



November 12, 2021

Angel Camacho
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: Thorium Monitoring 481- 523 E. Randolph St. ADA Sidewalk Ramp
City of Chicago Dept. of Transportation
CDOT Permit: 1608305

Dear Mr. Camacho:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the removal and replacement of an ADA sidewalk ramp at 481-523 E. Randolph St. in Chicago, Illinois. The monitoring was performed by Mark Dewald, SAHCI Health Physics Technician, on November 3, 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. 127242) 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 6,995 counts per minute (cpm). The average background count rate was measured at 1,640 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by performing a surface gamma scan both before and after the sidewalk concrete was removed (8 inches below ground surface) and recording the highest count rate.

The maximum gamma count rate for the single lift was recorded on the attached Radiation Survey Form. The count rates for the sidewalk excavation ranged from 1,800 cpm to 2,100 cpm. No count rates were found at any time that exceeded the threshold limit of 6,995 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: Randolph/Lake Shore Drive ADA - CDOT

Date: 11/3/21

Technician: Mark Dewald

Inst Model: Ludlum 2221

Serial No. : 127242

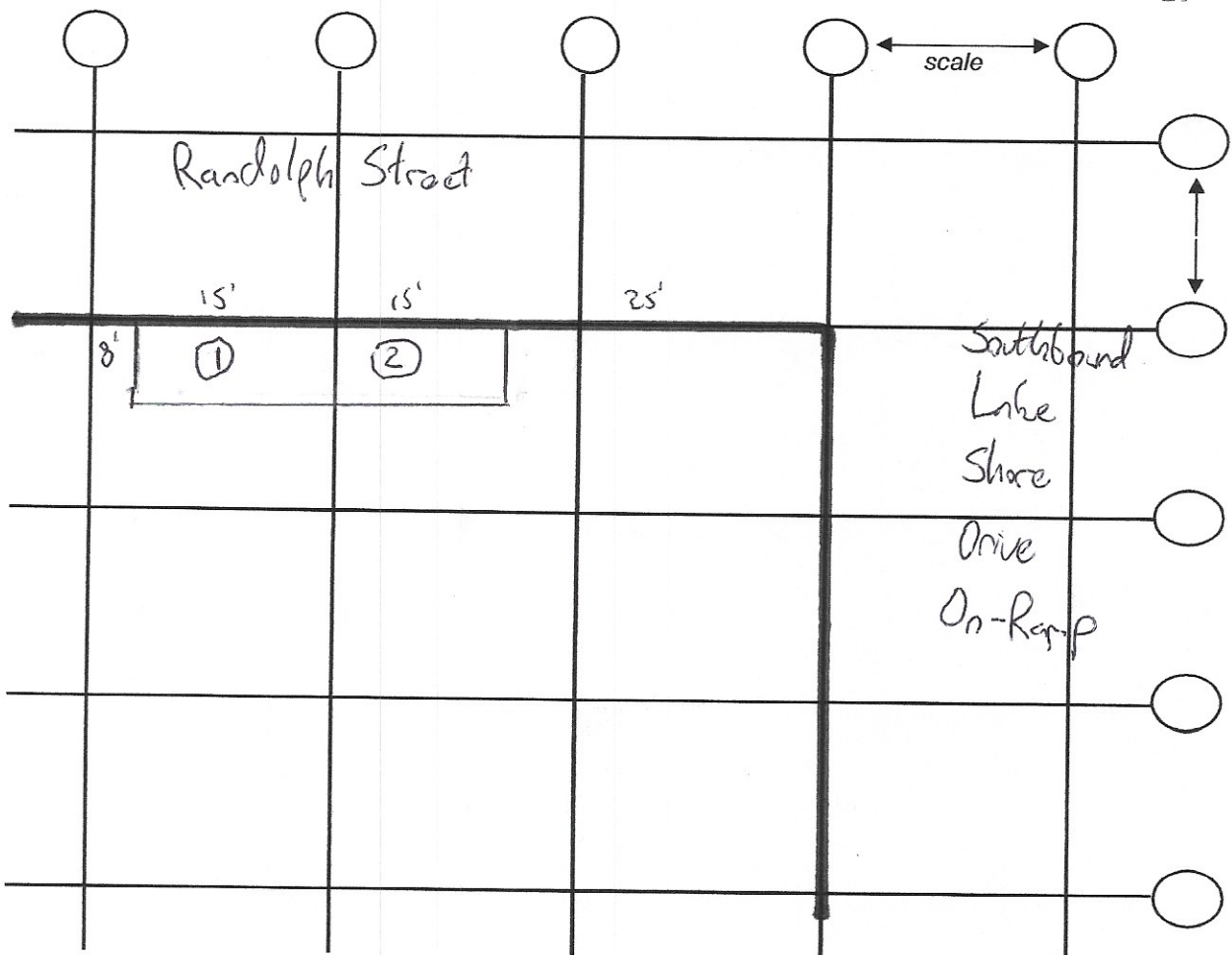
Probe Type: 1"x1" NaI 2"x2" NaI
 Shielded Not Shielded

Lift Elevation: Surface to -8" BGS

Background 1,640 cpm

Action Level: 6,995 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.



	0-8"	8-26"
Area 1	2100	1800
Area 2	1900	1800