



June 15, 2021

Ed McGinley
Sanchez Construction Services
1950 W 43rd St.
Chicago, IL 60609

RE: Thorium Monitoring: 350-411 E. Grand Ave.
CDOT Permit: 1530340

Dear Mr. McGinley:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation for curb and sidewalk restoration at 350-411 E. Grand Avenue in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on July 8, 2021.

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 April 21, 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 these locations was measured at 1,792 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by performing surface scans of the sidewalk and curb both before and after removal and recording the highest count rate to a maximum depth of 6 inches below ground surface. Excavated concrete was loaded into trucks for offsite disposal and was not stockpiled onsite.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 1,500 cpm to 2,700 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: SCS - SIDEWALK / CURB REPLACEMENT - GRAND AVE & McCLUNG Ct.
ROW RADIOLOGICAL SOIL SURVEY

Date: 7/8/2021

Technician: BRIAN SCHMIDT

Inst Model: Luzum-2221

Serial No.: 126497

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

Lift Elevation: 0-6"

Background 1792 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.

