

Stan A. Huber Consultants, Inc.

Health Physics and Radiation Safety Services

200 North Cedar Road - New Lenox, Illinois 60451-1751 - (800) 383-0468 or (815) 485-6161 - FAX (815) 485-4433 - Email sahci@sahci.com - Home Page www.sahci.com

November 9, 2017

Jennifer Rogulich Western Utility Contractors, Inc. 2565 Palmer Ave. University Park, IL 60466

RE: 423 E. Ohio St. Thorium Monitoring 11/6/17-11/7/17

CDOT Permit # 881697

Dear Ms. Rogulich:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for a utility conduit repair and manhole replacement at 423 E. Ohio St. in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on November 6 and November 7, 2017.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" Nal probe (w/ 6" collimated lead shield). The instrument was calibrated on October 11, 2017. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,366 counts per minute (cpm).

The average background count rate for this location was determined to be 1,910 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. No excavation work was performed on 11/6/17, only rodding out of an existing conduit. Survey data was collected on 11/7/17 by entering the excavation after the single 12 inch lift and recording the highest count rate for the floors and walls to an excavation depth of 1 feet below ground surface. All excavated material was loaded directly into a truck for disposal.

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 2,100 cpm. No count rates were found at any time that exceeded the threshold limit of 7,366 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.

Call He

Glenn Huber, CHP

President

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Radiation Survey Form

Location/ Project ID: WESTERN UTILITY - 423 E. OHIO ST. - MANHOLE REPLACEMENT - ROW RAD SURVEY Technician: BRIAN SCHMICT Date: 11/7/17 Inst Model: Lunun - 2221 Serial No.: 126496 Lift Elevation: 0-12" Probe Type: 1"x1" Nal / 2"x2" Nal Shielded / Not Shielded Action Level: 7336 Background 1910 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. scale 28 EXCAUATION ID 1600 (CONCRETE) 2100