



September 25, 2020

961251

Steve Griffin
Electric Conduit Construction
816 Hicks Drive
Elburn, IL 60119

RE: Thorium Monitoring 550-601 N. St. Clair St. (E. Ohio St. & N. St. Clair St.)
CDOT Permit #1281992

Dear Mr. Griffin:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and installation of a fiber optic and power conduit and utility pole at 550-601 N. St. Clair Street in Chicago, Illinois. The monitoring was performed by Jeremy Kieser, SAHCI Health Physics Technician, on September 14, 2020 through September 17, 2020.

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 last calibrated on July 28, 2020. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,013 counts per minute (cpm).

The background count rate for this location ranged from 1,857 cpm – 2,269 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 trench and recording the highest count rate for the floor and walls to a maximum excavation depth of 3 feet below ground surface. Soil was loaded directly into a truck for offsite disposal. One small 3 foot by 3 foot section was excavated to 9 feet below ground surface for a utility pole. This material was excavated using a vacuum truck. The detector was lowered in to the excavation to monitor below 3 feet.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 1,600 cpm to 3,300 cpm. No count rates were found at any time that exceeded the threshold limit of 7,013 cpm.

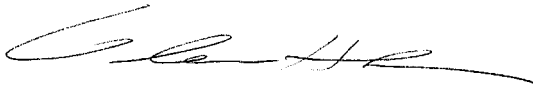
Additional Monitoring

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.

A handwritten signature in black ink, appearing to read "Glenn Huber", written in a cursive style.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: DOT 1281972

Date: Sept 14-17, 2020

Technician: Jeremy Kieser

Inst Model: 2221

Serial No. : 127242

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

Lift Elevation: Surface to 9ft

Background See Next Page cpm

Action Level: 7013 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.

