PARSONS

100 West Walnut Street • Pasadena, California 91124 • (626) 440-2000 • Fax (626) 440-6200 • www.parsons.com

March 15, 2010

Mr. Jeffery Hu
Water Resources Control Engineer
California Environmental Protection Agency
California Regional Water Quality Control Board, Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

Ms. Mary Jane McIntosh
Community Co-Chair, Restoration Advisory Board
12033 Olive Street
Norwalk, California 90650

Re: Revised Remedial Action Plan Progress Update
Defense Fuel Support Point Norwalk
15306 Norwalk Boulevard, Norwalk, California
SCP NO. 0286A, Site No. 16638

Dear Mr. Hu and Ms. McIntosh:

Per your request, Parsons has prepared this letter on behalf of Defense Energy Support Center (DESC), to summarize remediation work performed and to provide a progress update on the 2006 Revised Remedial Action Plan[1] at the Defense Fuel Support Point (DFSP) Norwalk Facility in Norwalk, California.

RECOMMENDATIONS AND IMPLEMENTATION OF THE 2006 REVISED RAP

This section discusses any recommendations in the 2006 revised RAP, implementation, and current status.

Soil Vapor Extraction System (SVES): Further SVES operation was recommended to reduce the total petroleum hydrocarbon (TPH) concentrations. The SVES was expanded in various areas, including the truck fill station area and the eastern area.

The SVES was shut down on April 24, 2006 for reasons listed in the revised RAP (including respiration/rebound monitoring and converting the SVES to a bioventing system). The SVES started up again in January 2007. In August 2007 vapor extraction was also conducted from the eastern boundary wells. The SVES operated until February 25, 2008 when it was shut off for the following reasons: to allow site to reach equilibrium then conduct respiration/rebound

[1] Parsons, 2006, Revised Remedial Action Plan, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California, September 7.

monitoring and to assess the efficiency of the thermal oxidizer equipment. It was again recommended to continue with SVE for high impacted areas but it was also determined that the thermal oxidizer was no longer viable equipment for operation and was taken off-line. A new system using granular-activated carbon (GAC) was designed and installed. An AQMD permit modification was submitted in July 2009 and the permit was received in February 2010. The permit specified a different configuration of air flow from what was proposed. Therefore, the SVES manifold and pipe routes were redesigned and the system was replumbed. Baseline monitoring and startup operation of the expanded/redesigned SVES is scheduled to begin March 16, 2010.

Free Product Recovery System (FPRS): It was concluded that the FPRS using the total fluids wells had reached asymptotic levels and using this system was no longer economical for further product removal at this stage. Parsons recommended using absorbent socks to remove any residual free product remaining in any wells. Absorbent socks were installed in GMW-4 and MW-9 in October 2007 and in GMW-21, GMW-58, TF-9, TF-17, TF-18, TF-20, and PZ-3 during the second quarter of 2007. Change-outs of the absorbent socks were conducted as-needed as part of the routine weekly monitoring at the site. The October 2009 gauging data collected shows product thicknesses ranging between 0.04 and 1.16 feet.

Groundwater Treatment System (GWTS): It was concluded that the GWTS is not an effective treatment technology to reduce the TPH as fuel product concentrations or for mass removal; however, the system does work to maintain hydraulic control of the TPH plume. In the eastern area it was concluded that additional groundwater extraction wells are needed to prevent off-site migration of the plume. In the western boundary of the site it was concluded that the GWTS has not been effective in maintaining hydraulic control and additional wells may be needed in this area. In addition, operation of GWTS was recommended in areas where groundwater TPH concentrations exceeded 10,000 µg/L.

Four new groundwater extraction wells with 6-inch diameter casing and screen were installed throughout the site at the following locations: GW-13 in the northwest corner of the site near MW-14, GW-14 in the central tank farm area, GW-15 and GW-16 in the eastern area bordering Holifield Park. The GWTS was also upgraded and expanded to include adequate equipment to handle the additional flow capacity, including switching to GAC and taking the air stripper off-line.

Biosparge System: The biosparge system operated on-going before April 24, 2006 when the SVES was shut down. The system operated again between January 2007 and February 2008. In the tank farm area additional biosparge points were recommended near tanks 80006, 80007, and 55004. The biosparge system has been expanded and once the SVES is back online, operation of the expanded biosparge system will commence.

REMEDIATION PROGRESS AND PLANNED ACTION

Fuel thickness and extent of free product in wells have decreased as a result of the FPR/GWTS and absorbent sock installations. Based on evaluations of the rebound monitoring, some areas have shown decreases in soil gas concentrations while other areas still show high impacts. Groundwater extraction from the northwest corner (extraction wells GW-2 and GW-13) and

north-eastern area (extraction wells GW-15 and GW-16) for containment has been effective. Off-site wells continue to show non-detect or decreasing trends in TPH and benzene, toluene, ethylbenezene, and xylenes (BTEX) concentrations. Although TPH concentrations in most wells throughout the site are lower and/or are declining, groundwater extraction has not been effective at mass removal at the site.

Two respiration/rebound monitoring events of the SVES were completed as well as confirmation soil sampling at selected areas. Additional impacted areas were discovered, including the water tank, truck fill station, and the pump house to the south of the truck fill station. Further investigation in these areas was recommended in order to define the soil impacts. A cost analysis and technical evaluation for soil impacts will be conducted to determine the optimal remedial solution and technology to best achieve soil cleanup goals in a reasonable time frame at each area. As an interim remedial measure, SVES should be reactivated and operate for 6 to 9 months then shut down for respiration/rebound monitoring.

GWTS will be continued for containment of plume and prevent off-site migration in the northwest corner and the north-eastern boundary and will be evaluated after 9 months of operation. After one year of biosparging operation, an assessment will be conducted to determine if dissolved groundwater concentrations have decreased. The groundwater remedial options will be assessed and a determination made if more aggressive solutions should be implemented.

UPDATED REMEDIATION SCHEDULE

The revised RAP presented a general estimated project schedule for the soil and groundwater remediation efforts. The updated remediation schedule is presented below and includes additional task that were not listed in the revised RAP. The estimated projected schedule could change depending on various elements including site conditions, new technology availability and applicability, regulatory approvals, and subcontract availabilities. In addition, this schedule will be updated on-going as necessary based on observed remedial progress and new findings. However, we will strive to address the remediation as aggressively as possible, and keep the project team updated.

Task:	Date Projected	Original Date Projected
Soil Remediation Schedule		
Conduct Additional Soil Investigation	April 2010 to August 2010	September 2006 to October 2006
SVE Operation	March 2010 to September 2010	September 2006 to March 2007
SVE & Bioventing Operation Combined	October 2010 to January 2011	April 2006 to October 2007
Respiration Test & Soil Confirmation Sampling	February 2011 to June 2011	November 2007
Potential New Remedial Solution	TBD	N/A
Groundwater Remediation Schedule		
Groundwater Extraction	thru February 2011	September 2006 to September 2008
Biosparging	March 2010 to March 2011	September 2006 to September 2008
Potential New Remedial Solution	TBD	N/A
Monitored Natural Attenuation	March 2012 to March 2014	October 2008 to October 2010
Confirmatory Groundwater Sampling	April 2014	November 2010
Request No Further Action for the Site	August 2014	March 2011

If you have any questions, please call me at 602-734-1083 or Mary Lucas at 626-440-6032.

Sincerely,

PARSONS

Redwan Hassan

Redwan N Hassan, PG
Project Manager

Distribution:

Mr. Kola Olowu, DESC-FQ
Ms. Amy Loar, DESC-FPA (transmittal only)
Mr. Chris Berthaume, DESC-Document Depository
Lt. Col. Jon Ramer, DESC
Mr. Steve Hariri, DTSC
Ms. Adriana Figueroa, City of Norwalk
Mr. Charles Emig, City of Cerritos
Ms. Mary Lucas, Parsons
Mr. Steve Defibaugh, KMEP
Ms. Shiow-Whei Chou, AMEC Geomatrix
Mr. Tim Whyte, URS
Minxia Dong, Norwalk Regional Library
Office of State Senator Ron Calderon
Office of Assemblyman Tony Mendoza
Office of Congresswoman Grace Napolitano

RAB Members:
Dr. Eugene Garcia
Mr. Bob Hoskins
Mr. William Miller
Ms. Tracy Winkler