

October 23, 2024

Angel Camacho
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: Thorium Monitoring – City of Chicago Department of Transportation
CDOT Permit 1988290 – 400 N. New St.

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiological monitoring after the removal of a section of curb at 400 N. New St. in Chicago, Illinois. The monitoring was performed by Mark Dewald, SAHCI Health Physicist, on October 17, 2024. All activities were conducted under the guidance of the 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 2"x2" NaI probe (w/ 6" collimated lead shield). The instrument was calibrated on May 7, 2024. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,669 counts per minute (cpm).

The average background count rate for this location was determined to be 2,274 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by entering the excavation where the curb was removed and recording the highest count rate for the floor and walls to a maximum depth of 12 inches below ground surface.

The maximum gamma count rates for the single lift were recorded on the attached Radiation Survey Form. The count rates ranged from 1,700 cpm to 2,400 cpm. No count rates were found at any time that exceeded the instrument specific count rate threshold of 6,669 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: 400 N New St Curb/Driveway Replacement - Bigane

Date: 10/17/2024

Technician: Mark Dewald

Inst Model: Ludlum 2221

Serial No.: 126497

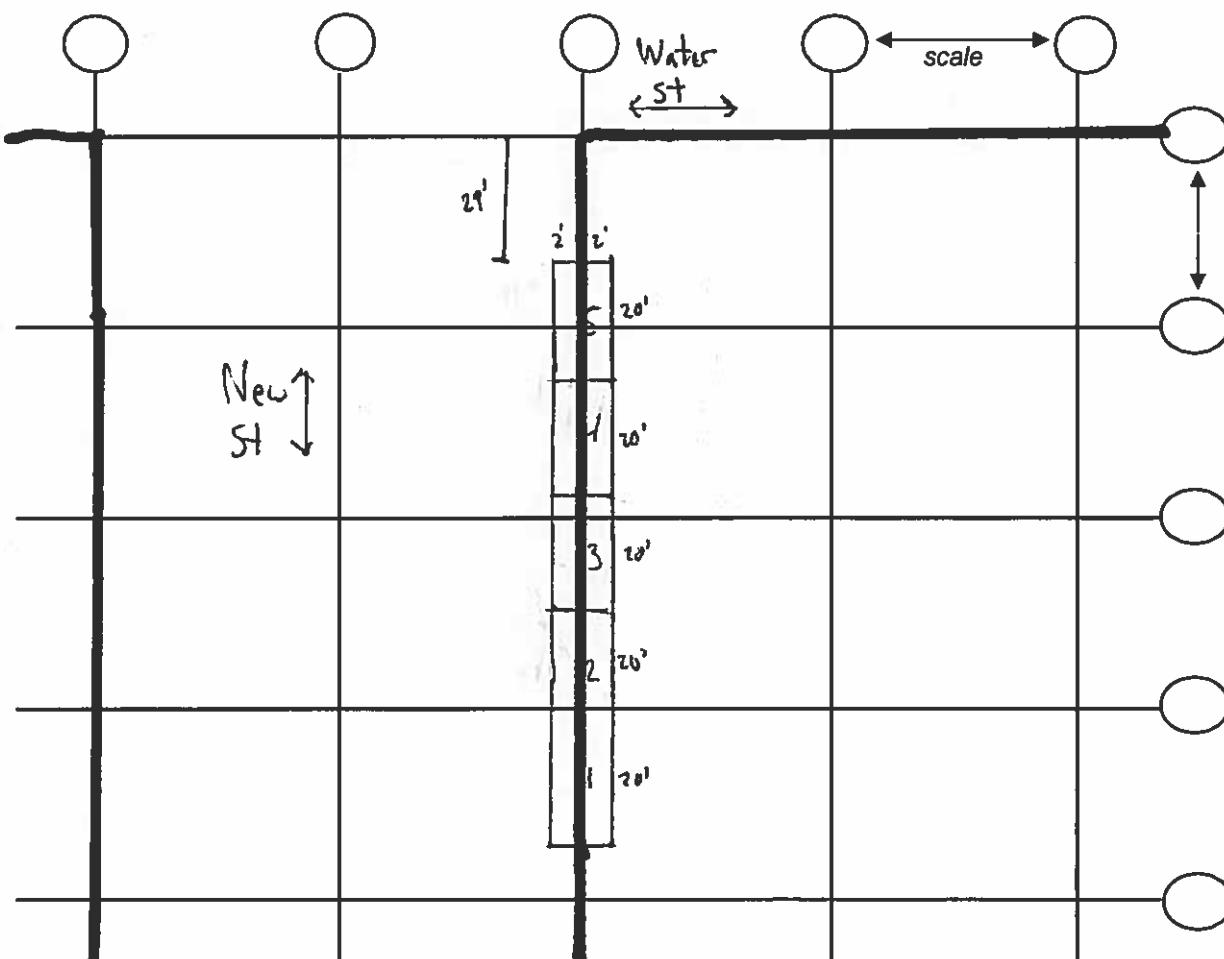
Probe Type: 1"x1" NaI 2"x2" NaI
Shielded Not Shielded

Lift Elevation: Surface to -12" BGS

Background 2,274 cpm

Action Level: 6,669 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.



	Area 1	Area 2	Area 3	Area 4	Area 5
0-12"	2100	1700	2300	2200	2200
12-30"	1800	2400	2200	2300	2100