Carnotite Reduction Company Site Remediation

Virtual Community Meeting
February 25, 2021

4th Ward Alderman Sophia King
City of Chicago Department of Assets, Information and Services

www.Chicago.org/carnotite
Meeting Agenda

Introduction to Speakers
• Alderman Sophia King
• Kimberly Worthington, AIS
• Abby Mazza, AIS

Site Background and Environmental Monitoring

Remediation Project
• Overview
• Construction Activities
• Project Timeline

Responses to Questions and Comments Received
Carnotite Site Background

• Radium processing facility operated from approximately 1916 to 1921 near what is now 434 E. 26th Street.

• Became part of the land occupied by the former Michael Reese Hospital.

• Elevated radioactivity identified in 1979 by a state regulatory agency with a determination of no immediate health hazard.

• Determined again to be safe in 2013 by Illinois Department of Public Health for vacant site conditions.
Activities Completed to Date

2009:
• City acquires Michael Reese Hospital site
• IEMA confirms radiological contamination is present
• City begins radiation monitoring program similar to Streeterville

2009-2013:
• IEMA, EPA and City conduct site investigations

2010:
• Public meeting held during demolition of Michael Reese buildings where radiological information was presented

2015:
• IEMA issues license to City to begin formal decommissioning process
• City begins quarterly environmental monitoring

2020:
• Project fact sheet mailed to community area in preparation for 2021 construction start
• Issue remediation bid

2021:
• Community meeting
Environmental Monitoring

Air particulate, groundwater, sewer sediment and sewer water
- Sampled quarterly starting in October 2015 for up to two years
- Results are below concentrations of concern

Passive gamma radiation and radon
- Evaluates the cumulative exposure to the public
- Started in October 2015 and will continue until remediation begins.
- Results are below maximum dose limits set by IEMA
Remediation Project Overview

Project Goals: Protect human health and the environment, fulfill regulatory requirements, and eliminate a primary barrier to redevelopment of the site.

Scope of Work: Excavate radiologically contaminated soil from the site for off-site disposal and backfill with clean fill.

Cost Estimate: $31,000,000 (GO bond and TIF; includes construction, oversight and contingency)

Minority and Local Resident Participation Goals:

<table>
<thead>
<tr>
<th>Contract</th>
<th>Goals</th>
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<tbody>
<tr>
<td>Construction</td>
<td>MBE – 14.5%</td>
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<td></td>
<td>WBE – 3.4%</td>
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<td></td>
<td>Local Resident - 10%</td>
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<tr>
<td>Professional</td>
<td>MBE - 16%</td>
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<tr>
<td>Services</td>
<td>WBE - 4.5%</td>
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*Construction goals are lower due to account for significant proportion of costs associated with the treatment, transportation and disposal of radiological which have limited or no MBE/WBE opportunities.
Extent of Contamination

Contamination Depth
~6 ft (south area) to 14 ft (north area) deep

Total Excavation
~17,400 cubic yards

Clean-up Criteria*
- Radium-226 - 5.9 pCi/g
- Total uranium – 22 pCi/g to 5 meters and 52 pCi/g below 5 meters
- Thorium-230 – 5.5 pCi/g

*Factors in the presence of background concentrations of these naturally occurring elements
Site Restoration

- Majority of excavation area will be backfilled with stone to existing grade
- A stormwater bioswale will be constructed for stormwater management
- 26th Street will remain closed after remediation is complete until redevelopment
Remediation Oversight

Regulatory
• Prior to beginning remediation, IEMA must review and approve construction plans and procedures.
• IEMA will have inspectors onsite throughout the project to ensure approved construction plans and procedures are being followed.
• IEMA will issue notices of violations and fines and can stop work if deemed necessary.
• Chicago Department of Public Health will also be involved and conduct site inspections for compliance.

Contractual
• The City’s remediation oversight consultant and Radiation Safety Officer (RSO) will be onsite during all excavation and loading activities to monitor for compliance with IEMA-approved plans and procedures.
• The City, oversight consultant, and RSO have the authority to stop work at any time if deemed necessary.
Air Monitoring During Remediation

• Conducted at the edge of the excavation and along the perimeter of the site.
• Performed by both oversight consultant and remediation contractor.
• Perimeter Monitoring
  • Action Levels are based on National Air Quality Standards.
  • Results will be made available regularly on the City’s website in an easy-to-understand format.
• If Action Levels are reached, work will stop to determine the source or cause of the exceedance and implement additional dust suppression measures accordingly

*Example photos from Ottawa, IL Radiation Site
Dust Protection

- Dust control measures will be reviewed and approved by IEMA and the City prior to starting work.
- Controls can include:
  - Water misting
  - Crusting
  - Shade cloth on perimeter fencing
  - Tarping/covering of stockpiles and trucks
  - Reducing speeds
  - Wheel washer
- Dust-generating activities (concrete/asphalt removal, soil excavation, blending and loading) will cease during periods of adverse weather.

*Example photos from Ottawa, IL Radiation Site
Temporary Truck Traffic

- Trucks will be decontaminated and tarped prior to leaving the site.
- **Expected Primary Route:** enter/exit at 27th Street, through the former Michael Reese Hospital site to 31st Street and to I-55 via Lake Shore Drive frontage roads/ramps.
- Flaggers and safety barriers will be provided for pedestrians accessing the 27th Street Metra Station.
- Although not expected, if the 31st Street bridge construction is not able to accommodate trucks, alternate routes will be used.
Metra Station Changes

- North access via 26th Street to be closed during and after remediation
- South entrance via Vernon Avenue will remain open during and after remediation
- Wayfinding signs to be installed prior to 26th Street closure
Fall/Winter 2020
- Issue bid
- Select remediation contractor to perform the construction work

Spring 2021
- Prepare submittals
- Request permits

Summer 2021-Summer 2022
- Construction

Fall 2022
- Complete surveys
- Submit reports and receive site closure from IEMA
Responses to Comments & Questions Received
THANK YOU FOR ATTENDING

Please check our website for continued updates on the project.

www.chicago.org/carnotite

Please email any comments to
Alderman King’s Office: ward04@cityofchicago.org
and
Department of Assets, Information and Services: 2FM_EHS_Notifications@cityofchicago.org