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July 14, 2020

959022

Ricardo Mendez Granite Construction 5031 W. 66th St Bedford Park, IL 60638

RE: Thorium Monitoring – 401 E. Ohio St. Granite Inliner / Seven-D Construction CDOT Permit: 1260581

Dear Mr. Mendez:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during follow-up work for the repair of a storm sewer catch basin lateral at 401 E. Ohio Street in Chicago, Illinois. The excavation for this project was completed on May 6 and May 15, 2020. Thorium monitoring was documented in the report dated, May 18, 2020.

Additional hand-digging was required on July 10, 2020 in order to complete the project. However, no additional trenching was performed.

The monitoring was performed by Glenn Huber, SAHCI Health Physicist.

## Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 134542) with attached Ludlum Model 44-10 2"x2" Nal Detector (w/ 6" collimated lead shield). The instrument was calibrated on August 6, 2019. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,124 counts per minute (cpm).

The average background count rate for these locations was measured at 1,628 cpm.

## Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeters described above. Survey data was collected by monitoring small piles of soil which were hand dug out of the existing excavations.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Forms. The count rates in the excavation ranged from 1,700 cpm to 2,100 cpm.

No count rates were found at any time that exceeded the instrument specific threshold limits of 6,124 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.

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.

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Glenn Huber, CHP President

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Radiation Survey Form

Location/ Project ID: 401 E. Ohio St. Granite Inliner CDOT Permit #1260581				
Date: 7/10/20		Technician:	Glenn Huber	
inst Model: Ludlum	2221	Serial No. :	134542	
Probe Type: <u>1"x1" Nal</u> / <u>2"x2" Na</u> Shielded Not Shielded		Lift Elevation: <u>Hand dig stockpile on</u> ly		
Background 1,628	cpm	Action Level: 6,1	24cpm	
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.				
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1 N. Mechag Ct.		3		
		Excauctor	#1=2100cp-	-0
		Excourton	#2=1700cp	
				-0

# 401 E. Ohio St. Granite Construction 7/10/20

Excavation #1 – Hand Dig



# Excavation #2 – Hand Dig

