

# Waste Management Working Group FY2017 EFCOG Annual Meeting

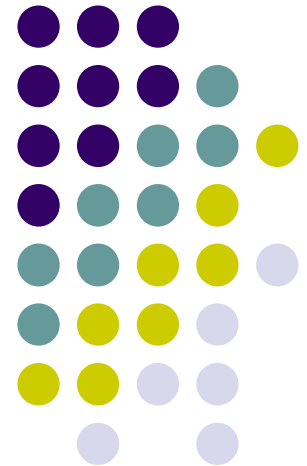


Sonny Goldston  
CH2M

Working Group Chair

June 7-8, 2017

Washington, DC

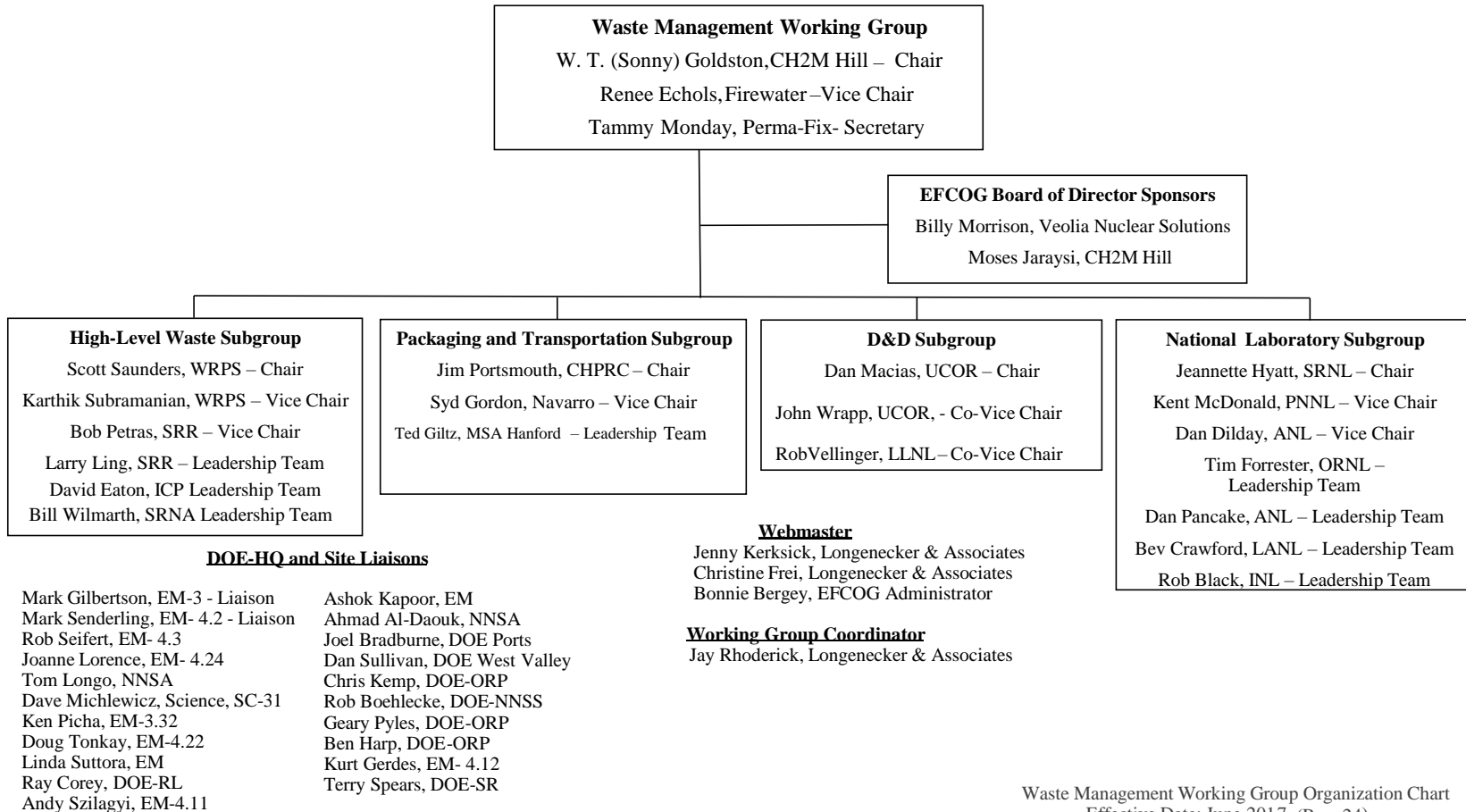
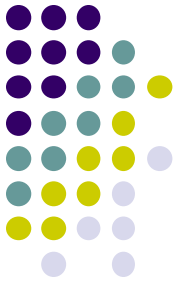


# Waste Management Working Group



- Leadership
  - Chair: W. T. (Sonny) Goldston – CH2M
  - Vice Chair: Renee Echols – FireWater
  - Secretary: Tammy Monday – Perma-Fix
  - DOE Liaison – Mark Gilbertson EM-4 / Mark Senderling EM-4.2

# WMWG Leadership



Waste Management Working Group Organization Chart  
Effective Date: June 2017 (Rev. 24)

# WMWG FY16 Key Achievements



## **DOE Order 435.1 Radioactive Waste Management**

- Technical support for response to comments, implementation and conducted training associated with order. Training at Los Alamos in May and HQ in Aug (requested by other sites);
- Developed an Assessment Plan & Criteria to assist LANL DOE-EM & NNSA to assess Contractor compliance with 435.1 (response to WIPP investigations);



# WMWG FY16 Key Achievements

- **DOE Order 435.1 Radioactive Waste Management (Cont'd)**
  - Participated in development of Technical Standard Guide for Disposal Authorization Statement for DOE LLW Disposal Facilities (approved);
  - Consultation on setting requirements for radioactive waste generation, treatment, storage and disposal;
  - Guidance on Consolidation, Waste Classification, Spent Fuel definition, and WIR Citation/Evaluation;
  - **DOE Liaisons:** David Levenstein, Betsy Forinash, Steve Gomberg; Justin Marble; Rob Seifert

# WMWG FY16 Key Achievements



## Participation in Low-Level Waste Federal Review Board (LFRG)

- WMWG participated in development & conduct of training for LFRG members in FY16.
- Training focused on the responsibilities of members and technical support concerning the regulatory responsibilities of DOE under the Atomic Energy Act of 1954 as amended for LLW Disposal granting Disposal Authority to DOE and continued approvals to dispose.
- Participated in May 16-17 LFRG meeting in Oak Ridge

# WMWG FY16 Key Achievements



## “Return to Service” Radiological Contamination Limits

- Complete the evaluation of realistic “return to service” radiological contamination limits for commercial equipment that has transported DOE wastes to a DOE disposal facility;
- Report and recommendations submitted 6/21/2016.
- Presentations & Path Forward discussed 2/27/17 Winter Workshop with EM and AU;
- **Anticipated Benefits:** Consistent application of DOE Release Criteria vs DOT Return to Service Limits result in cost savings and reduces contamination incidents - \$160K per incident and a history of over 10 incidents per year resulting in cost avoidance of estimated \$1.6 Million per year;
- DOE Liaisons: Ashok Kapoor, Joanne Lorence, Andy Wallo

# WMWG FY16 Key Achievements



## Development of Freight Container Guide

- Report provided to Christine Gelles, Associate Deputy Assistant Secretary Waste Management, EM-30 on 6/17/2014
- Assisted DOE to convert Guide to a DOE Handbook approved 10/2015 (FY16) and provided to DOE complex.
- The EFCOG Packaging & Transportation Subgroup was assisted by Packaging Management Council (PMC)
- Assists DOE packaging community in understand the proper and compliant procurement, use, and maintenance of standard freight containers for radioactive waste and materials.
- DOE Liaisons: Ashok Kapoor, Joanne Lorence,



# Best Practices Development

## WMWG FY16 Key Achievements



- Four Best Practices were developed:
- Use of a Remote Tapping Tool at Idaho National Laboratory to Minimize Worker Exposure and Avoid Future Contamination Accidents
- Use of Earthen Benches and Other Technologies to Support Remediation and Removal of Contaminated River Structures
- Effective Use of Site-specific Assessments by Waste Generators in Preparation for Facility Evaluations by the NNSR Radioactive Waste Acceptance Program
- Non-DOE Owned Transport Equipment Return to Service Inconsistencies

# FY 2017 Upcoming Focus Areas and Planned Achievements



## Development of Transportation Lessons Learned

- Summary of recent issues involving transportation of radioactive wastes
- Collecting inputs from CTMA, TMC, and NNSS generator sites
- Will provide guidance for more effective future waste shipments
- Emphasizing practical solutions to common site issues
- Anticipated benefits: Provide Lessons Learned to DOE/NNSA sites for Packaging and Transportation incidents.
- Report to be developed by December 31, 2017 by EFCOG P&T Group

# WMWG FY17 Focus Area and Planned Achievements



- **Develop Complex Wide Methodologies for the Characterization of Surface Contaminated LLW**
- **Anticipated Benefits:** Introduce consistency among sites for characterization processes applied to dry active LLW. Identify consistent guidance on methodologies, techniques, procedures, and documentation to reduce cost and improve accuracy/validity for waste characterization activities.
- Project Justification Statement approved for a proposed DOE Technical Standard
- Working on Technical Basis.
- **WMWG National Lab Subgroup:** Dan Dilday, Vice Chair, Syd Gordon, team leader

# WMWG FY17 Focus Area and Planned Achievements



## DOE Order 435.1 Radioactive Waste Management

- Anticipate renewed effort in 435.1 Revision – Started Reviews of Draft
- Participating in Training for Contractors and DOE staff around the complex
- Assisting the development of Assist Visits and Assessments Program Plans and Lines of Inquiry
- Expect to participate in site assists and assessments
- For example table top review of Site's RWMB's
- DOE Liaisons: Rob Seifert, David Levenstein, Justin Marble,

# WMWG FY17 Focus Area and Planned Achievements



## Tank Integrity Program

- Developed update to the Tank Integrity Program requirements and working on guidance to update 435.1 in concert with the Tank Waste Corporate Board.
- **Anticipated Benefits:** Tank Integrity Program requirements in the current Order 435.1 are out of date and inconsistent with the current state of technology. WMWG assisting DOE in update to the order revision requirements and guidance to make them consistent with current technology, which improves safety and regulatory compliance.
- **WMWG HLW Subgroup:** Scott Saunders, Chair, Bill Wilmarth, SRNL Leadership Team

# WMWG FY17 Focus Area and Planned Achievements



## Portsmouth Onsite Disposal Cell Performance Assessment/Composite Analysis LFRG Review

- Provide technical support and consultation to the Portsmouth Onsite Disposal Cell Performance Assessment/Composite Analysis LLW Federal Review Group (LFRG).
- **Anticipated Benefits:** DOE can access resources from EFCOG with years of PA, CA, and operational experience to carry out their authority to approve operation of LLW disposal facilities.
- **Progress to Date:** As a result of the LFRG review (assistance provided by the WMWG), DOE issued a preliminary Disposal Authorization Statement (DAS) for the Portsmouth Onsite Disposal Cell. The Technical Basis documents and the Operational PA are expect to be reviewed.

# WMWG FY17 Focus Area and Planned Achievements



## Technical Assistant to West Valley Waste Classification

- Provide technical assistance to West Valley's waste classification of spent fuel cuttings and vitrification cell/off-gas materials to enable disposition as TRU or LLW.
- **Anticipated Benefits:** The cost savings will be considerable since the alternative approach will be to classify these waste streams as spent nuclear fuel and high-level waste.
- **WMWG:** Sonny Goldston, Chair
- DOE Liaisons: Dan Sullivan, West Valley, Doug Tonkay, EM

# WMWG FY17 Focus Areas and Planned Achievements



## Technical Support to DOE EM Boards

- WMWG Chair or his/her representative will provide technical support to and attend scheduled meetings of DOE Corporate Boards (LLW, Tank Waste, TRU) and the Low-Level Waste Federal Review Group (LFRG).
- **Anticipated Benefits:** Providing technical and regulatory consultation to Corporate Boards and LFRG allows WMWG to keep current of issues facing DOE and provide immediate advice and longer term assistance.

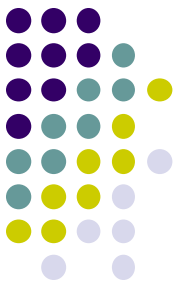


# WMWG FY17 Focus Areas and Planned Achievements



- EM Top to Bottom Macro Assessment of LLW/MLLW Program. Identify Potential Issues, Future needs and Opportunities for Integration
- Identify Vulnerabilities and barriers (problem waste streams)
- Opportunities, Regulatory Issues, (435.1)
- Research & Technology Needs

# WMWG FY17 Focus Areas and Planned Achievements



## LLW Initiative Task – Dan Macias, John Wrapp, Rob Vellinger

- In accordance with DOE O 435.1, assist the DOE Office of Waste Disposal (EM 4.22) with their top-to-bottom macro assessment of DOE's LLW/MLLW management activities to identify potential issues and opportunities for integration. Focus of the D&D Subgroup will be:
  - Provide EM with potential opportunities and risks for more efficient and effective pathways to dispose of D&D generated wastes, and to assess potential capacity gaps
  - Identify problematic waste streams and any technology gaps for disposition
  - Disposal Development of uniform standards to facilitate new technology development for D&D. DOE Orders promulgated in the 80's and early 90's do not support the introduction of new technologies for D&D.
  - D&D implications from the revised 420.1C Real Property Management.
- DOE Liaisons: Andy Szilagyi, Doug Tonkay, Jonathan Kang

# WMWG FY17 Focus Areas and Planned Achievements



## D&D Subgroup – LLW Initiative Team Members:

- John Wrapp (UCOR) Team Lead
- Renee Echols (Firewater)
- Jonathan Kang (EM HQ)
- Sonny Goldston (CH2M)
- Tammy Monday (Perma-Fix)
- Lee Fox (SRNS)
- Connie Simiele (CHPRC)
- Marilew Bartling (Fluor Portsmouth)
- Scott Anderson (CHBWW)
- Myrna Redfield (Fluor Paducah)
- Ben Roberts (LANS)
- John Bretzke (LANS)
- Michelle Coriz (LANS)
- Larry Ling (SRR)
- Rob Black (BEA)
- Bob Petras (SRR)

# WMWG FY17 Focus Areas and Planned Achievements



## D&D Subgroup Cont'd – Dan Macias, John Wrapp, Rob Vellinger

- Safety Basis Analysis and process for D&D and remediation (particularly for soil) difficult and not standardized. The use of fixatives, agents, etc. and how they interface with existing Safety Basis requirements.
- Process for taking a facility Cold and Dark and requirements for maintaining Life Safety Codes until just prior to Demo ready. A Graded Approach needs to be taken allowing a less stringent set of code compliance. Example is maintaining fire protection system active right up until Demo ready.

# WMWG FY17 Focus Areas and Planned Achievements



## 10 CFR 61 Revision

- Provide technical input to DOE/HQ regarding NRC's performance-based revision to 10 CFR 61 as it affects low-level waste (LLW) disposal performance requirements.
- NRC proposed revisions are much more consistent with DOE LLW disposal requirements. The WMWG will continue to work with DOE to ensure the technical details are consistent and provide draft comments for DOE consideration
- DOE Liaisons: Doug Tonkay, Justin Marble

# WMWG Upcoming Meetings



- Monthly conference calls - first Wednesday of each month at 3:00PM EST
- EFCOG WMWG in association with WM17 Phoenix March 9<sup>th</sup> 8:30am
- EFCOG P&T Subgroup meeting in conjunction with CTMA Workshop May 22-25 – Point Clear, Alabama
- EFCOG Annual Meeting June 7-8, 2017 – Washington, DC
- Hilton Mark Center Hotel in Alexandria during the FY2017 National Cleanup Workshop- September 14, 2017