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HUNTERS POINT  
SSIC NO. 5090.3

## MicroSearch Environmental Corporation

318 Harrison Street, Suite 1A Oakland, CA 94607 (510) 452-5500 Fax: (510) 452-5510

April 30, 1998

Mr. Michael McClelland  
Department of the Navy  
Naval Engineering Facility  
900 Commodore Way - Bldg. #105  
San Bruno, CA 94088-2402

Rec'd 5/4/98  
mem

Re: Hunter's Point Naval Shipyard DRAFT Parcel E Feasibility Study : Comments

Dear Mr. McClelland,

MicroSearch Environmental Corporation (MSE), in accordance with its role as Technical Advisor to the Southeast Alliance for Environmental Justice (SAEJ), submits these comments and concerns regarding the HPS DRAFT Parcel E Feasibility Study. These comments and questions are the result of MSE's review of the DRAFT FS and related documents, discussions with SAEJ members, and comments directly from a community meeting on April 29, 1998.

The comments deal primarily with technical issues that may directly or indirectly impact the health of the community during remediation and after the proposed remedial alternatives are performed.

### General

**Innovative Solutions :** The alternatives offered in the FS are all proven technologies. What innovative alternatives were considered? Were any new designs or methods explored and excluded from the FS?

**Long-Term Effectiveness and Permanence:** The integrity of a properly constructed sheetpiling wall is *30 years* (page 5-12, Vol II). This being the best-case estimate, how does any of the alternatives (2-6) that propose a sheetpiling wall along the shoreline assure long term effectiveness? If contaminated groundwater penetrates the wall, can a new one be constructed quickly enough to prevent a release to the Bay? Will the Navy or the Contractor guarantee the wall for any amount of time? Will the City of San Francisco, if the owner at the time, be required to finance a second wall?

## Timeline

**General:** The Parcel E Remedial Activity will obviously take considerable time. Is there a firmly established time line, or is that contingent upon the selected alternative? Given the high profile of this project, the community's understandable health concerns, and the value of the land to the City and County of San Francisco, the time frame of the cleanup is very important to all parties.

## Mitigation Measures

**Section 4.2.1 (First Paragraph)** "This infiltration study identified several sections of the storm drain system that have the potential to be infiltrated by groundwater." From the Parcel F DRAFT RI/FS Reports, it seems that storm water outfalls are a significant source of contaminant movement from HPS to the Bay. Prior to removal of the source contaminants from the storm drain system, is it possible that contamination migrated *from* the storm drain pipes *into* the groundwater? Are there any anomalous "hot spots" of contamination near areas of known pipe damage? "The pipes in these sections are in disrepair and allow groundwater infiltration." What percentage of the pipes lies below groundwater? What percentage are damaged? Are only those pipes below groundwater in need of repair? How significant is the damage to the pipes?

**(Last Paragraph):** "...the screening criteria...were re-evaluated and revised." What were these revised screening criteria? Does this revision create a data gap?

## Capping Alternatives

**General:** All the options proposed for remediation of the old landfill involve a multi-layer cap (except No Action). What measures will be taken to assure the integrity of this barrier? Has this maintenance been budgeted apart from the installation?

**Removal:** Once soils are excavated for removal from HPS (Alternatives 4, 6, 7, and 8 for GW) to off site locations, what will be the mode of transportation? Trucks have historically been disagreeable with Bay View/Hunter's Point residents because of the dust, diesel fumes, lack of soil coverings, and increased traffic. While rail transport may alleviate some of these problems, it poses some difficulty as well in terms of cost and feasibility. Is water transportation an option that was considered? Was there a breakdown of the comparable cost issues related to all possible modes of contaminant hauling and disposal?

**Historical:** Given that many Naval Facilities have undergone landfill remediations under similar situations, considerable historic comparisons must exist. Are there any similar situations to the landfill on Parcel E located at comparable Naval Facilities that can be "gone to school on", to learn potential problems, innovative solutions, and common

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cleanup goals? Are any of these projects far along the remedial path, giving any indication of the success rate and performance of the multi-layer cap? Are there any other multi-layered capped landfills in environments like Hunter's Point currently operational?

**Section 4.3.1.2 (Third Paragraph) "The FML would consist of 40-millimeters (mil)-thick, HDPE liner..."** Please clarify the thickness of this layer. Sheeting is commonly sold in thickness units of mil, which are different from millimeters.

**(Paragraph 7) "...designed to withstand forces generated by the maximum possible earthquake likely to occur in a 100-year interval."** What value of earthquake intensity was used in these calculations, on what scale of measurement?

**(General)** Since drainage runoff from any capping that is done in Parcel E is crucial to insuring soil stability and landfill cap integrity, the drainage system must be repaired to eliminate the risk of groundwater infiltration into the drainage system prior to any capping activity (See the first comment, above). Since the screening criteria are being revised and the resulting data gap must be satisfactorily filled by additional investigation, any capping may be delayed. Will this affect any of the projected budgets? Is the storm drain rehabilitation included in any of the cost estimates for the listed alternatives? Will the storm drain system be tested for tightness and leaks once repairs are completed?

## Groundwater Alternatives

**Discharge of Pretreated Groundwater to POTW (pages 4-68,9)** In the text and from Table 4-14, the contaminant levels in groundwater at Parcel E are compared to San Francisco's Southwest Pollution Control Plant's requirements. While the text states that the levels are "comparable", the table indicates that currently the average groundwater contamination levels at Parcel E are well below the requirements for SWPCP, in most cases an order of magnitude or more. The notable exceptions are lead, zinc, and oil and grease. Are the averages weighted to reflect different rates of extraction from different areas of Parcel E that vary in degree of contamination? Is pretreatment necessary? What is the anticipated treatment process? Does the construction budget make allowances for the Operations and Maintenance of the treatment system? If new contaminants are discovered during water extraction, or if the treatment system fails, will there be backup treatment system? Do any of the sewer lines that will carry the effluent have damage issues that need to be resolved? Is averaging the groundwater contamination levels representative of the nature of the specific groundwater issues?

## Radiological Issues

### **Section 4.2.4 Removal and Disposal of Scattered Radium Dials**

**Page 4-9, Paragraph 2,** describes the mitigation measures for radioactive materials scattered by soil redistribution from IR-02 Northwest to other parts of Parcel E. During the proposed excavations, "if conditions prove to be more complicated than expected...",

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this mitigative measure will be reevaluated” and “Any radium-containing devices that are excavated will be contained in drums and shipped to an appropriate off-site facility.” This seems to suggest that some radioactive materials would remain in place and be capped while others leave the site, possibly traveling through the local community. Would the radioactive soil waste be staged on site until the total amount of all waste is known and excavated, or would it be removed from HPS after each anomaly is excavated? The community will most likely not want to have radioactive material moved through the neighborhood, only to discover that some materials may be left on site anyway. Would staged waste be reburied on site if disposal is reconsidered?

## Human Health and Reuse Issues

**Appendix A** There is a significant human health risk associated with the Future Land Industrial and Residential Land Use Scenarios as identified in Appendix A. Do the Navy and EPA endorse these land use scenarios with such high risk profiles? Why is inhalation not even considered as a pathway for soils, given the windy conditions at Hunter’s Point? (Copy of summary from Appendix A is attached)

## Recommendations

MicroSearch anticipates problems with numerous aspects of the proposed alternatives. Alternative 1 is a tool for comparison and is not feasible for this Site. MicroSearch does not believe that the current state of sheetpiling wall technology in terms of construction reliability and longevity merits acceptance as a long term or permanent solution for the groundwater contamination.

MicroSearch also sees a conflict in the alternatives that remove some soils off site while other contaminants remain at HPS. This forces the community to endure the passage of contamination and heavy truck traffic through their neighborhood while still leaving waste on the base. This situation is lose-lose for the community, since they stand to gain very little in terms of employment opportunities during the cleanup.

MicroSearch believes the best situation for the community would be total, reliable, safe removal of all contaminated soil and groundwater from the site with some other transportation method than trucking. Simply put, remove it all and eliminate the problem. None of the proposed alternatives addresses this, due to the enormous cost of the excavation and disposal of that volume of material.

Barring a complete removal option, the next best option is removal of the most serious health threats, containment and in place management of the less serious contaminants, and a groundwater treatment program. MicroSearch believes that the proximity of the Site to the San Francisco Bay makes the groundwater issue very serious and far-reaching. Preventing contamination transport into the Bay should be the primary goal of any

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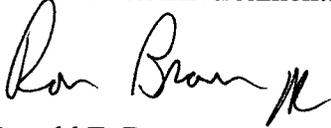
groundwater cleanup option. Unfortunately, we do not think sheetpiling walls will suffice in this capacity.

MicroSearch, in its capacity as Technical Advisor to SAEJ, reviews technical documents for SAEJ and presents summaries and proposes recommendations. Our analysis of the DRAFT FS for Parcel E indicates that there are numerous issues that need to be addressed prior to the selection of any of the proposed alternatives. Our own recommendations are limited by the content of the reports upon which this FS is based and the nature of the site and the contamination.

MicroSearch appreciates this opportunity to comment on the ongoing work at Hunter's Point Naval Shipyard. We realize the importance of this site to the City of San Francisco, the residents of Bay View/Hunter's Point, and the Navy. Thank you for your time and attention in these matters.

Sincerely,

MicroSearch Environmental Corporation

A handwritten signature in cursive script that reads "Ron Brown" followed by a stylized flourish.

Ronald E. Brown  
President