

# **Washington Savannah River Company**

## **2006 ALARA Goals (U)**

**December 2005**

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**CY06 ALARA Goals**

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**Executive Summary**

The ALARA goals for the Savannah River Site for calendar year 2006 were established by the Business Units and their support groups based on the anticipated work for the year.

The 101.72 rem cumulative exposure goal is for base routine operations. Exposure goals for special (non-recurring) work operations are maintained by calendar quarter. The preliminary special work goal for the year is 22.74 rem. The total exposure goal for 2006 is 124 rem. In comparison, the initial goal for 2005 was 207 rem, which was modified in mid-2005 to 179 rem. The 2006 goal is a 40% reduction from the 2005 goal.

An annual Administrative Control Level (ACL) of 600 mrem Total Effective Dose Equivalent (TEDE) has been established for the site. This is a 25% reduction from the 2005 ACL of 800 mrem. The site ACL for DOE-SR employees remains at 150 mrem. In comparison the federal limit for radiation exposure is 5,000 mrem in a year with DOE Secretarial Officer approval necessary for allowing an employee to exceed 2,000 mrem in a year.

The personnel contamination goal of 9 events is the sum of both skin contamination and personnel effects events. This is a reduction from the 2005 goal of 10 events.

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

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**Radiological Performance Goals**

**Cumulative Radiation Exposure** is based on total effective dose equivalent 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.

**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 CEDE >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.

## CY06 ALARA Goals

**Business Unit Goals**

<b>Business Unit</b>	<b>Base Routine (rem)</b>	<b>Special Work (rem)</b>	<b>Total Cumulative Exposure Goal (rem)</b>
<b>Closure Business Unit</b>			
<i>H-Area Completion</i>			
HB-Line	2.70	2.30	5.00
H-Canyon/OF	5.90	4.10	10.00
<i>F-Area Closure</i>			
FB-Line	10.00	0	10.00
F-Canyon/OF	2.50	0	2.50
<i>Waste Solidification Projects</i>			
DWPF	3.50	0	3.50
Saltstone	1.83	0	1.83
<i>Liquid Waste Disposition Projects</i>			
H-Tank Farm	7.70	8.30	16.00
F-Tank Farm	5.84	5.54	11.38
<i>Laboratories</i>			
772-F/772-1F	7.25	0	7.25
<i>Site D&amp;D</i>	1.00	0	1.00
<b>Operations Business Unit</b>			
Nuclear Materials Management (235-F & K-Area)	10.00	0	10.00
Waste Management Area Project (WMAP – E Area & ETP)	27.50	0	27.50
<b>Savannah River National Laboratory</b>	10.00	2.00	12.00
<b>Wackenhut Services Incorporated</b>	2.00	0	2.00
<b>Miscellaneous<sup>1</sup></b>	4.00	0	4.00
<b>Site Totals</b>	101.72	22.24	124

<sup>1</sup>Miscellaneous (SFP 0.375 base + 0.075 special; DP 0.35 base + 0.37 special; SGCP 0.100 base + 0.835 special; and other minor contributors to site total)