

Savannah River Site

2015 ALARA Goals (U)

April 2015

CY15 ALARA Goals

Executive Summary

The ALARA goals for the Savannah River Site for calendar year 2015 were established by the appropriate radiological facilities and their support groups based on the anticipated work for the year.

The annual base routine operations cumulative exposure goal is 55.232 Rem. Exposure goals for special (non-recurring) work operations are maintained by calendar quarter. The preliminary special work goal for the year is 30.884 Rem. The total exposure goal for 2015 is 86.116 Rem. In comparison, the goal for 2014 was 88.58 Rem. The 2015 goal is a 3 % decrease from the 2014 goal.

SRS has established an annual Administrative Control Level (ACL) of 500 mRem Total Effective Dose (TED) for most Site workers, the same as past few years. This can be compared to the DOE ACL of 2,000 mRem, and a federal limit of 5,000 mRem. Contractor chief official approval is necessary to allow a contractor employee to exceed the SRS ACL. DOE/National Nuclear Security Administration Secretarial Officer, or designee, approval is necessary to allow a Site worker to exceed the DOE ACL. DOE-SR has re-established the Site ACL for DOE employees at 150 mRem.

The goal for intakes of radioactive material resulting in an exposure greater than 500 mRem Committed Effective Dose (CED) from a single event continues to be zero.

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Radiological Performance Goals

Cumulative Radiation Exposure is based on total effective dose exposures (including tritium) resulting from Base Routine Operations and Special Work Operations.

- *Base Routine Operations* are related to normal day to day activities.
- *Special Work Operations* are not part of routine operations and typically are of limited, non-repetitive duration. Special Work Operations goals are reviewed quarterly by the facilities and goals may be adjusted as approved by the company's executive committee.

Maximum Individual Exposure/Administrative Control Levels are established to maintain personnel radiation exposure well below the Department of Energy's Administrative Control Level of 2,000 mRem, while being both challenging and achievable for the site.

Personnel Contamination Events are established for skin and personnel effects contamination events that are reportable in accordance with the criteria contained in DOE M 231.1-2, "Occurrence Reporting and Processing of Operations Information." These reporting criteria are available in the site's SIRIM/ORPS information system.

Confirmed Intakes Resulting in CED >500 mRem are established for a single intake of radioactive material that exceeds the anticipated exposure by 500 mRem or greater. This criterion is based on DOE M 231.1-2, "Occurrence Reporting and Processing of Operations Information." The reporting criterion is available in the site's SIRIM/ORPS information system.

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Business Unit	Base Routine (Rem)	Special Work (Rem)	Total Cumulative Exposure Goal (Rem)
Management & Operations Total	29.95	3.81	33.76
<u>H-Area Material Disposition</u>			
HB-Line	1.0	1.80	2.80
H-Canyon/OF	4.6	0.710	5.31
<u>Nuclear Materials Storage Project</u>			
K-Area	5.75	0.80	6.55
L-Area	0.40	0.20	0.60
<u>Solid Waste</u>			
E-Area	6.0	0	6.0
<u>INF</u>	1.4	0	1.4
<u>EC&ACP</u>			
SGW, SDD, Misc.	0.20	0	0.20
<u>Tritium Projects</u>			
TRI/TEF	0.20	0.10	0.30
<u>Laboratories</u>			
772-F/772-1F/735-B/735-2B	4.8	0	4.8
<u>F-Area Operations</u>	0.8	0	0.8
Savannah River National Laboratory	4.8	.2	5.0
WSI Total	1.60	0	1.60
Liquid Waste Operations Total	23.232	27.074	50.306
<u>Waste Treatment</u>			
DWPF/Saltstone	14	2.150	16.150
<u>Liquid Waste Disposition Projects</u>			
H-Tank Farm/299-H/ETP/F-Tank Farm	9.232	24.924	34.156
Site Goal	54.782	30.884	85.666

SRS ADMINISTRATIVE CONTROL LEVEL – 500 mRem

DOE-SR ADMINISTRATIVE CONTROL LEVEL – 150 mRem (for DOE-SR employees)