



June 29, 2021

Angel Camacho  
SET Environmental  
450 Sumac Road  
Wheeling, Illinois 60090

RE: Thorium Monitoring – 355 E. Chicago Riverwalk Tree Planting  
City of Chicago Dept. of Assets, Information, and Services (AIS)  
CDOT Permit: 1543411

Dear Mr. Camacho:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the replacement of 4 trees at the Chicago Riverwalk (355 E. Riverwalk). The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on June 11, 2021. 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" NaI Detector (w/ 6" collimated lead shield). The instrument was calibrated on May 5, 2021. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,383 counts per minute (cpm).

The average background count rate for this location was measured at 2,084 cpm.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by monitoring the spoils generated during the tree replacement and recording the highest count rate for each location.

The maximum gamma count rate for each boring was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 2,400 cpm to 3,200 cpm. No count rates were found at any time that exceeded the threshold limit of 6,383 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.

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.

Glenn Huber, CHP  
President

### Radiation Survey Form

Location/ Project ID: CHRISTY WESER - RIVERWALK - TREE ILLUSTRATION - RADIOLOGICAL SOIL SURVEY

Date: 6/11/2021

Technician: BRIAN SCHMIET

Inst Model: LUOVLM-2221

Serial No.: 126497

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

Lift Elevation: SURFACE (0-16")

Background 2084 cpm

Action Level: 6383 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.

