

## Stan A. Huber Consultants, Inc.

Health Physics and Radiation Safety Services

200 North Cedar Road - New Lenox, Illinois 60451-1751 - (800) 383-0468 or (815) 485-6161 - FAX (815) 485-4433 - Email sahci@sahci.com - Home Page www.sahci.com

March 21, 2016

Jesus Lopez T-Mobile 2001 Butterfield Road Downers Grove, IL 60515

RE: Ohio St. and St. Clair St. – Thorium Monitoring

Dear Mr. Lopez:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and installation of a utility pole and conduit trench at Ohio Street and N. St. Clair Street in Chicago, Illinois. The monitoring was performed on March 1, 2016 – March 3, 2016. All activities were conducted under the guidance of document *SET General Procedure for Thorium Monitoring*.

## <u>Instrumentation</u>

Surface gamma scans were performed by Brian Schmidt using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" Nal probe (6" lead shielded). The instrument was calibrated on October 15, 2015. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,054 counts per minute (cpm).

The average background count rate for this location was found to average 2,028 cpm.

## Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by monitoring the soil in each 18 inch lift as it was removed from the excavation and recording the highest count rate to a maximum excavation depth of 9 feet.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 2,000 cpm to 4,000 cpm. No count rates were found at any time that exceeded the threshold limit of 7,054 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.

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Glenn Huber, CHP

President

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Radiation Survey Form

Location/ Project ID: SW COMMEN OF CHICAGO, The Technician: Brian Styniot Date: 3/1-3/2016 Inst Model: LUCLUM - 222 Serial No. : \_\_\_\_\_/ 26496 Lift Elevation: \_\_\_\_\_\_\_\_\_ Probe Type: 1"x1" Nal / (2"x2" Nal) Shielded // Not Shielded Action Level: 7059 cpm Background 2028 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. N scale 0410 St STREET CURB B-1 = BACKGROUND (1 MIN COUNT) = 2028 3 0-18" - 7000 18-36" - 2900 36-54" - 3100 54-72" - 3500 72-90" - 3300 90-108" - 4000 - SILVETED VIA 108-126" - 2100 - DAILL Sports