

February 16, 2017

Mike Lanenga
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: 355 E. Riverwalk Thorium Monitoring – City of Chicago Department Fleet and Facilities Management

Dear Mr. Lanenga:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation of a hole to pour a concrete footing at 355 E. Riverwalk in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on February 14, 2017. 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 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" NaI probe (w/ 6" collimated lead shield). The instrument was calibrated on October 14, 2016. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,029 counts per minute (cpm).

The average background count rate for this location was determined to be 1,926 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 4 foot by 3 foot excavation after each 18 inch lift and recording the highest count rate for the floors and walls to a maximum excavation depth of 3 feet below ground surface.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 2,600 cpm to 4,300 cpm. No count rates were found at any time that exceeded the threshold limit of 7,029 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 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 'G. Huber', written in a cursive style.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: RIVER WALK CHICAGO - DEPT. OF FLEET SERVICES - ROW UTILITY INSTALLATION

Date: 2/14/2017

Technician: BRIAN SCUMIOT

Inst Model: LVPLUM-2221

Serial No.: 126496

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

Lift Elevation: 0 - 36"

Background 1926 cpm

Action Level: 7029 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.

