



June 30, 2016

Mike Lanenga
SET Environmental
450 Sumac Road
Wheeling, IL 60090

RE: 65 E. Ohio Street Thorium Monitoring – City of Chicago Department of Water Management

Dear Mr. Lanenga:

Stan A. Huber Consultants, Inc. (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and replacement of a City of Chicago Department of Water Management manhole at 65 E. Ohio Street in Chicago, Illinois. The monitoring was performed on June 22, 2016. All activities were conducted under the guidance of document *SET General Guidance for Thorium Monitoring*.

Instrumentation

Surface gamma scans were performed by Brian Schmidt using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" NaI probe with 6" lead shield. The instrument was calibrated on October 15, 2015. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,054 counts per minute (cpm).

The average background count rate for this location was determined to be 1,816 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by recording the highest count rate for the floors and walls to the maximum excavation depth of 1 foot below ground surface. Material excavated was loaded directly into a truck 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 1,600 cpm to 1,900 cpm. No count rates were found at any time that exceeded the threshold limit of 7,054 cpm.

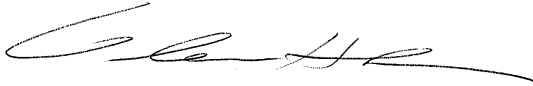
Additional Monitoring

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.

You will need to forward a copy of this report to the City of Chicago Department of Public Health (Attn: Rahmatunsia Begum) with the CDOT Permit Number in the subject line. Additionally, a copy of this report should be submitted to 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', with a long horizontal flourish extending to the right.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: 65 E. Ohio St. - CHICAGO, IL - DWM MANHOLE REPLACEMENT

Date: 6/22/16

Technician: BRIAN SOMMOT

Inst Model: LUOVUM-2221

Serial No.: 126496

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

Lift Elevation: 0-12" Dgs

Background 1816 cpm

Action Level: 7054 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.

