

# Arc Ecology

*Environment, Economy, Society, & Peace*

May 21, 2004

Jeffery C. Morris, P.E.  
CH2M HILL  
155 Grand Avenue, Suite 1000  
Oakland, CA 94612

**RE: Draft Final Investigation Area D1 Remedial Action Plan for Public Review for Mare Island, Vallejo, California, dated April 2004**

Dear Mr. Morris:

Arc Ecology has reviewed the *Draft Final Investigation Area D1 Remedial Action Plan for Public Review for Mare Island, Vallejo, California*, dated April 2004. Our comments and concerns are below.

## **Proposed Remedial Alternatives and Recommended Remedial Actions**

### 1. Lead Based Paint in Soil –

- a. Using the DTSC Lead Spread 7 model, risk-based threshold criteria were developed for residential and non-residential land use. Please include an explanation of what types of reuses are considered non-residential. For example, would a playground fall into a non-residential or residential reuse? What about a day care center or school site?
- b. According to Section 4.2.2, if the average lead concentration does not exceed the risk-based threshold criteria, but the concentrations in any soil sample are above 400 mg/kg for residential reuse and above 1000 mg/kg for non-residential reuse, additional action will be required. If the risk-based threshold criterion for lead in residential soils is 210 mg/kg and 750 mg/kg for non-residential reuse, how did Lennar/CH2M HILL decide upon 400 mg/kg and 1000 mg/kg as action levels for discrete samples? Why are the Lead Spread 7 criteria not used?
- c. Section 4.2.2, page 4-3 states, “If neither the average lead concentration of the drip-line composite or mid-yard discrete soil samples are above the risk-based threshold criteria, nor the specific drip-line or mid-yard samples are significantly above the criteria, then no further action is required.” What qualifies as significantly above the criteria? It is important that the action criteria be well defined to ensure that the community is comfortable with the criteria. As written, it is unclear how a sample will be determined as significantly different from the risk-based threshold criteria. Please clarify.

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- d. As indicated in the comments sent by the RAB Technical Focus Group of December 11, 2002, on the *Draft Methodology for Evaluation of Lead in Soil at Lennar Mare Island; Draft Generic Sampling and Analysis Plan for the Evaluation of Lead-based Paint and Pesticides in Soil*, more information about the verification sampling is needed. The report states that verification soil samples will be collected following any soil excavation to ensure the effectiveness of the excavation and that the total number of verification soil samples collected will be dependant on the size of the removal area. What is the ratio of the number of samples per unit area? How will Lennar/CH2M HILL determine if additional excavation is required? If excavation is required, will soil be excavated until levels of lead are below threshold criteria or will excavation stop at a certain depth? Please include more details about the excavations and verification sampling.
  - e. Who will be responsible for monitoring and maintaining the interim surface covers that are proposed at unoccupied structures?
2. PCBs
- a. There is little to no explanation of why 18 of the 19 remaining PCB sites require land-use covenants, with the exception of those currently encapsulated by active transformers. Experience has shown that land-use controls are often forgotten shortly after being put in place. Indeed, a classic example of forgotten land-use restrictions exists in Lennar Mare Island's recent history; students with young children were found living in an area whose land-use covenant stated that no one under the age of 18 should live on the property due to potentially high levels of lead. Land-use controls are difficult to monitor, difficult to manage, and extremely unreliable. Judging by the information given in the report, there is no reason that the PCBs at these sites cannot be removed. It is unclear how this is the best remedial alternative when weighed against the nine criteria in the NCP. In a situation such as this, where removal of the contamination is feasible, restricting use of the property rather than restoring it to its full potential is inappropriate and unacceptable. We strongly urge you to consider removal of all PCB contaminated media. If excavation is deemed not possible, an explanation of infeasibility needs to be provided.

### **Other Potential Environmental Concerns – Abrasive Blast Material**

1. We recently received a final technical memorandum for the removal of abrasive blast material in soil at Chapel Park, IA D1, dated May 13, 2004. There does not appear to be any mention of this area in Section 3.2.5.1 nor anywhere else within the remedial action plan. Please include a summary of the contamination found in this area and the associated removal actions that were conducted.
2. As mentioned in Section 3.2.5.1, due to the historical use of spent abrasive blast material (ABM) as pipeline bedding and backfill at Mare Island, reporting procedures for future encounters of ABM have been established by DTSC. These procedures should be included in Section 4 as part of the remedial alternatives in the event that ABM is encountered during redevelopment of the area.

We appreciate the opportunity to review and comment on this document. Should you have any questions about our comments, please contact me at 415-495-1786 or at lealoizos@mindspring.com.

Sincerely,

Lea Loizos  
Staff Scientist

Cc (electronic):

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