



November 27, 2018

Rick Choyce  
GEI Consultants, Inc.  
400 N. Lakeview Parkway, Suite 140  
Vernon Hills, IL 60061

RE: Thorium Monitoring at 220-240 E. Erie St.  
CDOT Permit #1017626

Dear Mr. Choyce:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for sidewalk replacement at 220-240 E. Erie Street in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on October 29-31, 2018.

#### Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 132844) with attached 2"x2" NaI probe (w/ 6" collimated lead shield). The instrument was calibrated on August 6, 2018. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,391 counts per minute (cpm).

The average background count rate for this location was determined to be 2,251 cpm.

#### Soil / Concrete Gamma Scans

Survey data was collected on by entering the excavation before and after the single 8 inch lift and recording the highest count rate for the floors and walls. All excavated material was loaded directly into a truck for disposal. No fill soil was excavated during this project and only existing sidewalk concrete was removed.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavations ranged from 1,300 cpm to 2,700 cpm. No count rates were found at any time that exceeded the threshold limit of 7,391 cpm.

#### Additional Monitoring

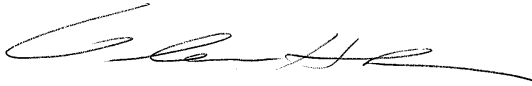
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

Regulatory Notification of Survey Completion

A copy of this report should be submitted 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.

A handwritten signature in black ink, appearing to read 'Glenn Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP  
President

### Radiation Survey Form

Location/ Project ID: 251 E. HIRSH ST. - CHICAGO, IL - SIDEWALK REPLACEMENT - ROW RAD SURVEY

Date: 10/29-31/2018

Technician: BRIAN SCAMOT

Inst Model: LVDCM-2221

Serial No.: 182844

Probe Type: 1"x1" NaI / 2"x2" NaI  
Shielded / Not Shielded

Lift Elevation: 0-8"

Background 2251 cpm

Action Level: 7391 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.

