



October 18, 2018

Buddy Hix
Western Utility Contractors, Inc.
2565 Palmer Ave.
University Park, IL 60466

RE: 535 – 621 E. Grand Ave Thorium Monitoring 10/16/18
CDOT Permit # 1014761

Dear Mr. Hix:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring of an excavation and repair of a utility handhole at 535-621 E. Grand Avenue in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on October 16, 2018.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 132844) with attached Ludlum Model 44-10 2"x2" NaI probe (w/ 6" collimated lead shield). The instrument was calibrated on August 8, 2018. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,391 counts per minute (cpm).

The average background count rate for this location was determined to be 2,680 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 excavated soil around the repaired handhole. Soil was not disposed of since the existing handhole which had sunken into the ground was only raised up to the ground surface.

The maximum gamma count rate for the 18" lift was recorded on the attached Radiation Survey Form. The count rates of the excavation ranged from 2,400 cpm to 3,100 cpm. No count rates were found at any time that exceeded the instrument specific threshold limits of 7,391 cpm.

Additional Monitoring

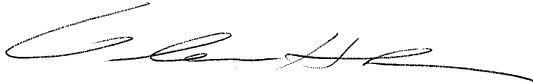
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

Regulatory Notification of Survey Completion

I will be providing a copy of this report to both the City of Chicago Department of Public Health and USEPA, 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 'G. Huber', written in a cursive style.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: GRAND AVE + STREETEN DRIVE - CHICAGO IL - HAND HOLE ROW RAD SURVEY

Date: 10/16/2018

Technician: BRIAN SCHMITZ

Inst Model: LUDUM-2221

Serial No.: 132844

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

Lift Elevation: 0 - 18"

Background 2680 cpm

Action Level: 7391 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.

