



AECOM  
303 E. Wacker Drive, Suite 900  
Chicago, Illinois 60601

312-938-0300 tel  
312-938-1109 fax

December 19, 2011

Mr. Narendra Prasad  
People's Gas Light & Coke Co.  
Environmental Services Department  
130 East Randolph, 22nd Floor  
Chicago, IL 60601

RE: Radiological Survey of Right-of-Way Utility Excavation  
Permit No.: 180056814  
Permit Address: 323-399 East Lower Wacker Drive  
AECOM Project No. 60157647

Dear Mr. Prasad:

Pursuant to conditions specified in a permit (see attached) issued by the City of Chicago, radiation monitoring was required to be performed at the above referenced site. AECOM Technical Services, Inc. (AECOM) provided the required radiation surveillance between November 17 and November 30, 2011 for trench excavation to install an 8-inch gas pipeline.

The U. S. Environmental Protection Agency (USEPA) threshold for Chicago's Streeterville area is 7.1 picocuries per gram (pCi/g total radium (Ra-226 + Ra-228)). Gamma radiation count measurements for the project were made using Ludlum Model 2221 survey meter and a 2 x 2 NaI probe (Model 44-10). For the instrument used, the gamma count indicative of the 7.1 pCi/g threshold was 20,356 counts per minute (cpm) unshielded 7,567 cpm shielded. The field gamma background for the area was measured at approximately 3,900 cpm unshielded.

Radiological surveying was performed for the soil removed from a 4 by 565-foot excavation including a service trench to a depth of 4-feet required for installation of the gas service piping. Indications of elevated gamma readings were not observed except for a small area at the base of the excavation near the western end of the trench. At about 4:30PM on Thursday November 17, 2011, monitoring within the trench revealed about a 7-foot section at the base of the trench had readings above the clean-up threshold established by the USEPA. The elevated readings occurred at the base about 3.5 feet below the pavement. This area was approximately 6-feet east from the beginning, or western end, of the trench (refer to the attached sketch). Screening of the trench sidewalls above the base did not reveal elevated readings.

The maximum reading observed at the base of the trench was about 12,000 cpm shielded versus a clean-up threshold of about 7,567 cpm shielded. These elevated readings were observed at the point where the trench passed just north of a sewer manhole. The spoil removed from the excavation above the area of elevated readings exhibited gamma readings of about 8,000 cpm shielded. Work was stopped briefly to assess the area, but continued east of the potentially impacted area when it was apparent that the extent of the elevated readings was limited horizontally and that additional vertical excavation in the potentially contaminated area was not required. The area of elevated gamma readings (base and sidewalls) was covered with plastic and the USEPA was notified that evening of the discovery. About 8AM on Friday November 18, 2011, Gene Jablonowski from the USEPA visited the site to observe the impacted area. He agreed that installation of the gas service line above the plastic covered area could proceed. He also requested, and was given, a sample collected from the base of the trench in the area of elevated readings.

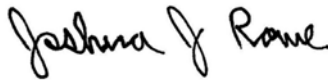
Gamma readings from the remaining trenching activities ranged from a minimum of 4,600 cpm to a maximum of 12,200 cpm unshielded. The value of 12,200 cpm was measured within and at the base of the trench. As such, this reading was biased high because of the depth and of the trench and unshielded probe. Measurements for the same soil, once the shield was added, were approximately 4,800 cpm. Thus, for the remainder of the trenching there was no indication of the presence of radiologically-contaminated material and/or an exceedance of the USEPA cleanup threshold of 7.1 pCi/g total radium.

As part of the permit conditions this letter has been forwarded to:

Chicago Department of Environment  
Attention: Ms. Rahmat Begum  
30 North LaSalle Street, 2<sup>nd</sup> Floor  
Chicago, Illinois 60602

Please contact us with any questions you have regarding this letter or the reported results.

Regards,



Joshua J. Rowe  
Project Scientist II



Steven C. Kornder, Ph.D.  
Senior Project Geoscientist

cc: Rahmat Begum, Chicago Department of Environment  
Verneta Simon, USEPA

Attachments: Permit  
Sketch

CITY OF CHICAGO DEPARTMENT OF ENVIRONMENT  
FORM NO. DOE.ROW.03

Notice is hereby given that the site you have requested a permit for is recorded with the City of Chicago Department of Environment as potentially having environmental contamination on the site and adjacent right-of-way. This environmental contamination could present a threat to human health and safety in connection with work performed at the site, or in the adjacent right-of-way, if proper safeguards are not employed.

A file containing detailed information regarding the aforementioned environmental contamination is available for review at the Department of Environment at 33 N. LaSalle St., Suite LL-120, Chicago, Illinois 60602 during normal business hours (8:30AM-4:30PM, Monday through Friday). Contact (312) 744-7606 for an appointment. This file must be reviewed and the remainder of this form completed before the permit can be issued if the ground is exposed or excavated. Please note that for some locations, additional health and safety procedures may be required by law.

Please complete the following:

I have reviewed and understand the documents, maintained by the Department of Environment, regarding environmental contamination of the site and adjacent right-of-way. Further, I will ensure that all work at the subject site and adjacent right-of-way, and any monitoring required including but not limited to radiation monitoring, will be performed in a manner that is protective of human health and the environment and in compliance with all applicable local, state, and federal laws, rules, and regulations, especially those pertaining to worker safety and waste management. I will ensure that the results of any radiation monitoring and/or surveying conducted shall be provided to the Department of Environment and the United States Environmental Protection Agency within two (2) weeks of their completion. If any elevated levels of radioactive material are detected, I will immediately contact the United States Environmental Protection Agency at (800) 424-8802.

Permit No. 180050814

Date 10/31/2011

Site Address 300-399 E Wacker (lower)

Work Location (Describe exact site location and attach map) traffic lane & intersection

Applicant Name (print) Yolanda DelReal

Signature [Signature] Date 10/31/2011

Company Peoples Gas Light & Coke Co

Company Address / Phone No. 130 E Randolph St

Check if City Department Work  Department Name \_\_\_\_\_

General / Prime Contractor Vipul Kapoor  
*Include subcontractor information if applicable*

Address 130 E Randolph St, Chgo, IL 60601

Phone No. 773-619-6216

Safety Officer / Phone No. Jake Wilken (773) 542-7838

Radiation Contractor / Phone No. (if applicable) AECOM - Steve Kornder (847) 279-2448

Department of Environment Approval / Date Kahmatunisa Begum

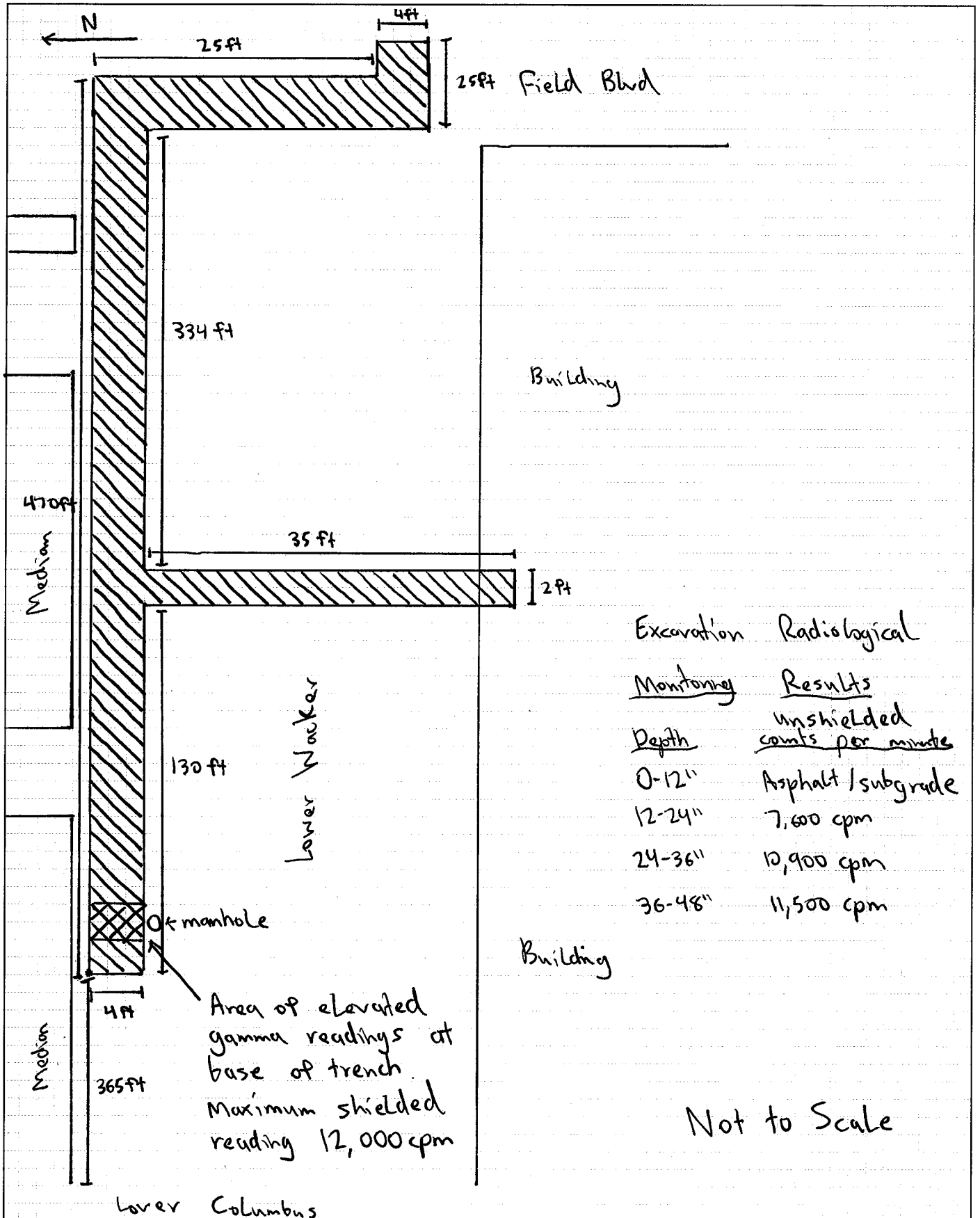
Nature of Work main installation

Expected Start Date \_\_\_\_\_

Please return this completed form to the City of Chicago Department of Transportation at 30 N. LaSalle St., Room 1101, Chicago, Illinois 60602 during normal business hours (8:30 AM - 4:30 PM, Monday through Friday).

11/2/2011

For DOE Use Only



Excavation Monitoring Depth	Radiological Results unshielded counts per minute
0-12"	Asphalt / subgrade
12-24"	7,600 cpm
24-36"	10,900 cpm
36-48"	11,500 cpm

Not to Scale