|  |  |  |
| --- | --- | --- |
| **Saturday August 17, 2024** | | |
| All Day | Nothing scheduled at this time | |
|  | | |
| **Sunday August 18, 2024** | | |
|  | **90 UV – Conf. Rm. A2/D72** | **100 UV – Conf. Rm. 125** |
| 8:00 am – 12:00 pm | **Bridging Knowledge Gap Between Engineering & Nuclear Safety**  Tinh Tran/Julie Minton-Hughes | **DOE-STD-5506**  Brenda Hawks, Ray Sprankle, Jeff Woody, Terry Foppe, Bill Walker |
| 12:00 pm – 1:00 pm | **Lunch** | |
| 1:00 pm – 5:00 pm | **DOE-STD-1189**  David Compton | **DOE-STD-5506 (cont.)** |
|  |  |  |
| **Monday August 19, 2024** | | |
| **All Day – Badging and Registration** | | |
|  |  | **Location** |
| 8:00 am – 5:00 pm | DOE-STD-5506 (cont.) | 100 UV – Conf. Rm. 125 |
| 8:30 am – 5:00 pm | Engineering Group Meeting | 90 UV – Conf. Rm. A94 |
| 8:30 am – 5:00 pm | Nuclear Criticality Safety Meeting | 90 UV – Conf. Rm. A2/D72 |
| 8:00 am – 12:00 pm | **Microshield for Nuclear Facility Safety Use**  Guy Wilson/Ian Gross | TBD |
| 12:00 pm – 1:00 pm | **Lunch** | |
| 1:00 pm – 5:00 pm | **Dispersion Modeling**  Carl Mazzola | TBD |

|  |  |  |
| --- | --- | --- |
| **Tuesday August 20, 2024** | | |
| **701 Scarboro Meet & Train** | | |
| 8:30 am – 8:40 am | **General Information and Announcements** | Karen Balo, UCOR Nuclear Safety |
| 8:45 am – 9:15 am | **Welcome - UCOR** | J. Kent Fortenberry  UCOR Chief Operating Officer  Project Execution & Operations |
| 9:15 am – 9:45 am | **Keynote Address** | John A. Mullis II  Manager, Oak Ridge Office of Environmental Management |
| 9:45 am – 10:00 am | **BREAK** | |
| 10:00 am – 10:45 am | **CNS/CDNS Panel Discussion** | Brandon Reyes, Facilitator |
| 10:45 am – 11:15 am | **DOE O 421.1 Update** | David Compton |
| 11:15 am – 11:45 am | **Regulatory Updates in Process** | TBD |
| 11:45 am – 1:30 pm | **Lunch** | |
|  | **Session 1 –Nuclear Criticality Safety** | **Session 2 – DOE-STD-1189 Documentation** |
|  | **90 UV Conf. Rm. A2/D72** | **100 UV Conf. Rm. 125** |
| 1:30 pm – 2:00 pm | The Most Reactive Height-to-Diameter Ratio for a Bare Plutonium Cylinder is about 0.9 ***Braden Saltus (Virtual)*** | Development of the Conceptual Safety Design Report (CSDR) for TerraPower’s Molten Chloride Reactor Experiment (MCRE) ***Troy P. Reiss*** |
| S1: 2:00 pm – 2:30 pm  S2: 2:00 pm - 2:45 pm | Design Feature Applicability/Elevation of Types of NCS Controls to Types of TSR Controls  ***Mark McHugh*** | Achieving Approval of a Compliant Preliminary Documented Safety Analysis by Partnering with the Design Team and Using Bridging Tables as a Tool to Develop Safety Controls ***David Korns (Virtual)*** |
| Session 1:2:30 pm – 2:45 pm  Session 2:2:45 pm – 3:00pm | **BREAK** | |
| S1: 2:45 pm - 3:00 pm  S2: 3:00 pm- 3:45 pm | The Transition from an Expert Based to a Standards Based NCS Program ***Matthew Grammes*** | SBRT-SRNS Review Process for SPD Project PDSA ***C. Brad Evans (Virtual)*** |
| S1: 3:15 pm - 3:45 pm  S2: 3:45pm – 4:30 pm | De Minimis Values: When is “Small” Small Enough? ***Lloyd Corwin*** | HLW Design Completion Approach  ***Mike Greutman*** |
| S1: 3:45 – 4:15 pm  S2: 4:30 pm – 5:00 pm | NUTRON: Modernizing Nuclear Material Tracking ***Lloyd Corwin*** | Safety in Site Selection: An Approach for Modular and Mobile Hazard Category 2 US Department of Energy Nuclear Facilities  ***Syreeta Vaugh*** |

|  |  |  |
| --- | --- | --- |
| **Wednesday August 21, 2024** | | |
| **701 Scarboro Meet & Train** | | |
| 9:00 am – 9:30 am | **Welcome – Y-12** | David Kupferer  Senior Director  Mission Engineering, Nuclear Safety |
| 9:30 am – 10:15 | **Historical DOE Drivers for < HC-3 Safety Basis Programs** | Kelsey Forde & Brenda Hawks |
| 10:15 am – 10:30 am | **BREAK** | |
|  | **Session 3 –Hazard Analysis/Modeling** | **Session 4 – Operations** |
|  | **100 UV Conf. Rm. 125** | **90 UV Conf. Rm. A2/D72** |
| 10:30 am – 11:00 am | Exploratory Data Analysis and Machine Learning of Long-Term Meteorological Observations for Nuclear Safety ***Xiao-Ying Yu*** | Transportation SAR Chapter Paper Summary ***Jonathon Wheelwright*** |
| 11:00 am – 11:30 am | Dust Hazard Analysis Integration within the Documented Safety Analysis ***Corey R. Crawford*** | Application of an NRC-Like Operability Determination Process in a DOE Environment  ***Mark McHugh*** |
| 11:30 am – 12:00 pm | Multiphysics-Modeling Of Fire-Induced Uranium Aerosol Formation – A-Posteriori Benchmarking Of Experiments ***Doug Clark*** | Actions Taken to Address Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2019-1 Uncontrolled Hazard Scenarios and 10 CFR 830 Implementation at the Pantex Plant ***Dave Kupferer*** |
| 12pm – 1:30 pm | **LUNCH** | |
| 1:30 pm – 2:00 pm | Effective Aircraft Impact Area ***William Walker*** | TWPC Low Differential Pressure Safety Instrumented System – From Failure to Success  ***Kyle Peterson*** |
| 2:00 pm – 2:30 pm | Hazard Evaluation Technique Selection  ***Kelsey Forde*** | Indications and Safety Functions/Items, SSCs, and Safety Designation of SSCs Relied Upon for SAC Action Performance  ***Mark McHugh*** |
| 2:30 pm – 3:00 pm | Operational Implementation Factors for Verification of Non-Safety Significant Shielding ***Cody C. Orsak*** |
| 3:00 pm – 3:15 pm | **BREAK** | |
| 3:15 pm – 3:45 pm | Modern Models for Calculating the Atmospheric Dispersion Factor  ***Carl Mazzola*** | Implementation of DOE-STD-5506-2021 at Hanford’s Central Waste Complex  ***Helen Boyd*** |

|  |  |  |
| --- | --- | --- |
|  | **Session 3 - Continued** | **Session 4 - Continued** |
| S3: 3:45 pm – 4:30 pm  S4: 3:45 pm – 4:15 | Plausibility Screening of Unmitigated Hazard Scenarios in Support of DOE-STD-3009-2014 Compliant Documented Safety Analysis ***Charles Carathers (Virtual)*** | Resolution of Chemical Burn Potential Inadequacy in the Safety Analysis (PISA) at 242-A Evaporator Facility via Sprint Team Approach  ***Roger Lanning*** |
| S4: 4:15 pm – 4:45 pm |  | ATRC Facility Dose Consequence Evaluation for 40 Years Extension  ***Gemma Irais Strong*** |

|  |  |  |
| --- | --- | --- |
| **Thursday August 22, 2024** | | |
| **701 Scarboro Meet & Train** | | |
| 8:30 am – 9:00 am | **Welcome – ORNL** | Tony Koonce  Division Director  Nuclear Facility Safety Division (NFSD) | ESH&Q |
| 9:00 am – 10:30 am | **DOE-STD-3009-2014 Panel – Status and Application Experience** | David Compton, Facilitator |
| 10:30 am – 10:45 | **BREAK** | |
| 10:45 am – 11:30 | **Risk Informed Decision Making** | Brandon Reyes/Vanderbilt University |
| 11:30 am – 1:00 pm | **LUNCH** | |
|  | **Session 5 –Risk/Process Improvements** | **Session 6 – D&D** |
|  | **100 UV Conf. Rm. 125** | **90 UV Conf. Rm. A2/D72** |
| 1:00 pm – 1:30 pm | Application of a Qualitative Risk-Informed, Performance -Based Approach for the MARVEL Microreactor at the Idaho National Laboratory  ***Doug Gerstner (Virtual)*** | D&D Challenges – ORNL Buildings 3026 & 3517  ***Charlie Hanna*** |
| 1:30 pm – 2:00 pm | Common Mistakes with the Application of a Risk Matrix  ***Timothy Stirrup*** | Portsmouth Gaseous Diffusion Plant Decontamination and Decommissioning: Challenges, Tool and Process Development  ***Craig Fraley*** |
| 2:00 pm – 2:30 pm | Downgrade of the 9206 Complex at Y-12 National Security Complex  ***Matthew Miller*** |
| 2:30 pm – 2:45 pm | **BREAK** | |
| 2:45 pm – 3:15 pm | Explaining Historic Events Involving Fluoride Volatility Processes in the Nuclear Industry  ***Guy Wilson*** | ORNL 3005 Low Intensity Test Reactor Demolition Project  ***Joshua Vajda*** |
| 3:15 pm – 3:45 pm | Emerging Issues Coordinator  ***Trina Garrett*** | Decommissioning & Demolition Safety Concerns on Capital Projects  ***Raymond Jasniecki*** |
| 3:45 pm – 4:15 pm | Strategy for Improving Cross-Functional Communication  ***Wes Collins*** | ORNL 3042 Research Reactor D&D Segmentation Project  ***Joshua Vajda*** |
| 4:15 pm – 4:45 pm | LLNL Lessons Learned  ***Brandalin Barnes*** | Deactivation and Decommissioning of the Triton Glovebox at Lawrence Livermore National Laboratory  ***Shauntay Coleman*** |