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SSIC NO. 5090.3.A



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September 13, 2007

Mr. Michael S. Bloom
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DRAFT GEOPHYSICAL INVESTIGATION, PRODUCTION MANUFACTURING AREA
AND SOUTH SHORE AREA, APRIL 2007

Dear Mr. Bloom:

The Department of Toxic Substances Control has reviewed the document titled, "Draft Geophysical Investigation, Production Manufacturing Area and South Shore Area," dated April 2007. Our comments are enclosed. It would be productive to discuss these comments and the next steps in the cleanup process for the subject areas and in relation to adjacent sites such as IR 05, the Western Magazine, and Investigation Areas K and F2.

Should you have any questions or would like to arrange a meeting to discuss our comments please contact me at (916) 255-3738 or by Email at bkilgore@dtsc.ca.gov

Sincerely,

William Kilgore
Senior Hazardous Substances Engineer
Office of Military Facilities

Enclosure

cc: See next page.

Mr. Michael S. Bloom
September 13, 2007
Page 2

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Comments on the Draft Geophysical Investigation, Production Manufacturing Area and South Shore Area, April 2007

General Comments

1. There must be agreement between the regulatory agencies and the Navy concerning the Anomaly Investigation Flow Process (attached below) which includes proposed Land Use Covenant (LUC) provisions. Contrary to the proposed land use restrictions, the Department of Toxic Substances Control believes that Unexploded Ordnance (UXO) construction support will likely be required for all intrusive activities, including those between the surface and four feet in depth.

It is unclear what specific lease restrictions and City Planning Department procedures are envisioned. The scope and details of these types of provisions need to be discussed and included in the decision, and certification of remediation, and operation and maintenance documents.

Specific provisions of the Munitions and Explosives of Concern (MEC) education and awareness program need to be developed and agreed upon, also prior to finalization of a decision, remediation certification, and operation and maintenance documents.

LUC provisions

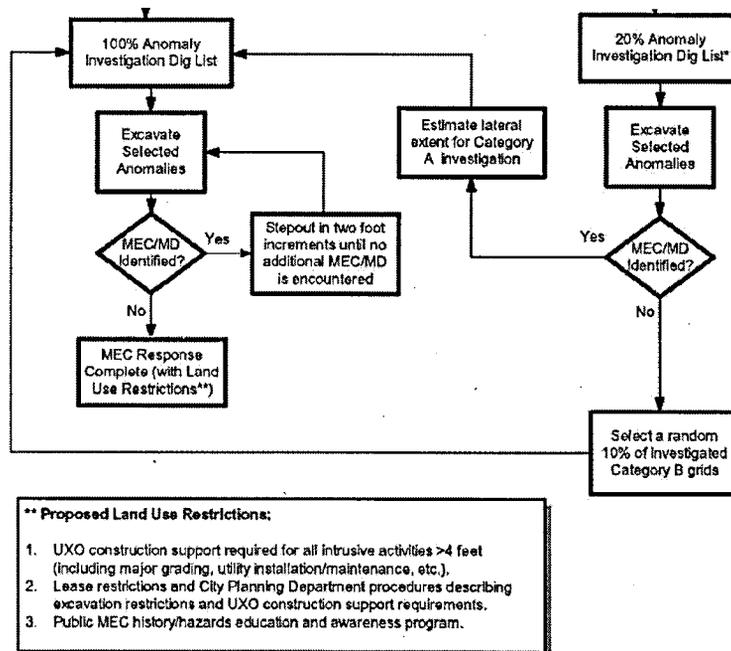


Figure 4-1 Anomaly Investigation Process

2. There are some category A sectors in IA K that Weston does not propose to investigate under this effort. Those sectors established in IA K will have to be finalized in conjunction with the appropriate document that addresses that area. It is also important to make sure the investigation of these sectors be coordinated and integrated with the adjacent on-shore investigation to ensure applicable information from each investigation area is considered as part of adjacent area response actions.
3. The title of this document does not correspond to task items currently listed in the SMP for the PMA/SSA. Please revise the SMP to include task items associated with this document.

Appendix F, Composite Anomaly Target List

A total of 16,572 targets are listed for the Production Manufacturing Area (PMA) and 15,031 for South Shore Area (SSA). While some of the listings have sensor response values under the heading "Response," most have the value as 1. While not critical at this time, dig results should be compared to signal strength as part of the quality control and quality assurance effort. Therefore, all digitally recorded sensor response values should be listed.

Appendix I, Revised Conceptual Site Model PMA and SSA

General comments

1. Several layers of information have been superimposed on the sites. They include a grid system, sectors for areas of higher likelihood of finding MEC labeled "A sectors," and areas where high densities of anomalies are present. As part of establishing boundaries for 100 percent anomaly excavation, how will these be integrated? Several questions arise concerning these three layers and their integration such as: Will all areas of high density anomalies be excavated completely? How will the remainder of a grid that is partially covered with an A sector be addressed with respect to anomaly excavation? These questions need resolution as part of preparations for and possibly during intrusive activities.
2. It is our expectation that all areas of the parcels to be transferred are subjected to and adequate level of MEC anomaly acquisition and excavation to support conclusions proposed. There appear to be portions of the area of the PMA and SSA that are proposed for transfer that have not had a geophysical survey or are planned for investigation.

Although some areas such as portions of IR 05 and the Western Magazine have likely been subjected to a geophysical survey and anomaly investigation, they need to be included in future documents as necessary to address the entire transfer parcel.

It is also assumed that all areas covered by grids will have at least 20 percent anomaly excavation. If this is not the case then adequate rationale and justification must be provided. The boundaries of the intrusive MEC response action and the parcel boundary should be shown.

The geophysical survey did not cover the entirety of either site. There are gaps along the shoreline in the PMA and SSA (e.g. sectors AC029, AD028, AH010, AH011, AI011, AJ012), around buildings (e.g. AF021, AG021, Z026, AC026), and along parcel boundaries (e.g. AF020). A rationale for how these areas will be adequately addressed needs to be presented.

The area in the vicinity of the junction of the PMA and SSA areas does not appear to be completely covered with the grid system. The grid system overlay appears incomplete between existing grid columns AF through AH, and rows 16 through 19. From this it appears that the areas not included in the grid system have not been geophysically investigated nor will they be included in the MEC anomaly response action. Investigation of these areas needs to be adequately addressed.

3. Many of the category A sector boundaries are close to or nearly coincident with other category A sector boundaries. It is appropriate to include those very small areas between sector A boundaries in the sector A category.
4. It is appropriate to conduct a separate evaluation of the geophysical and historical response action information and conduct a burial site investigation throughout the PMA and SSA.

Several of the sectors have been established because of past discovery of burial locations. The report presents the rationale that these burial locations are associated with nearby munitions storage facilities. It is appropriate that in addition to 100 percent anomaly excavation in the established sectors, an effort to locate other burial sites be implemented for areas around all buildings, both in the PMA and SSA that were used to store munitions. There may be value in also looking at areas where no MEC was found as part of past intrusive investigations.

5. Both 1941 and 1944 base plans show a building 155, south-east of building 215. Please provide any information on its use and its lifetime.
6. Why was the sector established for Pier 1 not included in this report?
7. The proposed strait-side limit of anomaly acquisition and removal should be identified. The boundaries of the 100 percent anomaly recovery sectors should be extended to meet the strait-side limits where they are near the parcel boundary.

Appendix I, Revised Conceptual Site Model Production Manufacturing Area And South Shore Area

Specific comments

Section 1.3.3 Unexploded Ordnance Site Investigation, Figures 5 and 6

It is unclear from the discussion and the legend on the figures whether anomalies were excavated. Were all anomalies excavated? Do the figures show the anomaly excavations or the detections?

Section 1.3.4, Unexploded Ordnance Intrusive Investigations

The text states that the primary goal of the [1997-2000] intrusive investigations [by SSPORTS] was to remove all MEC items and mitigate the immediate threat of uncontrolled releases and explosion. . . "Both Goals were achieved within the limitations of available geophysical search technology."

With over 31,000 anomalies listed as a result of the recent geophysical work (Appendix F), it is likely MEC remains and the goal of removal of all MEC was not completely achieved.

Appendix I, Attachment 1, PMA/SSA Category A Sector Descriptions

Sector PMA-2-A

Include the building locations and numbers on at least one of the figures. Some of the missing building numbers have been included as a revision to earlier versions but others are still not included. As an example, buildings A53 and A137 are discussed but not identified on the figures. In Figure 2 – 1918 Map, what is the structure on the Mare Island Strait side of what appears to be building A53? What is the linear feature running about North-South in Figure 2?

Sector PMA-3-A

Although there are few items and their period of manufacture covers the same 25 year period, an argument can be made that the items were either disposed of along the more recent shoreline or wave action has played a role in their location. Although the assumption seems appropriate that MEC distribution can be correlated to facilities such as piers and loading locations, consideration of strait currents and wave action on distribution needs to be taken into account when establishing A sector boundaries.

The sector boundary should be extended along the shoreline to meet the PMA-2-A sector on the northern end.

The sector boundary should also be extended farther inland since Pier 2, Building A-32 and the shoreline were located further inland than present. See Figure 3 – 1925 versus Figure 1.

Sector PMA-4-A

Does Figure 6 indicate an outside storage area for ordnance or is this a parking area? If it is possibly an ordnance storage area, then it should be analyzed in the same way as storage areas in the SSA.

The statement, “The MEC located east of the building is unknown.” needs to be clarified. Was there a record of MEC excavated at this location? Is there any information on the type of munitions? Is the location information accurate? How does it support, or not, the sector boundaries?

Sector PMA-5-A

The sector for this area was truncated due to the presence of building 266. Assuming that the building will not be demolished and will be reused and access to the area under the building is not possible, specific requirements and restrictions will need to be placed on the entire footprint of the building to ensure that appropriate precautions are taken if future work disturbs the area.

Sector PMA-6-A

Based on the rationale for establishing sectors for PMA-4A, 5A, and 6A, (i.e. possible burial areas) then the area between building A266 and the shoreline should be established as a sector with 100 percent anomaly excavation. What is the feature extending from the shore in Figure 4 – 1918? Could this feature be associated with the discarded munitions (MD) and MEC in the vicinity? It is reasonable to include the space between sectors 3-A and 2-A in a sector because of the nearby MD and MEC.

Sector PMA-7-A

Does the red triangle closest to the shoreline represent the location of the recovered 16 inch projectiles? Based on Figure 2 – 1896, it appears that Sector 7-A should be extended south along the shoreline to cover the entire area of early storage.

Sector PMA-8-A

It is appropriate to include the area (because of the potential for ordnance storage) adjacent to building 224 in the 100 percent anomaly investigation sectors. In addition, it is appropriate to include an evaluation of this area for munitions burial locations.

Sector PMA-9-A

Has the sector and the area south of the sector between sector 9-A and 2-A been surveyed in the past? It is unclear whether the MD found in sector 9-A was as the result of an investigation. The extent of previous investigation of the sector and the area to the south along the shoreline has a bearing on how much of the area should be designated as a 100 percent anomaly investigation area.

Sector PMA-11-A

Explain the geophysical response presented in Figure 5, page 6 in relation to the boundaries proposed for the sector.

SSA Sectors 2-A and 3-A

The southwestern boundaries of these two sectors need to be extended to the edge of the access road to Pier 35.

Sector SSA-4-A

The sector boundary is a polygon that appears to be precisely drawn. What are the features and considerations used to establish the sector outline?

SSA Sectors 4,5,6,8

Was the area bounded on three sides by sectors SSA-4-A, SSA-5-A, SSA-6-A, and SSA-8-A geophysically mapped? Based on the figures that are included in the geophysical report, not a single target has been indicated for this area. Irrespective of whether it was geophysically mapped, it is appropriate to include the area within the sectors to receive 100 percent anomaly excavation.

Sectors SSA-6-A and SSA-9-A

The area on the northwest side of sector SSA-6-A, across the road and tracks, could potentially have been used for outside storage of munitions. This sector, or sector SSA 9-A, should be expanded to include the areas between sector SSA-6-A and buildings including the locations of items found in grids AH012 and AI013. See also the comment below on SSA-9-A

Sector SSA-7-A

In relation to outside storage areas, the southwest boundary of this sector could be extended southwesterly. It is reasonable to assume that storage took place in this area; at least based on the depiction of the area in the 1944 and 1960 versions of the facility

plan. Was it possible that storage could have occurred northeast of the northeast side of building A161?

Sector SSA-9-A

It is unclear how the establishment of a 25 foot area around the location of previous MEC or MD finds addresses the case of items falling off trucks or railcars. There is an existing road, historical road, and some rail lines running through the parcel. An effort needs to be made to evaluate this scenario throughout the parcel.

Only one sector was established north of the road that transverses the SSA. Was there no outside storage areas identified or assumed to have been utilized adjacent to the structures as was found to be the case for the Western Magazine Area? Justification for the lack of sectors associated with the munitions storage structures needs to be presented.