would be removed as part of the potential groundwater remediation. Ms. Clark stated that it will not be necessary to remove the line, unless it is determined that the plume extends beneath the lines.

Ms. Loizos stated that the Sites 14 and 15 focus group would like to schedule a meeting with the Navy to discuss some of their concerns. The Navy agreed to the meeting and will meet with the focus group on October 15, 2002, following the BCT meeting at 6:30 p.m.

Dale Smith, Sierra Club, stated that the Sierra Club has concerns about the Sites 14 and 15 RI and feels strongly that in its present form, the document is inadequate. Ms. Smith emphasized that the selected end receptors for the ecological risk assessment may not appropriately measure risks posed by soil and groundwater at Site 14. In addition, Ms. Smith stated that she thinks the Audubon Society may take a similar stance against the document. Ms. Smith will submit her comments to the Navy by the end of the week.

The following is a schedule of the documents for Sites 14 and 15:

- The Draft RI Report was delivered on August 15, 2002.
- The Draft FS Report is due on October 15, 2002.
- The Draft Proposed Plan (PP) is due on March 15, 2003.
- The Draft Record of Decision (ROD) is due on September 30, 2003.

Mr. Weissenborn gave a brief overview of the status of cleanup at OU-3, Site 1. Site 1 is the 1943 to 1956 Disposal Area. During the time that the disposal area was in operation, it received all solid wastes generated on the base, including household, industrial, and ship wastes and construction debris. The disposal area itself is about 14 to 17 acres; however, the area being addressed in the FS is about 55 acres. The study is addressing the larger area because of radiological waste discovered after the original definition of Site 1 boundaries.

The Final RI Report and Draft FS were submitted on August 9 and August 27, 1999, respectively. A Revised Draft FS will be submitted on October 11, 2002. Review and discussion of the RI Report led to the conclusion that there are several remaining data gaps. In December 1999, groundwater, landfill gas, and soil gas samples were collected. Additional groundwater sampling was conducted in April 2000. Results of the DGS were presented in the RI Addendum Volume I, submitted on January 27, 2001. The presence of methane, volatiles in soil gas/landfill gas, and chemicals in groundwater was evaluated. Groundwater data include Hydropunch® samples and monitoring wells. RI Addendum Volume II was a cumulative human health risk assessment that combined the risks associated with chemicals in groundwater and soil and radiological waste. Volume II was submitted on January 30, 2002. The RI Report and Addenda Volumes I and II have all been finalized and are available for review in the RAB Information Repository. RI Report Addendum Volume III, the Geotechnical/OEW Characterization Report, was submitted (Draft Final) on September 20, 2002. This investigation was handled as a separate RI. An RI work plan was prepared, and all CERCLA and ordnance remediation guidance were followed. A surface sweep was conducted to determine if ordnance was present on the site. The sweep resulted in 1,800 spent rounds that were demilitarized and disposed of off site. Based on the findings of the surface sweep, it was determined that there are no longer any live/explosive materials in the landfill and it is safe to proceed with preparation for the cap.

Mr. Reilly asked how deep the surface sweep measured. Mr. Weissenborn stated that it only covered the land surface and no subsurface testing was conducted.

Remaining tasks for site remediation include closure of the pistol range (small arms range), removal of radiological waste, and installation of the cap. Closure of the pistol range will be conducted under the new Munitions Response Program. The blacktop that is in place will be removed, and a human health, risk-based lead cleanup of surface soil will be conducted. A full surface sweep for radiological materials will be conducted and any material that is detected at greater than 15,000 counts per minute (c/m) will be removed to 20 inches bgs. If it is necessary to go deeper than 20 inches bgs, particularly in the northwestern area of the site, the removal will be conducted to whatever depth is necessary to remove the radiological material. Most of the radiological material is from radium paint on aircraft dials, paintbrushes, and rags from the Building 5 shop.

Ms. Smith asked about the rate of decay of the radioactive material found at the site. Mr. Weissenborn stated that he did not know the answer to that question. Mr. Humphreys estimated that the decay is millions of years. Mr. McClelland stated that he believes it is somewhat less than that; he will

investigate this issue and report back to the RAB. The Navy Radiological Affairs Support Office will assist in the removal. DTSC, EPA, and the Department of Health Services agreed to the cleanup criteria during a series of negotiations about a year and a half ago. The cleanup will be conducted when funding becomes available.

Ingrid Baur asked if any remediation has been conducted for radiological materials and expressed concern about the tours that are conducted in the vicinity of the site. Anna-Marie Cook stated that there is an 8-acre area at Site 1 that was addressed in a radiological removal action. Mr. Weissenborn stated that long-term risks are associated with exposure to radium; however, there are no short-term risks. Mr. Humphreys stated that ingestion is the main risk associated with radium because it is a bone-seeking agent (causes bone cancer).

Mr. Reilly asked how close to the water the removal action will be conducted. Mr. Weissenborn stated that a 100 percent surface sweep will be conducted right up to the water's edge to ensure that no radiological material is missed. It is not expected that any detections will be made beyond the rock riprap. Mr. Reilly also asked if the offshore area adjacent to Site 1 has been addressed by the radiological program. Mr. Weissenborn stated that he does not believe that it has, but he will verify that and report back to the RAB.

Mr. Humphreys asked several technical questions regarding the type of detector that will be used in the surface sweep. Mr. Weissenborn was unable to respond to those questions; however, the details of the surface sweep will be available in the work plan.

Ms. Sweeney asked if the radiological material has the potential to leach into the San Francisco Bay. Mr. Weissenborn stated he does not believe that leaching will occur because the radiological material is primarily from painted dials.

Mr. Reilly asked if EPA knows the standard cleanup level that has been agreed to for radium. Ms. Cook stated that Steve Dean, EPA's radiological expert, initially had wanted 15 millirems per year as the cleanup level. Mr. Weissenborn stated that the Navy had proposed 20,000 c/m; however, background levels are 10,000 c/m. EPA and the Navy agreed to compromise at 15,000 c/m. Mr. Reilly asked if the cleanup level was based on the recreational exposure scenario and if there is any concern about the potential effects on wildlife or fish. Ms. Cook stated that Mr. Dean would like to have the cleanup level as close to background as possible and that his primary concern was human ingestion (of strontium), particularly for children who might find it. Currently, no data suggest that strontium is present; however, the Navy is still looking for the source of the higher detections.

Ms. Loizos asked if there will be a work plan for the radiological removal action. Mr. Weissenborn confirmed that a work plan will be part of the remediation. Ms. Cook stated that every removal action must be preceded by a remedial design and a remedial design work plan that are both subject to the review process.

Ms. Sweeney asked for clarification that the chosen remedial alternative would likely be an in situ alternative, rather than excavation. Mr. Weissenborn confirmed that excavation is unlikely because it would not be economically feasible to excavate the entire landfill. Estimates for the cost of excavating Site 2 revealed that it would cost about \$390 million and would take about 3 to 4 years. In addition, all hazardous material excavated would have to be safely transported through the City to a hazardous waste site.

The FS will evaluate two types of caps for the landfill: a Resource Conservation and Recovery Act (RCRA) C cap (also known as an engineering cap) and a monolithic RCRA D cap. The RCRA C cap is a minimum of 4 feet thick and has a 2-foot-thick, low-permeability layer beneath it. Doug DeHaan asked if the cap will cover the whole site. Mr. Weissenborn stated that it will cover 55 acres. The cost will be about \$1 million per acre. The RCRA D cap can be operated as an evapotranspiration cap that uses plants to regulate moisture. The primary purpose of most landfill caps is to keep water from infiltrating the landfill. However, because of the inevitable tidal influence of Site 1, it is difficult to justify the expense of a cap designed to prevent infiltration through the top of the site. In addition, the geotechnical RAO is to prevent the discharge of waste into the bay or the estuary. Construction of the cap also will involve regrading of the surrounding area and construction of a geotechnical wall. Jim Leach stated that he was in charge of the cleanup at Travis Air Force Base (AFB). Mr. Leach has been unable to find an explanation of how the estimated cost was derived for the remedial alternatives at Alameda; however, Travis AFB had a similar problem with landfills. There, the contents of the landfill were excavated, spread across the runway, and sorted and hazardous materials were removed and transferred to a class II facility. The remaining contents were returned to the landfill. This process took about 3 months. Mr. Leach also noted that the wastes could be barged to a rail station to avoid having to transport hazardous materials through residential areas and that this approach may be of particular usefulness, because the intended reuse for Site 1 would most likely require penetration of the cap. Mr. Leach asked if the same type of alternative could be considered in the FS for Site 1. Mr. Weissenborn stated that the estimates of the excavation would have to be based on sifting through the entire contents of the landfill, operating at Level B, if not Level A. However, it may be investigated further as a remedial alternative. Part of the remedial alternative with the cap would be institutional controls. Mr. Weissenborn stated that he believes that any construction on top of a landfill will eventually result in problems. There are many variables that will factor into the remediation and reuse alternatives.

Ms. Sweeney asked if a cap would be required if the methods used at Travis AFB were employed at Site 1. Mr. Weissenborn stated that he was unsure about that answer. Mr. Leach answered that they did not use a cap at Travis. Mr. McClelland asked Mr. Leach how large the landfill was at Travis AFB. Mr. Leach responded that there were 20 trenches that measured about 15 feet deep, 30 feet wide, and 150 feet in length.

Ms. Baur asked what a monolithic cap is and if it less expensive than the RCRA C cap. Mr. Weissenborn responded that the RCRA D (monolithic) cap is significantly less expensive than the RCRA C cap and has a higher permeability than the RCRA C cap. Native vegetation would trap most of the rainwater that would fall on the landfill. The technical reason for a landfill cap is to prevent water from infiltrating the landfill. An alternative reason for a landfill cap is to prevent exposure to landfill contents. Ms. Cook added that typically, caps are designed for landfills that are inland, not on the coast. Therefore, normal considerations do not include exposure to a body of water such as the bay. In this case, there is a greater effort to prevent materials from leaching out of the landfill and affecting groundwater.

Mr. Reilly asked if the State Bay Conservation and Development Commission (BCDC) has to approve the chosen remedial alternative. Mr. Weissenborn stated that he does not believe their approval is required as long as the bay is not impacted.

Ms. Smith asked why the Navy is not willing to consider installing a liner beneath the landfill.

Mr. Weissenborn responded that the landfills were operated before the use of liners and that because of the age of the landfill, most of the leaching from it is probably nearly finished. Practically, it would not be feasible to dig it all up, place a liner, and replace the entire landfill. It would be just as effective to excavate it and transport it to another hazardous waste site. Operating the landfill as a bioreactor

(allowing water and air in and collecting leachate to put it back into the landfill) also helps promote biodegradation.

Mr. Humphreys stated that he would like to clarify that the following are requirements for landfill caps:

- Gas collection system and burning of gases
- High-density polyethylene liner
- A gap where any leaking gases or liquids could be measured
- Second, bentonite clay cap
- Foundation material
- Topsoil
- Plants

Mr. Weissenborn agreed that these are the characteristics of a regulation cap. The problem with traditional regulations at Site 1 is that the landfill was constructed prior to institution of regulations requiring liners.

Because the presentations were running over schedule, Mr. Weissenborn stated that he would return to do an additional presentation following submittal of the FS when further questions could be addressed.

Andrew Dick, Navy, provided information on Site 32, the Northwestern Ordnance Storage Area, located just east of Site 1. Site features include eight buildings, two of which have been demolished; GAP-7, located northeast of Building 420; and three underground storage tanks (UST) and the associated piping (tanks and piping were removed in 1994). In 1999, an investigation was conducted to evaluate the presence of methyl tertiary butyl ether, and groundwater samples were collected in the vicinity of the former USTs. Chlorinated compounds were detected above MCLs. As part of the DGS investigation in 2001, groundwater samples were collected to delineate the extent of chlorinated compounds. The results indicated that the lateral extent of the plume was larger than anticipated; however, the vertical extent of the plume has not been determined. Groundwater at Site 32 is found at about 5 feet bgs. The Navy is hoping to award the contract for RI at Site 32 by February 2003.

Ms. Baur asked if the primary reason for designating this area as a new CERCLA site is groundwater impacts. Mr. Dick confirmed that is true. 1,2 DCE has been detected at 120 parts per billion (ppb) and has an MCL of 6 ppb; VC has been detected at 35 ppb and has an MCL of 0.5 ppb.

The following is a schedule of activities to be conducted at Site 32 when funding is available.

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|------------------------------------|----------------------------------|
| • 05/03/03 – Draft Work Plan | • 03/01/05 – Draft PP |
| • 07/01/03 – Comments due | • 05/01/05 – Comments due |
| • 09/01/03 – Draft Final Work Plan | • 07/01/05 – Draft Final PP |
| • 10/01/03 – Final Work Plan | • 09/01/05 – Public comments due |

- 10/01/03 – Begin field work
- 10/01/04 – Draft RI/FS Report
- 12/01/04 – Comments due
- 02/01/05 – Draft Final RI/FS Report
- 03/01/05 – Final RI/FS Report
- 09/15/05 – Final PP
- 09/15/05 – Draft ROD
- 11/15/05 – Comments due
- 1/15/06 – Draft Final ROD
- 2/15/06 – Final ROD submitted

Mr. DeHaan asked what type of sampling (if any) has been conducted in the area between Sites 14 and 15, the location of a former industrial complex. Mr. Dick stated that he did not have any information on that.

Mr. Humphreys asked if designation of the new sites was a result of information from the DGS investigation. Mr. Dick clarified that designation of Site 32 resulted from the DGS; however, Sites 30 and 31 (Marina Village Housing and the Miller School, respectively) were designated as new sites because of results of the PAH investigation.

Mr. Humphreys asked why there have been so many sampling investigations that target one or a few chemicals rather than doing one comprehensive sampling event to target all chemicals. Ms. Cook stated that the Environmental Baseline Survey (EBS) was designed to target all chemicals that the Navy had reason to believe might be impacting soil or groundwater. Subsequent sampling events were designed based on new information. The more information that is gathered about the base, its history, and the types of impacts to soil and groundwater, the easier it is to define which chemicals should be investigated. Ms. Cook emphasized that RI is, by nature, an iterative process.

IV. Update on EPA Grant to City and Status of Golf Course Planning

Ms. Johnson provided the following update on the EPA Grant and the progress of planning the golf course. The Base Reuse Plan (1996) designated the northwestern portion of the base as a planning area called the “northwest territories”. That area was set aside for recreation and open space. Later it was decided that the City would develop the property as a championship golf course. Currently, the City is preparing an Environmental Impact Report (EIR) for construction of the golf course. The next phase of planning will involve construction of a hotel that will be situated near the center of the course and will not be on the landfill. No significant structures will be built on the landfill. Mr. Torrey asked which hotel it might be. Ms. Johnson stated that a request for qualifications was issued, and Hilton, Ritz Carlton, and several others responded. The research the City has completed so far indicates that there is a strong market for high-end golf. The resort will be more expensive than the existing course in Alameda, and the City hopes that it will generate enough revenue to fund construction of the new sports complex planned for the north-central portion of the base, just east of the golf course. The City is proposing itself as the developer for the golf course. If this approach is successful, it will allow the City to retain the greatest portion of the revenue possible, rather than having to share the profits with the master developer. The City is still interested in pursuing early transfer for the northwest territories; however, designation of Site 32 will have to be factored into the plans. Ms. Johnson stated that the City shares many of the RAB members’ concerns about the implications of developing a landfill site. To evaluate the landfill cap design and use of dredge material from the Seaplane Lagoon beneath the cap, the City applied for the EPA’s Superfund Redevelopment Initiative Pilot Program. A grant of \$100,000 was

awarded to evaluate these issues. The City has been working on design and development plans since 2000, and progress is being made; however, it has been slow. The City has spent the last year resolving design issues. Mechanisms to prevent squirrels from digging down into the cap and a way to co-design the drainage system to protect the cap and capture runoff from the irrigation system have been evaluated. In addition, ways to maximize use of resources and minimize costs also are being considered. The City has applied for an extension of the EPA grant and is hoping to give the Navy their recommendation about how to design the landfill cap and discuss the potential to reuse the material dredged from the Seaplane Lagoon. The next step will be to hold a public meeting and mail the results of studies that have been conducted. That meeting will be held during the RAB meeting in an effort to get the most participation from the people that are addressing the questions.

Currently, the City is also negotiating with the Port of Oakland (Port) and the ACOE to use dredge materials from the Harbor to contour the whole golf course. In addition, plans are being made to remove the runways and mine the sand beneath them for use as a layer between dredge material and topsoil. In order to meet the Port's timeframe the City is making an effort to get their EIR certified as soon as possible. However, because the golf course is within the area covered by the proposed General Plan amendment, the City wants to be able to accurately convey the cumulative impacts from the General Plan amendment, and to be consistent with the General Plan as it will be after the amendment. Therefore, the City will wait for the General plan draft EIR to be released before releasing the golf course EIR. The City's golf course EIR most likely will not be certified until January or February 2003. Following certification of the EIR, the City will submit an application to BCDC for permission to develop within 100 feet of the Bay. The City will present their preliminary project design to BCDC on Monday, November 4, 2002.

Because an updated figure of the plans for the golf course, walking trail, park, hotel, and clubhouse has not yet been prepared, Ms. Johnson presented an older draft of the proposed trail and indicated where most of the new changes are. The path around the course roughly follows the Oakland Inner Harbor along the northern edge of the base, connects to the beach and the wildlife refuge beyond the western edge of the course, meets the 7-acre park, and wraps back around toward the hotel. The road runs east-west just to the south of the golf course, then curves northward to the center of the course to meet the hotel and clubhouse and extends westward to meet the park.

Mr. Humphreys asked if the effects of methane and VC gas escaping from the landfill to the grass on the golf course had been evaluated. Mr. Weissenborn stated that there are no indications from measurements taken above the landfill that there are elevated levels of either gas coming off of the landfill. Ms. Loizos stated that after the landfill is capped, the insignificant amounts that may be coming off of the landfill now will build up and become concentrated. Eventually, the gas will find a preferential pathway to escape.

Mr. Lynch stated that he believes there are two water tanks in Site 14 filled with contaminated materials from UST excavations and asked how the golf course will be contoured around them. Mr. Lynch stated that he believes that tanks are associated with the PanAm well and suggested that sampling of the soil in the tanks should be conducted. Ms. Clark responded that sampling of the soil in the tanks has been conducted.

Ms. Baur asked for clarification about the uses of dredge materials from the Seaplane Lagoon and the Oakland Inner Harbor. Mr. McClelland stated that the material from Seaplane Lagoon would be used as a base beneath the RCRA cap on the landfill. The material from the Oakland Inner Harbor would be used to contour the golf course.

Mr. Humphreys asked if removing the silt layer in the Seaplane Lagoon would expose the organic layer of contamination that lies beneath the silt. Ms. Cook stated that the Lagoon has a layer of sediment and a layer of contaminated sediment from historic liquid waste disposal. If the lagoon is dredged, it would be required that the dredging be conducted to below 15 feet, the depth of the contaminated sediment, so no exposed contamination would remain. The contaminated sediment could safely be used on the landfill, because it does not pose a significant risk to human health. Its primary risk is associated with aquatic receptors; therefore, removing it from the lagoon would diminish the threat associated with it.

Ms. Sweeney asked how aquatic receptors would be protected during the removal process. Ms. Cook stated that it is an extensive process involving construction of a wall, removal of sediment, and dewatering of the sediment before use as the base for the cap. The wall allows safe removal of potentially harmful materials. After removal is complete, the wall can be removed and the fish and other organisms can safely return.

Bert Morgan asked if the City is planning to use the runways for riprap around the golf course. Ms. Johnson stated that the runway material will be recycled and used as road base around the city.

Ms. Sweeney asked if development of northwest territories would harm the large rabbit population. Ms. Johnson responded that generally, wildlife tend to move out of development areas quickly and are not harmed. However, the City will be consulting with wildlife biologists to ensure that all necessary precautions are taken to protect the area wildlife.

V. BCT Activities

Marcia Liao gave the following summary of BCT activities for the month of September 2002.

The September 2002 BCT Monthly Tracking Meeting was cancelled; however, two conference calls were held. The first call was held to discuss the Site 25 Draft RI Report. During that call, agency comments and concerns were addressed and resolved.

The second conference call was held regarding the Site 1 Draft RI Report Addendum Volume III. This report is the OEW and Geotechnical Characterization.

VI. Community and RAB Comment Period

Mr. Torrey opened the floor for nominations for Community Co-Chair and Vice Community Co-Chair. RAB members decided to postpone election nominations until the November 2002 RAB meeting; however, Mr. Torrey suggested that Mr. Morgan and Mr. Humphreys consider accepting his nomination for Co-Chair and Vice Co-Chair, respectively. Elections will be held at the December 2002 meeting prior to the RAB holiday party.

Mr. Lynch stated that his review of the Background PAH Investigation Report led to several questions regarding the EBS. Mr. Lynch stated that he believes that the first evidence of PAHs was found only because a soil sample mistakenly was collected from the wrong location during EBS sampling. Mr. Lynch suggested that because only 9 of 24 samples were collected successfully using hand augers during the PAH investigation and the OU-5 RI investigation at Site 25, an alternative method of collecting samples should be employed at Sites 30 and 31.

Mr. Lynch also stated that he has seen data indicating that PAHs are present in the top 2 feet of soil at Marina Village Housing, which is supposed to be clean fill brought in following remediation at that site. He concluded that either the remediation was not conducted properly or there could be a problem with upward migration of PAHs in soil. In addition, Mr. Lynch stated that elevated levels of nickel present at that site raise questions about the remedial measures taken.

Mr. Lynch has found information that indicates hotspots in Community Environmental Response Facilitation Act parcels, which regulators agreed had no hazardous material impacts to them. Mr. Lynch suggested that the Navy review the responses to comments by him and Arc Ecology regarding the Marsh Crust Remedial Action Plan/Record of Decision. Those responses do not appear to be consistent with current data.

Ms. Sweeney asked if RAB members would consider moving the monthly RAB meetings to a day that would not conflict with the City Council Meetings.

Ms. Loizos reminded members of the Sites 14 and 15 Focus group that they will meet with Ms. Clark and the Sites 14 and 15 RI Report team to discuss their comments on the document at 6:30 p.m. on October 15, 2002.

The meeting was adjourned at 8:49 pm.

ATTACHMENT A

**NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING AGENDA
OCTOBER 1, 2002**

(One Page)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

1 OCTOBER, 2002 6:30 PM

ALAMEDA POINT – BUILDING 1 – SUITE 140

COMMUNITY CONFERENCE ROOM

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

MEETING MINUTES AVAILABLE ONLINE AT:

WWW.EFDSW.NAVFAC.NAVY.MIL/ENVIRONMENTAL/ALAMEDAPOINT.HTM

<u>TIME</u>	<u>SUBJECT</u>	<u>PRESENTER</u>
6:30 - 6:35	Approval of Minutes	Michael John Torrey
6:35 - 6:50	Co-Chair Announcements - <i>Upcoming Deliverables</i>	Co-Chairs
6:50 – 6:55	Co-Chair and Vice Co-Chair Nominations	Michael John Torrey
6:55 - 7:30	IR Sites 1, 14 & 15 Status	Navy RPMs
7:30 - 8:10	Update on EPA Grant to City & Status of Golf Course Planning	Elizabeth Johnson
8:10 - 8:20	BCT Activities	Marcia Liao
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: October 1, 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		X		X	X	IB		
Clem Burnap												
Ardella Dailey		*			X	X				AD		
Nick DeBenedittis												
Douglas deHaan		X	X		X	X			X	df		
Tony Dover	X		X				X					
George Humphreys	X	X	X	X	X	X	X	X	X	GH		
James D. Leach	X	X	*	*	X	X	X		*	JDL		
Jo-Lynne Lee	X	**	X		**			*				
Lea Loizos	X	X	X	X		X	X	*	X	LL		
Bert Morgan	X	X	X	X	X	X		X	*	BM		
Ken O' Donoghue												
Kurt Peterson				X	X	X	X	X	X	KP		
Kevin Reilly	X	X			X	X	X	X	X	KRR		
Bill Smith (attending for Mary Sutter)	X	X	X	X								
Dale Smith (attending for Mary Sutter)				X	X	X			X	DS		
Lyn Stirewalt	X	X	*		*	X		*	*			
Mary Sutter												
Jean Sweeney						**		X	X	X		
Jim Sweeney						**	X	X	X	X		
Luann Tetrick		X	X		X	X	X	X	X	X		
Michael John Torrey	X	X	X	X	X	X	X	X	X	MJT		

* Denotes excused absense

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					X					
David Rheinheimer								X	X			
REGULATORY AND OTHER AGENCIES	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Anna-Marie Cook (EPA)	X	*	X	X	X		X	*	X	<i>AMC</i>		
David Cooper (EPA)	X	X	X					X				
Judy Huang (RWQCB)								X	*	<i>JH</i>		
Elizabeth Johnson (City of Alameda)	X	X		X	X	**	**	*		<i>EJ</i>		
Marcia Liao (DTSC)			*	X		X	X	X	X	<i>ML</i>		
Laurent Meillier (RWQCB)												
Patricia Ryan (DTSC)	X	X	X	X	X	X			X			
Sophia Serda (EPA)					**							
Michael Shields (USCG)								X	X	<i>MS</i>		
Merry Goodenough (USCG)									X	<i>MG</i>		

* Denotes excused absense

U.S. NAVY	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Glenna Clark										JC		
Andrew Dick	**			X	X			X	X			
Steve Edde	X	X	X	X			X		X			
Greg Lorton							X					
Mike McClelland	X	X	X	X		**	X	X	X	men		
Tom Pinard	X	X		X	X	X	X	X	X	top		
Rick Weissenborn	X			X	X	X	X			RW		
TETRA TECH EMI	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Courtney Colvin	X	X	X		X	X	X	X	X	CSC		
Tracy Craig	X	X	X			X		X	X			
Chris Fennessy						X			X			
Jim Helge						X						
Marie Rainwater												
Leah Waller	X	X	X									
Corinne Crawley				X								
Craig Hunter										A		
GPI	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Michael Stone	**	**	**	**	**	**	**	**	**			

* Denotes excused absense

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		X		X	X	185		
Eric Johansen - Bechtel					X							
Ron Rinehart, Pacific States			X	X	X	X	X	X				
Aidan Barry - APCP					X	X	X					
Bill Howell - 3-D Environmental					X	X						
Lee Dodge - LFR							X		X	X		

* Excused absence

** Attended but did not sign roster

* Denotes excused absence

ATTACHMENT C

**NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS**

Remedial Investigation (RI)/Feasibility Study (FS) Report for Sites 14 and 15, 2002. Presented by Glenna Clark, Department of the Navy (Navy) Remedial Project Manager (RPM).
October 1.

Operable Unit (OU) 3 Status Update, 2002. Presented by Rick Weissenborn, Navy RPM.
October 1.

IR Site 32 (Northwestern Ordnance Storage Area), 2002. Presented by Andrew Dick, Lead Navy RPM. October 1.

Remedial Investigation (RI)/Feasibility Study (FS) Report for Sites 14 and 15, 2002.

(11 Pages)



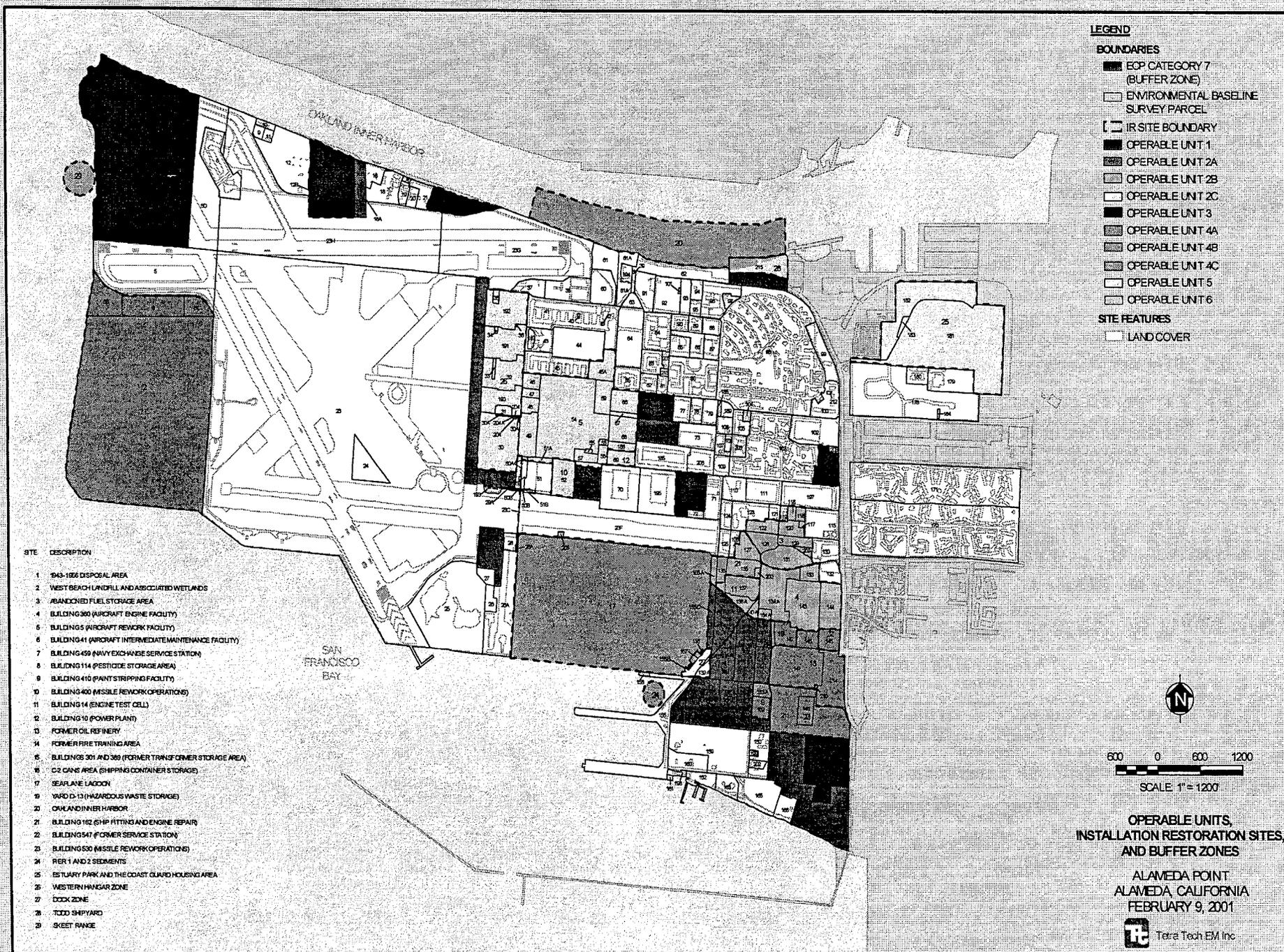
ALAMEDA POINT
ALAMEDA, CALIFORNIA



Remedial Investigation/Feasibility Study
Report for IR Sites 14 and 15

Glenna Clark
Remedial Project Manager
NAVFAC Southwest Division

October 1, 2002





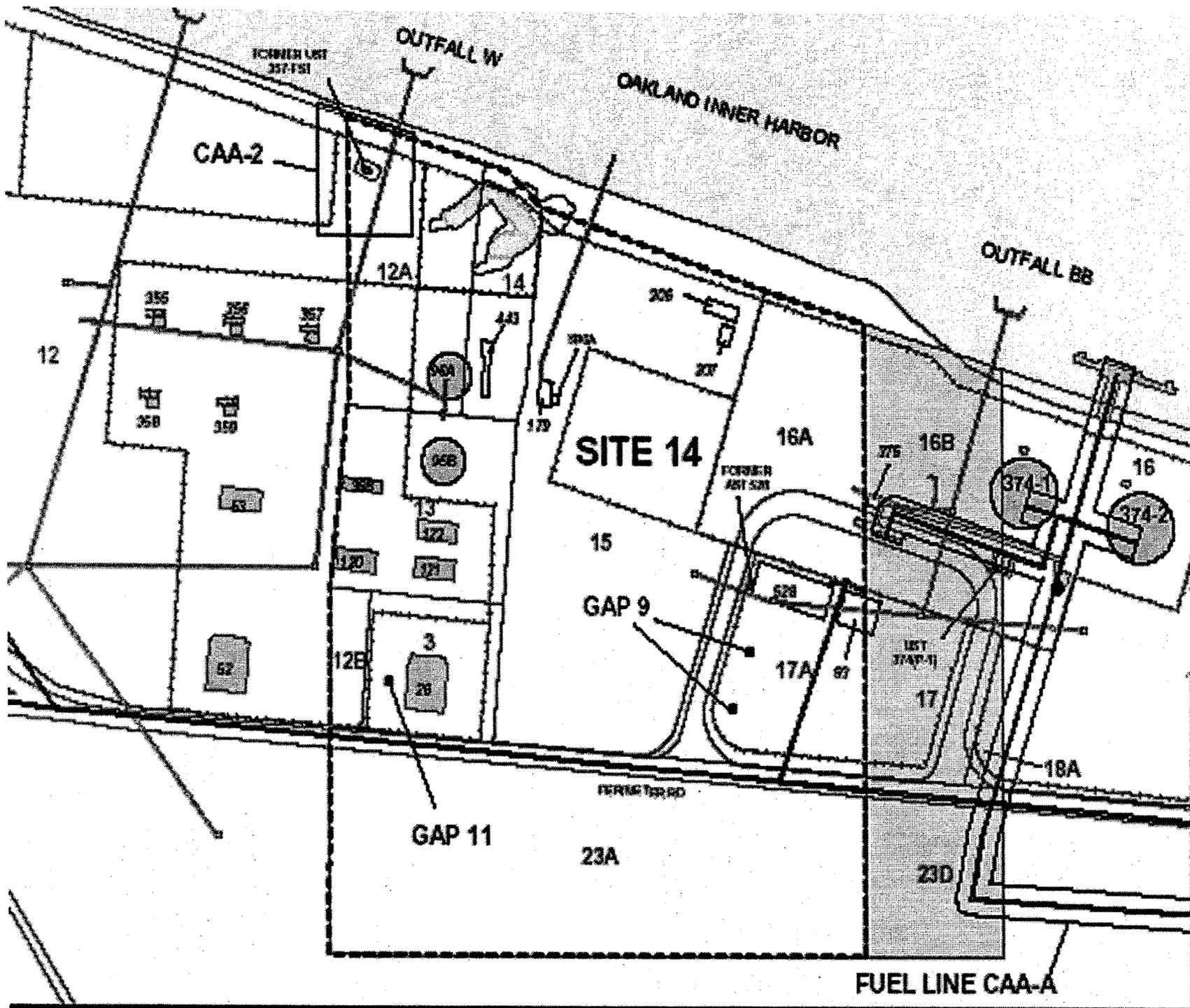
ALAMEDA POINT

ALAMEDA, CALIFORNIA



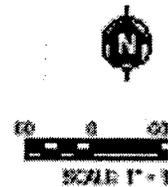
Site 14 – Former Fire Training Area

- Fire training school through 1987
- Burning of waste fuel occurred within bermed area, unburned fuel captured in sump
- Building 528 (maintenance shop)
- CAA-2
- GAP 9
- GAP 11



- LEGEND**
- CATCH BASIN
 - GENERATOR ACCIDENT (GAP)
 - CERCLA SITE ID#
 - ~ FENCE LINE
 - ~ FUEL LINE
 - ~ SEWERY SLEEVES
 - ~ STORAGE SLEEVES III
 - CORRECTIVE ACTION
 - BUFFER ZONE
 - TRANSFERENTIAL SURVEY PARCEL
 - STORAGE TANK
 - EXCAVATION
 - FORMER FINE-FINE TRANSFER AREA (RE-DEVELOPMENT)
 - BUILDING (STEEL)
 - BUILDING (CONCRETE)
 - SAND COVER
 - OPEN WATER

NILES
 AST: ALI'S GENERAL
 CERCLA: COMMERCIAL RE-DEVELOPMENT
 LIST: (UNDEVELOPED)



**FIGURE 2-
 SITE 14**
 ALAMEDA, CA
 ALAMEDA, CALIF





ALAMEDA POINT

ALAMEDA, CALIFORNIA



Current Status – Site 14

- CAA-2 – recommending no further action under the TPH Program
- TPH is not a chemical of concern
- Removal Action for dioxins in berm/sump area completed. No further action is recommended.
- No significant risk from soil.
- Groundwater is recommended for remedial action. 1,1-dichloroethane (DCA), 1,2-dichloroethene (DCE), trichloroethene (TCE), and vinyl chloride (VC) exceed the MCL



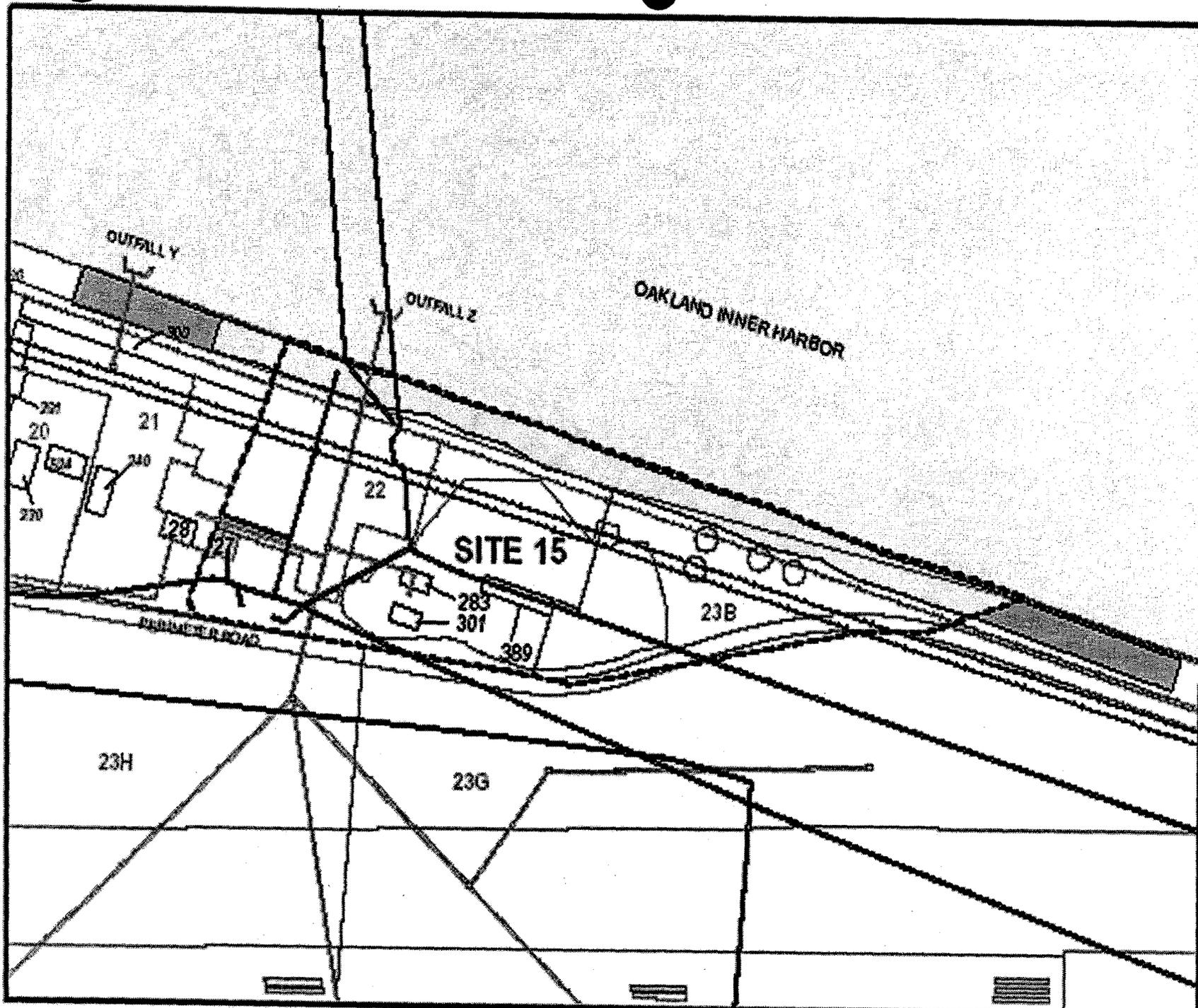
ALAMEDA POINT

ALAMEDA, CALIFORNIA



Site 15 – Former Transformer Storage Area

- Area used for storage of electrical equipment, oil-filled transformers, and machinery
- A non-time critical removal action was conducted in 1995 to excavate surface soil contaminated with PCBs and lead.
- Analytical data from additional soil sampling conducted in 2001 as part of the Data Gap Sampling event failed to verify significant lead and PCB concentrations. As a result, a planned removal action was canceled by the BCT.



- LEGEND**
- CATCHMENT
 - CIRCLED SITE 1
 - FENCE LINE
 - RAILROAD
 - FUEL LINE
 - SANITARY SEWER
 - STORM SEWER
 - ENCROACHMENT OR EASEMENT
 - EXCAVATION
 - VEHICLE**
 - CLEARED INFILL
 - BUILDING FOOTPRINT
 - BUILDING FOOTPRINT
 - LAND CONTOUR
 - OPEN WATER

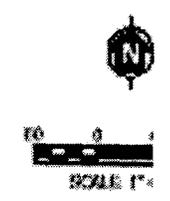


FIGURE SITE
ALAMEDA
ALAMEDA, CA





ALAMEDA POINT ALAMEDA, CALIFORNIA



Current Status – Site 15

- Removal Action for lead and PCBs is complete – no further action
- No significant soil or groundwater risk
- Entire site recommended for no further action



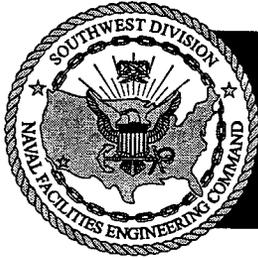
**ALAMEDA POINT
ALAMEDA, CALIFORNIA**



Site 14 Feasibility Study

Remedial Action Objective: Prevent human ingestion of groundwater containing VOCs at concentrations above the state MCLs.





ALAMEDA POINT
ALAMEDA, CALIFORNIA



General Response Actions

No Action

No remedial measures will be taken at the site

Land Use Controls

Non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use

Active Remediation

Engineering technologies that minimize or eliminate the potential exposure of human and ecological receptors to contamination by reducing contaminant toxicity, volume, or mobility through treatment or containment



**ALAMEDA POINT
ALAMEDA, CALIFORNIA**



Schedule

**Draft Remedial Investigation
Report**

August 15, 2002

Draft Feasibility Study Report

October 15, 2002

Draft Proposed Plan

March 15, 2003

Draft ROD

September 30, 2003



Operable Unit (OU) 3 Status Update, 2002.

(Six Pages)



**ALAMEDA POINT
ALAMEDA, CALIFORNIA**



Site Remediation

Pistol Range Closure

Radiological Waste Removal

Cap Installation





**ALAMEDA POINT
ALAMEDA, CALIFORNIA**



CERCLA Process (Continued)

Remedial Investigation Report Addendum, Volume 3
September 20, 2002 (Draft Final)

Revised Draft Feasibility Study Report
Due October 11, 2002





**ALAMEDA POINT
ALAMEDA, CALIFORNIA**

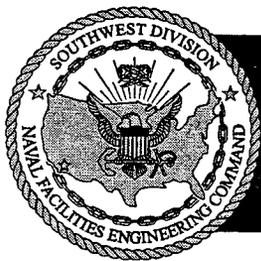


CERCLA Process (Continued)

Remedial Investigation Report Addendum, Volume 1
January 27, 2001

Remedial Investigation Report Addendum, Volume 2
January 30, 2002
EPA Concurrence March 4, 2002





ALAMEDA POINT
ALAMEDA, CALIFORNIA
CERCLA Process



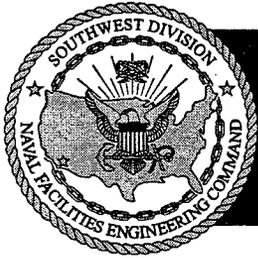
Final Remedial Investigation Report

August 9, 1999

Draft Feasibility Study Report

August 27, 1999





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ALAMEDA, CALIFORNIA



Site 1

1943 to 1956 Disposal Area

All Base Waste Disposed

Household, Industrial, Construction Debris, Ships Waste





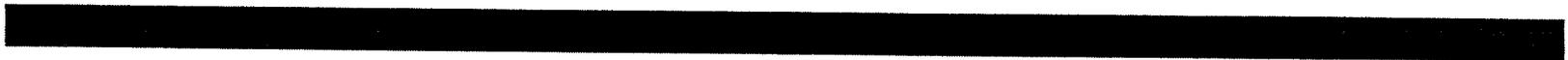
**ALAMEDA POINT
ALAMEDA, CALIFORNIA**



Operable Unit 3 Status Update

**Rick Weissenborn
Remedial Project Manager
NAVFAC Southwest Division**

October 1, 2002



IR Site 32 (Northwestern Ordnance Storage Area), 2002.

(6 Pages)

ALAMEDA POINT RAB MEETING

INSTALLATION RESTORATION (IR) SITE 32 (NORTHWESTERN ORDNANCE STORAGE AREA)

October 1, 2002

**Andrew Dick
Lead Remedial Project Manager
U.S. Department of Navy
Naval Facilities Engineering Command,
Southwest Division**

October 1, 2002



SITE 32 - LOCATION

October 1, 2002



SITE 32 – NORTHWESTERN ORDNANCE STORAGE AREA

Description

- 8 Buildings
 - Two destroyed - Bldg 82 (Barracks) and Bldg 596 (Sewage Lift Station)
 - Six present – Building 420 (Ammunitions Storage and Repair), Bldg 439 (Sewage Pump Station), Bldg 440 (Guard Watch Tower), Bldg 497 (Special Weapons Magazine), Bldg 498 (Sentry Tower), and Bldg 594 (Offices and Living Space)
 - GAP-7, northeast of Bldg. 420
 - Storage of solvents and thinners in 5-gal containers
 - 3 USTs and assoc. piping (Removed in November 1994)
 - T-594-1 (1,000-gal diesel) used to fuel generators in Bldg 594
 - T-420-1 (1,000-gal diesel) used to fuel generators in Bldg 420
 - T-594-2 (1,000-gal gasoline) used to fuel generators in Bldg 594
-

October 1, 2002



SITE 32 – NORTHWESTERN ORDNANCE STORAGE AREA

Investigation History

- 1994-1995 USTs T-594-1 and T-594-2 removal
 - Soil and groundwater samples collected from excavation and pipe trenches (TPH and BTEX analyses only)
 - TPH concentrations deemed acceptable but need MTBE
- 1999 Investigation (evaluate presence of MTBE)
 - Groundwater samples collected in vicinity of former tanks
 - Chlorinated compounds detected above MCL
- 2001 Data Gap Sampling
 - Groundwater samples collected in attempt to delineate chlorinated compound plume
 - Chlorinated compound plume larger than anticipated

October 1, 2002



SITE 32 - GROUNDWATER PLUME

October 1, 2002



SCHEDULE OF ACTIVITIES

- 05/01/03 – Draft Work Plan
- 07/01/03 – Comments due
- 09/01/03 – Draft Final Work Plan
- 10/01/03 – Final Work Plan
- 10/01/03 – Begin field work
- 10/01/04 – Draft RI/FS Report
- 12/01/04 – Comments due
- 02/01/05 – Draft Final RI/FS Report
- 03/01/05 – Final RI/FS Report
- 03/01/05 – Draft PP
- 05/01/05 – Comments due
- 07/01/05 – Draft Final PP
- 09/01/05 – Public Comments due
- 09/15/05 – Final PP
- 09/15/05 – Draft ROD
- 11/15/05 – Comments due
- 1/15/06 – Draft Final ROD
- 02/15/06 – Final ROD submitted

October 1, 2002





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: Michael Wanta, Contract Manager

DOCUMENT TITLE AND DATE:

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

TYPE: Contractual Deliverable, Technical Deliverable (DS), Other (TC)

VERSION: NA REVISION #: NA

ADMIN RECORD: Yes No CATEGORY: Confidential

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

NUMBER OF COPIES SUBMITTED TO NAVY: O/3C/4E

COPIES TO: (Include Name, Navy Mail Code, and Number of Copies)

Table with columns: NAVY, TETRA TECH, OTHER. Includes recipient names like M. McClelland and Diane Silva.

Date/Time Received