

July 2, 2025
Analysis of Brownfield Cleanup Alternatives for
Union at Rose Park

Introduction and Background

The Redevelopment Authority of the City of Milwaukee (RACM) was selected to administer a United States Environmental Protection Agency (USEPA) Brownfields Cleanup Revolving Loan Fund (BCRLF). The first Cooperative Agreement was received in 2002, which provided \$1,000,000 in federal assistance over a five-year period. Additional Cooperative Agreements were received in 2003, 2004 (amended the 2003 agreement), 2005, 2006, 2007, 2008 (amended the 2007 agreement), 2009, 2011 (amended the 2009 agreement), 2012 (amended the 2009 agreement), 2013 (amended the 2009 agreement), 2014, 2023, and 2024 (amended the 2023 agreement) respectively for a total of \$16,700,000.

On July 17, 2025, a resolution will be introduced that will allow for RACM to provide up to a \$750,000 loan to Union at Rose Park, LP for an affordable housing development project from the RACM's EPA BCRLF Program to support environmental remediation at the property located at four parcels on the east side of North Martin Luther King Junior Drive (3030, 3048, 3056, and 3064 North Martin Luther King Junior Drive, Milwaukee, Wisconsin).

The four parcels are currently owned by MLK Investment, LLC. Union at Rose Park, LP intends to purchase the property in late July 2025, remediate the property, and redevelop the site into an affordable housing development with 75 units.

The Union at Rose Park site was historically occupied with various residential and commercial buildings, including stores, residential, an icehouse, a smokehouse, and an auto sales and service company. Historical records indicate that the businesses at the site included auto repair/service activities, oil burners, a spray booth, and petroleum storage tanks. The buildings on-site were demolished in 2024-2025.

The subject sites became contaminated as a result of their past uses and historical fill material. Phase II environmental site investigation to date has identified the presence of petroleum volatile organic compounds (PVOCs) in soil, and PVOCs and chlorinated volatile organic compounds (CVOCs) in groundwater.

An AAI Phase I Environmental Site Assessment was completed in June 2025 for the development group to ensure the future owner is considered a bona fide prospective purchaser.

Phase II environmental site investigation activities were initiated in August 2024. The Phase II activities identified the presence of PVOCs (1,2-dichloroethane, ethylbenzene, naphthalene, toluene, 1,2,4-Trimethylbenzene and 1,3,5-trimethylbenzene, and total xylenes) in soils at concentrations above NR 720 residual contaminant levels (RCLs). Also, 1,2-dichloroethane exceeds the soil to groundwater pathway RCL in four samples located in the southeastern portion of the site. In groundwater, concentrations of several PVOC and CVOCs (naphthalene, TCE, toluene, 1,2,4-trimethylbenzene, 1,3,5-

trimethylbenzene, m&p-xylene, and o-xylene) were detected at levels greater than NR 140 preventative action limits (PALs) and/or Enforcement Standards (ESs). Based on the contaminant concentrations identified, the Wisconsin Department of Natural Resources (WDNR) was notified and an Environmental Repair Program (ERP) Site (BRRTS #03-41-595416) activity was opened.

Applicable Regulations and Cleanup Standards

Notification of a release and assignment of BRRTS numbers by the Southeast Region of the Wisconsin Department of Natural Resources (WDNR) is complete, and therefore the site is subject to the requirements of Section 292.11 (3) Wisconsin Statutes (hazardous substances spill law) and Wisconsin Administrative Code chapters NR 700 through NR 749 (which establish requirements for emergency and interim actions, public information, site investigations, design and operation of remedial action systems, and case closure). The borrowers, in coordination with qualified consultants, have completed a Site Investigation and Interim Action Plan as well as a Vapor Action Plan for the site in accordance with all applicable state statutes and WAC chapters. These documents have been submitted to WDNR for comment and approval prior to cleanup and will form the basis for the cleanup activities.

Cleanup at the site will continue to be monitored by staff at the WDNR. Cleanup will be targeted to meet relevant industrial standards set forth in Wisconsin Administrative Code (WAC) chapter NR 720 (Soil Cleanup Standards) and WAC chapter NR 746 (Risk screening and closure criteria for petroleum product contaminated sites, and agency roles and responsibilities).

Evaluation of Cleanup Alternatives

This section identifies various remediation alternatives that could be used to address the environmental contamination issues at the Union at Rose Park site. The “No Action Alternative” is used as the baseline against which the other alternatives are analyzed.

The following broad categories of evaluation criteria were considered in assembling remediation alternatives at the site: effectiveness, implementability, cost, and impacts from potential extreme weather events.

Alternative One – No Action / Monitored Natural Attenuation

The no-action response involves no remediation of residual impacted soil at the site. This response typically serves as a baseline against which the other remedial options and technologies can be compared. The no-action response may be used as the sole remedial action only in the event the prevailing site conditions lead to the determination that the site poses no significant risk to human health or the environment with no controls in place. In that event, implementation of other types of action becomes unnecessary.

1. Effectiveness – The no-action alternative would do little to address the PVOC and CVOC impacted soil and groundwater. This alternative would not take action to protect public health, safety, and welfare and the environment.
2. Implementability – This alternative is implementable.

3. Cost – This alternative was considered the lowest in terms of present worth cost and disruption to the site. It has no associated capital costs or operation and maintenance costs, although indirect costs of the no action alternative will include a continued blighting influence on surrounding properties which would be manifested in lower property values and a decreased tax base.
4. Impact of Potential Extreme Weather Events – The United States National Oceanic and Atmospheric Administration (NOAA) finds that the Midwest region will likely see future changes to climate that include an overall increase in winter and summer temperatures, increasing numbers of hot days, and an increasing numbers of wet days. Related impacts to the No Action Alternative are expected to be minimal as the site is not near a coastline or in a floodplain.

Alternative Two – Excavation and Off-Site Landfill Disposal

Additional excavation and off-site disposal of soil in the areas with residual impacts was evaluated as a possible remedial alternative. Under this alternative, all impacted soils would be excavated and disposed of at an area licensed landfill, followed by backfilling of the excavation to the planned grade with unimpacted soil or subbase aggregate. Under this alternative, neither capping nor registration on the WDNR's GIS database would be required.

1. Effectiveness – This alternative would be effective. However, the site contaminants would be simply moved to an off-site landfill, and the excavation and transportation of the impacted soil may present health and risks that may be greater than the risks posed by leaving the soil in place. In the short term, excavation and off-site transport of impacted soil would temporarily increase hazards to site workers and the public due to the necessary handling and transportation of these soils. In the long term, excavation and off-site disposal may somewhat reduce the magnitude of existing risk at the site by contaminant mass removal compared to no action.
2. Implementability – The implementability of this remedial alternative is low given the cost it would take to excavate, and then backfill, all impacted soils. The site also would experience extreme disruption.
3. Cost – The estimated capital costs are anticipated to be very high.
4. Impact of Potential Extreme Weather Events – The United States National Oceanic and Atmospheric Administration (NOAA) finds that the Midwest region will likely see future changes to climate that include an overall increase in winter and summer temperatures, increasing numbers of hot days, and an increasing numbers of wet days. Related impacts to the Excavation and Off-Site Landfill Disposal Alternative are expected to be minimal as the site is not near a coastline or in a floodplain.

Alternative Three – Limited Soil Excavation and Off-Site Disposal with On-Site Soil Management, Engineering and Institutional Controls, and Vapor Mitigation

This alternative best fits the planned redevelopment of the site, which requires some soil excavation, grading, and soil management, and also includes site infrastructure (building, pavement, landscaping/hardscaping) that would be used as an environmental cap/barrier. Additionally, a passive vapor mitigation system would be installed beneath the building with infrastructure to convert the system to active if necessary. Natural attenuation would be used to address residually affected

groundwater. The site would be listed on the WDNR database to notify the public of residual soil and groundwater impacts.

1. Effectiveness – This alternative would be effective at reducing the magnitude of the existing risk, while maintaining protection from direct contact exposures to site workers and the public.
2. Implementability – The implementability of this alternative is high. The use of soil disposal, engineered barriers, vapor mitigation systems, and institutional controls in conjunction with the WDNR database for soil contamination is an existing proven mechanism, with no fewer disruptions to the Site and less unnecessary soil handling.
3. Cost – Compared to the complete excavation and offsite landfill disposal of impacted soil remediation alternative, the associated capital costs for this option are much lower than Alternative 2.
4. Impact of Potential Extreme Weather Events – The United States National Oceanic and Atmospheric Administration (NOAA) finds that the Midwest region will likely see future changes to climate that include an overall increase in winter and summer temperatures, increasing numbers of hot days, and an increasing numbers of wet days. Related impacts to the Limited Soil Excavation and Off-Site Disposal with On-Site Soil Management, Engineering and Institutional Controls, and Vapor Mitigation Alternative are expected to be minimal as the site is not near a coastline or in a floodplain.

Recommendation

The Remedial Alternatives were evaluated based on their effectiveness, their feasibility of implementation, the costs of each alternative, and the impact of potential extreme weather events. Based on the above evaluation, the selected final remedy is Alternative Three which uses limited soil excavation and off-site disposal with on-site soil management, engineering and institutional controls, and vapor mitigation to address PVOC and CVOC concentrations in soil and groundwater. As a whole, this alternative provides both the most efficient cleanup strategy and the best protection for human health and the environment.