



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

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

September 10, 2014

Mr. Matt Cison  
Optima, Inc.  
630 Vernon Avenue  
Glencoe, IL 60022

RE: Radiological Survey of Caisson Excavations in the Alley East of the Former Mary's Cafe  
Permit No.: D13198-01  
Permit Address: 220 E. Illinois St.  
AECOM Project No. 60331497

Dear Mr. Cison:

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 monitoring on August 22, 2014 and September 3-5 for 4 caisson pothole excavations.

Surveying was conducted in 18-inch lifts for soils removed from four caisson locations that each required an approximately 4 by 6 foot excavation to a depth of 96-inches beneath the existing alleyway south of Grand Ave. and just east of the former Mary's Cafe (see sketch). The excavations were required for the clearing of obstructions at the proposed caisson locations. Soils were also surveyed via stockpiles when each excavation advanced deeper than 54-inches below ground surface.

The excavation work in the alley was extremely tedious because of the presence of an existing 7-foot deep grade beam that ran through each caisson location. At each location, the existing concrete grade beam needed to be hammered out and numerous rebar reinforcements needing to be cut along the way. Native soils were observed just below the grade beam at each location. Since native soils were encountered, no additional screening for thorium will be required during the installation of these caissons.

The gamma monitoring of the fill soils encountered, and of the excavation sidewall along the property line, revealed no indication of contamination above the clean-up value established by the U.S. Environmental Protection Agency (USEPA) for the Streeterville area of Chicago. The USEPA cleanup value 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 a Ludlum Model 2221 survey meter and an unshielded 2 x 2 inch sodium iodide (NaI) probe Model 44-10. For the instrument used, the gamma count threshold equivalent to the 7.1 pCi/g cleanup value was 17,390 counts per minute (cpm) unshielded.

The field gamma background for the area was measured at approximately 6,400 cpm unshielded. Field gamma measurements greater than twice the background count are considered anomalous results that potentially may indicate that contaminated fill soil is in close proximity to the excavation. When observed these anomalous results require more cautious and frequent field screening (excavation in thinner lifts), but are not necessarily indications of the presence of thorium contaminated fill soil. Specifically, there are naturally materials such as granite, clay and brick that may produce readings above twice background. In any case, the field gamma measurements within the excavation and for the spoil materials generated during the excavation process did not exceed twice background or the field instrument threshold equivalent to the USEPA cleanup value. The field gamma counts ranged from a minimum of 5,900 cpm to a maximum of 8,700 cpm unshielded. Thus, there was no indication of the presence of radiologically-contaminated fill soil 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 Public Health  
Attention: Ms. Rahmat Begum  
333 South State Street, Room 200  
Chicago, Illinois 60604

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

Regards,



Brian R. Schmidt  
Project Scientist II



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

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

Attachments: Permit  
Sketch

**PERMIT**



DEPARTMENT OF PUBLIC HEALTH  
CITY OF CHICAGO

MEMORANDUM

TO:

✓ Mary Fulghum  
USEPA Region V  
Lindsay Light II Site, Office of the Regional Counsel  
77 W. Jackson Blvd.  
Chicago, Illinois 60604

Mr. Vincent S. Oleszkiewicz  
Leech Tishman, Fuscaldo & Lampl. LLC  
4225 Naperville Road, Suite 230  
Lisle, IL 60532

Roy Widman  
Tronox LLC  
3301 N. W. 150<sup>th</sup> St.  
Oklahoma City, OK 73134

FROM: Raul Valdivia, Ph. D., Chief Engineer  
City of Chicago Department of Public Health

SUBJECT: Notification of Permit Application - Lindsay Light II Site

DATE: 5/6/14 220 E. Illinois

Pursuant to Condition 10(a) of the Right-of-Way Agreement dated September 27, 1999, this is to inform you that a permit has been applied for with the City of Chicago Department of Transportation to conduct subsurface activities at the subject right-of-way. The applicant has contacted this Department and has reviewed additional information regarding potential contamination at the subject site (see attached form DOE.ROW.01).

If you have any questions, please do not hesitate to call me at (312) 744-5711.

Attachment

cc: ✓ Mort Ames, City of Chicago Department of Law (via fax 742-3832)  
✓ Eugene Jablonowski, USEPA (via fax 312-353-9281)

Last updated March 15, 2010



DEPARTMENT OF PUBLIC HEALTH  
CITY OF CHICAGO

FORM NO. CDPH.PRPTY.02 (STREETERVILLE - Private Property)

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

A file containing detailed information regarding the aforementioned environmental contamination is available for review at CDPH at 333 S. State St., Room 200, Chicago, Illinois 60604 during normal business hours (8:30AM-4:30PM, Monday through Friday). Contact (312) 745-3152 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 CDPH, regarding environmental contamination of the site. Further, I will ensure that all work at the subject site, 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 CDPH and the United States Environmental Protection Agency (USEPA) 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.

Applicant Name (print): BY: OPTIMA OPPORTUNITY PARTNERS, LLC, ITS MANAGER  
BY: DAVID C. HOLEY, ITS MANAGER Signature: [Signature]

Site Address and Work Location (Describe exact site location and attach map): 220 E. ILLINOIS, CHICAGO, IL

AT INTERSECTION OF ILLINOIS AND CITYFRONT PLAZA - SEE MAP 60611

Nature of Work: MISSIONS

Company Name, Address, Phone No.: OPTIMA, INC.

General / Prime Contractor Name, Address, Phone No.: OPTIMA, INC.  
Include subcontractor information (if applicable)

Safety Officer / Phone No.: 630 VERNON AVE. GLENCOE, IL 60022

Radiation Contractor / Phone No. (if applicable): AE-COM, STEVE KORNER 847-279-2448

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

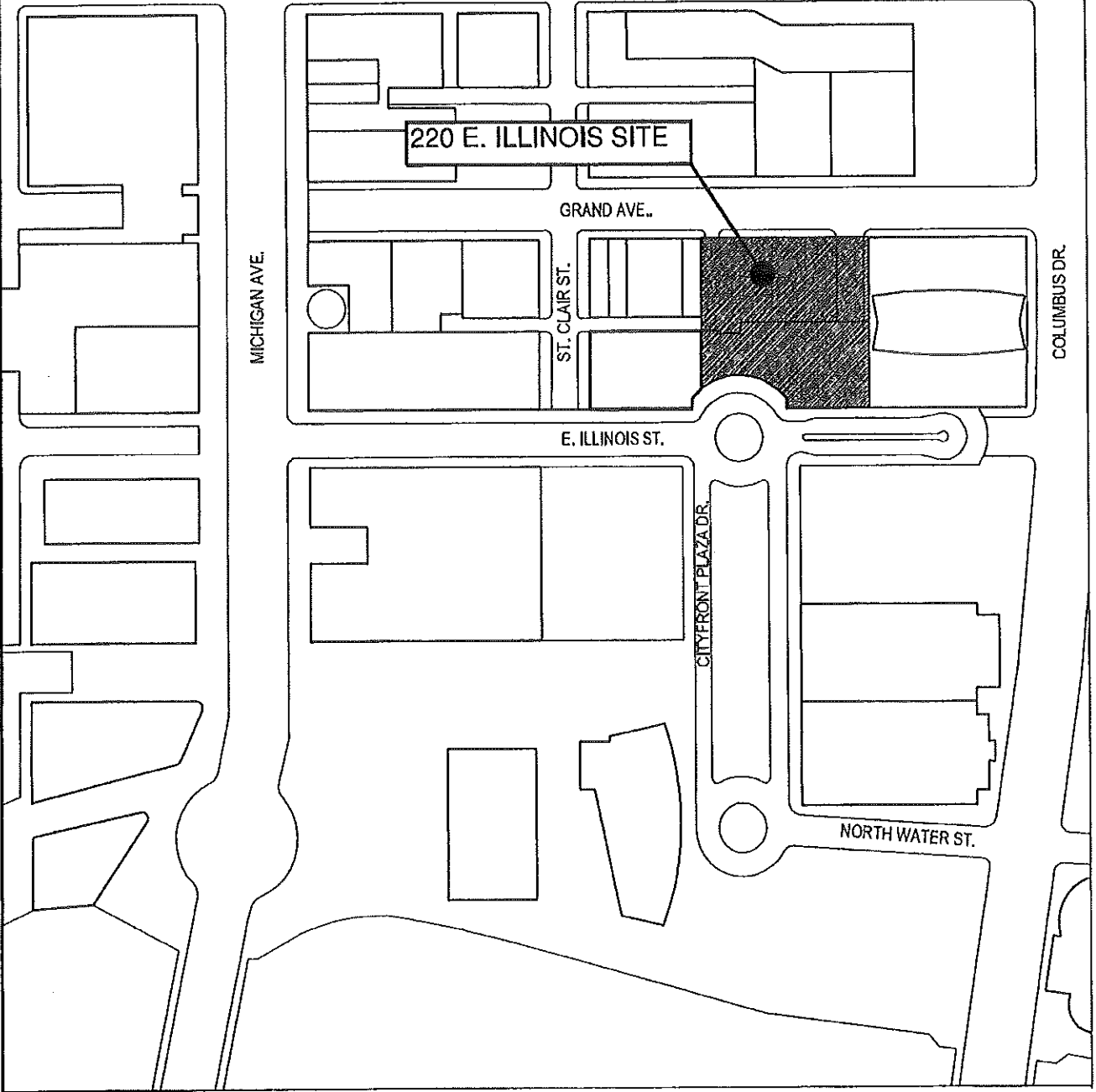
CDOT Permit No. or Developer Services No.: D13198-01

Today's Date: 5/6/14 Expected Start Date: 7-1-14 CDPH Approval / Date: [Signature] 5/20/14

Please return this completed form along with maps showing exact site location to CDPH at 333 S. State St., Room 200, Chicago, Illinois 60604 during normal business hours (8:30 AM - 4:30 PM, Monday through Friday)

For CDPH Use Only

LOCATION MAP





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3580

7-1-02  
31-1-02

August 26, 2002

REPLY TO THE ATTENTION OF SE-5J

VIA FACSIMILE AND U.S. MAIL

Mr. Richard Berggreen, C.P.G.  
STS Consultants, Ltd.  
750 Corporate Woods Parkway  
Vernon Hills, Illinois 60061-3153

DUPLICATE  
RECORDS CENTER  
EPA/ILLINOIS

Re: Completion of On-Site Work under Order No. V-W-96-C-353 for the Lindsay Light II Site, RV3 North Columbus Drive Site (200 East Illinois Street), Chicago, Cook County, Illinois As Issued June 6, 1996 and Amended on March 29, 2000.

Dear Mr. Berggreen:

The United States Environmental Protection Agency issued a Unilateral Administrative Order No. V-W-96-C-353 (UAO) on June 6, 1996 to Kerr-McGee Chemical, Corporation and The Chicago Dock & Canal Trust requiring removal of thorium contamination from the Lindsay Light II Site located at 316 East Illinois Street, Chicago, Cook County, Illinois. On March 29, 2000, U.S. EPA amended the UAO (Amended UAO) to also include the property located across Columbus Drive bearing the Cook County's Assessor's Parcel Number 17 10 212 019 (the Site or Grand Pier Site). This Completion Letter covers only the on-site portion of the Grand Pier Site located at 200 East Illinois Street as described in the Amended UAO issued March 29, 2000. For the purposes of this Notice of Completion, "on-site" is defined as the real property identified as Cook County's Assessor's Parcel Number 17 10 212 019 that is bounded by, but does not include any remaining thorium contamination underlying the adjacent sidewalks or street right-of-ways of East Illinois Street, North Columbus Drive, East Grand Avenue, and St. Clair Street. This Completion Letter concludes that upon receipt of bound final report which incorporate all editorial changes requested in a separate letter dated June 14, 2002, that all on-site work required by the Amended UAO at Grand Pier will be complete and no further on-site removal activities are necessary. This Completion letter also determines that all off-site work required by the Amended UAO has not been completed. Specifically, the removal of thorium contamination beneath the Columbus Drive sidewalk right-of-way as described in your U.S. EPA-approved workplan dated April 11, 2001, which is required by Section V, 3. Paragraph g. of the UAO and Amended UAO. Paragraph g. requires "...off-site surveying and sampling as necessary and, at a minimum, implement 40 CFR 192, if deemed necessary should contamination be discovered beyond current site boundaries."

The June 6, 1996 UAO required removal of thorium contamination from the 316 East Illinois Street site that the Chicago Dock & Canal Trust identified in an extent of contamination study

Chicago Dock performed pursuant to an Administrative Order by Consent, No. V-W-94-C-22 dated January 27, 1994. The UAO also required Chicago Dock & Canal Trust to excavate and dispose of all characterized wastes identified and generated during removal activities. After the discovery of elevated levels of radioactive materials at the Grand Pier site on February 29, 2000 the Amended UAO was issued to Kerr-McGee Chemical Corporation, River East L.L.C. (the former Chicago Dock & Canal Trust), and Grand Pier Center L.L.C..

The UAO and the Amended UAO required the following work:

- 1) Develop and implement site health, safety and security measures.
- 2) Develop and implement air monitoring program.
- 3) Remove contamination until the cleanup criterion of 5 picoCuries per gram total radium (radium-226 + radium-228) over background is achieved. This cleanup criterion will be met in each 15 centimeter layer below the surface. Averaging over areas up to 100 square meters will be allowed, but only after reasonable efforts have been made to achieve levels As Low As Reasonably Achievable (ALARA). It is not U.S. EPA's intent to leave any elevated areas of contamination if at all possible.
- 5) Transport and dispose of all characterized or identified hazardous substances, pollutants, wastes or contaminants at a RCRA/CERCLA/IDNS approved disposal facility in accordance with the U.S. EPA off-site policy.
- 6) Conduct off-site surveying and sampling as necessary and, at a minimum, implement 40 CFR 192, if deemed necessary should contamination be discovered beyond current site boundaries.
- 7) Backfill all excavations with suitable material, and if soil, test borrow source for radioactivity and other pertinent characteristics in 40 CFR Part 261.

Pursuant to the Amended UAO, Grand Pier Center L.L.C. through their consultant, STS Consultants Ltd., submitted a workplan on March 20, 2000. U.S. EPA approved the workplan, on March 23, 2000. In total, 10,606.4 tons of thorium impacted soil were shipped to Envirocare in Clive, Utah. On July 3, 2001, STS Consultants Ltd. submitted a final report on their activities at the site, as required by the Amended UAO.

U.S. EPA's Superfund Division performed oversight of the PRP's activities at this site. Superfund Division reviewed the final report.

This notice of completion in no way releases River East, L.L.C. and Kerr-McGee Chemical L.L.C, or Grand Pier Center L.L.C. from any potential future obligations to perform additional work to address the same or other conditions at the site, at the 341 East Ohio (North McClurg Court) Site, or at off-site locations associated with the Lindsay Light II facility. Similarly, this



notice of completion does not release River East, L.L.C. Kerr-McGee, Chemical L.L.C., and Grand Pier Center L.L.C. from any recordkeeping, payment, penalties for any violation of the Order or other obligations under the Order that extend beyond the date of this notice.

Please contact me at (312) 886-5123 or Mary Fulghum, Associate Regional Counsel at (312) 886-4683 if you have any questions concerning this letter.

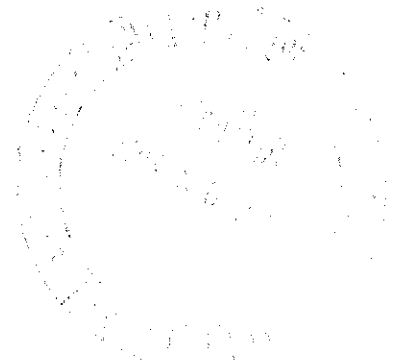
Sincerely,

*Fredrick A. Micke*

Fredrick A. Micke, P.E.

On-Scene Coordinator, ERB #3

cc: Mark Kripple, Kerr-McGee  
J.T. Smith, Covington & Burling  
Vincent S. Oleszkiewicz, Baker and McKenzie  
Fredrick Moeller, Johnson & Bell



**SKETCH**

# Caisson Pothole Radiological Surveying

Site: 220 E Illinois St.

CDPH Permit: D13198-01

Dates: 8/22/14 and 9/3-5/14

## E. Grand Ave.

### B-6.1

- 0-18" - 7400 cpm
- 18-36" - 7700 cpm
- 36-54" - 6900 cpm
- 54-72" - 7100 cpm
- 72-80" - 6300 cpm
- 80-98" - 6800 cpm
- 96-114" - 6900 cpm

Surveyed with a Ludlum - 2221 w/  
2x2 NaI Probe (Unshielded)

### C-6.1

- 0-18" - 6700 cpm
- 18-36" - 7100 cpm
- 36-54" - 7800 cpm
- 54-114" - Stockpile Screening
- Range: 5900-6800 cpm

S/N: 176944  
Background = 6400 cpm

### D-6.1

- 0-18" - 8700 cpm
- 18-36" - 8100 cpm
- 36-54" - 7900 cpm
- 54-72" - 8200 cpm
- 72-80" - 6800 cpm
- 80-98" - 6900 cpm
- 96-114" - 6400 cpm

Cut-off Value: 17390  
(Unshielded)

Caisson Dimensions  
Approximately 6-feet long by  
4-feet wide

### E-6.1

- 0-18" - 5700 cpm
- 18-36" - 6100 cpm
- 36-54" - 6500 cpm
- 54-72" - 7400 cpm
- 72-90" - 7600 cpm
- 90-114" - Stockpile Screening
- Range: 6050-7059 cpm

