



November 4, 2016

Mike Lanenga
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: 500 E. Lower Wacker Dr. (Chicago Riverwalk) Thorium Monitoring – Christy Webber Landscapes

Dear Mr. Lanenga:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the planting of 20 shrubs at the Chicago Riverwalk in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on November 2, 2016. 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' lead collimator 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 2,659 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by measuring each of the twenty planting locations that were excavated to approximately 1 foot deep.

The maximum gamma count rate for each planting location was recorded on the attached Radiation Survey Form. The count rates ranged from 2,500 cpm to 4,900 cpm. No count rates were found at any time that exceeded the threshold limit of 7,029 cpm.

Additional Monitoring

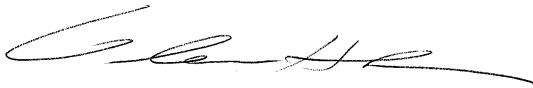
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

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 'Glenn Huber', written in a cursive style.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: CHICAGO RIVERWALK - BETWEEN LAKE SHORE DRIVE + COLUMBUS AVE
LANDSCAPING EXCAVATIONS

Date: 11/2/16

Technician: BRIAN SCHMIDT

Inst Model: LUDLUM-2221

Serial No.: 126496

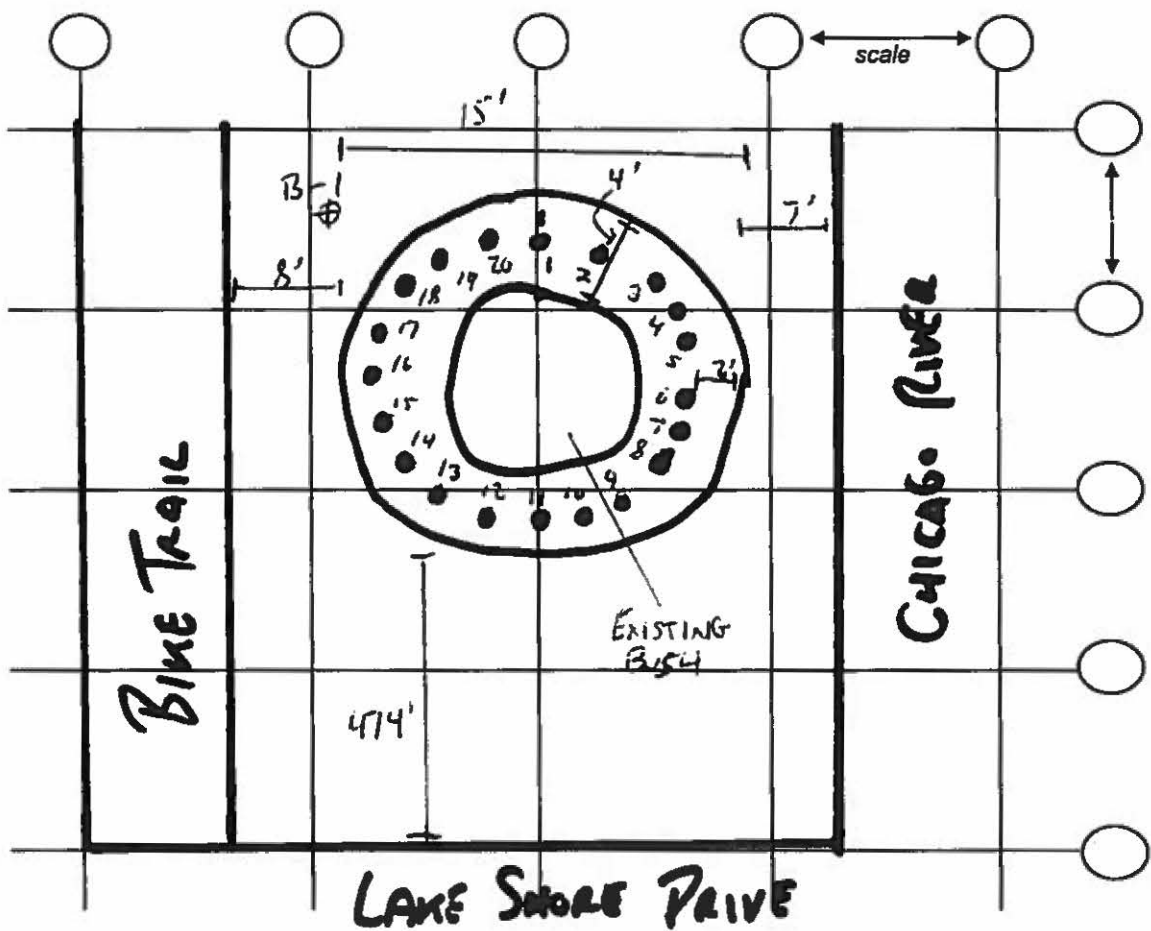
Probe Type: 1"x1" NaI / ~~2"x2" NaI~~
Shielded / Not Shielded

Lift Elevation: 0-12"

Background 2659 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.



- SURFACE SURVEY OF ENTIRE LANDSCAPED AREA = 3300 cpm
- B-1 = BACKGROUND = 2659 cpm (1 MIN INTERVAL)
- 20 PLANTER LOCATIONS - EVENLY SPACED APART @ 1'
- DUG DOWN TO 1' bgs

Radiation Survey Form

Location/ Project ID: CHICAGO RIVERWALK - BETWEEN LAKE SHORE DRIVE & COLUMBUS AVE.
LANDSCAPING EXCAVATION

Date: 11/2/2016

Technician: BRIAN SCUMIOT

Inst Model: LUPLUM-2221

Serial No.: 126496

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

Lift Elevation: 0-12"

Background 2659 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.



PLANT #	DEPTH	CPM
1	12"-30" ↓	2900
2		2900
3		3200
4		2500
5		2700
6		2800
7		2900
8		3100
9		3000
10		3100
11		2900
12		2800
13		2700
14		3600
15		2800
16		2900
17		2500
18		2900
19		4900
20		3000