

May 27, 2021

Created by Pamela A. Powell 

Site ALARA Committee & Change Control Board Meeting

The Site ALARA Committee and Change Control Board held a teleconference.

Rollcall was performed and Quorum was met for the SAC and CCB. (See Attached)

1) Introduction: Kent Williams

Kent welcomed everyone to the meeting. Safety topic discussed was heat stress and Memorial Day weekend travel. Kent encouraged everyone to follow-up on Teleworkers with Dosimetry.

2) Environmental ALARA: Teresa Eddy

Teresa gave an overview of Liquid and Airborne ALARA guides status through February (See attached).

The increases noted were stated to decrease throughout year unless there is another flow impact. Question was asked is trend in liquid discharges comparable to past year. It was stated that the trend is comparable.

Dennis Carr requested a trend chart for the F Area liquid discharge.

It was requested by the Environmental ALARA group to reduce the frequency of investigation memoranda to semiannual in accordance with the recently revised 3 Q-18.5 procedure. This item was approved per the board.

3) Review of 1st/2nd Quarter Performance: Pamela Powell

1st Quarter PI were reviewed (See Attached)

4) Review of +/- 25%

Facility	*Target	*Actual	Percent
Centerra	1.0	0.59	-41.00
NMD	3.0	1.82	-39.23
FCA	0.30	0.065	-78.33
L AREA	0.685	0.262	-61.75
KAC	3.70	1.769	-52.19
TRIT	0.575	0.87	+51.30
SWM	1.0	0.718	-28.20
LWO	23.19	16.55	-28.63

Centerra – Site was in Phase one of Covid. Normal exercises were not run. No request to change goals at this time.

NMD - Below goal for the first quarter due to the fact that steam outage duration lasted longer than expected we experienced difficulties with our shielding door than reduced our cask car evolutions. We would like to maintain our current goal for the second quarter as well as the carryover for the first quarter. We will have the accumulated dose from the removal of the high rad box in the second quarter dose results and other associated activities that have occurred or are scheduled to be performed for the second quarter. We would like to reserve the right to adjust after the second quarter results are published.

FCA & SWM – Target was increased for 2021 because OSL results were higher in 4th quarter of 2020. Didn't know what to expect from Neutron dose issue from Landeur. No request to change goals at this time.

L Area – Settler tank settlement removal work not performed in 1st quarter as planned. No request to change goals at this time.

KAC – Mining of drums was completed at end of 2020. First quarter processing started slower than expected. No request to change goals at this time.

Trit – Review of Dosimetry data show that craft employees were issued dosimetry in TEF but worked all oversite. Some key employees in org have higher level dose. Data to be further reviewed. No request to change goals at this time.

LWO – Activities scheduled for 1st quarter were moved out to the end of year. Activities that were performed were done using good ALARA practices. No request to change goals at this time.

5) Review of DOE Findings

See Attached.

No questions or comments

Meeting was adjourned with a reminder to follow up to pull the string on Teleworkers with dosimetry.

1st Quarter Site ALARA Committee Meeting

Kent Williams

**Radiological Protection Director
Savannah River Nuclear Solutions, LLC**

1st Quarter Review

Teleconference

AGENDA

- | | |
|---|---------------|
| 1. Introduction | Kent Williams |
| 2. Environmental ALARA | Teresa Eddy |
| 3. 1 st Qtr Performance Indicators | Pamela Powell |
| 4. ALARA Program Assessment | Pamela Powell |



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Environmental ALARA Update

Teresa Eddy
Environmental ALARA Chairperson
Savannah River Nuclear Solutions, LLC
May 2021

CY2021 Liquid ALARA guides status

Liquid Discharges ALARA Guide Summary Report for All Areas February 2021					
Area	YTD TED (mrem)	Projected Annual TED (mrem/yr)	Alara Guide (mrem/yr)	YTD % of Guide	Projected % of Guide
A-Area	4.46E-06	2.68E-05	6.00E-05	7.4%	44.6%
F-Area	1.59E-04	9.54E-04	5.20E-04	30.6%	183.5%
F-Tk Firm	3.37E-04	2.02E-03	2.00E-03	16.8%	101.0%
G-Area	1.43E-04	8.61E-04	5.07E-02	0.3%	1.7%
H-Area	1.59E-05	9.54E-05	1.04E-03	1.5%	9.2%
H-ETP	7.56E-05	4.53E-04	6.00E-03	1.3%	7.6%
H-Tk Firm	4.13E-04	2.48E-03	8.65E-03	4.8%	28.7%
K-Area	0.00E+00	0.00E+00	1.71E-05	0.0%	0.0%
L-Area	0.00E+00	0.00E+00	7.08E-05	0.0%	0.0%
S-Area	7.15E-08	4.29E-07	1.65E-04	0.0%	0.3%
Tritium	1.87E-05	1.12E-04	2.37E-04	7.9%	47.4%
Site Totals:	1.17E-03	7.00E-03	6.95E-02	1.7%	10.1%

CY2021 Airborne ALARA guides status

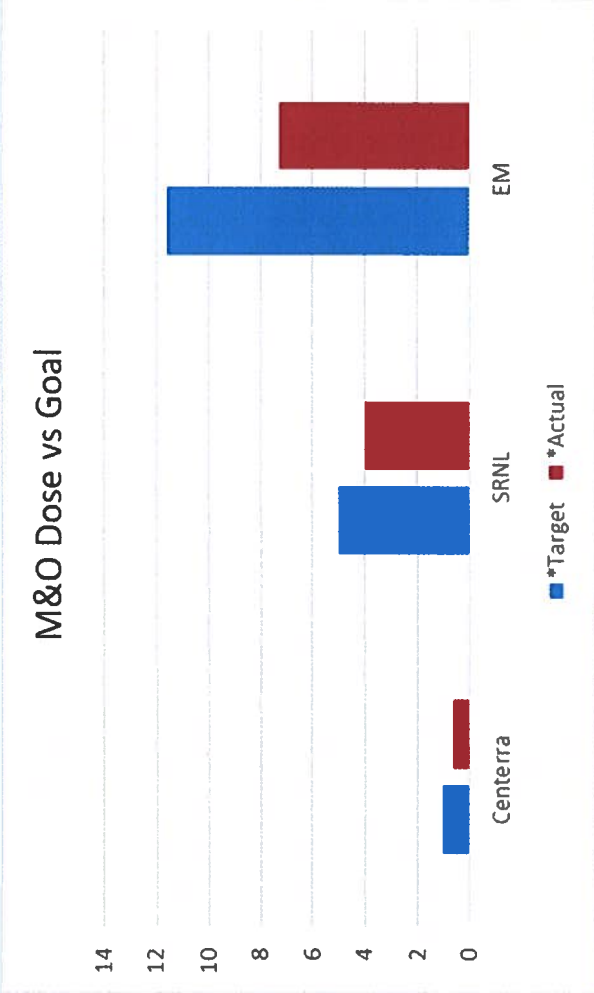
Airborne Emissions ALARA Guide Summary Report for All Areas February 2021

Area	YTD TED (mrem)	Projected Annual TED (mrem/yr)	Alara Guide (mrem/yr)	YTD % of Guide	Projected % of Guide
A-Area	2.24E-08	1.34E-07	1.70E-03	0.0%	0.0%
C-Area	1.40E-05	8.41E-05	2.50E-04	5.6%	33.6%
F-Area	4.39E-05	2.64E-04	1.29E-03	3.4%	20.4%
H-Area	2.30E-06	1.38E-05	5.00E-03	0.0%	0.3%
H-ETP	0.00E+00	0.00E+00	1.00E-07	0.0%	0.0%
H-Tk Frm	1.97E-10	1.18E-09	1.00E-06	0.0%	0.1%
J-Area	2.28E-10	1.37E-09	1.00E-06	0.0%	0.1%
K-Area	2.87E-04	1.72E-03	4.05E-03	7.1%	42.5%
L-Area	3.59E-04	2.15E-03	4.75E-03	7.6%	45.3%
S-Area	4.13E-06	2.48E-05	5.50E-05	7.5%	45.1%
Tritium	1.73E-03	1.04E-02	7.88E-02	2.2%	13.1%
Z-Area	6.66E-09	4.00E-08	5.00E-06	0.1%	0.8%
Site Totals:	2.44E-03	1.46E-02	9.59E-02	2.5%	15.2%

F-Area Airborne Sum of Fractions Exceedance Investigation Request

- As stated in the February Monthly Radiological Releases Report ([SRNS-TR-2021-00210](#)) and the attached exceedance investigation (SRNS-J2600-2021-00132) for that report, that the frequency of investigation memoranda be reduced to semiannually in accordance with the recently revised 3Q-18.5 procedure (Section 5.6.2.3)
- The technical evaluations that have been performed supporting ongoing DCS Sum Of Fractions exceedance investigation has identified that the safest path forward indicates that the associated risk (i.e. worker exposure, release of contamination) with remediation the legacy contamination is higher than refraining from remediating.

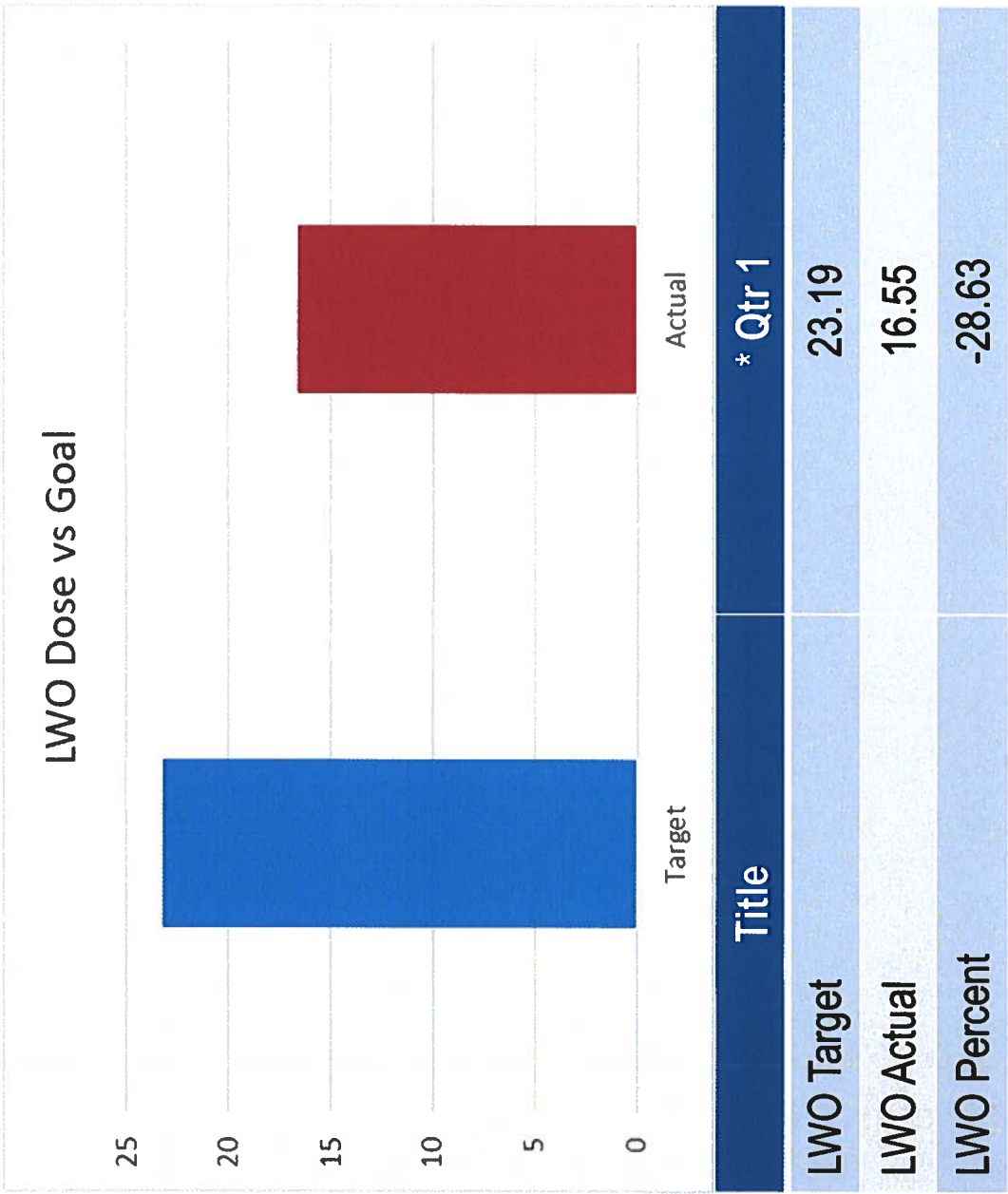
M&O Dose vs Goal



Title	*Target	*Actual	Percent
Centerra	1.0	0.59	-41.00
SRNL	5.0	3.977	-20.46
EM	11.56	7.279	-37.03

*Dose(Rem)

LWO Dose vs Goal



Maximum Individual Dose

Title	*YTD	Facility
EM	0.108	HCA
LWO	0.116	HTF
SRNL	0.089	
Centerra	.035	

*Dose(Rem)

Maximum Extremity

Title	*CY21
EM Maximum Extremity Dose	3.102 (KAC)
LWO Maximum Extremity Dose	1.926 (SSS)

Dose(Rem)

Radiological Events

Title	QTR 1	Event
M&O ORPS PerCon	0	
M&O Non ORPS Percon	0	
M&O ORPS Rad Mat	0	
M&O Non ORPS Rad Mat	0	
LWO ORPS PerCon	1	Personnel Shoe Contamination at 242-9H
LWO Non ORPS PerCon	1	Worker sprayed with flush water at Tank 42 Riser
LWO ORPS Rad Mat	1	Personnel Shoe Contamination at 242-9H
LWO Non ORPS Rad Mat	0	

Intakes

Title	CY21
M&O > 500 mrem	0
M&O > 100 mrem	0
LWO > 500 mrem	0
LWO > 100 mrem	0

+/- 25 %

Facility	*Target	*Actual	Percent
Centerra	1.0	0.59	-41.00
NMD	3.0	1.823	-39.23
FCA	0.30	0.065	-78.33
L AREA	0.685	0.262	-61.75
KAC	3.70	1.769	-52.19
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***Dose(Rem)**

Department of Energy-Savannah River Findings Associated with Site ALARA Committee Functions STAR Item 2020-CTS-011754

DOE-SR Finding – ALARA Program

- **FINDING NO. 1 - In EM Operations from 2017 to 2020, the Site Collective Exposure goal in the Executive Summary is being revised on a quarterly basis without a significant change in the basic work assumption used to establish it. For example, the CY 2019 goal was revised from 129.9 Rem to 153.3 Rem by the end of the calendar year.**
- **Corrective Actions – Enhanced guidance for the Site ALARA Committee (SAC)**
 - Facility/Organization established Annual Radiation Exposure ALARA Goals should not be considered for modification unless actual received or projected collective dose is +/- 25% of the originally established exposure goal(s).
 - Facilities/Organizations are to present their proposed change(s) to the SAC and demonstrate the modifications represent a significant change in the basic work assumption used to establish their ALARA Goal(s).
 - Site ALARA Coordinator will submit meeting presentation prior to meeting (at least 24 hours) so that potential ALARA goal changes can be evaluated by voting members.
 - To assist the Facilities/Organizations with SAC presentations, a template will be provided for developing expected documentation to be presented.

DOE-SR Finding – ALARA Program

- Corrective Actions – Documenting approved changes to ALARA Goals
 - The Site ALARA Coordinator will document SAC approved ALARA goal changes and presentations related to modifying established ALARA goals within the meeting minutes. This has been an existing practice in excess of five years.
 - The Site ALARA Coordinator will summarize SAC approved ALARA goal changes within the Executive Summary of the revised site ALARA goals document for each calendar year. The summary will include details to demonstrate the ALARA goal modifications are representative of a significant change to the basic work assumption used to establish their original ALARA goal.

SITE ALARA COMMITTEE & CHANGE CONTROL BOARD

ATTENDANCE ROSTER

Meeting Date: 05/27/2021

Quarter/Year: 1/2021

<u>✓</u> _____	<u>Chair</u> Dennis Carr Doug Bumgardner (Vice Chair)	<u>✓</u>	<u>Alternate</u> Wyatt Clark John Gall
<u>✓</u> _____ <u>✓</u> _____ <u>✓</u> _____ _____ <u>✓</u> _____ <u>✓</u> _____ _____ _____	<u>SAC Voting Member</u> Kent Williams (Ex. Secretary) Richard Sprague (ESH&Q) Deborah Solomon (SRTE) Verne Mooneyhan (SWM/TRU) Scott Germain (NMD) Janice Lawson (NMSP) Geoffrey Smoland (SRNL) Doug Bumgardner (WT) Joel Cantrell (TF) Wes Bryan John Gall (LWO RPD) Tim West (EC&ACP)	<u>✓</u> _____ <u>✓</u> _____ _____ _____ _____ _____ _____ _____ <u>✓</u> _____ _____	<u>Alternate</u> Roy Windham Mary Flora Ruby Parks Robert Minnick Nicholas Miller Durwood Melvin Scott Craft Carol Hunter

Quorum Requirements: SAC = Chair/Vice Chair + 7 other members* = 8 total

***Member may be represented by designated alternate. At least 2 members from each company are required for an official vote.**

CCB = Chair/Vice Chair* + 5 other members = 6 Total May be represented by designated alternate.

Quorum Met SAC: Yes No

Quorum Met CCB: Yes No

ATTENDANCE ROSTER

Teresa Eddy

ERIC Domain

Martha Thompson