RESPONSE TO COMMENTS ON FINAL PARCEL B DESIGN PLAN DATED APRIL 21, 2006 STORM DRAIN AND SANITARY SEWER REMOVAL PARCEL B, HUNTERS POINT SHIPYARD SAN FRANCISCO, CALIFORNA

Comments dated: April 28, 2006

Comments by: James Ricks, Project Manager, Superfund Division (SFD 8-1)
U.S. Environmental Protection Agency (EPA), Region IX

RESPONSES TO GENERAL COMMENTS

Comment 1: ***Response to General Comment (GC) 1:*** *The response states that "there is no historical indication of LNAPL or DNAPL from monitoring wells within the current Parcel B boundaries and "LNAPL and DNAPL will likely not he encountered," but this removal action includes the IR-25 and IR-06 groundwater plumes in Parcel C (see Drawing Sheets 7, 12, and 18). Since dense nonaqueous phase liquid (DNAPL) has been observed in several IR-25 monitoring wells and there is evidence that DNAPL is still present at IR-25, it is possible that DNAPL could be encountered in the vicinity of the storm drain (SD) and sanitary sewer (SS) lines located northwest, northeast, southwest, or passing beneath Building 134 in IR-25. The invert depths of several of these lines appear to be below the water table and a note on Sheet 7 indicates that one manhole is water filled.*

Further, although the response indicates that the Base-wide Plan has been revised to include provisions for handling DNAPL, the Final Project Work Plan, Base-wide Storm Drain and Sanitary Sewer Removal (the Base-wide Plan) does not include any procedures for identifying DNAPL (i.e., in Section 7.8.4, Other Considerations); the only provision for addressing potential DNAPL is included in the section on Well Destruction. Since DNAPL moves along soil and bedrock interfaces, it cannot be assumed that the only place DNAPL will be found is in the vicinity of wells. DNAPL was released from the dip tanks and sump associated with Building 134. It is not known if it was also released from the SDs and SSs, but this should be considered likely. Although the response states, "LNAPL and DNAPL, if encountered will be isolated with absorbent material or pumped from the excavation," procedures for identifying DNAPL in excavations are needed.

Please revise the Parcel B Design Plan to include specific procedures for identifying and addressing DNAPL in SD and SS excavations. Please also include these procedures in the Base-wide Plan.

Response 1: Prior to initiating work in each area, the historical data on DNAPL in the vicinity of the sewer excavations will be reviewed. If there is evidence for potentially encountering DNAPL, the field staff will be provided information about the approximate locations where the DNAPL may have migrated to and intercepted the planned excavations. Field staff may be able to recognize the presence of DNAPL from its color or odor in the field. If encountered, DNAPL will be removed from the excavations, containerized, sampled and disposed off site as appropriate. Prior to excavation in areas of potential DNAPL, the information collected from the historical data will be shared with the regulatory agencies during the weekly time-critical removal action (TCRA) calls. Since the Parcel B Design Plan has already been finalized, a Field Change Request (FCR) will be prepared to describe the procedures for identifying DNAPLs.

Comment 2: ***Response to GC 2:*** *Concrete ditch indications titled "concrete street crossing" have been added to sheets, but these indications do not reference a detail number or sheet. Also, the corresponding detail is titled "concrete ditch detail". To avoid confusion, please revise the sheets to include a detail number and sheet callout for each street crossing, and use the terminology "concrete ditch detail" for consistency. Please also ensure that design plans for the other parcels include the detail numbers and sheet callouts.*

Response 2: Comment noted. Revision 1 drawings will consistently call out the street crossings as "Concrete Ditch" in the drawings. The reference to call out the detail will be added to the notes as "See Sheet 21 for Concrete Ditch Detail."

Comment 3: ***Response to GC 4:*** *It is unclear if the list of chemicals of concern on Table 3-1 includes constituents of concern remaining after the Parcel B Remedial Action excavations were completed. EPA identified excavations (reported in either the Parcel B Construction Summary Report [CSR] or the Parcel B Construction Summary Report Addendum [CSRA]) where the extent of horizontal contamination has not been delineated. Please clarify whether the CSR and CSRA were used to identify contaminants of concern, and if not, please review EPA's comments on the CSR and CSRA to identify other contaminants of concern.*

Response 3: Comment noted. Table 3-1 is based on historical chemicals of concern (COCs) associated with the IR sites and does not reflect the COCs that may have remained after completing excavations reported in the CSR and CSRA. As suggested by the comment, the CSR and the CSRA will be reviewed prior to sewer removal activities within each IR site or its vicinity to further clarify the pertinent COCs. This information will be shared with the regulatory agencies during the weekly TCRA calls.

RESPONSES TO SPECIFIC COMMENTS

Comment 4: ***Response to Specific Comment (SC) 6:*** *It is noted that the detail sheets have been revised to indicate the sheet where the details apply, however, the excavation details on Sheet 20 are not referenced on Sheets 4 through 8. For clarity, please revise drawings to refer to the detail sheets in the notes on Sheets 4 through 8. Also, for future parcel-specific design plans, please provide detail callouts on the sheers to which they apply.*

Response 4: Comment noted. In Revision 1 drawings, Sheets 4 through 8 will include a note such as "See Sheet 20 for excavation details."

Comment 5: ***Response to SC 8:*** *The response does not address the portion of the comment that requested that lines that are to be sealed in place be noted on the drawings. Please clarify whether lines that are to be sealed in place are specified on the drawings.*

Response 5: Yes. The lines to be sealed and left in place are noted in the drawings.

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Comments dated: May 1, 2006

Comments by: Michael Work, Superfund Division (SFD 8-3)
U.S. Environmental Protection Agency (EPA), Region IX

RESPONSES TO SPECIFIC COMMENTS

Comment 1: ***Soil Segregation Issues for the Parcel B Storm Drain and Sanitary Sewer Removal Action***

This document summarizes issues EPA identified as part of our review of the Parcel B Construction Summary Report (CSR) and Construction Summary Report Addendum (CSRA) that should be used to evaluate soil segregation for the Parcel B Storm Drain and Sanitary Sewer Removal Action. Former excavations have been associated with the Drawing Sheet numbers in Appendix C of the Final Parcel B Design Plan, Storm Drain and Sanitary Sewer Removal, Parcel B, Hunters Point Shipyard.

Sheet 4

Fuel Line F and Excavations 23-1/23-3

Analytical results from oil in the vicinity of Fuel Line F, which was parallel to some of the storm drain (SD) lines (i.e., the 36 inch diameter "SDNV VCP" line aligned along Donahue Street that leads to Outfall 1), indicate that there is a layer of soil with high levels of copper, zinc, and polyaromatic hydrocarbons (PAHs) at 2 to 3 feet below the ground surface (ft bgs). Confirmation samples were not collected from the sidewalls at 2 to 3 ft bgs when the depth of the excavation was extended to 6 ft or 10 ft bgs.

All of the original Fuel Line F excavation bottom composite samples had high levels of copper (i.e., at 3 ft bgs); samples from the northern half of the excavation also had high levels of zinc. Samples from the 7 foot depth just north of Building 146 had high concentrations of

copper. Samples from original bottom and sidewalls of the excavation also had PAHs above cleanup goals.

Excavation 23-1 is contiguous with the northern end of Fuel Line F excavation, and is located northeast of Outfall 1. This excavation also had high concentrations of copper and zinc at 1.75 ft bgs. Contamination in this area may extend into the vicinity of the line labeled 8" SDNV UNK or into the area of the 39 inch storm drain line.

Excavation 23-3 was contiguous with the northern end of Excavation 23-1. Elevated concentrations of PAHs and copper were found at the 1.75 foot depth. Contamination in this area may extend into the vicinity of the line labeled 8" SDNV UNK or into the area of the 39 inch storm drain line.

Conclusion: It is likely that there is a layer of contaminated soil that extends from at least 1.75 ft bgs to more than 3 ft bgs. Except for the area just north of Building 146, where the layer extends below 7 ft bgs, this layer ends somewhere between 3 and 6 ft bgs. This soil has concentrations of copper, zinc, and PAHs that exceed ecological and/or human health criteria.

Excavation 60-1

This excavation appears to have been in the vicinity of the 15 and 10 inch lines that run northwest to Outfall 1. Arsenic was detected just above the Hunters Point Ambient Level (HPAL) at 6.25 feet in the original boring. The extent of potential arsenic contamination has not been determined, since this excavation was only opened to 3 ft bgs.

Excavation 7-4, portion across Donahue from Building 146 (a storm drain lateral runs into/beneath this excavation)

The eastern portion of this excavation is across the street from Building 146 and a portion of the original storm drain line runs into (beneath?) a portion of this excavation. There are elevated concentrations of copper (4 to 9+ ft bgs) in the vicinity of the storm drain lateral.

EE-03

The exploratory excavation, which was just east of the northeastern corner of Building 146, where there are several sanitary sewer (SS) lines, several SD lines and a catch basin, had high concentrations of arsenic, lead and nickel. If this contamination was associated with fill

rather than a surface spill as assumed at the time, contamination may extend into the areas of the SD and SS lines.

Industrial Waste Line

The industrial waste (or drain) line (IDL) excavation was parallel to the southern SD line that extends into IR-07. In addition, the 36 SD line to Outfall 1 crosses the IDL excavation. Elevated concentrations of copper, lead, and cadmium were detected along the western portion of the IDL at depths of 9 to 10 ft bgs. There was no attempt to delineate the lateral extent of these contaminants.

<u>Sheets 4 and 6 along Donahue Street</u>

Excavation 7-4

The southeastern portion of this excavation is near the western edge of Donahue Street. Contamination may extend into the vicinity of the 36 inch SD that appears to run beneath Donahue. Elevated concentrations of Arsenic (3 to5 + ft bgs), Aroclor 1254 (3 ft bgs), PAHs (5 to 6 ft bgs), and copper (2 to 5 + ft bgs) may extend into the vicinity of the storm drain, depending on the relative elevations of the excavation and storm drain piping.

Sheet 5

Excavation Fuel Line A

Fuel Line A which is parallel to and crosses several SD laterals, appears to have soil layers with high concentrations of copper, arsenic, polychlorinated biphenyls (PCBs) and PAHs.

PAHs were found in bottom samples at 10 ft bgs and at depths as shallow as 2.5 feet along the excavation sites for Fuel Line A. The lateral extent of PAH contamination has not been delineated.

Elevated concentrations of arsenic were found in between 3.25 and 4 ft bgs, but no confirmation samples were taken on the western sidewall of the excavation.

Elevated concentrations of Aroclor 1260 were found at depths between 2.5 and 7 feet, but the extent of contamination was not delineated.

Excavation B2414

Excavation B2414 is located southeast of Drydock 5. Aroclor 1260 was found at 4, 6 and 10 ft bgs. PAHs and pentachlorophenol were detected in waste profile samples from this excavation, but the source of this contamination is unknown.

Sheet 6

Nothing specific in the vicinity of SD and SS lines.

Sheet 7

Excavation 10-5

The extent of lead at 1.25 ft bgs was never delineated. The boring with high concentrations of lead (above residential preliminary remediation goals [PRGs]) is on the south side of this excavation; an 18-inch SD line runs nearby.

Excavation B3422

This excavation was located north of the northeastern portion of Building 123 in IR10. An 8 inch SD line runs northeast from Building 123. The extent of Aroclor 1260 at the 2.25 foot depth was not delineated to the east or southeast of this excavation. In addition, PAHs were detected in waste profile samples, but were not contaminants of concern (COCs) in this excavation. PAHs and PCBs should be considered likely COCs in this area.

Excavation 24-3

If the 6 inch SS that runs parallel to the seawall is on the south side of the seawall, it is possible that contamination found in Excavation 24-3 may extend into the vicinity of this line. Elevated concentrations of Aroclor 1260 were found in samples collected between the 1.25 and 3 ft bgs. In addition, waste profile samples had high concentrations of several PAHs and pentachlorophenol, but there is no way to tie the waste profile samples to any location in the excavation. Therefore, soil in the vicinity of the 6 inch SS may have elevated levels of PCBs, PAHs, and pentachlorophenol.

Excavation 24-5

This excavation appears to be in the vicinity of several SD and SS lines. The concern was manganese at more than 3 times its PRG at a depth of 1.75 ft.

Excavation 24-6

Excavation 24-6 is south of the southeast corner of Former Building 130; it appears that the 33 inch SD runs through this area. PAHs were detected in waste profile samples, although they were not COCs in this excavation. Since this area was excavated to a depth of 6 feet, PAHs may be present at any depth.

Excavation B2918

This excavation was located south of the western end of Building 128. A 12 inch SD appears to run diagonally through or near this area. The extent of PAHs at 1.75 feet was not delineated to the east, northeast, or southeast of the northeast corner of this excavation. PAHs were not detected at 6.75 feet, but the thickness of the PAH-contaminated layer is not known.

Excavation B3914

This excavation is north-northeast of Former Building 130. The extent of copper at 4.25 feet may be an issue for the excavation of the 6 inch SS in this area.

Excavation B4113

This excavation is northeast of Former Building 130. This excavation is near the 6 inch SS line that runs parallel to the seawall and there are several SD lines that intersect just east of this excavation. The extent of PAHs at 2.5 ft bgs to the northeast and east of this location have not been delineated.

Fuel Line A

PCBs and PAHs may be an issue at depths of 3 to 5.25 feet in the vicinity of the portions of Fuel Line A that are north of the western end of Former Building 130 and the section that extends towards Berths 57 and 58. There are some SD lines in this vicinity.

Fuel Line B

Fuel Line B was excavated north of Former Building 130. There are several SD laterals north of Building 130. It appears that soil between 3 and 4.25 ft bgs was contaminated with copper and manganese. In addition, PAHs were an issue at depths between 2.25 and 8.25 feet.

Fuel Line C

Fuel Line C was excavated east and south of Former Building 130; this excavation reached a depth of 6 feet. A 12 inch SS, a 6 inch SS, and the 33 inch SD line run parallel to this former fuel line. In addition, northeast of the southeast corner of this former building, there is a major SD junction with a 15 inch SD running southwest-northeast, the 33 inch SD entering from the south, and leaving to the northeast, and a 15 inch SD running southeast-northwest into the junction. PAHs may impact soils in this area at depths of 2.5 to 5 ft bgs. Elevated concentrations of manganese were found at depths of 2.5 to 6 ft bgs; the extent of manganese below 6 ft bgs is unknown.

Industrial Waste Line (IDL)

The 4 foot bottom sample southwest of the southern corner of Building 123 had high concentrations of PAHs and lead; the horizontal extent of contamination was not delineated, so soil in the SD and SS excavations in this area may have elevated concentrations of lead and PAHs.

Similarly, there are two areas between Building 123 and the northwest portion of Building 113 that had elevated concentrations of cadmium at a depth of 6 feet. Since no delineation was done, cadmium may be present laterally or at greater depths; there are several SD and SS lines that run adjacent to the IDL in this area.

Excavations B3822, B3921, A-1, B3530, 24-7, and Fuel Line D

These excavations were not included in the Parcel B CSR or CSRA. COCs and whether the extent of contamination was delineated should be evaluated for purposes of soil segregation.

EE-04C

Exploratory Excavation EE-04 was in the vicinity of the 4-, 8- and 12-inch SD lines east of Building 157. PAHs were found at 1.75 and 3 ft bgs, but the extent of PAH contamination was not delineated

EE-05

Exploratory Excavation EE-05 is located over and in the vicinity of the 8-inch SD lines that lead to the outfall on Point Avisadero (IR-26). The extent of lead, mercury, arsenic, copper, zinc and PAHs was not delineated. Lead was found at depths of 1.75 to 3 feet and at 6 ft bgs. The other COCs were found at various depths between 1.75 and 10 ft bgs throughout the site.

Response 1: Comment noted. As suggested by the comment, the CSR and the CSRA will be reviewed prior to sewer removal activities within each IR site or its vicinity to further clarify the pertinent COCs and the potential for encountering contaminated material during excavation of the sewer lines. This information will be used in the field to take appropriate measures for handling of the excavated soil and debris and groundwater in the suspected contaminated areas. The information obtained from CSR, CSRA, as well as other pertinent documents, will be shared with the regulatory agencies during the weekly TCRA calls. In addition, the detailed information provided above will be thoroughly evaluated and used as appropriate.

TETRA TECH EC, INC.

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LOCATION: Hunters Point, CA

FROM: Edwin Neil Hart
Neil Hart, Program Manager

DESCRIPTION: Response to Comments (RTCs) for the Final Parcel B Design Plan, Storm Drain and Sanitary Sewer Removal at HPS, SF, CA, dated April 21, 2006, DCN:06-0674

2 RTC's included on Final Parcel B Design Plan; 1.) from Mr. Ricks 2.) from Mr. Work

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