

# ENVIRONMENTAL RESTORATION PROGRAM St. Juliens Creek Annex, Chesapeake, Virginia

October 2023

## About the Base

St. Juliens Creek Annex (SJCA) is a Navy facility located where St. Juliens Creek and the Southern Branch of the Elizabeth River meet in Chesapeake, Virginia. SJCA began operations as a naval ammunition facility in 1849. For a majority of its history, SJCA was used for the storage and transportation of ammunition and ordnance. SJCA has also been involved in non-ordnance operations, including degreasing operations; paint, machine, vehicle and locomotive maintenance, pest control, battery, print, and electrical shop operations; boiler plant operations; wash rack operations; potable water and saltwater fire-protection systems; fire-fighter training operations; and storage of oil and chemicals. While activity at SJCA has decreased overall in the past decade with the demolishment of many older structures, most recently it has increased. The current primary mission of SJCA is to provide a radar-testing range and various administrative and warehousing facilities for local naval activities.

### **Environmental Restoration Program**

The Department of Defense (DoD) identifies, assesses, and conducts environmental cleanup of contaminated sites through the Environmental Restoration Program (ERP) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly referred to as "Superfund." The ERP is divided into the Installation Restoration Program (IRP), to address contamination from hazardous substances and pollutants,

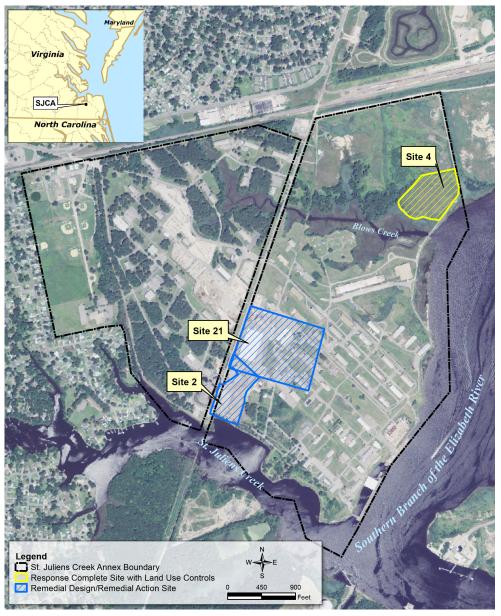
and the Munitions Response Program (MRP), to address military munitions.

SJCA was listed as a Superfund site in July 2000. To manage the ERP and the CERCLA process, SJCA works in partnership with the Virginia Department of Environmental Quality (VDEQ) and the United States Environmental Protection Agency (EPA). There are currently three active IRP sites that are being addressed using the CERCLA process. There are currently no active MRP sites that are being addressed using the CERCLA process. Fifty-six ERP sites have been cleaned up or determined to require no further action.

### **Construction Complete**

A facility achieves Construction Complete when the last remedial action has been completed or the remedy has been implemented such that the treatment system is operating as intended (Remedy in Place) and the Preliminary Closeout Report for the facility has been signed. SJCA achieved Construction Complete on July 7, 2016, when the Preliminary Closeout Report was signed by the EPA. Following Construction Complete, ongoing work will consist primarily of monitoring. A Final Closeout Report for the facility will be executed once the remedial action objectives for all of the sites have been achieved, after which time the facility will be eligible for deletion from the National Priorities List.

Location of SJCA and the Active ERP Sites





#### Summary of Active ERP Sites

| Site  | Primary Contaminants  | Selected Remedial Action/Removal Action  | Status   |
|---|---|--|--|
| Site 2<br>Former<br>Waste<br>Disposal<br>Area B | Waste, chlorinated<br>solvents (trichloroethene<br>and its breakdown<br>products) in shallow<br>aquifer groundwater and<br>surface water; Inorganics<br>and polycyclic aromatic<br>hydrocarbons in soil<br>and sediment | <ul> <li>Soil cover over waste and impacted soil, surface water and inlet sediment</li> <li>Excavation of impacted sediment in St. Juliens Creek</li> <li>Enhanced reductive dechlorination through injections in select areas of the shallow aquifer groundwater</li> <li>Monitored natural attenuation of select areas of the shallow aquifer groundwater</li> <li>Land use controls to prevent unacceptable exposure to waste and impacted soil, inlet sediment, and shallow aquifer groundwater</li> </ul> | <ul> <li>Remedy in Place (RIP) – Remedial action initiated in 2012</li> <li>Ongoing remedial action-operation, consisting of<br/>additional injections of emulsified vegetable oil (ERD) and<br/>groundwater monitoring</li> <li>Land use controls in place</li> <li>Reviews of remedy protectiveness every five years</li> </ul>                                  |
| Site 4<br>Landfill D                            | Waste, inorganics, and pesticides in soil and/or drainage sediment  | <ul> <li>Soil cover over waste and impacted soil</li> <li>Surface debris removal</li> <li>Excavation of impacted drainage sediment</li> <li>Land use controls to prevent unacceptable exposure<br/>to waste and impacted soil</li> </ul>   | <ul> <li>Response Complete – Remedial action completed in 2005</li> <li>Land use controls in place</li> <li>Reviews of remedy protectiveness every five years</li> </ul>   |
| Site 21<br>Industrial<br>Area                   | Chlorinated solvents<br>(trichloroethene and its<br>breakdown products)<br>in shallow aquifer<br>groundwater  | <ul> <li>In situ chemical reduction and enhanced reductive<br/>dechlorination through injections in select areas of the<br/>shallow aquifer groundwater</li> <li>Land use controls to prevent unacceptable exposure<br/>to shallow aquifer groundwater</li> </ul>  | <ul> <li>Remedy in Place (RIP) – Remedial action initiated in 2011</li> <li>Ongoing remedial action-operation, consisting of additional injections of emulsified vegetable oil (ERD) as needed, groundwater, storm water, and vapor intrusion monitoring</li> <li>Land use controls in place</li> <li>Reviews of remedy protectiveness every five years</li> </ul> |

### Per- and Polyfluoroalkyl Substances

In 2016, NAVFAC Headquarters released a directive to conduct a comprehensive compilation of existing information about known or potential releases and potential migration pathways for per- and polyfluoroalkyl substances (PFAS), an emerging class of contaminants, at naval facilities. As part of the NAVFAC Headquarters directive, a Navy-wide review of records was conducted to establish an inventory of locations where PFAS may have been used, stored, released, or disposed of at Navy installations. In response to this direction, a Preliminary Assessment (PA) for PFAS was completed and finalized in February 2021; a total of seven areas at SJCA were recommended for further investigation as part of an Site Inspection (SI). The SJCA PFAS SI is currently ongoing. Fieldwork was completed in 2022 and the SI report is currently being developed. For additional information on the Navy's ongoing efforts to investigate and mitigate PFAS within their facilities across the nation please see the PFAS tab at the top of the SJCA website: https://go.usa.gov/xSvtw

### Public Involvement and the Restoration Advisory Board

The Navy encourages public participation in the investigation and remediation process. The best way to be involved is to attend meetings of the RAB. The RAB is a joint initiative of the DOD, VDEQ, and EPA to increase participation by local community members in the cleanup process at military installations. The RAB provides a forum through which local communities, installations and regulatory agencies work together in an atmosphere that encourages discussion and exchange of information. A RAB was established for the SJCA ERP in 1999. The RAB meets annually, typically around May timeframe each year to conduct a tour of the active sites at SJCA.

### For More Information

The Navy maintains a web site for more information about the ERP at SJCA: https://go.usa.gov/xSvtw

This Web site provides updates on the status of all sites in the program, an overview of community involvement activities, and a link to the Administrative Record, which is an online file of all documents related to cleanup decisions at the environmental sites. It also contains the previous RAB meeting minutes.

Internet access and the "Public Information Repository" containing ERP documents, can be obtained at:

Major Hillard Library 824 Old George Washington Highway Chesapeake, Virginia 23323 (757) 410-7078

# For additional information, please contact:

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