

# Stan A. Huber Consultants, Inc.

Health Physics and Radiation Safety Services

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July 19, 2018

Mike Lanenga SET Environmental 450 Sumac Road Wheeling, Illinois 60090

RE: 201 E. Riverwalk South Thorium Monitoring 7/16/18

Industrial Fence, Inc. (for 2FM)

Dear Mr. Lanenga:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide thorium monitoring during the excavation of 2 postholes for traffic bollards at 201 E. Riverwalk South in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on July 16, 2018. 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 Scaler / Ratemeter (serial no. 126496) with attached Ludlum Model 44-10 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 1,797 cpm.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by scanning the excavation and any spoils generated after each 18-inch lift and recording the highest count rate for the floors and walls to an excavation depth of 42 inches below ground surface.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the post hole excavations ranged from 1,300 cpm to 2,900 cpm. No count rates were found at any time that exceeded the instrument specific 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.

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Glenn Huber, CHP

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	Stan A. Huber Counsultants	i, tota.	Radiatio	n Survey For	m o	05 25	Brande
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42-60" 2900