

Table of Contents

Acknowledgements	i
To Our Readers	v
Table of Contents	vii
List of Figures	xi
List of Tables	xiii
Acronyms and Abbreviations	xv
Sampling Location Information	xxv
1 Introduction	1-1
Chapter Background.....	1-1
1.1 History.....	1-1
1.2 Mission and Current Operation	1-2
1.3 Site Location, Demographics, and Environment.....	1-3
1.4 DOE-EM Primary Site Activities.....	1-6
1.5 NNSA Primary Site Activities	1-9
1.6 Special Environmental Studies.....	1-10
2 Environmental Management System.....	2-1
2022 Highlights.....	2-1
2.1 SRS Environmental Management System.....	2-2
2.2 EMS Implementation	2-4
2.3 Sustainability and Stewardship Goals and Implementation	2-6
2.4 EMS Best Practices	2-21
3 Compliance Summary	3-1
2022 Highlights.....	3-1
3.1 Introduction	3-3
3.2 Federal Facility Agreement	3-3
3.3 Regulatory Compliance	3-12

3.4	Major DOE Orders for Environmental Compliance	3-32
3.5	Regulatory Self-Disclosures	3-32
3.6	Environmental Audits	3-32
3.7	Key Federal Laws Compliance Summary	3-35
3.8	Environmental Compliance Summary	3-37
4	Nonradiological Environmental Monitoring Program	4-1
	2022 Highlights	4-1
4.1	Introduction	4-2
4.2	Calculated Air Emissions	4-3
4.3	Water Monitoring	4-4
5	Radiological Environmental Monitoring Program	5-1
	2022 Highlights	5-1
5.1	Introduction	5-1
5.2	SRS Offsite Monitoring	5-3
5.3	Air Pathway	5-4
5.4	Water Pathway	5-13
5.5	Aquatic Food Products	5-26
5.6	Wildlife Surveillance	5-27
5.7	Enhancements to the Creek Plantation Monitoring Program	5-30
6	Radiological Dose Assessment	6-1
	2022 Highlights	6-1
6.1	Introduction	6-2
6.2	What is Radiation Dose?	6-3
6.3	Calculating Dose	6-3
6.4	Offsite Representative Person Dose Calculation Results	6-7
6.5	Sportsman Dose Calculation Results	6-15
6.6	Release of Material Containing Residual Radioactivity	6-17

6.7	Radiation Dose to Aquatic and Terrestrial Biota.....	6-18
7	Groundwater Management Program	7-1
	2022 Highlights.....	7-1
7.1	Introduction	7-1
7.2	Groundwater at SRS.....	7-2
7.3	Groundwater Protection Program at SRS	7-3
8	Quality Assurance	8-1
	2022 Highlights.....	8-1
8.1	Introduction	8-1
8.2	Background	8-2
8.3	Quality Assurance Program Summary	8-3
8.4	Environmental Monitoring Program QA Activities	8-4
8.5	Environmental Monitoring Program QC Activities.....	8-5
8.6	Records Management.....	8-8
9	Perfluoroalkyl and Polyfluoroalkyl (PFAS) Substances.....	9-1
	2022 Highlights.....	9-1
9.1	Introduction	9-1
9.2	Status of PFAS Regulations and Guidance	9-4
9.3	A PFAS Case Study: D-Area Groundwater	9-6
	Appendix A: Environmental Management System.....	A-1
	Appendix B: Environmental Surveillance Media and Sampling Frequencies	B-1
	Appendix C: Nonradiological Environmental Monitoring Program Supplemental Information	C-1
	Appendix D: Radiological Environmental Monitoring Program Supplemental Information.....	D-1
	Appendix E: Groundwater Management Program Supplemental Information	E-1
	Appendix F: Glossary	F-1
	Appendix G: References	G-1
	Appendix H: Units of Measure.....	H-1