

Site ALARA Committee Meeting Minutes

3rd Quarter 2023

Diana Jennings

This meeting was held via Microsoft Teams on December 7, 2023.

Introduction

Kent Williams welcomed everyone to the meeting and opened with a safety topic on situational awareness. Kent stated that there had been many injuries on site recently to include a fall in a hole that resulted in a fractured wrist and a trip over uneven pavement that resulted in a broken arm. He reminded us that it is important to be aware of your surroundings, especially during the holidays with all the distractions that come along with the season. Kent also took this opportunity to remind everyone that they should return their dosimetry prior to leaving for the holidays if they do not plan to be on site until the new year. He then turned the meeting over to Diana Jennings to establish a quorum. A quorum was established for the Site ALARA Committee and the Change Control Board.

The meeting was then turned over to Teresa Eddy for the Environmental ALARA Review.

Environmental ALARA Review

Teresa first discussed the Liquid Discharges for all areas as of September 2023. See attached slide 4. The overall site total is well below the ALARA guides for the year. Kent inquired about L-area projected guide being at 81.5%. Teresa stated that L-Area saw an increase due to a shutdown at Tritium and these numbers were expected and explainable. There was not a need to request an increase. There were no further comments or questions.

Teresa then discussed the Airborne Emissions for all areas as of September 2023. See attached slide 5. All facilities are well within the ALARA Guide for the year. There were no change requests or any comments.

Teresa stated that they expected to have CY 2024 Environmental ALARA Goals available by January 15th and that they would be sent out to the Site ALARA Committee voting members for approval via email as they have been in previous years.

The meeting was then turned over to Diana Jennings for the 3rd Quarter Performance Review.

3rd Quarter Performance Indicators

Diana first presented the M&O Performance Indicators for 3rd Quarter. See attached slide 7. The facilities that were +/- 25% of their ALARA Goals were required to discuss.

Tritium- Joey Huckabee with Tritium Operations stated that he worked with Tritium RPD to look over the dose reports and noted that the number of individuals with badges had increased during the 3rd Quarter. He then stated that he questioned some of the dose assigned to individuals that should have not picked up any dose. He asked the question could it be an issue with the transport of the badges or the background subtraction. David Roberts, Dosimetry Manager, stated that the background subtractions are normal. David asked if it was investigated that some personnel had brought dose from other facilities. It was decided that there would be further investigation into Tritium dose to determine what caused the increase in dose. There was no request for an increased ALARA Goal at this time.

SWM- Terry Pifer stated that there was unplanned activity due to a contaminated shipment from WIPP where most of the work took place in a Radiation Area (RA). Because of the increase in dose, he requested an increase of 1.4 rem to bring the SWM ALARA Goal to a total of 5.0 rem for CY 2023. This request was approved per the board.

INF/SGP - Terry Pifer stated that because dose is difficult to manage in INF because of subcontractors coming from other areas with dose that was picked up from previous facilities. Mike Swain asked what subcontractors they typically see bringing dose in. Terry answered that it is typically construction and radiography. Because of this, they requested an increase of 1.0 rem. This request was approved per the board.

Centerra- Ethan Vanfossen stated that Centerra works closely with K Area RPD, as K Area is where most of Centerra's dose is from, to minimize dose but the increase in both work and personnel has influenced dose totals. Ethan requested an additional 3 rem be added to the current CY 2023 to equal a total of 6 rem for the year. This increase was approved per the board.

LWO Performance Indicators for the 3rd Quarter were presented. See attached slide 8. There were no comments or questions.

BSRA Performance Indicators for the 3rd Quarter were presented. See attached slide 9. There were no comments or questions.

Radiological Events were discussed next. See attached slide 10.

Intakes were reviewed. See attached slide 11. There have been no intakes greater than 100 mrem on site for CY 2023 and no ORPS events during the 3rd Quarter.

2024 ALARA Goals

2024 ALARA Goals were presented for approval. See attached slide 12. The floor was opened for 2024 ALARA Goals to be discussed. Kent requested that someone from K Area discuss the increase from 24.8 rem to 34.4 rem. Robert Entzminger stated that K Area will increase production and increase the number of Glovebox workers during 2024 and therefore the increase in ALARA Goals were required.

John Gall discussed that the SRMC ALARA Goals were not complete yet and would not be approved until December 12th by the ESQB. Once approved, the goals will be shared with the Site ALARA Coordinator to complete the 2024 SRS ALARA Document.

There were no other comments or questions. The 2024 ALARA Goals were approved as shown per the board.

2024 Administrative Control Levels (ACL)

2024 Administrative control levels were presented. See attached slide 13. The general employee SRS ACL was recommended to continue to be 500 mrem/year.

K Area requested that the KIS Glovebox (GB) operators were assigned an ACL of 800 mrem/year. The estimated dose for KIS Glovebox work is 14 rem. With 20 qualified KIS Glovebox operators, that equates to 700 mrem/person/year. Scott Craft praised K Area for the good ALARA practices during KIS operations where they challenged themselves to less than the 800 mrem/year ACL.

John Gall stated that SRMC is considering the CY 2024 ACL for SWPF to be 750-800 mrem/year in comparison to 1000 mrem/year for CY 2023. The final decision will be shared after the ESQB meeting on December 12, 2023.


The general SRS ACL of 500 mrem/year and KIS GB Operator ACL of 800 mrem/year was approved per the board.

Conclusion


Mike Swain applauded the effort during CY 2023 for the work done and ALARA considerations throughout.

There were no other comments. The meeting was adjourned.

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Site ALARA Committee Meeting


Kent Williams
Radiological Protection Department Director

December 7, 2023

Agenda



1. Introduction	Kent Williams
2. Environmental ALARA Update	Teresa Eddy
3. 3rd Quarter Performance Indicators	Diana Jennings
4. 2024 ALARA Goals	
5. 2024 Administrative Control Levels	



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Environmental ALARA Update

Teresa Eddy

Environmental Bioassay Laboratory and Environmental Monitoring Manager

December 7, 2023

2023 Environmental ALARA Guides Status Liquid Discharges



Liquid Discharges ALARA Guide Summary Report for All Areas- September 2023

Area	YTD TED (mrem)	Projected Annual TED (mrem/yr)	Alara Guide (mrem/yr)	YTD % of Guide	Projected % of Guide
A-Area_LIQUID	2.51E-05	3.35E-05	6.00E-05	41.9%	55.9%
F-Area_LIQUID	1.56E-04	2.08E-04	5.20E-04	30.0%	40.0%
F-Tank Farm_LIQUID	4.83E-04	6.44E-04	2.00E-03	24.2%	32.2%
G-Area_LIQUID	7.40E-05	9.87E-05	5.07E-02	0.1%	0.2%
H-Area_LIQUID	2.37E-04	3.16E-04	5.20E-03	4.6%	6.1%
H-ETP_LIQUID	1.70E-04	2.27E-04	1.00E-02	1.7%	2.3%
H-Tank Farm_LIQUID	2.77E-03	3.69E-03	8.65E-03	32.0%	42.6%
K-Area_LIQUID	5.27E-06	7.03E-06	3.09E-04	1.7%	2.3%
L-Area_LIQUID	4.33E-05	5.77E-05	7.08E-05	61.1%	81.5%
S-Area_LIQUID	2.95E-06	3.93E-06	1.65E-04	1.8%	2.4%
Tritium_LIQUID	1.65E-04	2.19E-04	4.21E-04	39.1%	52.1%
Site Totals:	4.13E-03	5.51E-03	7.81E-02	5.3%	7.1%


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2023 Environmental ALARA Guides Status- Airborne Emissions



Airborne Emissions
ALARA Guide Summary Report for All Areas- September 2023

Area	YTD TED (mrem)	Projected Annual TED (mrem/yr)	Alara Guide (mrem/yr)	YTD % of Guide	Projected % of Guide
A-Area_AIR	1.38E-06	1.84E-06	1.70E-03	0.1%	0.1%
C-Area_AIR	5.65E-06	7.53E-06	2.50E-04	2.3%	3.0%
F-Area_AIR	7.74E-05	1.03E-04	1.29E-03	6.0%	8.0%
H-Area_AIR	1.71E-05	2.28E-05	4.96E-03	0.3%	0.5%
H-ETP_AIR	0.00E+00	0.00E+00	1.00E-07	0.0%	0.0%
H-Tank Farm_AIR	2.97E-10	3.96E-10	1.00E-06	0.0%	0.0%
J-Area_AIR	0.00E+00	0.00E+00	1.00E-06	0.0%	0.0%
K-Area_AIR	4.95E-05	6.60E-05	4.05E-03	1.2%	1.6%
L-Area_AIR	4.02E-05	5.36E-05	4.75E-03	0.8%	1.1%
S-Area_AIR	1.08E-05	1.44E-05	6.60E-04	1.6%	2.2%
Tritium_AIR	1.18E-02	1.58E-02	6.21E-02	19.0%	25.4%
Z-Area_AIR	3.20E-09	4.27E-09	5.00E-06	0.1%	0.1%
Site Totals:	1.20E-02	1.60E-02	7.98E-02	15.1%	20.1%



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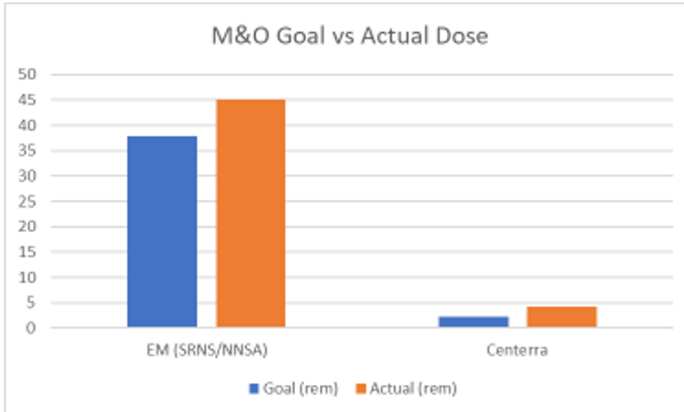
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3rd Quarter Performance Indicators

Diana Jennings
 Site ALARA Coordinator

December 7, 2023

M&O Performance Indicators- 3rd Quarter



	Goal (rem)	Actual (rem)	Percent
EM (SRNS/NNSA)	37.771	45.101	+19.41
Centerra	2.25	4.252	+89.98

Maximum Individual Dose

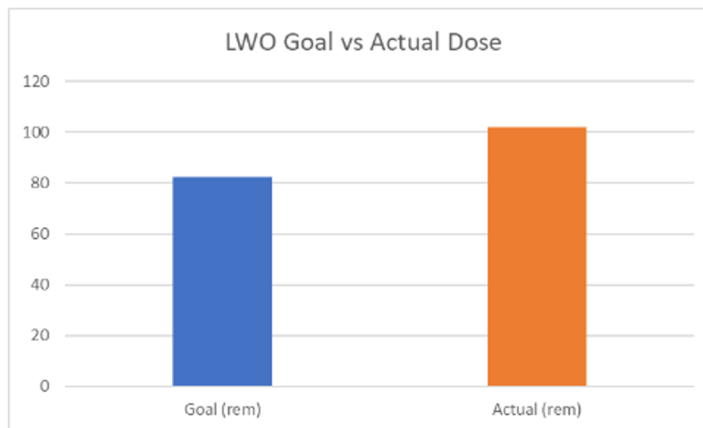
	YTD (rem)
Whole Body	0.500 (KAC) 0.066 (Centerra)
Extremity	8.471 (KAC) 0.066 (Centerra)

Facilities +/- 25%

Facility	Goal (rem)	Actual (rem)	Percent
Tritium	2.075	3.097	+49.25
SWM	2.7	4.362	+61.56
INF/SGP	3	4.565	+52.17
Centerra	2.25	4.265	+89.56

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LWO Performance Indicators- 3rd Quarter



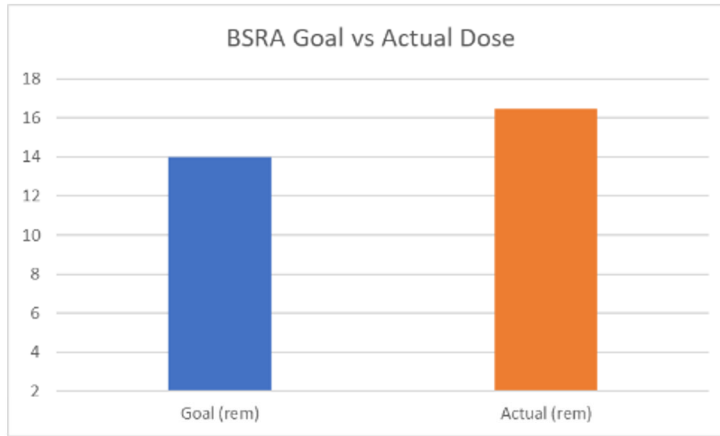
	Goal (rem)	Actual (rem)	Percent
LWO	82.402	101.932	+23.7

Maximum Individual Dose

	YTD (rem)
Whole Body	0.678 (SWPF)
Extremity	6.704 (HTF)

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BSRA Performance Indicators– 3rd Quarter



Maximum Individual Dose

	YTD (rem)
Whole Body	0.264
Extremity	2.546

	Goal (rem)	Actual (rem)	Percent
BSRA	14	16.484	+17.74

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Radiological Events



Title	QTR 3	Event
M&O ORPS PerCon		
M&O Non ORPS PerCon	1	221-H Canyon PCM Alarm due to contaminated Electronic Personal Dosimeter (EPD)
M&O ORPS Rad Mat		
M&O Non ORPS Rad Mat		
SRMC ORPS PerCon		
SRMC Non ORPS PerCon	3	Personnel Clothing Contamination (HTF), Personnel Contamination During Tank 11 riser 5 Slurry Pump Readiness Testing (HTF), Personnel Contamination Case (DWPF)
SRMC ORPS Rad Mat		
SRMC Non ORPS Rad Mat	3	Contamination Found in RRW (DWPF), Vault 4 RBA West Roadway Post Rain Contamination (Saltstone), Contamination Found at the Canister Entry Tunnel during Swiffering (DWPF)
BSRA ORPS PerCon		
BSRA Non ORPS PerCon		
BSRA ORPS Rad Mat		
BSRA Non ORPS Rad Mat		

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Intakes



Title	CY 2023
M&O > 500 mrem	0
M&O > 100 mrem	0
SRMC > 500 mrem	0
SRMC > 100 mrem	0
BSRA > 500 mrem	0
BSRA > 100 mrem	0



2024 ALARA Goals



Facility	2023 ALARA Goal (rem)	2024 ALARA Goal (rem)	Percent Change
HCA/HBL/HOF	12.5	12.071	-3.4
K-Area	24.8	34.4	+38.7
L-Area	3.2	4.0	+25
F-Area	3.1	0.5	-83.9
INF / EC&ACP	4	4	0
Solid Waste Management	3.6	3.6	0
Tritium	2.9	2.41	-16.9
SRNS/NNSA Total	54.1	60.981	+12.7
BSRA	18.5	18.5	0
Centerra	3	9	+200



2024 Administrative Control Levels (ACL)



- General SRS ACL recommendation of 500 mrem.
- KAC requests that all qualified KIS Glovebox (GB) operators are given an ACL of 800 mrem.
 - The estimated exposure of KIS processing is 14 rem.
 - With 20 qualified KIS GB operators, that equates to an average exposure of 700 mrem/person/year.



SITE ALARA COMMITTEE & CHANGE CONTROL BOARD

ATTENDANCE ROSTER

Meeting Date: 12/07/2023

Quarter/Year: 3rd Quarter/ 2023

<u>X</u> <u>X</u>	<u>Chair</u> Mike Swain Lisa Amidon (Vice Chair)	<u>*</u>	<u>Alternate</u> Janice Lawson Bruce Long
	<u>SAC Voting Member</u>		<u>Alternate</u>
<u>X</u> _____ _____ _____	Kent Williams (Ex. Secretary) Richard Sprague (ESH&Q) Deborah Solomon (SRTE)	<u>X</u> _____ _____	Roy Windham
<u>X</u> _____ _____	Anthony Carraway (SWM/TRU) Matt Arnold (NMD)	<u>X</u> <u>X</u> _____	Ruby Parks Terry Pifer Scott Craft
<u>X</u> _____ _____	Lee Sims (NMSP) Geoffrey Smoland (SRNL)	_____ _____ _____	Neil McIntosh Kevin Webster Carol Hunter
<u>X</u> _____ _____ _____	John Gall Rodney Blackmon Glen Johnson Tim West (EC&ACP)	<u>X</u> _____ _____ _____	

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

Quorum Met CCB: Yes

SITE ALARA COMMITTEE & CHANGE CONTROL BOARD

ATTENDANCE ROSTER

Other Meeting Attendees (print name)

Diana Jennings

Pamela Powell

Teresa Eddy

Wendy Furtick

*Doug Bumgardner (for Bruce Long)

[illegible]

Full Name	User Action	Timestamp
Diana Jennings	Joined	12/7/2023, 9:46:24 AM
VANFOSSEN, ETHAN	Joined	12/7/2023, 9:46:39 AM
Robin Farmer	Joined	12/7/2023, 9:46:48 AM
David-W Roberts	Joined	12/7/2023, 9:50:03 AM
Trinidad Bush	Joined	12/7/2023, 9:50:29 AM
+1 803-725-8757	Joined	12/7/2023, 9:50:36 AM
Todd Brantley	Joined	12/7/2023, 9:52:50 AM
+1 803-208-8521	Joined	12/7/2023, 9:52:59 AM
OWEN, AUSTIN A	Joined	12/7/2023, 9:53:49 AM
OWEN, AUSTIN A	Left	12/7/2023, 10:26:57 AM
Carol Hunter	Joined	12/7/2023, 9:54:23 AM
Ruby Parks	Joined	12/7/2023, 9:54:24 AM
Scott Craft	Joined	12/7/2023, 9:54:40 AM
John Gall	Joined	12/7/2023, 9:54:58 AM
CR-730-1B-139 (Guest)	Joined	12/7/2023, 9:55:13 AM
Jeremy Mathis	Joined	12/7/2023, 9:55:23 AM
Jamie Willing	Joined	12/7/2023, 9:55:36 AM
Phillip Owens	Joined	12/7/2023, 9:56:38 AM
Terry Pifer	Joined	12/7/2023, 9:57:19 AM
Paul Bordon	Joined	12/7/2023, 9:57:43 AM
+1 803-557-6194	Joined	12/7/2023, 9:57:46 AM
Douglas Bumgardner	Joined	12/7/2023, 9:57:55 AM
Douglas Bumgardner	Left	12/7/2023, 9:59:20 AM
Douglas Bumgardner	Joined	12/7/2023, 9:59:57 AM
Joy Epps	Joined	12/7/2023, 9:58:41 AM
Joseph Huckabee	Joined	12/7/2023, 9:58:45 AM
Kent Rosenberger	Joined	12/7/2023, 9:58:56 AM
Ivonne Amidon	Joined	12/7/2023, 9:59:22 AM
Robert Entzminger	Joined	12/7/2023, 10:00:21 AM
Robert Entzminger	Left	12/7/2023, 10:02:47 AM
Robert Entzminger	Joined	12/7/2023, 10:03:02 AM
Colleen Davis	Joined	12/7/2023, 10:00:31 AM
Matthew Arnold	Joined	12/7/2023, 10:00:58 AM
+1 803-646-1045	Joined	12/7/2023, 10:01:20 AM
Jewel Lenderman	Joined	12/7/2023, 10:04:32 AM