

Stan A. Huber Consultants, Inc.

Health Physics and Radiation Safety Services

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February 26, 2019

Mike Lanenga SET Environmental 450 Sumac Road Wheeling, Illinois 60090

RE: Thorium Monitoring: 351 E. Lower Randolph St. (2FM)

Digger No. 600598075

Dear Mr. Lanenga:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the repair and installation of fence posts 351 E. Lower Randolph St. in Chicago, Illinois. The monitoring was performed by Jeremy Keiser and Glenn Huber, SAHCI Health Physicists, on February 21-22, 2019. All activities were conducted under the guidance of document *SET General Procedure for Thorium Monitoring*.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 126497) with attached Ludlum Model 44-10 2"x2" Nal detector (w/ 6" collimated lead shield). The instrument was calibrated on October 15, 2018. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,319 counts per minute (cpm).

The background count rate for this location was found to average 1,632 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was by monitoring the spoils generated while the post holes were completed.

The maximum gamma count rate for each boring was recorded on the attached Radiation Survey Form. The count rates of the boring spoils ranged from 1,800 cpm to 2,000 cpm. No count rates were found at any time that exceeded the threshold limit of 6,319 cpm.

No surveys were required on February 22, 2019 since no additional borings were performed. Only fence repairs took place on the second day.

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.

I will be providing a copy of this report to both the City of Chicago Department of Public Health and US Environmental Protection Agency, 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.

Call He

Glenn Huber, CHP

President

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Radiation Survey Form

Location/ Project ID: 600598075 Technician: <u>Jeremy Kieser</u>
Serial No.: 126497 Date: Feb. 21,2019 Inst Model: Ludlum 2721 Lift Elevation: Surface, to 2 feet Probe Type: 1"x1" Nal / 2"x2" Nal Shielded / Not Shielded Action Level: 63 19 cpm Background 1632 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. N Lower Randolph Parking Lot Extrance parking Spot #51 parking Spot #55 -2 feet deep -6 man acep 1800 cpm