



January 16, 2015

Paul Cho, P.G.

Water Resources Control Engineer
California Regional Water Quality Control Board, Site Cleanup Unit IV
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Request for Confirmation Sample Frequency Modification for Treated Soil at the
Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk,
California (SCP NO. 0286A, Site ID NO. 16638)

Dear Mr. Cho:

On January 7, 2015, the Los Angeles Regional Water Quality Control Board (LARWQCB) provided conditions (and related information requests) that the Defense Logistics Agency-Energy (DLA-Energy), and Source Group, Inc. (SGI), would be required to adhere to associated with the pending Waste Discharge Requirement (WDR) for excavation and soil treatment at the Defense Support Facility Point (DFSP) Norwalk.

Item 3 of that correspondence addressed the number of confirmation samples required for soils subjected to treatment onsite by means of bioremediation. Via electronic mail and phone communication, we discussed alternative configurations of sample quantities and locations. We also discussed the revised volume to be placed in a typical treatment row. This letter addresses item 3 and the revised volume only. A separate letter will be provided to respond to and address all the remaining items on or before the due dates specified in the January 7, 2015, correspondence.

SGI provided design specifications for treatment cells. In the soil management document, *Revised Soil Management Plan: Treatment Cell Operation and Site Excavation (SMP)* (SGI, November 5, 2014), The volume per treatment row within each cell was identified as typically 1,700 cubic yards (cu yds). This was incorrectly stated, as the approximate volume will typically be 750 cu yds. Correspondingly, alternate scenario grids of confirmation sampling locations were sent to the RWQCB reflecting the revised stockpile volume.

Based on the discussion and RWQCB review of the alternatives, it was mutually agreed the grid configuration as identified in the attached Figure 1 would provide an acceptable density of data to confirm a treated stockpile was suitable for reuse. This assumes the combined discrete values meet or exceed the 95% upper control limit (UCL) as compared to the soil cleanup goals as prescribed in the LARWQCB correspondence dated July 12, 2012.

The attached grid figure shows the locations of 35 discrete sample points for a typical stockpile size of 750 cu yds. A detailed sample strategy document addressing confirmation sampling for both treated soil and soil assumed clean will be provided on or before February 15, 2015, as

1962 Freeman Avenue
Signal Hill, California 90755

Telephone: (562) 597-1055
Facsimile: (562) 597-1070

required per the January 7, 2015, LARWQCB correspondence.

The sampling frequency in the January 7, 2015, correspondence substantially exceeds the sampling frequency as prescribed by the LARWQCB's, April 10, 2012, correspondence. The April, 2012 letter provided review comments to the *Soil Management Plan* (SMP) prepared by Parsons (Parsons, 2012). The LARWQCB later approved Parsons' SMP on February 26, 2014. The final SMP incorporated the confirmation sampling frequency prescribed by the LARWQCB. Accordingly, the planning of this excavation and treatment project incorporated those confirmation sampling requirements. Further, the sampling frequency for untreated soil remains consistent with the original sample-to-volume ratio requirements.

In our recent discussion, the rationale for not using the aforementioned sampling frequency was associated with two primary factors:

1. The intended future use of the property has not been formally communicated to the LARWQCB, and
2. The F4 technology, though similar to other bioremediation treatments, has not been used within the jurisdiction of the LARWQCB.

As such, the LARWQCB must assume unrestricted use of the property and wants to review a dense population of data from treatment piles early in the project. DLA-Energy and SGI understand this conservative approach. After completion of treatment of three rows and assuming requisite analytical results demonstrate the process has met or exceeded the soil cleanup goals, necessary for soil reuse, DLA-Energy and SGI will request a reduction to the sampling frequency.

We are pleased to submit this letter of clarification as requested by the LARWQCB prior to final preparation of the WDR for bioremediation of soil at the DFSP Norwalk site. If you have any questions, please call me at (562) 597-1055.

Sincerely,



Ken E. Wall
Senior Project Engineer
The Source Group, Inc

Ec: Mr. Everett Bole, DLA -Energy
Mr. Neil F. Irish, P.G., SGI
File: DFSP Norwalk – 04-NDLA-007

Attch:

Figure 1 – Confirmation Sample Grid – Stockpile Volume 750 Cubic Yards

Figure -1
Treatment Row Sampling Locations

Volume of a Rectangular Trapezoidal Trough
 $V = (H/3) [WL + \sqrt{WL}ab] + ab$

Hieght	h	8
Width of Bottom	W	20
Length of bottom	L	215
Width of top	a	4
Length of top	b	199
V		20043 sq ft
Cu yards		742
Tons		1188

Confirmation Samples Required 35

Note: Samples in green will be obtained from middle of pile via access through side

