



# FINAL

## MEETING MINUTES

16 August 2016

### **BACKGROUND**

Defense Logistics Agency - Energy (DLA Energy) and Kinder Morgan Energy Partners (KMEP) are conducting environmental cleanup activities at the area in and surrounding the former Defense Fuel Support Point (DFSP) Norwalk facility, formerly known as the Tank Farm, located at 15306 Norwalk Boulevard, Norwalk, California. The Restoration Advisory Board (RAB) is an advisory committee of local citizens and project members that review and comment on documents relating to the environmental cleanup. All RAB meetings are open to the public and are scheduled semiannually on the fourth Thursday at 4:00 p.m. in the months of February and August unless otherwise voted on by the RAB community membership.

### **1. Introduction** Mary Jane McIntosh, RAB Co-Chair, Meeting Chair

Mary Jane McIntosh, RAB Co-Chair, Meeting Chair, called the meeting to order at 4:05 p.m.

Ms. McIntosh introduced Ms. Carol Devier-Heeney of DLA Energy (replacement for Nicholas Carros), Major Justin Settles of DLA Energy (replacement for Major Todd Morin), Vidal Cortes of CH2M and Griselda Ortiz (representative for the Office of Congresswoman Sanchez).

Ms. McIntosh asked for comments on the minutes from the February 25, 2016 RAB meeting. Ms. McIntosh made a motion for the minutes to be approved as written. Mr. Steve Defibaugh approved the minutes and Ms. McIntosh seconded the motion. The minutes were approved without opposition.

### **2. United States Air Force Update**

Michael Wilson was not in attendance. Mr. Nicholas Carros of DLA Energy thanked everyone for their assistance on all the worked completed to date that allowed for the property conveyance to the City of Norwalk as a park parcel that occurred earlier that day at the ceremony at Holifield Park.

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### 3. DLA Energy Update Neil Irish, The Source Group, Inc.

#### Status of Remediation System Update

Neil Irish, SGI Project Manager for the DFSP Norwalk site began by discussing the status of the ongoing remediation systems for soil and groundwater treatment and provided information on groundwater remediation, soil vapor extraction (SVE) and light non-aqueous Phase Liquids (LNAPL) recovery.

Mr. Irish stated that 74.4 million gallons of groundwater have been treated and 2.9 million pounds of hydrocarbons have been removed since April 1996.

Mr. Irish stated that efforts to obtain approval to reuse treated groundwater for dust control for the soil remediation activities were unsuccessful. Reuse was determined neither practical or cost effective based on the requirements.

Mr. Irish stated that 200 gallons of free product has been recovered in 2016 stating that 70% of the product recovered is from well TF-18. To explore why TF-18 is yielding so much product, five additional wells were installed near TF-18 and became operational in August 2016.

#### Soil Remediation – Site Wide

Mr. Irish provided an update on the soil remediation that is being accomplished by excavation and on-site bio-remediation. All soil between zero to 10 feet with contamination above cleanup goals is scheduled to be excavated and treated. To date, 100 percent of the targeted shallow soil has been excavated from the future park area (approximately 13 acres) and over 99.5 percent of the targeted shallow soil has been excavated from the remainder of the site (approximately 36 acres). Excavated soil has been placed into treatment stockpiles. Treated soil that has been confirmed clean has been used to backfill some excavations. The remaining ~0.5 percent of soil to be excavated was located under the KMEP office trailer. The trailer has since been moved. Due to the timeline and nature of the soil, this soil will be excavated and hauled offsite for disposal in coordination with the City of Norwalk transportation of soil requirements. Deeper soil (greater than 10 feet) with the highest concentrations of contamination (affecting groundwater) were also excavated and treated. The deeper soil was removed from Tank Basin 80008 and 55004 and the Former Truck Rack Area.

Mr. Irish presented an aerial photo of the site depicting the excavations and stockpile treatment rows.

Mr. Irish discussed continuing treatment of soil currently in cells, specifically the “oily sands” material. Due to the nature of the “oily sands” material, it takes longer than the other material to treat (as was expected). Some of the treated “oily sands” material required retreatment (which entailed adding additional bacteria and increasing the moisture levels).

Mr. Irish also stated that approval has been received from the Regional Board to use approximately 11,000 cubic yards of treated soil as backfill material.

Mr. Irish stated that remaining soil is expected to be treated by the end of November 2016. If at that time some soil is still in need of treatment, discussions will occur to determine if we continue treatment or haul soil offsite for disposal.

Mr. Irish stated that to date, approximately 120,000-150,000 cubic yards (yd<sup>3</sup>) of soil have been excavated. Much of which was clean overburden soil that was sampled, confirmed clean and approved by the Regional Board for use as backfill. Approximately 66,000 yd<sup>3</sup> of contaminated soil has been excavated and placed into treatment. Of the 66,000 yd<sup>3</sup>, 55,000 yd<sup>3</sup> treated have been approved for use as backfill, 11,000 yd<sup>3</sup> are currently being treated. Cross trenches have been performed throughout the site to confirm all contamination has been removed.

Mr. Irish presented an excavation status map.

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Mr. Irish discussed the activities completed in the eastern area (park area) which included the backfilling of park area excavations, a soil gas survey, and the preparation of a Human Health Risk Assessment which confirmed that the proposed park area is ready for re-use. All documentation for the future park area has been submitted to the Regional Board and is currently under review.

Mr. Irish discussed work planned until the end of 2016 which includes completing soil treatment and request for authorization to re-use soil for backfill, transportation of soil not treated to cleanup goals for off-site recycling (if needed), importing soil for backfill (additional soil is needed due to higher compaction density of backfilled excavations) and backfilling remaining excavations (December 2016 to January 2017).

Mr. Irish presented and discussed photos of the site and remediation process as well as a photo of the boundary of the new park area.

Ms. McIntosh thanked everyone for their hard work in completing activities in the eastern area (park area) and for the dedication ceremony put on by The City of Norwalk for the 15-acre expansion of Holifield Park. Ms. McIntosh stated that Congresswoman Sanchez and Congresswoman Napolitano were in attendance. Ms. McIntosh specifically thanked Ms. Adriana Figueroa and the City of Norwalk for organizing the event.

Ms. Winkler asked Ms. Figueroa if the City of Norwalk has any plans for the newly acquired 15 acres of park property. Ms. Figueroa stated that the City of Norwalk plans to expand the existing Holifield Park; however, the City of Norwalk could not begin applying for grants until the property was transferred to the City. The grant requirement is that you must own the property.

### Groundwater

Mr. Irish discussed the groundwater assessment planning stating that the next steps are to install replacement groundwater recovery wells and reconfigure the extraction system, collect final data to demonstrate minimal residual hydrocarbon impact at GMW-62 and Holifield Park, operate new free product wells in the central area of the tank farm, evaluate LNAPL recovery and options for enhancements, and install and commission new and replacement air sparge wells.

Mr. Irish presented additional information on the Ultraviolet Optical Screening Tool (UVOST), which included the CPT/UVOST location map, UVOST profile for TF-18, and CPT Lithology Log.

#### **4. KMEP Update Mark Wuttig, CH2M**

##### **Remediation Operations Update**

Mark Wuttig provided an update on KMEP's remediation operations, annual soil vapor monitoring, biosparge pilot testing and planned activities.

Mr. Wuttig stated that overall objectives are to remove contaminated mass and contain the contamination. To accomplish these objectives KMEP maintains an SVE system, a groundwater extraction (GWE) system and total fluids extraction (TFE) system. These systems are located in the South-Central and Southeast areas. Additionally, pilot testing of the biosparge system began in January 2016. Mr. Wuttig mentioned the former remediation system referred to as "The West Side Barrier" was discontinued in August of 2008 based on low contaminant concentrations that no longer pose a risk.

Mr. Wuttig also discussed the treatment and discharge of the systems.

Mr. Wuttig discussed operation and maintenance activities and summarized KMEP's SVE operations. Since 1995, approximately 515,100 gallons (3.4 million pounds) have been treated. Mr. Wuttig displayed a graph depicting the cumulative fuel removed by vapor extraction to date.

Regarding KMEP's TFE/GWE system, Mr. Wuttig stated that groundwater extracted from the south-central and southeast areas is 70.9 million gallons and from the West Side Barrier is 26.9 million gallons since 1995.

Mr. Wuttig reported that a total of 14,177 gallons of free product has been recovered since 1995. Mr. Wuttig

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displayed a graph of floating product and groundwater recovered over time.

Mr. Wuttig presented a hydrograph showing the historical groundwater elevations in the upper aquifer and the underlying exposition aquifer from 1993 to present, which depicts the groundwater table at a historical low which has exposed floating product trapped in the smear zone.

Mr. Wuttig summarized remediation systems operation time.

### Pilot Biosparge System

Mr. Wuttig provided detailed explanation of the biosparge well layout and design.

Mr. Wuttig provided an explanation of the pilot test program that commenced in January 2016; discussing baseline testing, ramp-up period, short term tracer testing and long term testing.

Mr. Wuttig discussed safety measures and offsite monitoring and response activities. Mr. Wuttig stated that the field team would respond to any odor complaints from residents immediately and collect indoor air samples if odors are reported.

Mr. Dan Jablonski of CH2M provided preliminary results of the soil vapor testing. Mr. Jablonski noted the gradual decline in concentrations over the last few sampling events. Mr. Jablonski noted that VOCs are still present in the deeper zones (20-22 feet) which was expected as it is close to the smear zone. Mr. Jablonski stated that monitoring will continue and mobile lab sampling will be conducted quarterly.

Mr. Jablonski also provided preliminary results of the free product gauging and groundwater sampling that occurred in March and June 2016 at a subset of wells in the south-central area. Mr. Jablonski reported a significant decline in product thickness and areal extent. He noted that in June 2016, only four wells in the south-central area had measurable product thickness with a maximum product thickness of 3.32 feet. Mr. Jablonski stated that product thickness in offsite well GMW-O-12 decreased from 6.49 feet in April 2016 to 0.8 feet in June 2016 which is a positive sign that biosparge operations are working. More biosparge data will be collected to better identify trends in dissolved phase concentrations.

### Planned Activities

Mr. Wuttig stated that planned remediation activities include continuing SVE and TFE in south-central and southeastern areas, continuing as-needed hand bailing product from wells without TFE capabilities, continuing operation of biosparge well and routine groundwater and soil vapor monitoring, completing installation of a new oil water separator and remediation pad for GWTS, and installing new SVE system.

### Dissolved Air Flotation System

Mr. Jablonski provided an overview of the new Dissolved Air Flotation (DAF) system, which separates fuel product and groundwater (similar to an oil water separator). Mr. Jablonski explained that the DAF system uses an air bubble system to enhance separation of fluids and biodegradation of hydrocarbon constituents by increased dissolved oxygen. The system is easier to maintain and improved separation of fuel product and biosludge from groundwater. Mr. Jablonski stated that they system should be fully operational by September 2016.

Mr. Jablonski presented a schematic of the planned Regenerative Thermal Oxidizer (RTO) system and described the system. Mr. Jablonski stated that this system is more efficient and consumes less natural gas by regeneration of heat.

Mr. Jablonski introduced Mr. Vidal Cortes of CH2M who presented a process flow diagram and gave an overview of the RTO system.

Mr. Steve Defibaugh of Kinder Morgan Energy Partners provided an operations update stating that in July 2016 Kinder Morgan Operations Group began excavation (hand digging) and removal of legacy infrastructure in the south-central manifold area. Mr. Defibaugh also stated that the south-central area

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pipeline loop outside of KMEP easement will be decommissioned and removed. The above-grade portion of pipeline further to the east will be installed below grade. The first phase of work will be completed by November 2016 and the remaining work (contingent upon budget) is scheduled to be completed by mid-2017.

Mr. Wuttig presented photos of the demolition.

### **5. First Semiannual 2016 Groundwater Monitoring Report Mark Wuttig, CH2M**

Mr. Wuttig summarized the First Semiannual 2016 Groundwater Monitoring Report for sampling conducted in April 2016. Well gauging and groundwater sample collection was conducted by The Source Group, Inc., and Blaine Tech. A total of 139 wells were gauged. Groundwater samples were collected from 91 wells using low-flow methodology.

Mr. Wuttig presented the sampling results for the uppermost aquifer wells and the exposition aquifer wells.

Mr. Wuttig displayed and discussed groundwater elevation maps for the uppermost groundwater zone and the Exposition Aquifer.

Mr. Wuttig stated that floating product was measured in 14 of the 139 wells gauged and measured thicknesses range from 0.01 feet to 6.49 feet.

Mr. Wuttig stated that the decrease in product thickness and areal extent is a result of biosparging in the south-central area.

Mr. Jablonski announced that Mr. Wuttig will be leaving CH2M. Mr. Wuttig was thanked for all of his hard work.

### **6. Regulatory Agency Update Paul Cho, Regional Water Quality Control Board**

Mr. Paul Cho, the Regional Water Quality Control Board (Regional Board) Project Manager for the Norwalk site, provided an update on the recently received Human Health Risk Assessment (for the 15-acre park portion) from DLA-Energy and Kinder Morgan Energy Partners. Mr. Cho stated that the HHRA was submitted to the Office of Environmental Health Hazard Assessment (OEHHA) for review and their technical comments were recently returned to the Regional Board for review. Upon completion of review by the Regional Board, comments will be submitted back to DLA-Energy and Kinder Morgan Energy Partners for response. Once finalized, the Regional Board will prepare a closure package for upper management review. Following upper management review, deed restriction language will be finalized with the lawyers for state counsel review. A 30-day public comment period will follow. Once all public comments are addressed, the Regional Board executive officers will sign off on final closure. Note that this same HHRA and closure process will occur for the remaining 36 acres currently under remediation.

Ms. Winkler asked when the closure process will be complete for the 15 acres.

Mr. Cho responded that it is dependent on the review, but typically takes two to three months after public comments are received.

Ms. Figueroa reiterated that the ceremony held earlier in the day was a ceremonial transfer and that official transfer will not be complete until the "No Further Action" letter is received from the Regional Board for the shallow soils on the 15-acre parcel.

Ms. Figueroa thanked everyone again for their support and work on this project.

Ms. McIntosh announced that Mr. Wilson of the Air Force has transferred to a new project; however, he requested to retain the Norwalk project until the property transfer is complete.

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<b>MEETING MINUTES</b>	<b>16 August 2016</b>
<b>7. <u>Set Date and Agenda for Next Meeting</u></b>	
The next semiannual RAB meetings will be held on Thursday, February 23, 2017 and Thursday, August 24, 2017, at 4:00 p.m. in the Hargitt Room at the Norwalk Arts & Sports Complex. Agenda items to be included are pilot testing and remediation system updates.	
<b>8. <u>Public Comment Period</u></b>	
Ms. McIntosh made a motion to adjourn the meeting. Meeting adjourned at 6:12 p.m.	

<b>ACTION ITEMS</b>		
<b>Item</b>	<b>Responsible Party</b>	<b>Due Date</b>
Schedule February and August 2017 RAB Meetings in Hargitt Room	Adriana Figueroa/Molly Black	8/31/16
Add "Update from GSA" section to future agendas	Molly Black	8/31/16
Include photos of the Property Transfer Ceremony held on August 16, 2016 at 10am in the next Fact Sheet	Molly Black/Adriana Figueroa	1/1/17