California Regional Water Quality Control Board
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MARE ISLAND
SSIC NO. 5090.3.A

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File No. 2129.2001 (LCR;BRT)

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SUBJECT: Review comments on the *Draft Work Plan Time-Critical Removal Action, IR04, IR05, Parcel XVI Paint Waste Area, Defense Reutilization and Marketing Office Scrapyard, and Horse Stables area*, dated May 14, 2007, former Mare Island Naval Shipyard, Vallejo, California

We have reviewed the subject document and have the following comments.

Target Cleanup Goals

Corrective action needs to also consider degradation of waters of the state and threats to aquatic habitats. The proposed target cleanup goals focus on direct or surface exposure to humans and ecological habitats. Since the target cleanup goals do not consider leaching of soil contaminants to groundwater, pollution of groundwater, and the discharge of polluted groundwater to surface waters and aquatic habitats, we do not concur that a possible outcome of the time critical removal action is no further action.

Excavation Plan

1. Provide additional information on how excavation grids will be established, how excavation depths will be controlled, and how sample depths will be measured at the center of excavations. We recommend that this type of work be controlled by elevation, not depth, since reference surfaces are lost and changed during excavation. Final excavation boundaries and sample locations need to be documented. Describe how this will be done and to what degree of accuracy.

2. The work plan discusses removal action and sampling according to established grids. The only site which plans excavation according to a grid approach is the Paint Waste Area. Plans for excavation do not consistently follow a grid approach. We are particularly confused by the selection of "grids" at the Horse Stable Area.

3. Please overlay the proposed excavation area (shown on Figure 4-1) on the abrasive blast material (ABM, also called "green sand") isopach map (Figure 4-1a) so we can review how the proposed removal action targets the known occurrence of ABM.

Soil Containment

The criteria of the corrective action management unit says that material consolidated into the containment area (the landfill within Investigation Area H1 (IA H1)) will have similar or lower contamination levels than existing material within the landfill. Describe procedures for encountered contamination at more elevated levels, if encountered.

Placement of Soil Cover during Backfill

It has been suggested that soil cover could be installed during backfill of some of the excavations as part of an overall remedial strategy. We are not able to comment on the usefulness of placing soil cover at this time since sufficient information on site-specific conditions, receptor risks, and the feasibility of remedial alternatives has not been provided for our review. We support Department of Toxic Substances Control (DTSC) comments that, based on lack of information available for our review, the soil cover should not be less than three-feet-thick.

Sampling and Analysis Plan

Collect soil samples from both the base and sidewalls of excavations to confirm the effectiveness of removal actions. Base of excavation samples are useful for evaluating removal of the vertical extent of soil contamination. Sidewall samples are needed to evaluate removal of the lateral extent of soil contamination. We do not concur with using the results of base of excavation samples to evaluate the need for additional lateral excavation or with using the results of sidewall samples to evaluate the need for additional vertical excavation. Include procedures for sampling the sides and base of excavations in the work plan and describe the frequency at which these samples will be collected.

Installation Restoration Sites 4 (IR04) and 5 (IR05)

1. Removal actions need to consider contaminants that are in direct communication with surface water at sites IR04 and IR05. Sites IR04 and IR05 are located directly adjacent to bodies of surface water and contaminants within portions of these sites may be in direct communication with surface water via tidal influence. The target cleanup goal for contaminants in these areas should be the lower of surface water and aquatic habitat criteria.

2. We do not concur with stopping excavation based on the presence of groundwater, particularly based on the projected depths of ABM at site IR04. Contingencies should be included in the work plan for excavating below groundwater to meet target clean up goals.

3. We support a recommendation by the DTSC control that field screening, using x-ray fluorescence (XRF), will be more useful for guiding excavation than visual observations of ABM.

4. The Work Plan indicates that silt fencing will be set up along open water and wetlands boundaries and the excavation zones. Because of the limited ability of silt fencing to contain silt and sand in high wave and tidal action areas, we ask Weston to consider using a better barrier or a combination of measures (buffer zone and barrier) for the exclusion zone where contaminant levels are noted to be high and tidal and wave activity is vigorous.

5. [Excavation and Handling of contaminated Soil: 4.7.1.] The purpose and extent of adding water to soil during excavation—in advance of hydrating truck loads for dust control—is unclear. Please clarify the purpose of soil saturation as well as how drainage from contaminated sediments will be contained. We are concerned with the spread of pollutants outside the excavation areas.

6. Has soil within drainage channels leading from IR05 to Carquinez Strait ever been sampled for pollutants? If pollutant levels in areas adjacent or connected to these drainages and channels are found to exceed action levels, we recommend including these drainage conduits in the analysis.

7. Pending Department of Fish and Game and Fish and Wildlife Services approval, please amend the backfilling option for IRO5 to reflect discussions in our May 15 meeting: leave at excavation levels and reduce levees to prevent road access to subtidal wetlands.

8. Due to the Ordnance Materials Production Area (Section 1.1.) and historic munitions use near and at IRO4 and IRO5, we have recommended perchlorate sampling of ground water in the past. We also noted a discussion of perchlorate missing from the Draft Data Gaps Sampling Plan. Please discuss how you plan to address perchlorate for these parcels.

Stormwater Pollution Protection Plan

1. We are concerned about airborne transport of sediment/contaminants to surface water (Mare Island Strait, San Pablo Bay, Carquinez Strait) during down time (when there is not active work). Work will be implemented during the summer months when weather conditions can be dry and windy. Describe how airborne transport of sediments/contaminants will be mitigated if there are periods of down time.

2. We question some input values used to calculate a runoff coefficient value. In general, lower end values were selected from a classification range. The soil type selected for filtration was "normal and well drained" when much of the soil that will be encountered is low permeable bay deposits. The factor selected for topographic relief (0.06) is lower than any of the classification ranges (from 0.08 to 0.28). Please explain use of the input parameters and the significance of the final coefficient value has on your proposed work.

3. Describe how soil will be managed in the event that the waste can not be contained in a vessel (drum, soil bin, etc) and needs to be stockpiled.

Air Monitoring Plan

1. Locating a weather station within IA H1 may not provide accurate meteorological data for all the proposed sites. Target excavation sites are located to the north south, east, and west of a topographic high (Mare Island). Wind conditions around the island may vary. Demonstrate that the proposed location is suitable for measuring weather conditions at the excavation sites or select multiple locations for the meteorological station to monitor weather where work is being conducted.

2. Further describe the air monitoring plan. The plan proposes collecting and analyzing samples on a daily basis and changing to weekly analysis if no elevated results are detected. At what point will a change in the analysis frequency be evaluated? Since windy days will generate more dust, how do changes in weather conditions factor into evaluating the frequency of analysis and which samples will be analyzed (under the weekly plan). If an elevated result is detected during the weekly plan, will the plan go back to daily analysis?

A hard copy of these comments will be submitted both by e-mail and letter by 5/30/2007.

Sincerely,

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