

## 1st Quarter 2024 Site ALARA Committee Meeting Minutes

June 3, 2024

Prepared by Diana Jennings

### **Introduction**

Kent Williams welcomed everyone to the meeting. As the safety topic, Nick Miller discussed the 100 Days of Summer campaign and asked everyone to review the publications to keep everyone aware of ways to stay safe during the Summer. A quorum was then established for the Site ALARA Committee and the Change Control Board. See attached meeting roster.

### **Environmental ALARA Update**

Eric Doman, Environmental ALARA Chairperson, discussed the Liquid Discharges and Airborne Emissions as of March 2024. See slides 3-5. Kent asked about the projections for A Area and H Area. Eric explained that releases and doses are projected for the calendar year based on the year to-date results. Due to the way projections are made and with challenging ALARA guides, it is not uncommon that early in a calendar year, an area may be projected to exceed the ALARA guide. This may occur when a source with an analyte (with a higher dose factor) that has occasional detects experiences a detect early in the year. Because of they did not request any changes at this time. Nick then asked about Tritium and the recent HP-50 issue. Eric said that they are monitoring it closely and that flow has slowed considerably. Data from that will be on the 2<sup>nd</sup> Quarter (June 2024) report.

### **External Dosimetry Presentation – Increase of Low-Level Positives Dose Results 3<sup>rd</sup> and 4<sup>th</sup> Quarter 2023**

The meeting was then turned over to Joy Epps, External Dosimetrist, to discuss the increase in low-level positive dose results seen in the 3<sup>rd</sup> and 4<sup>th</sup> Quarter of 2023. See slides 6-8. Joy first discussed the increase in beta-gamma positives seen during the 3<sup>rd</sup> Quarter. Rick Sprague asked how we document these changes to the background subtraction. Wendy Furtick, Health Physics Services Manager, explained that most changes are tracked by a STAR item and are updated within the technical documents. She then explained the historical significance of the ‘take home’ dosimetry program and how the background subtraction is developed. Wendy also discussed how our dosimetry program at SRS is DOELAP accredited, and explained how External Dosimetry models the background subtraction calculations after DOELAP’s background calculation process.

Next, Joy discussed the increase in positive neutron dose readings during the 4<sup>th</sup> Quarter. Lee Sims asked if this was an issue that was seen within the blind spike program. David Roberts, Dosimetry Services Manager, explained that the Blind Spike Program worked well when identifying the higher doses, but the lower doses such as 30-40 mrem are harder to identify. David then explained how SRS has a unique source term that was different than what Landauer

had experienced so they had to update their program accordingly. Rick asked what changed between the 3<sup>rd</sup> and 4<sup>th</sup> Quarter. David explained that Landauer had a large amount of personnel turn over during this time. During a field observation it was discovered that there was an issue with the technical personnel training during the manual reading process. Landauer addressed this and saw improvement. David also stated that with the introduction of the new CR-39 reader that Joy discussed, we should see better results because it is an automated reader and therefore removes the human error. Rick also asked if this was an issue that was also seen when the dosimetry processing was done at SRS. David stated that it was also an issue with processing on site because of the unique source term, and imperfections in the dosimeters could be mistaken for neutron tracks. Rick then asked how transparent External Dosimetry is with the field when changing and updating personnel dose. David explained the Radiation Exposure Data Investigation (REDI) process, contested dose procedure and other tools that keep the field aware of personnel doses, as well as the records that are kept within personnel dosimetry files.

### **1<sup>st</sup> Quarter Performance Indicators**

The meeting was then turned over to Diana Jennings to discuss the 1<sup>st</sup> Quarter Performance Indicators. M&O goals versus actual dose was discussed first. See slide 10. The following facilities were greater than +/-25% of the ALARA Goal and were required to discuss.

HCA- Matthew Arnold stated that FCA, 6.3 Dissolver, ABD work was delayed. They expect to see dose increase once these projects start later in the year and do not request to change their ALARA Goals at this time.

K-Area – Lee Sims stated that they planned to get higher dose from a HEPA filter change out job that was performed, however the dose was lower than expected due to good ALARA practices. Lower doses than expected were seen on material processing and mining as well. K Area was also affected by the delayed FCA work. No changes requested at this time.

L-Area – Jeremy Mathis stated that the Mark 18 Cask processing was delayed but is expected to start during the 3<sup>rd</sup> Quarter of 2024. They were also affected by the 6.3 Dissolver delays. No changes requested at this time.

Tritium- Ronald Creech stated that they improved the cutter head process which resulted in a lower dose. No changes requested at this time.

SWM- Anthony Carraway noted that their dose was slightly higher than the ALARA Goal and that may be attributed to the number of support personnel such as construction that works not only in E Area but other facilities as well throughout the quarter. No changes were requested at this time.

CLB- Terry Pifer stated that they saw more neutron dose than was expected for CLB and they are currently working with External Dosimetry to investigate the dose. No changes were requested at this time.

Centerra- Ethan Vanfossen stated that training and clearances delayed many new Centerra officers from entering the field which lowered the overall personnel dose. They expect to see dose totals increase once they have entered the field so no changes to ALARA Goals are requested at this time.

LWO 1<sup>st</sup> Quarter Performance Indicators were presented. See slide 11. No comments or questions.

BSRA 1<sup>st</sup> Quarter Performance indicators were presented. See slide 12. Trinidad Bush discussed that the Mark 18 Cask processing was delayed which was the cause for the lower dose. This work is expected to start later this year, so no changes are requested at this time.

Radiological Events that occurred during the 1<sup>st</sup> Quarter were then discussed. See slide 13. Nick Miller asked if this is higher than we have usually seen. Diana stated that it is higher totals than usual, however the majority of them were caused by naturally occurring things that we do not have much control of, such as the five contaminated wasps' nests that were discovered at F Tank Farm. Nick then asked is there anything that was learned that can be shared with the group. John Gall stated that that they have continued to look for contaminated wasps' nests and bird nests, which we have seen in the past. He also discussed how it is important to try and fix any contamination that may be in areas where rainwater may intrude so that it does not get in unexpected areas as it did with these incidents.

There have been no intakes of radioactive material greater than 100 mrem for CY 2024. See slide 14.

There were no other comments or concerns, and the meeting was adjourned.

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Site ALARA Committee Meeting


Kent Williams

Radiological Protection Department Director

June 3, 2024


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Agenda




|   |                |
|---|----------------|
| 1. Introduction                                   | Kent Williams  |
| 2. Environmental ALARA Update                     | Eric Doman     |
| 3. External Dosimetry Presentation                | Joy Epps       |
| 4. 1 <sup>st</sup> Quarter Performance Indicators | Diana Jennings |


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Environmental ALARA Update

Eric Doman  
Environmental Compliance & Area Completion Projects

June 3, 2024

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2024 Environmental ALARA Guides Status- Liquid Discharges




Liquid Discharges

ALARA Guide Summary Report for All Areas – March 2024

March 2024 -- MONTHLY RADIOACTIVE RELEASES REPORT


Liquid Discharges  
ALARA Guide Summary Report for All Areas  
March 2024

| Area               | YTD TED (mrem) | Projected Annual TED (mrem/yr) | Alara Guide (mrem/yr) | YTD % of Guide | Projected % of Guide |
|--------------------|----------------|--------------------------------|-----------------------|----------------|----------------------|
| A-Area_LIQUID      | 8.73E-06       | 3.49E-05                       | 6.00E-05              | 14.5%          | 58.2%                |
| F-Area_LIQUID      | 1.79E-06       | 7.15E-06                       | 5.86E-04              | 0.3%           | 1.2%                 |
| F-Tank Farm_LIQUID | 5.47E-06       | 2.19E-05                       | 2.00E-03              | 0.3%           | 1.1%                 |
| G-Area_LIQUID      | 1.42E-05       | 5.69E-05                       | 4.16E-02              | 0.0%           | 0.1%                 |
| H-Area_LIQUID      | 1.07E-04       | 4.27E-04                       | 5.20E-03              | 2.1%           | 8.2%                 |
| H-ETP_LIQUID       | 5.58E-04       | 2.23E-03                       | 1.00E-02              | 5.6%           | 22.3%                |
| H-Tank Farm_LIQUID | 1.08E-03       | 4.33E-03                       | 8.65E-03              | 12.5%          | 50.1%                |
| K-Area_LIQUID      | 0.00E+00       | 0.00E+00                       | 3.60E-04              | 0.0%           | 0.0%                 |
| L-Area_LIQUID      | 0.00E+00       | 0.00E+00                       | 6.32E-04              | 0.0%           | 0.0%                 |
| S-Area_LIQUID      | 2.60E-07       | 1.04E-06                       | 1.65E-04              | 0.2%           | 0.6%                 |
| Tritium_LIQUID     | 1.16E-05       | 4.63E-05                       | 1.59E-03              | 0.7%           | 2.9%                 |
| Site Totals:       | 1.82E-03       | 7.27E-03                       | 7.08E-02              | 2.6%           | 10.3%                |

  
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2024 Environmental ALARA Guides Status- Airborne Emissions



Airborne Emissions

ALARA Guide Summary Report for All Areas – March 2024


March 2024 -- MONTHLY RADIOACTIVE RELEASES REPORT

Airborne Emissions

ALARA Guide Summary Report for All Areas

March 2024


| Area            | YTD TED (mrem) | Projected Annual TED (mrem/yr) | Alara Guide (mrem/yr) | YTD % of Guide | Projected % of Guide |
|-----------------|----------------|--------------------------------|-----------------------|----------------|----------------------|
| A-Area_AIR      | 0.00E+00       | 0.00E+00                       | 1.70E-03              | 0.0%           | 0.0%                 |
| C-Area_AIR      | 5.79E-07       | 2.32E-06                       | 4.50E-04              | 0.1%           | 0.5%                 |
| F-Area_AIR      | 7.03E-06       | 2.81E-05                       | 6.26E-04              | 1.1%           | 4.5%                 |
| H-Area_AIR      | 3.53E-06       | 1.41E-05                       | 4.96E-03              | 0.1%           | 0.3%                 |
| H-ETP_AIR       | 0.00E+00       | 0.00E+00                       | 1.00E-07              | 0.0%           | 0.0%                 |
| H-Tank Farm_AIR | 3.36E-09       | 1.34E-08                       | 1.00E-06              | 0.3%           | 1.3%                 |
| J-Area_AIR      | 0.00E+00       | 0.00E+00                       | 1.00E-06              | 0.0%           | 0.0%                 |
| K-Area_AIR      | 7.96E-06       | 3.18E-05                       | 4.05E-03              | 0.2%           | 0.8%                 |
| L-Area_AIR      | 9.54E-06       | 3.82E-05                       | 4.75E-03              | 0.2%           | 0.8%                 |
| S-Area_AIR      | 4.76E-08       | 1.90E-07                       | 6.60E-04              | 0.0%           | 0.0%                 |
| Tritium_AIR     | 3.85E-03       | 1.54E-02                       | 2.66E-01              | 1.4%           | 5.8%                 |
| Z-Area_AIR      | 0.00E+00       | 0.00E+00                       | 5.00E-06              | 0.0%           | 0.0%                 |
| Site Totals:    | 3.88E-03       | 1.55E-02                       | 2.83E-01              | 1.4%           | 5.5%                 |




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External Dosimetry

Increase of Low-Level Positive Dose Results 3<sup>rd</sup> and 4<sup>th</sup> Quarter 2023

Joy Epps

External Dosimetrist

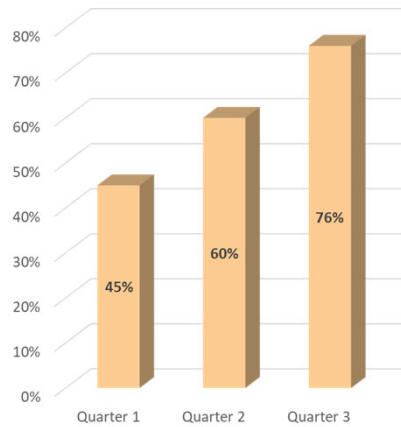
June 3, 2024

### Q3 2023 – Increase of Positive Beta/Gamma Dose Results



- The SRS External Dosimetry Group observed an increase in the number of positive low-level beta/gamma dose assignments in 3<sup>rd</sup> Quarter.
- Evaluated:
  - Transit controls
  - Area monitoring dosimeters
  - Dosimeter storage controls
  - Background subtraction rate
- Landauer and SRS External Dosimetry worked together to develop a more efficient program for background subtraction that uses controls provided by Landauer. This program aligns with the other DOE sites who use Landauer dosimetry. This change will begin in Q3 2024.

Positive Doses per Quarter 2023



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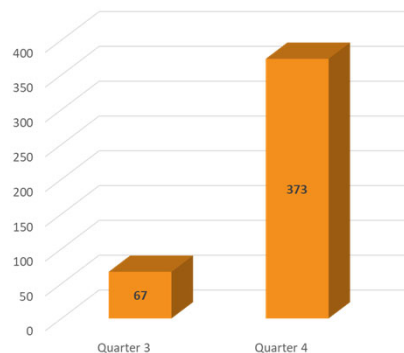
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### Q4 2023 – Increase of Positive Neutron Dose Results



- External Dosimetry observed an increase in positive neutron dose results in 4<sup>th</sup> Quarter.
- Majority of doses were between 30 - 40 mrem (Neutron MRD is 30 mrem).
- 36 were selected for reanalysis:
  - EPD to DOR comparison
  - Reanalysis yielded lower results.
- 163 employees from 2<sup>nd</sup> evaluation:
  - Positive neutron dose (30-40mrem)
  - No RWP sign-ins
  - No dose expected from previous history.
  - 0 mrem neutron dose assigned via REDI
- Landauer provided Corrective Action Plan to address technician proficiency issues with analyzing SRS CR-39s.
- A new CR-39 reader is in testing phase which is expected to improve accuracy of track determinations and reduce processing and reporting times significantly.

Positive Neutron Dose Results Q3 vs. Q4 2023



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1st Quarter Performance Indicators


Diana Jennings

Site ALARA Coordinator

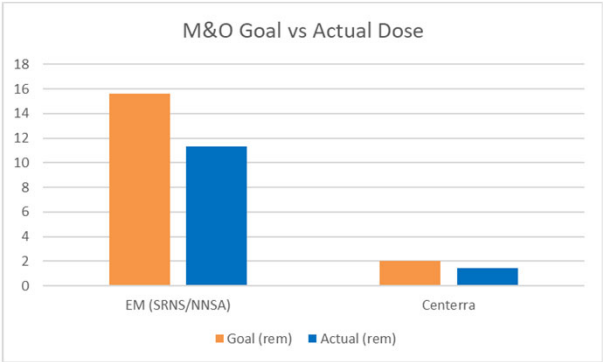
June 3, 2024

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M&O Performance Indicators – 1<sup>st</sup> Quarter



M&O Goal vs Actual Dose




|                | Goal (rem) | Actual (rem) | Percent |
|----------------|------------|--------------|---------|
| EM (SRNS/NNSA) | 15.645     | 11.328       | -27.59  |
| Centerra       | 2          | 1.448        | -27.6   |

Maximum Individual Dose

|            | YTD (rem)                       |
|------------|---------------------------------|
| Whole Body | 0.247 (KAC)<br>0.177 (Centerra) |
| Extremity  | 3.861 (KAC)<br>0.177 (Centerra) |

Facilities +/- 25%

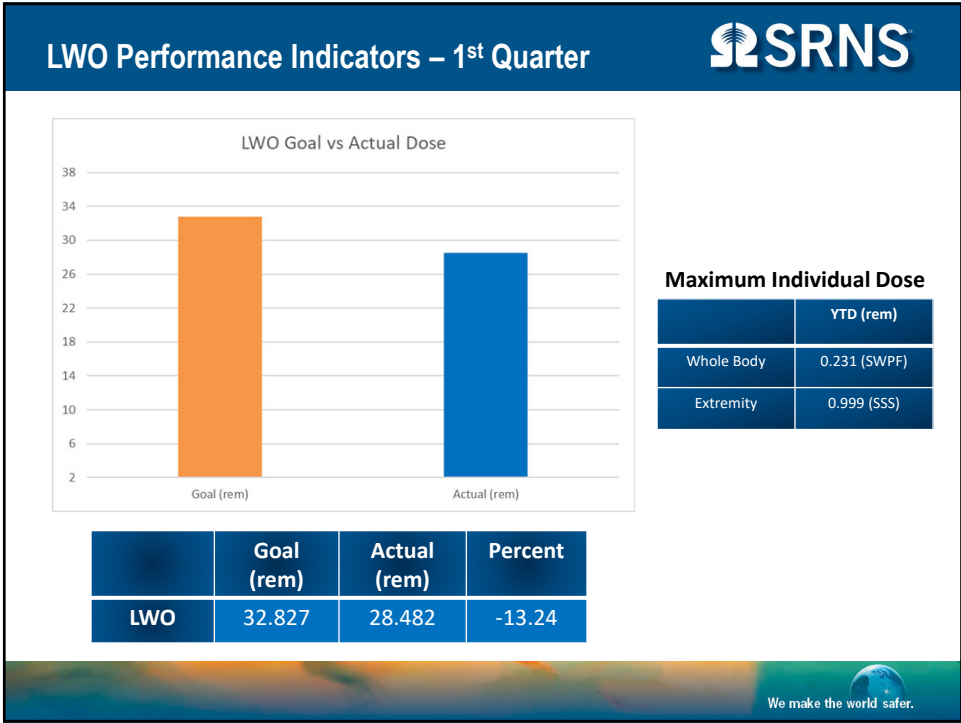
| Facility | Goal (rem) | Actual (rem) | Percent |
|----------|------------|--------------|---------|
| HCA      | 3.02       | 1.582        | -47.62  |
| K-Area   | 8.85       | 6.134        | -30.69  |
| L-Area   | 1          | 0.395        | -60.5   |
| Tritium  | 0.75       | 0.518        | -30.93  |
| SWM      | 0.9        | 1.149        | +27.67  |
| CLB      | 0.125      | 0.455        | +264    |
| Centerra | 2          | 1.448        | -27.6   |



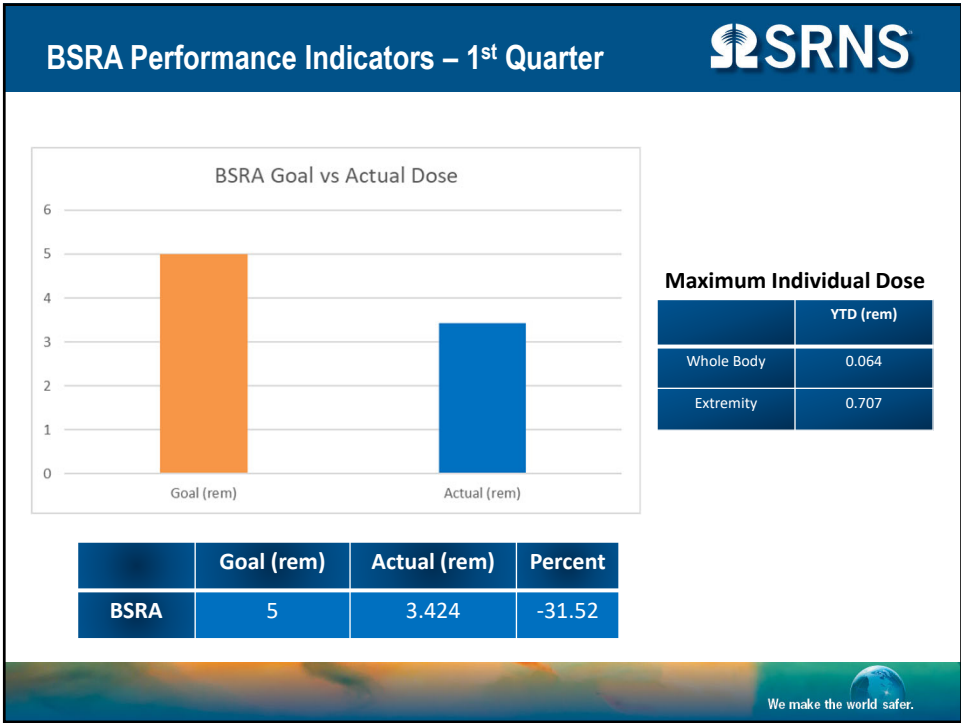
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| Radiological Events   |       |  | SRNS |
|-----------------------|-------|--|------|
| Title                 | QTR 1 | Event  |      |
| M&O ORPS PerCon       |       |  |      |
| M&O Non ORPS PerCon   | 1     | L-Area Disassembly Particle Contamination  |      |
| M&O ORPS Rad Mat      |       |  |      |
| M&O Non ORPS Rad Mat  |       |  |      |
| SRMC ORPS PerCon      | 2     | Personnel Contamination Event (FTF), Total contamination levels indeterminate due to high dose rates (HTF)   |      |
| SRMC Non ORPS PerCon  |       |  |      |
| SRMC ORPS Rad Mat     |       |  |      |
| SRMC Non ORPS Rad Mat | 8     | (5) Contaminated Wasps Nests in FTF, Contamination detected during rain runoff surveys (FTF), Contaminated Water Intrusion from degraded overhead expansion joint (DWPF), Contamination found in RBA during after rain surveys (Saltstone) |      |
| BSRA ORPS PerCon      |       |  |      |
| BSRA Non ORPS PerCon  |       |  |      |
| BSRA ORPS Rad Mat     |       |  |      |
| BSRA Non ORPS Rad Mat |       |  |      |

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| Intakes         |         |   | SRNS |
|-----------------|---------|---|------|
| Title           | CY 2024 |   |      |
| 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 |      |

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# SITE ALARA COMMITTEE & CHANGE CONTROL BOARD

## ATTENDANCE ROSTER

Meeting Date: June 3, 2024

Quarter/Year: 1st Qtr/2024

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

|                                       |               |
|---------------------------------------|---------------|
| *Nick Miller serving as meeting chair | David Roberts |
| Diana Jennings                        |               |
| Pamela Powell                         |               |
| Wendy Furtick                         |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |
|                                       |               |

Additional meeting attendees via Microsoft Teams on the following page.

## 1. Summary

|                         |                              |
|-------------------------|------------------------------|
| Meeting title           | Site ALARA Committee Meeting |
| Attended participants   | 48                           |
| Start time              | 6/03/24, 9:46:58 AM          |
| End time                | 6/03/24, 11:15:45 AM         |
| Meeting duration        | 1h 28m 47s                   |
| Average attendance time | 1h 4m 44s                    |

## 2. Participants

| Name                       | First Join          | Last Leave           | In-Meeting Email                      |
|----------------------------|---------------------|----------------------|---------------------------------------|
| Diana Jennings             | 6/03/24, 9:47:28 AM | 6/03/24, 11:14:32 AM | 1h 27m 4s Diana.Jennings@srs.gov      |
| VANFOSSSEN, ETHAN          | 6/03/24, 9:47:02 AM | 6/03/24, 11:13:51 AM | 1h 26m 49s ethan.vanfossen@srs.gov    |
| Trinidad Bush              | 6/03/24, 9:47:08 AM | 6/03/24, 11:13:56 AM | 1h 26m 47s trinidad.bush@srnl.doe.gov |
| Ronald Creech              | 6/03/24, 9:47:32 AM | 6/03/24, 11:13:53 AM | 1h 26m 21s Ronald.Creech@srs.gov      |
| Teresa Eddy                | 6/03/24, 9:47:57 AM | 6/03/24, 11:13:52 AM | 1h 25m 55s teresa.eddy@srs.gov        |
| +18037258757 (Unverified)  | 6/03/24, 9:48:26 AM | 6/03/24, 11:04:50 AM | 1h 16m 23s                            |
| Page Courtney              | 6/03/24, 9:48:31 AM | 6/03/24, 11:15:20 AM | 1h 26m 48s page.courtney@srs.gov      |
| Joy Epps                   | 6/03/24, 9:48:56 AM | 6/03/24, 11:13:54 AM | 1h 22m 54s Joy.Epps@srs.gov           |
| Derek Colligan             | 6/03/24, 9:51:17 AM | 6/03/24, 11:13:53 AM | 1h 22m 35s Derek.Colligan@srs.gov     |
| Scott Craft                | 6/03/24, 9:52:39 AM | 6/03/24, 11:13:53 AM | 1h 21m 14s scott.craft@srs.gov        |
| +18035573267 (Unverified)  | 6/03/24, 9:53:02 AM | 6/03/24, 11:15:45 AM | 1h 22m 43s                            |
| Eric Doman                 | 6/03/24, 9:53:29 AM | 6/03/24, 11:13:59 AM | 1h 20m 30s Eric.Doman@srs.gov         |
| Terry Pifer                | 6/03/24, 9:53:41 AM | 6/03/24, 11:13:51 AM | 1h 20m 10s terry.pifer@srs.gov        |
| +18039528253 (Unverified)  | 6/03/24, 9:53:47 AM | 6/03/24, 11:13:52 AM | 1h 20m 5s                             |
| Ashley Eskew               | 6/03/24, 9:54:17 AM | 6/03/24, 11:13:39 AM | 1h 19m 21s Ashley.eskew@srs.gov       |
| Debd Solomon               | 6/03/24, 9:54:51 AM | 6/03/24, 11:13:59 AM | 1h 19m 7s debd.solomon@srs.gov        |
| +18032088098 (Unverified)  | 6/03/24, 9:54:54 AM | 6/03/24, 11:14:02 AM | 1h 19m 7s                             |
| Todd Brantley              | 6/03/24, 9:55:14 AM | 6/03/24, 11:13:56 AM | 1h 18m 41s todd.brantley@srs.gov      |
| CR-730-1B-139 (Unverified) | 6/03/24, 9:55:18 AM | 6/03/24, 9:59:14 AM  | 3m 55s                                |
| Jeremy Mathis              | 6/03/24, 9:55:28 AM | 6/03/24, 11:13:52 AM | 1h 18m 23s Jeremy.Mathis@srs.gov      |
| Carol Hunter               | 6/03/24, 9:55:36 AM | 6/03/24, 11:13:56 AM | 1h 18m 19s carol.hunter@srs.gov       |
| Rhianna Hubbard            | 6/03/24, 9:55:36 AM | 6/03/24, 11:14:02 AM | 1h 18m 26s Rhianna.Hubbard@srs.gov    |
| Gregory Walkup             | 6/03/24, 9:56:35 AM | 6/03/24, 11:13:57 AM | 1h 17m 22s gregory.walkup@srs.gov     |
| Paul Bordon                | 6/03/24, 9:57:33 AM | 6/03/24, 11:14:05 AM | 1h 16m 31s paul.bordon@srs.gov        |

|                          |                      |                      |            |                               |
|--------------------------|----------------------|----------------------|------------|-------------------------------|
| Dennis Hadlock           | 6/03/24, 9:57:51 AM  | 6/03/24, 11:13:57 AM | 1h 16m 5s  | dennis.hadlock@srs.gov        |
| Kevin Webster            | 6/03/24, 9:58:08 AM  | 6/03/24, 11:13:57 AM | 1h 15m 49s | kevin.webster@srnl.doe.gov    |
| Megan Corbin             | 6/03/24, 9:58:24 AM  | 6/03/24, 11:13:59 AM | 1h 15m 35s | Megan.Corbin@srs.gov          |
| Bruce Long               | 6/03/24, 9:58:46 AM  | 6/03/24, 11:13:52 AM | 1h 15m 5s  | bruce.long@srs.gov            |
| John Gall                | 6/03/24, 9:58:59 AM  | 6/03/24, 11:14:03 AM | 1h 15m 4s  | John.Gall@srs.gov             |
| Robert Entzminger        | 6/03/24, 9:59:05 AM  | 6/03/24, 11:13:51 AM | 1h 14m 46s | robert.entzminger@srs.gov     |
| CR-730-1B-139 (Unverifie | 6/03/24, 9:59:34 AM  | 6/03/24, 11:14:36 AM | 1h 15m 2s  |                               |
| Matthew Arnold           | 6/03/24, 9:59:34 AM  | 6/03/24, 10:57:44 AM | 58m 10s    | matthew.arnold@srs.gov        |
| Phillip Owens            | 6/03/24, 9:59:35 AM  | 6/03/24, 11:13:57 AM | 1h 14m 21s | phillip.owens@srs.gov         |
| Stephanie Blazer         | 6/03/24, 10:00:00 AM | 6/03/24, 11:13:59 AM | 1h 13m 59s | Stephanie.Blazer@srs.gov      |
| Geoffrey Smoland         | 6/03/24, 10:00:12 AM | 6/03/24, 10:51:08 AM | 50m 56s    | geoffrey.smoland@srnl.doe.gov |
| Nicholas02 Miller        | 6/03/24, 10:01:27 AM | 6/03/24, 10:03:03 AM | 1m 35s     | Nicholas02.Miller@srs.gov     |
| OWEN, AUSTIN A           | 6/03/24, 10:02:27 AM | 6/03/24, 11:14:01 AM | 1h 11m 33s | Austin02.Owen@srs.gov         |
| Anthony Carraway         | 6/03/24, 10:02:30 AM | 6/03/24, 11:14:12 AM | 1h 11m 41s | anthony.carraway@srs.gov      |
| Roy Windham              | 6/03/24, 10:02:48 AM | 6/03/24, 10:04:16 AM | 1m 28s     | roy.windham@srs.gov           |
| David-W Roberts          | 6/03/24, 10:03:00 AM | 6/03/24, 10:04:28 AM | 1m 27s     | david-w.roberts@srs.gov       |
| Richard Sprague          | 6/03/24, 10:05:29 AM | 6/03/24, 10:06:27 AM | 58s        | richard.sprague@srs.gov       |
| Joseph Brutto            | 6/03/24, 10:05:42 AM | 6/03/24, 11:02:40 AM | 56m 58s    | Joseph.Brutto@srs.gov         |
| ACHENBACH, GERALD M      | 6/03/24, 10:06:31 AM | 6/03/24, 11:13:53 AM | 1h 7m 22s  | Gerald.Achenbach@srs.gov      |
| +18032088095 (Unverifie  | 6/03/24, 10:06:41 AM | 6/03/24, 10:50:06 AM | 43m 25s    |                               |
| NELSON, ROBERT K         | 6/03/24, 10:18:53 AM | 6/03/24, 11:13:53 AM | 54m 59s    | Robert.Nelson@srs.gov         |
| Ronald Sykes             | 6/03/24, 10:31:24 AM | 6/03/24, 11:14:00 AM | 42m 36s    | ronald.sykes@srs.gov          |
| Jamie Willing            | 6/03/24, 10:48:36 AM | 6/03/24, 11:13:59 AM | 25m 23s    | jamie.willing@srs.gov         |
| +18033359296 (Unverifie  | 6/03/24, 11:06:37 AM | 6/03/24, 11:13:58 AM | 7m 21s     |                               |

### 3. In-Meeting Activities

| Name                    | Join Time           | Leave Time           | Duration   | Email                      |
|-------------------------|---------------------|----------------------|------------|----------------------------|
| Diana Jennings          | 6/03/24, 9:47:28 AM | 6/03/24, 11:14:32 AM | 1h 27m 4s  | Diana.Jennings@srs.gov     |
| VANFOSSEN, ETHAN        | 6/03/24, 9:47:02 AM | 6/03/24, 11:13:51 AM | 1h 26m 49s | ethan.vanfossen@srs.gov    |
| Trinidad Bush           | 6/03/24, 9:47:08 AM | 6/03/24, 11:13:56 AM | 1h 26m 47s | trinidad.bush@srnl.doe.gov |
| Ronald Creech           | 6/03/24, 9:47:32 AM | 6/03/24, 11:13:53 AM | 1h 26m 21s | Ronald.Creech@srs.gov      |
| Teresa Eddy             | 6/03/24, 9:47:57 AM | 6/03/24, 11:13:52 AM | 1h 25m 55s | teresa.eddy@srs.gov        |
| +18037258757 (Unverifie | 6/03/24, 9:48:26 AM | 6/03/24, 11:04:50 AM | 1h 16m 23s |                            |
| Page Courtney           | 6/03/24, 9:48:31 AM | 6/03/24, 11:15:20 AM | 1h 26m 48s | page.courtney@srs.gov      |



|                          |                      |                      |                                       |
|--------------------------|----------------------|----------------------|---------------------------------------|
| Joy Epps                 | 6/03/24, 9:48:56 AM  | 6/03/24, 9:50:26 AM  | 1m 29s Joy.Epps@srs.gov               |
| Joy Epps                 | 6/03/24, 9:52:28 AM  | 6/03/24, 11:13:54 AM | 1h 21m 25s Joy.Epps@srs.gov           |
| Derek Colligan           | 6/03/24, 9:51:17 AM  | 6/03/24, 11:13:53 AM | 1h 22m 35s Derek.Colligan@srs.gov     |
| Scott Craft              | 6/03/24, 9:52:39 AM  | 6/03/24, 11:13:53 AM | 1h 21m 14s scott.craft@srs.gov        |
| +18035573267 (Unverifie  | 6/03/24, 9:53:02 AM  | 6/03/24, 11:15:45 AM | 1h 22m 43s                            |
| Eric Doman               | 6/03/24, 9:53:29 AM  | 6/03/24, 11:13:59 AM | 1h 20m 30s Eric.Doman@srs.gov         |
| Terry Pifer              | 6/03/24, 9:53:41 AM  | 6/03/24, 11:13:51 AM | 1h 20m 10s terry.pifer@srs.gov        |
| +18039528253 (Unverifie  | 6/03/24, 9:53:47 AM  | 6/03/24, 11:13:52 AM | 1h 20m 5s                             |
| Ashley Eskew             | 6/03/24, 9:54:17 AM  | 6/03/24, 11:13:39 AM | 1h 19m 21s Ashley.eskew@srs.gov       |
| Debd Solomon             | 6/03/24, 9:54:51 AM  | 6/03/24, 11:13:59 AM | 1h 19m 7s debd.solomon@srs.gov        |
| +18032088098 (Unverifie  | 6/03/24, 9:54:54 AM  | 6/03/24, 11:14:02 AM | 1h 19m 7s                             |
| Todd Brantley            | 6/03/24, 9:55:14 AM  | 6/03/24, 11:13:56 AM | 1h 18m 41s todd.brantley@srs.gov      |
| CR-730-1B-139 (Unverifie | 6/03/24, 9:55:18 AM  | 6/03/24, 9:59:14 AM  | 3m 55s                                |
| Jeremy Mathis            | 6/03/24, 9:55:28 AM  | 6/03/24, 11:13:52 AM | 1h 18m 23s Jeremy.Mathis@srs.gov      |
| Carol Hunter             | 6/03/24, 9:55:36 AM  | 6/03/24, 11:13:56 AM | 1h 18m 19s carol.hunter@srs.gov       |
| Rhianna Hubbard          | 6/03/24, 9:55:36 AM  | 6/03/24, 11:14:02 AM | 1h 18m 26s Rhianna.Hubbard@srs.gov    |
| Gregory Walkup           | 6/03/24, 9:56:35 AM  | 6/03/24, 11:13:57 AM | 1h 17m 22s gregory.walkup@srs.gov     |
| Paul Bordon              | 6/03/24, 9:57:33 AM  | 6/03/24, 11:14:05 AM | 1h 16m 31s paul.bordon@srs.gov        |
| Dennis Hadlock           | 6/03/24, 9:57:51 AM  | 6/03/24, 11:13:57 AM | 1h 16m 5s dennis.hadlock@srs.gov      |
| Kevin Webster            | 6/03/24, 9:58:08 AM  | 6/03/24, 11:13:57 AM | 1h 15m 49s kevin.webster@srnl.doe.gov |
| Megan Corbin             | 6/03/24, 9:58:24 AM  | 6/03/24, 11:13:59 AM | 1h 15m 35s Megan.Corbin@srs.gov       |
| Bruce Long               | 6/03/24, 9:58:46 AM  | 6/03/24, 11:13:52 AM | 1h 15m 5s bruce.long@srs.gov          |
| John Gall                | 6/03/24, 9:58:59 AM  | 6/03/24, 11:14:03 AM | 1h 15m 4s John.Gall@srs.gov           |
| Robert Entzminger        | 6/03/24, 9:59:05 AM  | 6/03/24, 11:13:51 AM | 1h 14m 46s robert.entzminger@srs.gov  |
| CR-730-1B-139 (Unverifie | 6/03/24, 9:59:34 AM  | 6/03/24, 11:14:36 AM | 1h 15m 2s                             |
| Matthew Arnold           | 6/03/24, 9:59:34 AM  | 6/03/24, 10:57:44 AM | 58m 10s matthew.arnold@srs.gov        |
| Phillip Owens            | 6/03/24, 9:59:35 AM  | 6/03/24, 11:13:57 AM | 1h 14m 21s phillip.owens@srs.gov      |
| Stephanie Blazer         | 6/03/24, 10:00:00 AM | 6/03/24, 11:13:59 AM | 1h 13m 59s Stephanie.Blazer@srs.gov   |
| Geoffrey Smoland         | 6/03/24, 10:00:12 AM | 6/03/24, 10:51:08 AM | 50m 56s geoffrey.smoland@srnl.doe.gov |
| Nicholas02 Miller        | 6/03/24, 10:01:27 AM | 6/03/24, 10:03:03 AM | 1m 35s Nicholas02.Miller@srs.gov      |
| OWEN, AUSTIN A           | 6/03/24, 10:02:27 AM | 6/03/24, 11:14:01 AM | 1h 11m 33s Austin02.Owen@srs.gov      |
| Anthony Carraway         | 6/03/24, 10:02:30 AM | 6/03/24, 11:14:12 AM | 1h 11m 41s anthony.carraway@srs.gov   |
| Roy Windham              | 6/03/24, 10:02:48 AM | 6/03/24, 10:04:16 AM | 1m 28s roy.windham@srs.gov            |
| David-W Roberts          | 6/03/24, 10:03:00 AM | 6/03/24, 10:04:28 AM | 1m 27s david-w.roberts@srs.gov        |

|                         |                      |                      |           |                          |
|-------------------------|----------------------|----------------------|-----------|--------------------------|
| Richard Sprague         | 6/03/24, 10:05:29 AM | 6/03/24, 10:06:27 AM | 58s       | richard.sprague@srs.gov  |
| Joseph Brutto           | 6/03/24, 10:05:42 AM | 6/03/24, 11:02:40 AM | 56m 58s   | Joseph.Brutto@srs.gov    |
| ACHENBACH, GERALD M     | 6/03/24, 10:06:31 AM | 6/03/24, 11:13:53 AM | 1h 7m 22s | Gerald.Achenbach@srs.gov |
| +18032088095 (Unverifie | 6/03/24, 10:06:41 AM | 6/03/24, 10:50:06 AM | 43m 25s   |                          |
| NELSON, ROBERT K        | 6/03/24, 10:18:53 AM | 6/03/24, 11:13:53 AM | 54m 59s   | Robert.Nelson@srs.gov    |
| Ronald Sykes            | 6/03/24, 10:31:24 AM | 6/03/24, 11:14:00 AM | 42m 36s   | ronald.sykes@srs.gov     |
| Jamie Willing           | 6/03/24, 10:48:36 AM | 6/03/24, 11:13:59 AM | 25m 23s   | jamie.willing@srs.gov    |
| +18033359296 (Unverifie | 6/03/24, 11:06:37 AM | 6/03/24, 11:13:58 AM | 7m 21s    |                          |