



COMMISSION
BRIEFING

NOVEMBER 5, 2020

STRATEGIC PROGRAMMATIC OVERVIEW OF THE DECOMMISSIONING AND LOW-LEVEL WASTE AND NUCLEAR MATERIALS USERS BUSINESS LINES

Opening Remarks

MARGARET DOANE

EXECUTIVE DIRECTOR FOR OPERATIONS





Decommissioning And Low-Level Waste Business Line

- ▶ Margaret Doane
 - ▶ Introductory Remarks
- ▶ John Lubinski
 - ▶ Overview of the Business Line
- ▶ Patricia Holahan
 - ▶ Innovations within the Business Line
 - ▶ Transition of Decommissioning Plants
- ▶ Mary Muessle
 - ▶ Risk Informing the Uranium Recovery and Decommissioning Oversight Guidance

Decommissioning and Low-Level Waste Business Line General Program Overview

JOHN LUBINSKI

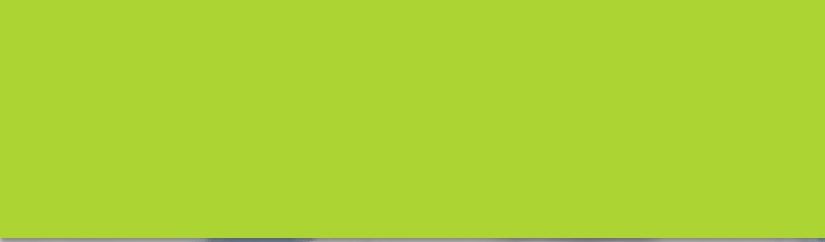
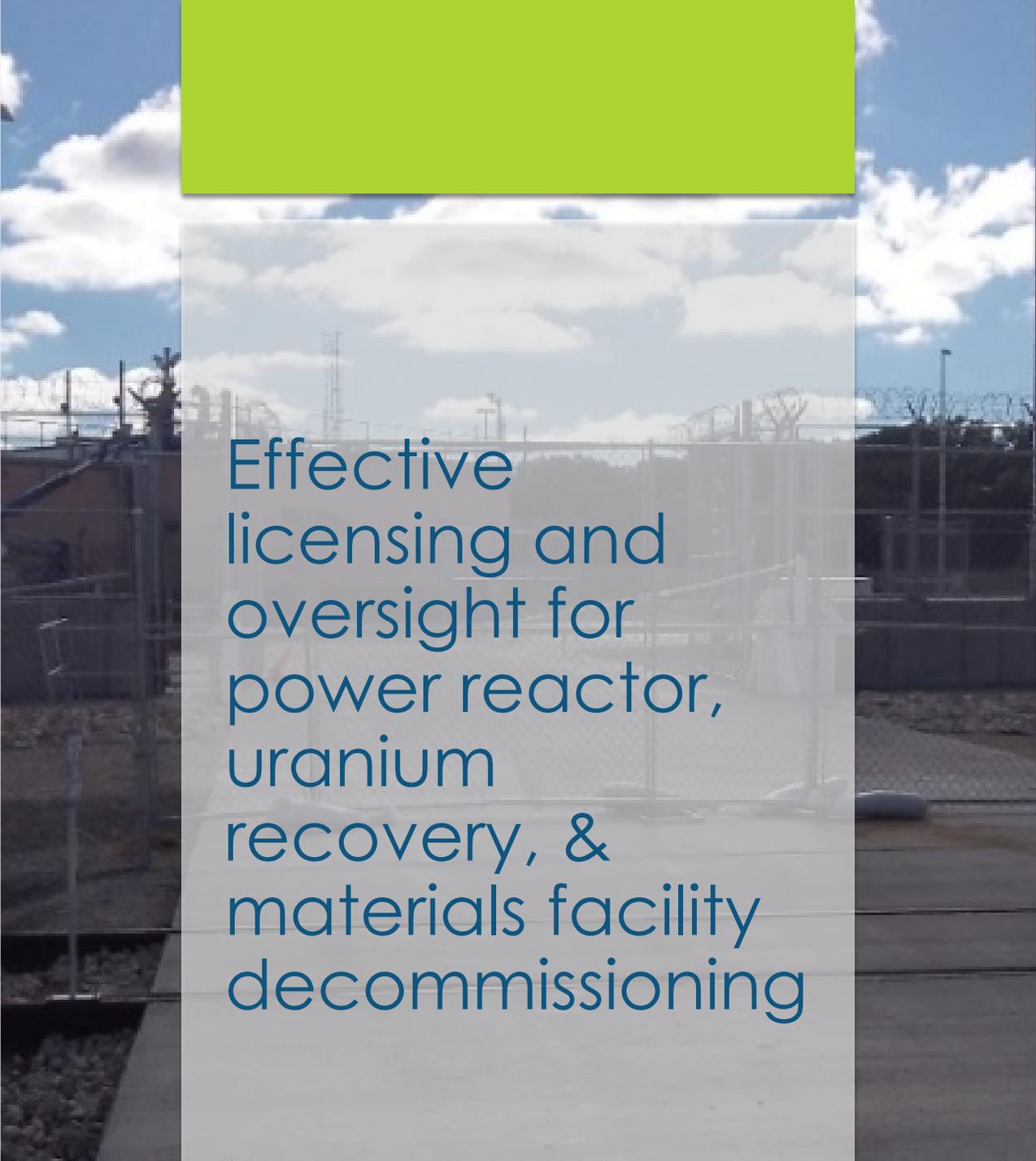
DIRECTOR

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

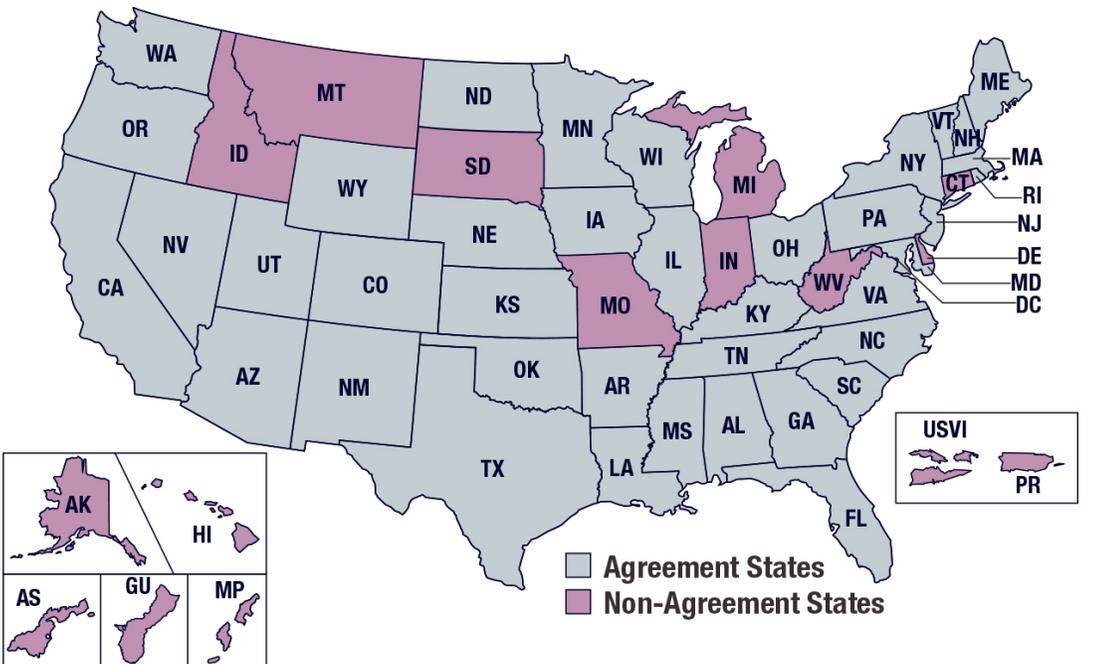
Office of Nuclear Material Safety and Safeguards

Working together to ensure the safe, secure, and environmentally responsible use of radioactive materials and nuclear facilities.

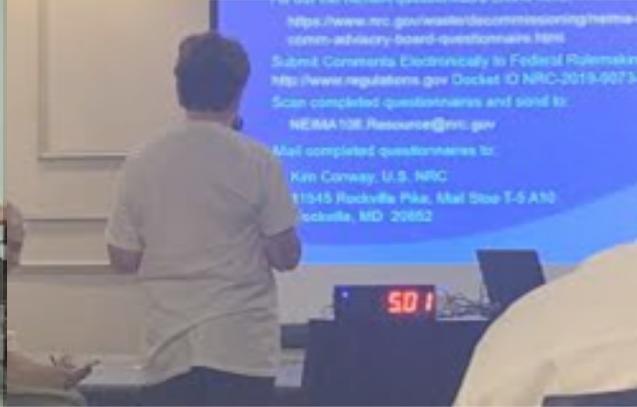




Effective
licensing and
oversight for
power reactor,
uranium
recovery, &
materials facility
decommissioning



NEIMA Section 108 Final Report



Wyoming Becomes Agreement State



Uranium Recovery Licensing Efficiencies



Low-Level Waste Disposal Guidance

Business Line Innovations and Transition of Decommissioning Reactors

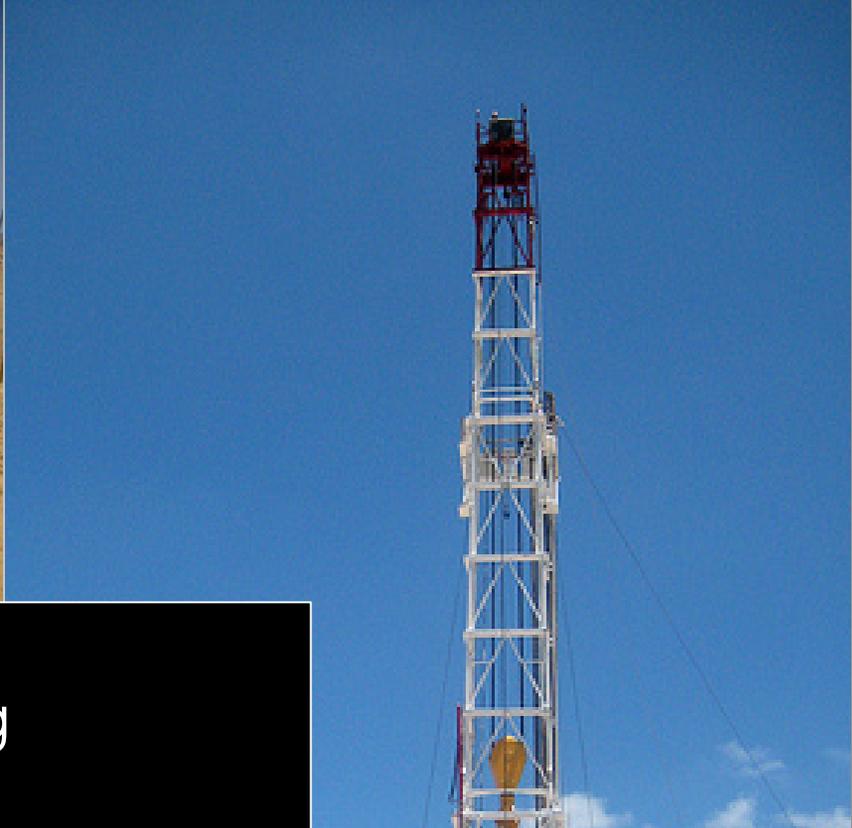
PATRICIA HOLAHAN, PH.D.

DIRECTOR

DIVISION OF DECOMMISSIONING, URANIUM RECOVERY, AND WASTE PROGRAMS

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS





In Situ Recovery Rulemaking



Innovations Within the DLLW Business Line



Greater-Than-Class C & Part 61 Rulemakings

- ▶ Considering combining these efforts to address overlapping technical requirements, streamline stakeholder outreach, and gain efficiency in proceeding as one rulemaking activity

Most GTCC waste can be safely disposed in near surface facilities

Agreement States can effectively regulate the majority of GTCC waste

Extensive stakeholder outreach



Very Low-Level Waste Developments

Staff initiative to explore other regulatory options for safe disposal of very low-level waste

Proposed interpretive rule related to 10 CFR 20.2001 "authorized recipient"

Leveraging feedback on the Very Low-Level Waste Scoping Study

Proposal commensurate with the risk and safety significance of the waste type

Soliciting public comments to better inform future decisions related to very low-level waste

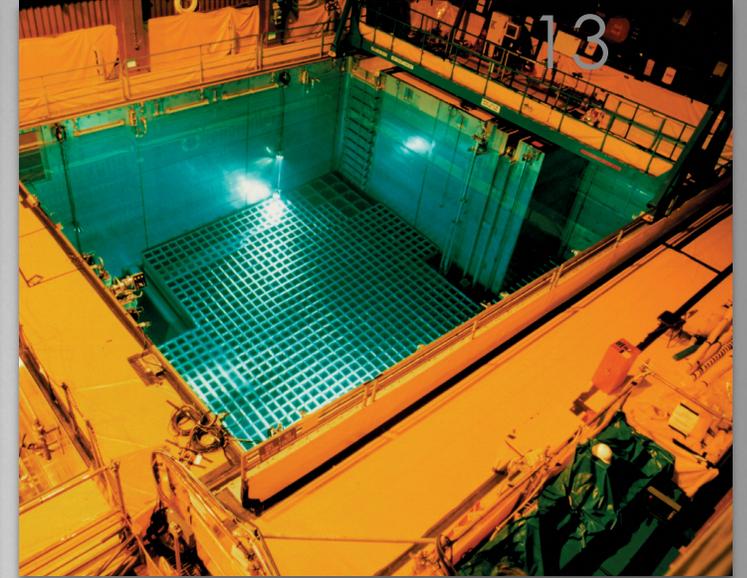
Improving the Decommissioning Oversight Processes

- ▶ Proactively identifying and addressing any potential risk associated with implementation of new decommissioning reactor business models
- ▶ Enhancing and clarifying coordination for transitioning sites through issuance of updated guidance
- ▶ Effective transition of recently shut down reactors



Enhancing Reactor Inspections and Associated Oversight Guidance

- ▶ IMC 2561 was revised holistically in an effort to risk-inform inspections at permanently shutdown power reactors
- ▶ Several updates to decommissioning guidance documents



Risk-Informing the Uranium Recovery and Decommissioning Oversight Guidance

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MARY MUESSLE

DIRECTOR

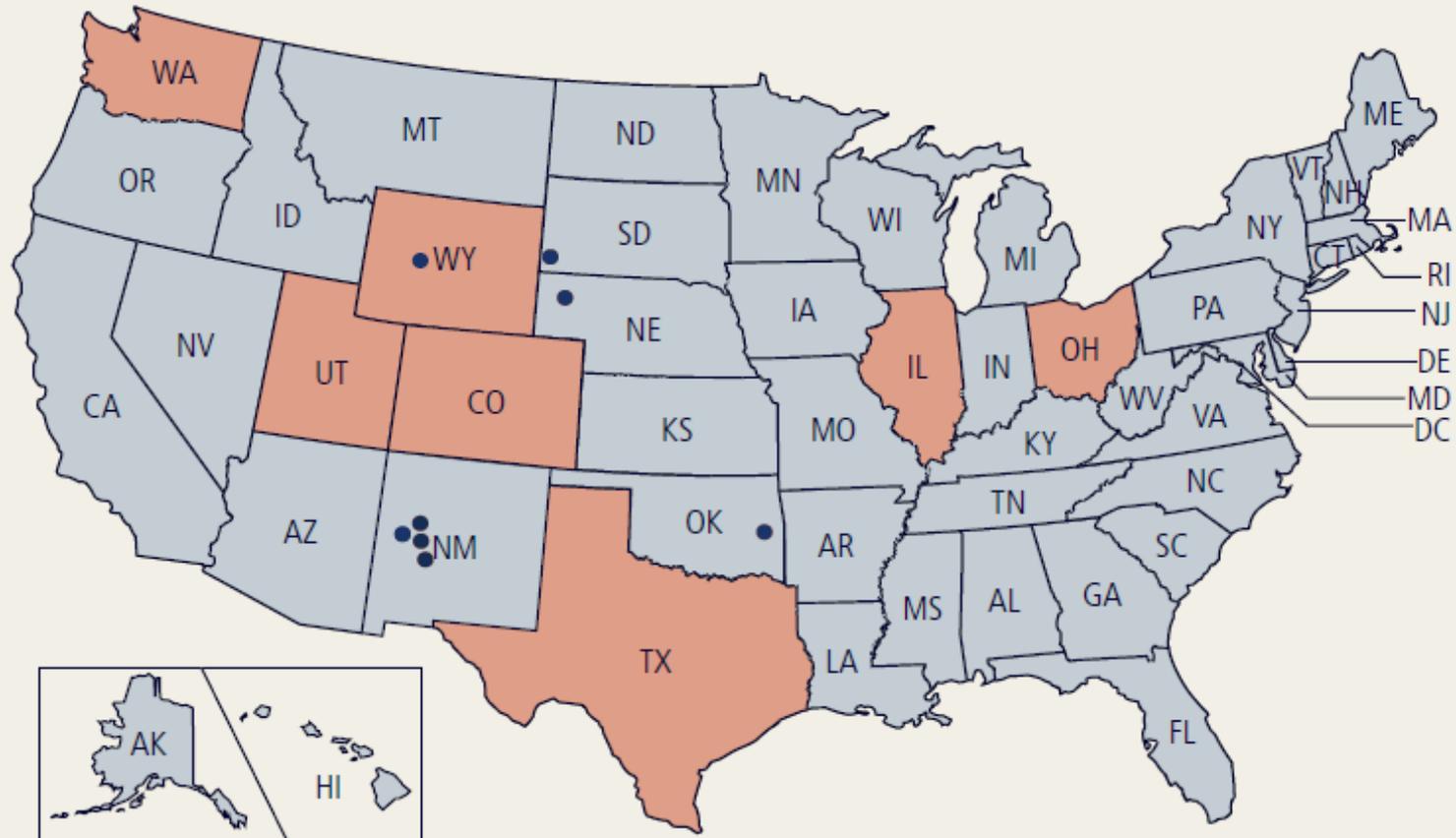
DIVISION OF NUCLEAR MATERIAL SAFETY

REGION IV



Uranium Recovery Overview

Figure 30. Locations of NRC-Licensed Uranium Recovery Facility Sites
(Includes sites undergoing decommissioning)



- States with authority to license uranium recovery facility sites
- States where the NRC has retained authority to license uranium recovery facilities
- NRC-licensed uranium recovery facility sites (8)

Note: For the most recent information, go to the Dataset Index Web page at <https://www.nrc.gov/reading-rm/doc-collections/datasets/>.

Risk-Informing Uranium Recovery Oversight Guidance

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- ▶ Consolidation of Inspection Manual Chapters (IMCs) to simplify inspection guidance for uranium mill and recovery facilities
- ▶ Risk-informed IMC 2801 and associated procedures
 - Improves the inspection procedures from compliance-based to performance-based
 - Engagement with Agreement States and other stakeholders
 - Inspector training



Risk-Informing Uranium Recovery Oversight Guidance



Revisions to Decommissioning Oversight Guidance – Fuel Facilities, Complex Materials, and Uranium Recovery

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- ▶ Adapt the approach used for the uranium recovery guidance: incorporate risk perspectives and focus procedures on a performance-based approach
- ▶ Working group comprised of representatives from each region, headquarters, and Agreement States
- ▶ Innovative engagement strategies with internal and external stakeholders



One
Unifying
Vision



Safety and
Security
Mission



Our
People



Principles of
Good
Regulation



NRC
Values



Innovation and
Transformation



NUCLEAR MATERIALS USERS BUSINESS LINE

MARGARET DOANE

EXECUTIVE DIRECTOR FOR OPERATIONS



- ▶ John Lubinski
 - ▶ Nuclear Materials Users Business Line: General Program Overview
- ▶ Kevin Williams
 - ▶ Materials Program Transformation and Innovation Activities
- ▶ Timothy Mossman
 - ▶ Use of Technology to Enhance Our Materials Workflow Management and Data Analytics
- ▶ David Pelton
 - ▶ Openness and Coordination with External Stakeholders

Nuclear Materials Users Business Line General Program Overview

JOHN LUBINSKI

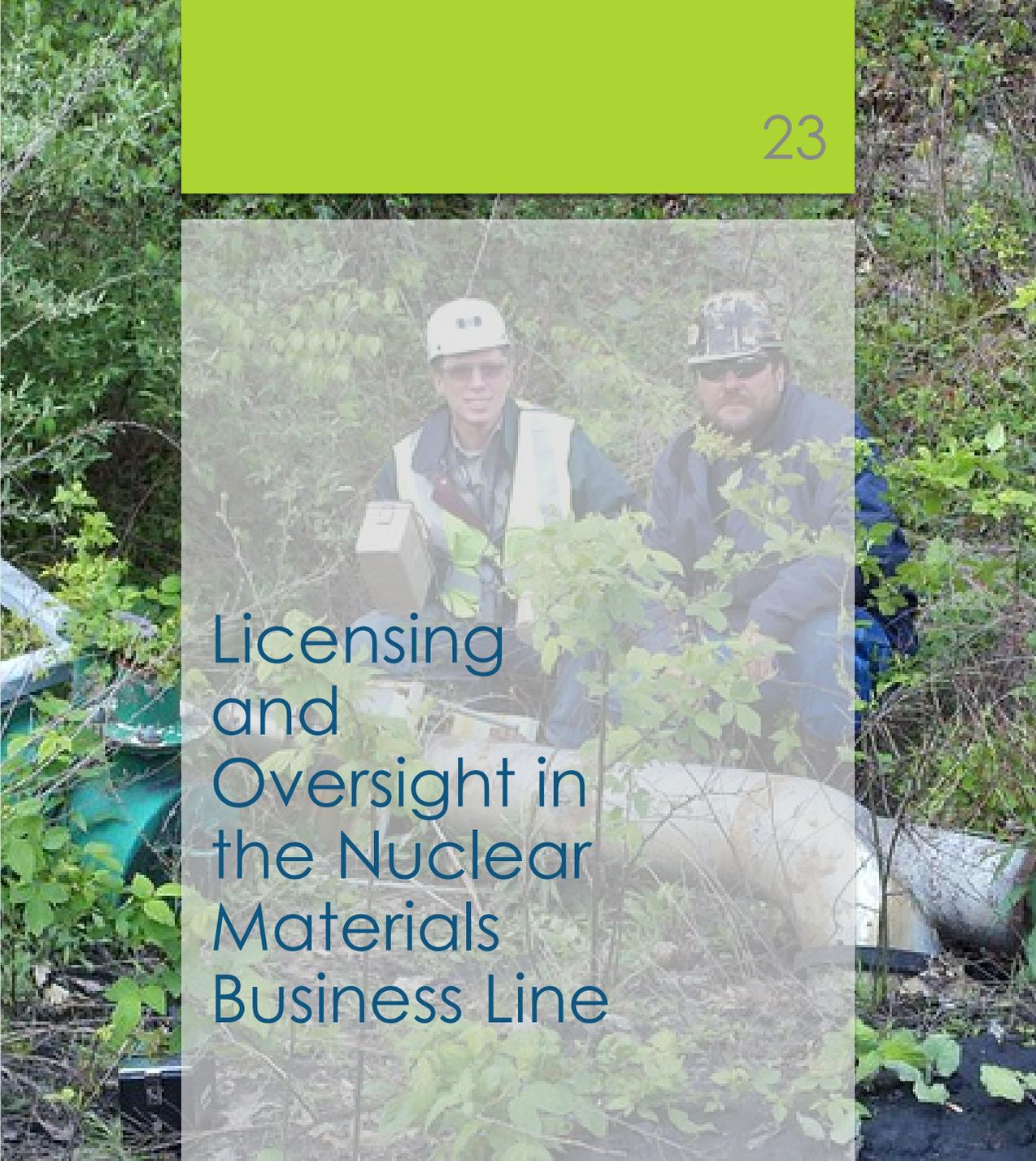
DIRECTOR

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Office of Nuclear Material Safety and Safeguards

Working together to ensure the safe, secure, and environmentally responsible use of radioactive materials and nuclear facilities.





Licensing
and
Oversight in
the Nuclear
Materials
Business Line



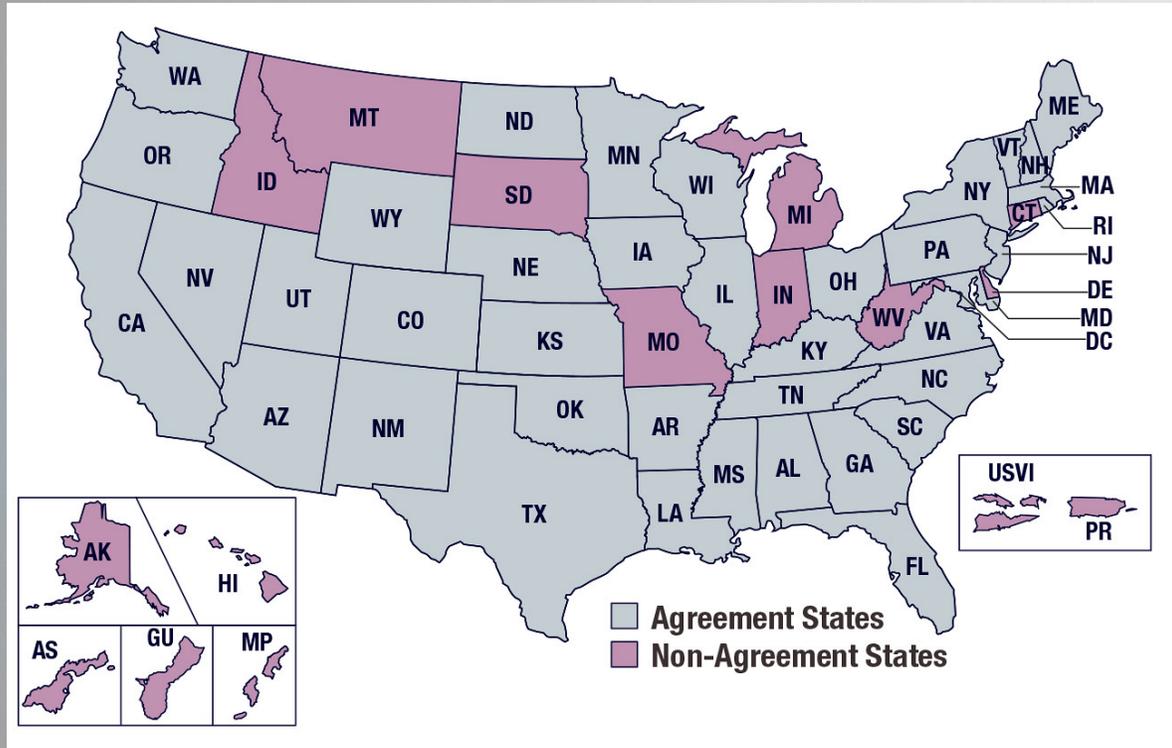
- Digital Dosimetry Direct Final Rule
- Materials Inspection Program



Modernizing & Risk Informing the Materials Program

Growing and Transforming the National Materials Program

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Vermont Agreement

- September 30, 2019



Consolidated NRC IMPEP Review

- Summer 2021



Issuance of 13 SA Procedures

- October 2020

Materials Program Transformation and Innovation Activities & The National Materials Program

KEVIN WILLIAMS

DIRECTOR

DIVISION OF MATERIALS SAFETY, SECURITY, STATE AND TRIBAL PROGRAMS

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS



Incorporating Transformation, Innovation, and Risk Information into Our Processes

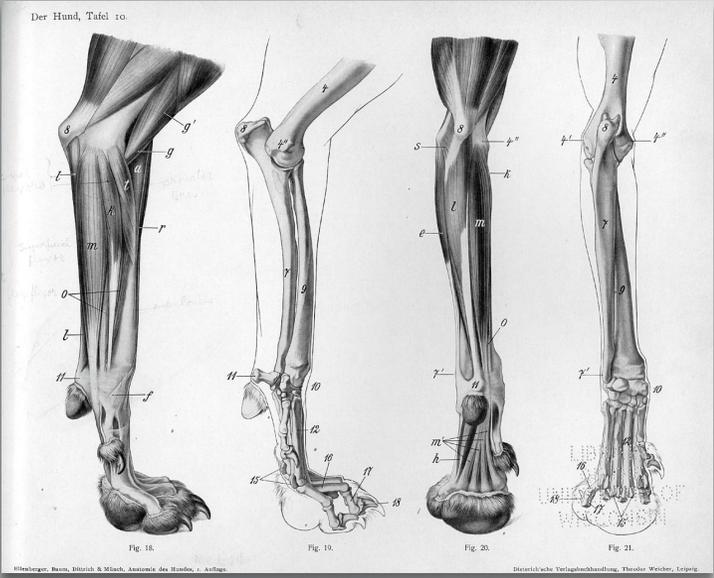
Focus on Our People
modern, risk-informed regulator Use Technology
Be riskSMART Innovate





Be riskSMART

Transforming
Our Processes
and
Modernizing
Our
Decision-
making

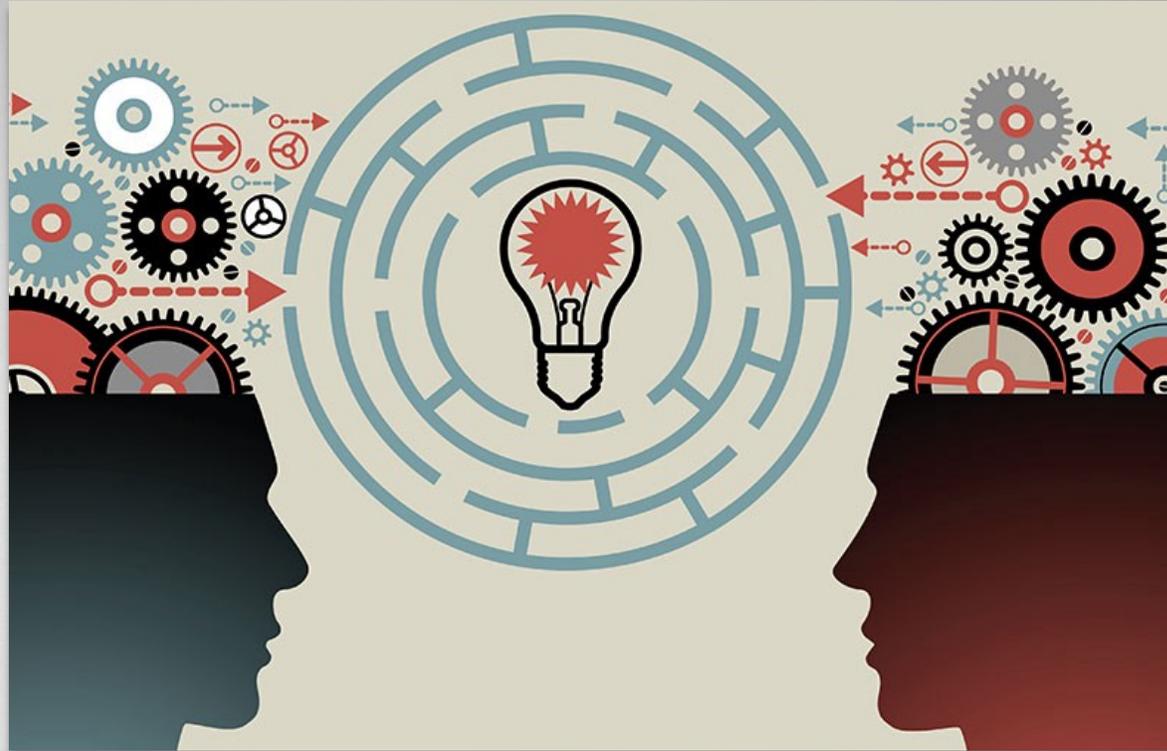
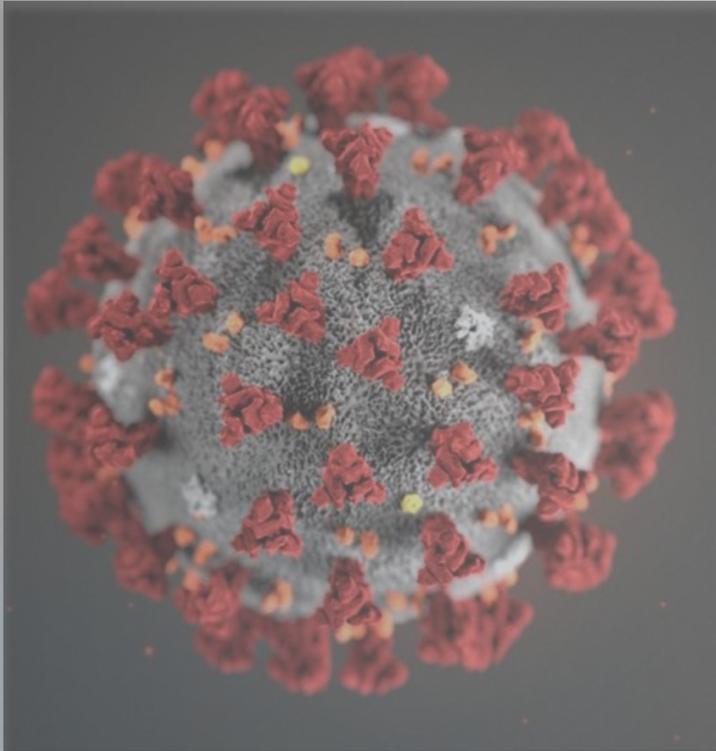


Changing the Medical Training and Experience Paradigm





Streamlining
the Emerging
Medical
Technologies
Review Process
&
Reevaluating
Medical Event
Reporting



Modernizing Our IMPEP Strategy

The National Materials Program: A 21st Century Partnership (Video)

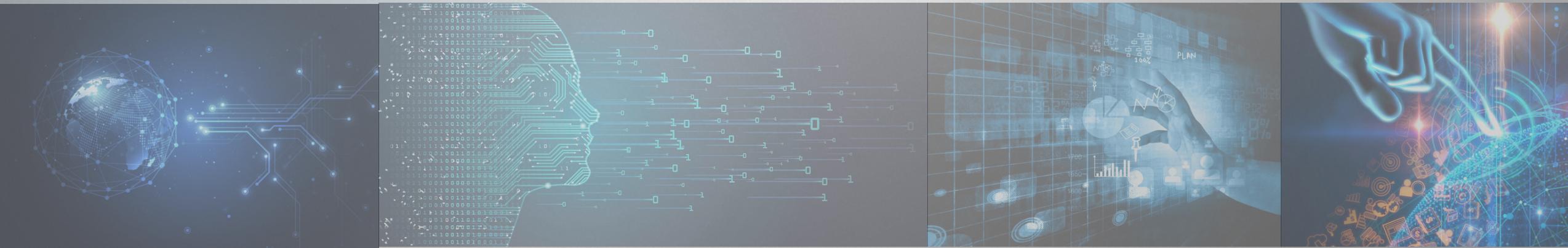
Use of Technology to Enhance Our Materials Workflow Management and Data Analytics

TIMOTHY MOSSMAN

CHIEF

DIVISION OF MATERIALS SAFETY, SECURITY, STATE, AND TRIBAL PROGRAMS

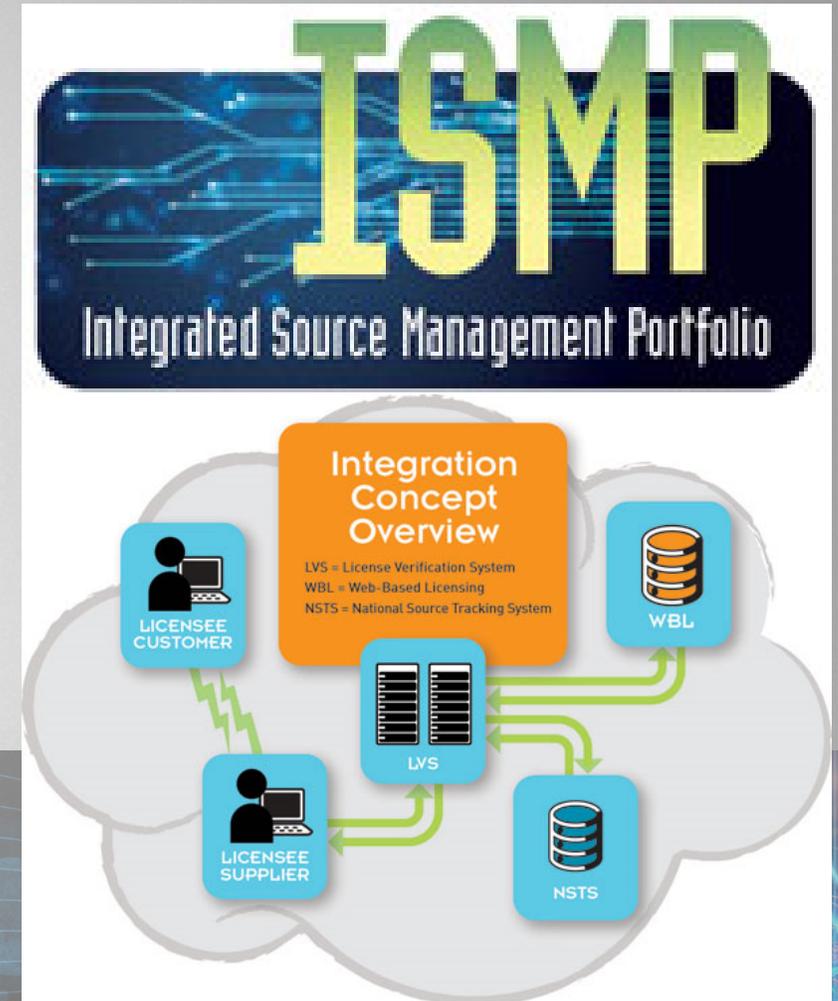
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS



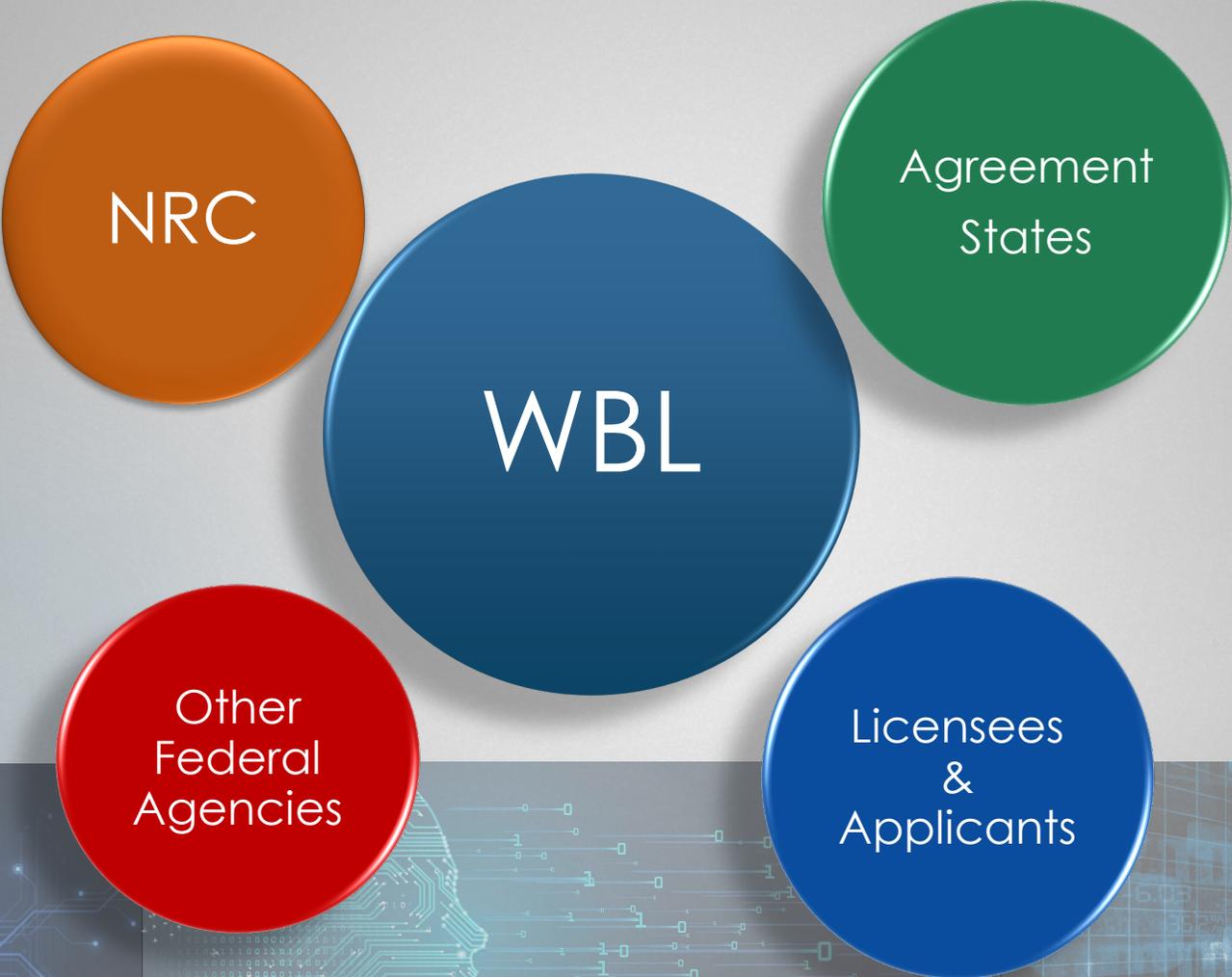
Powering NMU Operations With Modern Technology

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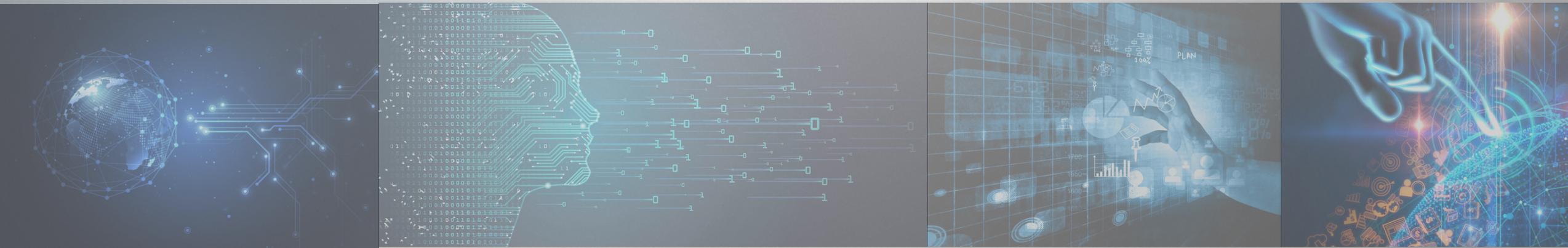
- ▶ Integrated Source Management Portfolio features:
 - ▶ National Source Tracking System
 - ▶ Web-Based Licensing
 - ▶ License Verification System
 - ▶ Portfolio Enrollment Module



Expanding The Reach of WBL

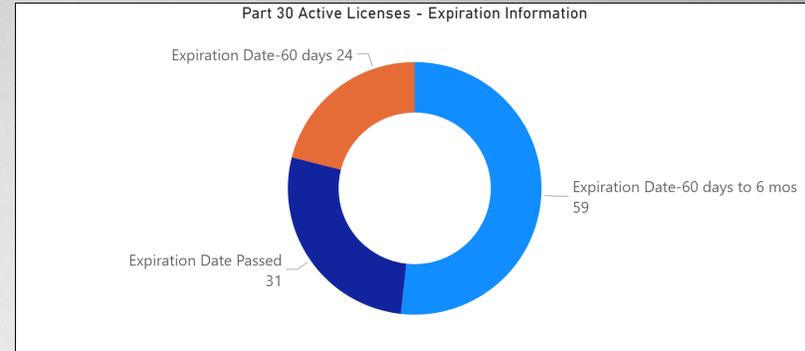


Enhancing NMU Workflows Through WBL Modernization Efforts (Video)



Using Data to Drive NMU Planning

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Data slicer

Specific Status

- Expiration Date Passed
- Expiration Date-60 days
- Expiration Date-60 days t...
- More than 6 mos away

Data Slicer

License Region

- HQ
- I
- III
- IV

| Part 30 Active Licenses - Summary Expiration Information | |
|--|-------------------------|
| Specific Status | Count of License Number |
| Expiration Date Passed | 31 |
| Expiration Date-60 days | 24 |
| Expiration Date-60 days to 6 mos | 59 |
| More than 6 mos away | 2112 |
| Total | 2226 |

MSST ACTIVITIES

MSST TICKETS

Branch: All

Status: Multiple selections

Estimated Completion Date: 11/5/2020 to 12/31/2020

| Ticket No. | Description | Branch | Final Due Date |
|----------------------|---|---------|-------------------------------|
| MSST_TA-011 | Updates to NMSS P&P 6-15, "Administration of the Advisory Committee on the Medical Uses of Isotopes." | MSEB | Tuesday, June 30, 2020 |
| MSST_TA-001 | Regional Review of draft NMSS Policy and Procedure (P&P) 7-5, Revision 1, "Procedures for Processing of Technical Assistance Requests." Regions to provide comments by 12/7/2018. | MSEB | Friday, July 10, 2020 |
| NMSS202000090MSS T-3 | Memorandum from C. Haney to those on attached list regarding Fiscal Year 2021 Organization Performance Management Guidance | MSST FO | Wednesday, September 16, 2020 |
| MSST_TA-019 | Region IV TAR - St. Luke's Regional Medical Center Request for Approval for Proposed Alternate Waste Disposal Method for Lu-177m | MSEB | Wednesday, October 14, 2020 |
| NRC-2021-00012 | FOIA: Please provide a fee estimate for search, review and duplication by 10/21/20 | MSTB | Wednesday, October 21, 2020 |
| NMSS202000117MSS T | Final IMPEP Report: Rhode Island | SALB | Tuesday, November 03, 2020 |

Part 30 Active Licenses - Expiration Information

| Active Record Mail Control No | License Number | Licensee | License Region | Days to Expiration | Expiration Date | Pending Renewal Mail Control No |
|-------------------------------|----------------|--|----------------|--------------------|-----------------------------|---------------------------------|
| 586898 | 24-16273-01 | Sigma Aldrich FMG LLC | HQ | -2618 | Tuesday, April 30, 2013 | |
| 617096 | 05-29372-01 | Calfrac Well Services Corporation | IV | -182 | Tuesday, December 31, 2019 | 617100 |
| 318548 | 24-32768-01 | Mid River Asphalt, Inc. | III | -151 | Friday, January 31, 2020 | 617139 |
| 22764 | 09-23866-01E | AMGLO KEMLITE LABORATORIES, INC. | HQ | -122 | Saturday, February 29, 2020 | |
| 601657 | 53-00515-01 | Hawaii Agriculture Research Center | IV | -122 | Saturday, February 29, 2020 | 617781 |
| 617401 | 11-27380-01 | Idaho State University Technical Safety Office | IV | -122 | Saturday, February 29, 2020 | 617844 |
| 617169 | 24-32199-01 | IDEKER, Inc. | III | -122 | Saturday, February 29, 2020 | 617377 |
| 618288 | 21-16560-01 | JAN X-Ray Services, Inc. dba JANX | III | -122 | Saturday, February 29, 2020 | 617766 |
| 601177 | 21-32190-01MD | PharmaLogic Michigan, L.L.C. | III | -122 | Saturday, February 29, 2020 | 617740 |

| Action | Action Description | Milestone | Branch | Lead | Remarks | Estimated Completion Date |
|---|--|--------------|---------|-----------------------------|---------|-----------------------------|
| DLWV NMU Commission Meeting | | Meeting | MSST FO | Valentin-Rodriguez, Celimar | | Thursday, November 05, 2020 |
| NMU BL Briefing - Using Technology (Modern Regulator) | We have 6 minutes scheduled as part of the November 5, 2020 NMU Business Line briefing to discuss how the NMU BL has been using technology to be the "modern" part of the modern, risk-informed regulator. | Briefing | SMPB | Mossman, Tim | | Thursday, November 05, 2020 |
| Develop Patient Release Video | | Proposed | MSEB | Daibes Figueroa, Said | | Friday, November 06, 2020 |
| RASSC 49, fall meeting | Review and approve DPP and DSG | Meeting | MSST FO | Layton, Michael | | Friday, November 06, 2020 |
| MD IMPEP | | Draft Report | SALB | Modes, Kathy | | Monday, November 09, 2020 |
| TAR from North Carolina | SSD Concurrence Review for CivaDerm Brachytherapy Source | Final | MSTB | Herrera, Tomas | | Monday, November 09, 2020 |
| ACMUI Commission Meeting | Slides to SECY 5 business days before meeting | Slides | MSEB | Jamerson, Kellie | | Thursday, November 12, 2020 |

Past Due
Due in < 14 days
Due in 15 to 30 days
Due > 30 days
Due in 61 to 90 days
Due in 91 to 120 days

MSST Workload Management



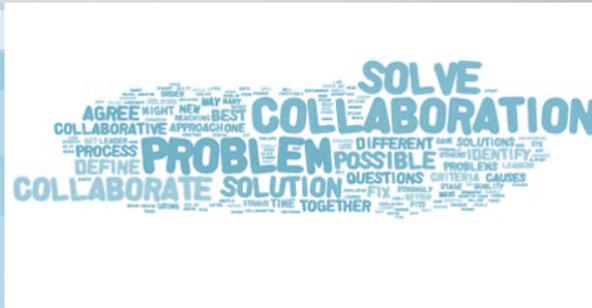
Openness and Coordination with External Stakeholders

DAVID PELTON

DIRECTOR

DIVISION OF NUCLEAR MATERIAL SAFETY

REGION III



Regional Communication and Coordination with NMP



Staying Connected to Federal and International Partners



One
Unifying
Vision



Safety and
Security
Mission



Our
People



Principles of
Good
Regulation



NRC
Values



Innovation and
Transformation

Acronyms

- ▶ CRCPD – Conference of Radiation Control Program Directors
- ▶ DLLW – Decommissioning and Low-Level Waste
- ▶ GTCC – Greater-Than-Class C
- ▶ IMC – Inspection Manual Chapter
- ▶ IMPEP – Integrated Materials Performance Evaluation Program
- ▶ ISMP – Integrated Source Management Portfolio
- ▶ NEIMA – Nuclear Energy Innovation and Modernization Act
- ▶ NMU – Nuclear Materials Users
- ▶ OAS – Organization of Agreement States
- ▶ RSAOs – Regional State Agreement Officers
- ▶ RSLOs – Regional State Liaison Officers
- ▶ SA – State Agreements
- ▶ WBL – Web-Based Licensing