

Stan A. Huber Consultants, Inc.

Health Physics and Radiation Safety Services

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July 31, 2013

Paul Duncan Western Utility Contractors, Inc. 2565 Palmer Ave. University Park, IL 60466

RE: 300 E. Ohio Street Thorium Monitoring

Dear Mr. Duncan:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the repair of a utility trench at 300 E. Ohio St. in Chicago, Illinois. The monitoring was performed on July 16, 2013.

<u>Instrumentation</u>

Surface gamma scans were performed by Joel Ahrweiler using a Ludlum Model 2221 Scaler / Ratemeter with attached 2"x2" Nal probe. The instrument was calibrated on November 9, 2012. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 17,915 counts per minute (cpm).

The average background count rate for this location was found to be between 4,500 cpm and 5,600 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by entering the excavation after each 18 inch lift and recording the highest count rate for the floors and walls to a maximum excavation depth of 36 inches. No soil was stockpiled during the project and all excavated soils were loaded directly into the truck after screening.

The maximum gamma count rates for each 1.5 foot lift are detailed on the attached Radiation Survey Form. The count rates in the excavation ranged from 5,600 cpm to 8,100 cpm. No count rates were found at any time that exceeded the threshold limit of 17,915 cpm.

Additional Monitoring

Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

You will need to forward a copy of this report to the City of Chicago Department of Public Health (Attn: Rahmatunsia Begum) with the CDOT Permit Number in the subject line. I will be providing a copy of this report to USEPA, as required.

Thank you for your assistance with this project. If you have any questions or need additional information please call me at (815) 485-6161.

Sincerely,

Stan A. Huber Consultants, Inc.

Glenn Huber, CHP

President

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Radiation Survey Form

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	Locat	tion/ Pro	ject (D:	Vestern V	Utilities 300 E. Ottio St.					
	Date:	:7 16 2013			T	Technician: Joel Ahrweiler Serial No.: 126497				
	Inst N				_ 8					
	Probe Type: 1"x1" Nat / 2"x2" Nat Shielded Not Shielded Not Shielded):
	Background 4.5 -5.6 k cpm				A	Action Level: 17915 cpm				
	Write grid designations in circles. Record highest counts for grid in cpm. Record 30 second counts at grid intersections (if required). Shade areas of elevated counts and record max cpm.									
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