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March 4, 2010

Mike Kasal SET Environmental 450 Sumac Road Wheeling, Illinois 60090

RE: 500 N. Streeter Dr. – City of Chicago Thorium Monitoring

Dear Mr. Kasal:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation of a City of Chicago water line repair at 500 N. Streeter Dr. in Chicago, Illinois. The monitoring was performed on March 3, 2010. All activities were conducted under the guidance of document *SET General Procedure for Thorium Monitoring.*

Instrumentation

Surface gamma scans were performed by Glenn Huber using a Ludlum Model 2221 Scaled / Ratemeter with attached 2"x2" Nal probe. The instrument was calibrated on November 6, 2009. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 17,774 counts per minute (cpm).

Background was determined for this site by selecting 5 random locations in the vicinity of the planned excavation and collecting one-minute integrated counts at each location. The average background count rate for this location was found to be 6450 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 an excavation depth of 4.5 feet. After the excavation was 4.5 feet deep, surveys were performed of the buckets of soil as they were removed from the excavation, prior to loading in the truck. No soil was stockpiled during the project and all excavated soils were loaded directly into the truck after screening.

The maximum gamma count rate for each 1.5 foot lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 5400 cpm to 8200 cpm. No count rates were found at any time that exceeded the threshold limit of 17,774 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.

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

sobci	Page of
Stan A. Huber Counsultants, Inc. Radiation Survey Form	
Location/ Project ID:	500 N. Streeter Dr.
Date: <u>3/3/10</u>	Technician: <u>Slem Huber</u>
Inst Model: Ludhan 2021	Serial No. : <u>/ パチディス</u>
Probe Type: 1"x1" Nal 2"x2" Nal Shielded Not Shielded	Lift Elevation: <u></u>
Background <u>6450</u> cpm	Action Level: <u> </u>
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. $\int \int \frac{1}{\sqrt{1 + c_{ee} + c_{ee}}} \Delta r$.	
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Building Fire hydren7 Fence Curbs	
	* surveys of Suckets, not

= Excavated area



http://maps.google.com/maps?f=q&source=s_q&hl=en&geocode=&q=500+n+stree... 3/4/2010