## Highlights

The U.S. Department of Energy (DOE) Order 231.1B (Environment, Safety, and Health Reporting) requires Annual Site Environmental Reports (ASERs) to assess field environmental program performance, sitewide environmental monitoring and surveillance effectiveness, and to confirm sites are complying with environmental standards and requirements.

ASERs are prepared in a manner that addresses likely public concerns and to solicit feedback from the public and other stakeholders. The Savannah River Site (SRS) began publishing ASERs in 1959.

Readers can find the *SRS Environmental Report* on the World Wide Web at the following address:

http://www.srs.gov/general/pubs/ERsum/index.html

he *SRS Environmental Report 2021* is an overview of environmental management activities conducted on and in the vicinity of SRS from January 1 through December 31, 2021. This report includes the following:

- A summary of implemented environmental management systems that facilitate sound stewardship practices and demonstrate compliance with applicable environmental regulations and laws intended to protect air, water, land, and other natural and cultural resources that SRS operations have impacted.
- A summary of the results of nonradiological parameters. These results are compared to permit limits and applicable standards.
- A summary of the results of effluent monitoring and environmental surveillance of air, water, soil, vegetation, biota, and agricultural products to determine radioactivity in these media. SRS compares the results with historical data and background measurements, and to applicable standards and requirements to verify that SRS does not adversely impact the environment or the health of humans or biota.
- A discussion of the potential doses to members of the public from radioactive releases from SRS operations compared to applicable standards and regulations, and from special-case exposure scenarios.
- An explanation of the quality assurance and quality control program, which ensures that samples and data SRS collects and analyzes are reported with utmost confidence.

The report addresses three general levels of reader interest:

- The first is a brief summary with a "take-home" conclusion. This is presented in the "Highlights" text box at the beginning of each chapter. There are no technical tables, figures, or graphs in the "Highlights."
- 2) The second level is a more in-depth discussion with figures, summary tables, and summary graphs accompanying the text. The chapters of the annual report represent this level, which requires some familiarity with scientific data and graphs.
- 3) The third level includes links to supplemental and technical reports and websites that support the annual report. The links to these reports may be found in the chapters or on the SRS Environmental Report 2021 webpage. Many of the reports mentioned in Chapter 3, Compliance Summary, are submitted to meet compliance requirements and are not available on the SRS Environmental Report 2021 webpage or through direct links. These reports may be obtained through a Freedom of Information Act request.

When a regulation or DOE Order requires reporting on a fiscal year (FY) basis, the information in this report is reported by FY. This allows for consistency with existing documentation. FY reporting is typically found in Chapter 2, *Environmental Management System*, and Chapter 3, *Compliance Summary*.

The *SRS Environmental Report* webpage contains reports from multiple years with the 2021 report being the latest. The report folders feature:

- The full report with hyperlinks to supplemental information or reports
- Maps with environmental sampling locations for the various media samples. These figures are identified as "Maps Figure" within the text of the report
- Annual reports from SRS organizations

Savannah River Nuclear Solutions, LLC (SRNS) develops this report as the management and operations contractor to the DOE at SRS. In addition to SRNS, the contributors to the annual report include the U.S. Department of Energy, the Savannah River Operations Office (DOE-SR); Savannah River Remediation (SRR); Parsons Government Services, Inc.; Centerra-SRS; Ameresco Federal Solutions; the Savannah River Ecology Laboratory (SREL); and the United States Forest Service-Savannah River (USFS-SR).

The photographs in this report and the accompanying Summary were taken both before the COVID-19 pandemic and in the months of 2021 when the virus was active in the United States. In many of the photographs throughout these two documents, you will see SRS workers distancing themselves from others, wearing masks, or doing both to protect against the spread of COVID-19. When masks and distancing are taking place, employees followed SRS guidelines from the Centers for Disease Control and Prevention, South Carolina Department of Health and Environmental Control, Georgia Department of Public Health, and the U.S. Department of Energy. If a photograph shows a worker interacting within 6 feet of another worker or not wearing a mask, they are following the appropriate safety protocol for the COVID-19 pandemic at the time the photograph was taken.