

Community Update

Fort Darling Landfill Site

National Park Service
U.S. Department of the Interior

Richmond National Battlefield Park

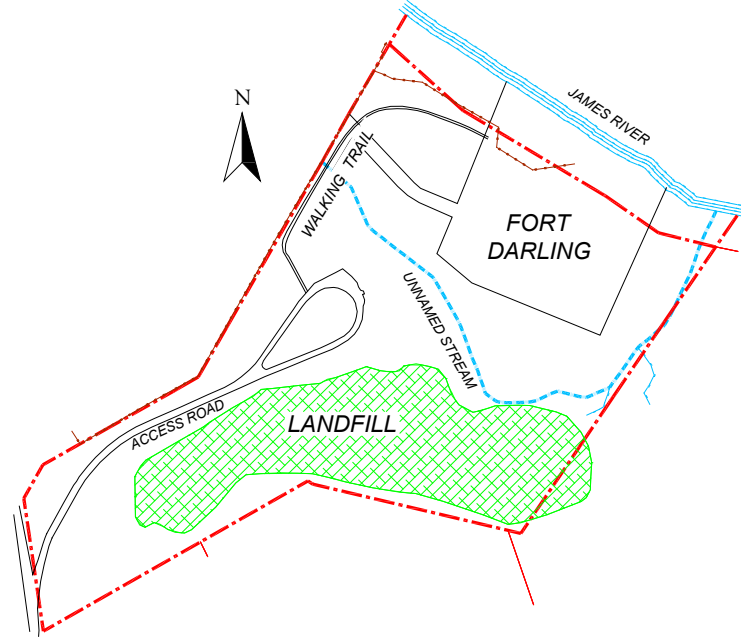
Fall 2024



SITE HISTORY

The Fort Darling Landfill Site is located in the Drewry's Bluff Unit of the Richmond National Battlefield Park in Chesterfield County on metropolitan Richmond's "south side," between the western bank of the James River and Interstate Highway 95. The historic fort is situated on Drewry's Bluff, overlooking the James River, and is reached via a walking trail that begins at the northern end of the access road. Fort Darling has been preserved as a historically important military site used during the Civil War.

Between 1960 and 1969, Chesterfield County obtained ownership of several parcels of land surrounding Fort Darling and operated a 10-acre municipal landfill on the 23-acre parcel to the south of Fort Darling from 1963 to 1972. The landfill and surrounding property were donated to the federal government by Chesterfield County in 1975 and are now managed by the National Park Service (NPS). The landfill and immediate vicinity are referred to as the Fort Darling Landfill Site (Site).



ENVIRONMENTAL INVESTIGATIONS

Multiple environmental investigations related to the Site have been conducted since 1985. In 2008, NPS initiated an Engineering Evaluation/Cost Analysis (EE/CA) investigation pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to determine the nature and extent of contamination at the Site. The EE/CA investigation included drilling and installing groundwater monitoring wells, testing for the presence of landfill gas, and sampling groundwater, surface water, and soil. The EE/CA included a human health risk assessment (HHRA) and a screening level ecological risk assessment (SLERA).

The results of this investigation were documented in a 2015 EE/CA Report that was released for public comment in 2016. The 2015 EE/CA Report identified three areas of concern that required evaluation of response action options: 1) methane identified in groundwater; 2) volatile organic compounds (VOCs) in groundwater; and 3) unconsolidated landfill waste materials present on the landfill north slope. The recommended removal action for the Site included the following combination of options:

- 1) Land use restrictions and pre-construction sampling to address methane identified in groundwater.
- 2) Monitored natural attenuation and institutional controls to address VOCs in groundwater.
- 3) Periodic removal of potentially hazardous landfill waste to address unconsolidated landfill waste materials that are or will become exposed over time due to erosion on the landfill north slope.

During Site visits in 2017 and 2018, prior to final selection of a removal alternative, NPS staff noted that the steep landfill slope on the northern border of the Site is in a state of failure that has resulted in exposure of previously buried landfill waste, including drums that may contain hazardous waste. Previously collected Site data were insufficient to characterize the extent of hazardous substances releases from the landfill north slope, or whether exposure to such releases may pose an unacceptable risk to human, or ecological receptors.

To fill the data gaps from the newly discovered conditions in the landfill north slope area, NPS determined that the 2015 EE/CA needed to be supplemented with additional soil and sediment data from the landfill north slope area. An additional field investigation to fill these data gaps was completed in 2018.

FINDINGS FROM EE/CA ADDENDUM

The conclusions of the 2018 investigation indicated that, as a result of ongoing landfill north slope failure, contaminated subsurface soil and landfill waste has become exposed at the surface. Given the unstable nature of the slope, potentially hazardous waste will continue to be exposed through the ongoing failure mechanisms. With increased frequency and intensity of extreme weather events, there is the potential for the slope failure processes to be accelerated. In addition to exposing human and ecological receptors to contaminated soil and landfill waste, a more dramatic failure of the slope could significantly impact the unnamed stream. Updated human health and ecological risk assessments identified unacceptable long-term human health exposure risks for park staff and construction workers involved in excavation activities. The EE/CA Report Addendum identifies and evaluates four

removal action alternatives for the landfill north slope area of the Site ranging from no action to complete removal of landfill waste and contaminated soil. The recommended alternative includes modifying the steep north slope to a more stable angle (33%), covering the exposed waste with two feet of clean soil fill and reestablishment of the native forest.

COMMUNITY INVOLVEMENT

Community involvement is an important part of the NPS CERCLA process. The EE/CA Report Addendum is now available for public review and the 30-day public comment period is open. During this time, the public may provide written comments on the EE/CA Report Addendum. Following the close of the public comment period and consideration of public comments, NPS will release an Action Memorandum, to document the selection of a final remedy.

NPS has established an information repository, which houses a copy of the Fort Darling Site Administrative Record File. CERCLA Administrative Record Files consist of those documents that form the basis for the selection of the response at the Site. The Fort Darling Site Administrative Record File will be updated periodically as new information and reports are finalized. The public can view the Administrative Record File and make copies of documents at the following information repository location.

Fort Darling Landfill Site Information Repository

***Richmond National Battlefield Park – Chimborazo Medical
Museum and Visitor Center***

*3215 East Broad Street
Richmond, VA 23223*

*Phone: (804) 226-1981
Wed.-Sun.: 9:00 a.m. – 4:30 p.m.*



Section of landfill north slope with visible waste. Photograph taken December 2020.

FOR MORE INFORMATION

If you have questions concerning the information contained in this Community Update, please contact Kristen Allen, Chief of Natural and Cultural Resource Management at Richmond National Battlefield Park at (804) 640-7919.

Additional information and project updates are available through the Site website:

<https://parkplanning.nps.gov/parkHome.cfm?parkID=263>