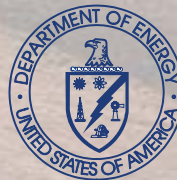


Repository Safety Strategy-Process Model Reports and Analysis/Model Reports

Presentation to:
Nuclear Waste Technical Review Board (NWTRB)

Presentation by:
Mike Lugo
Manager, Process Model Reports
M&O/TRW

Alexandria, VA
September 14-15, 1999



U.S. Department of Energy
Office of Civilian Radioactive
Waste Management

Yucca
Mountain
Project

Process Model Reports (PMRs)

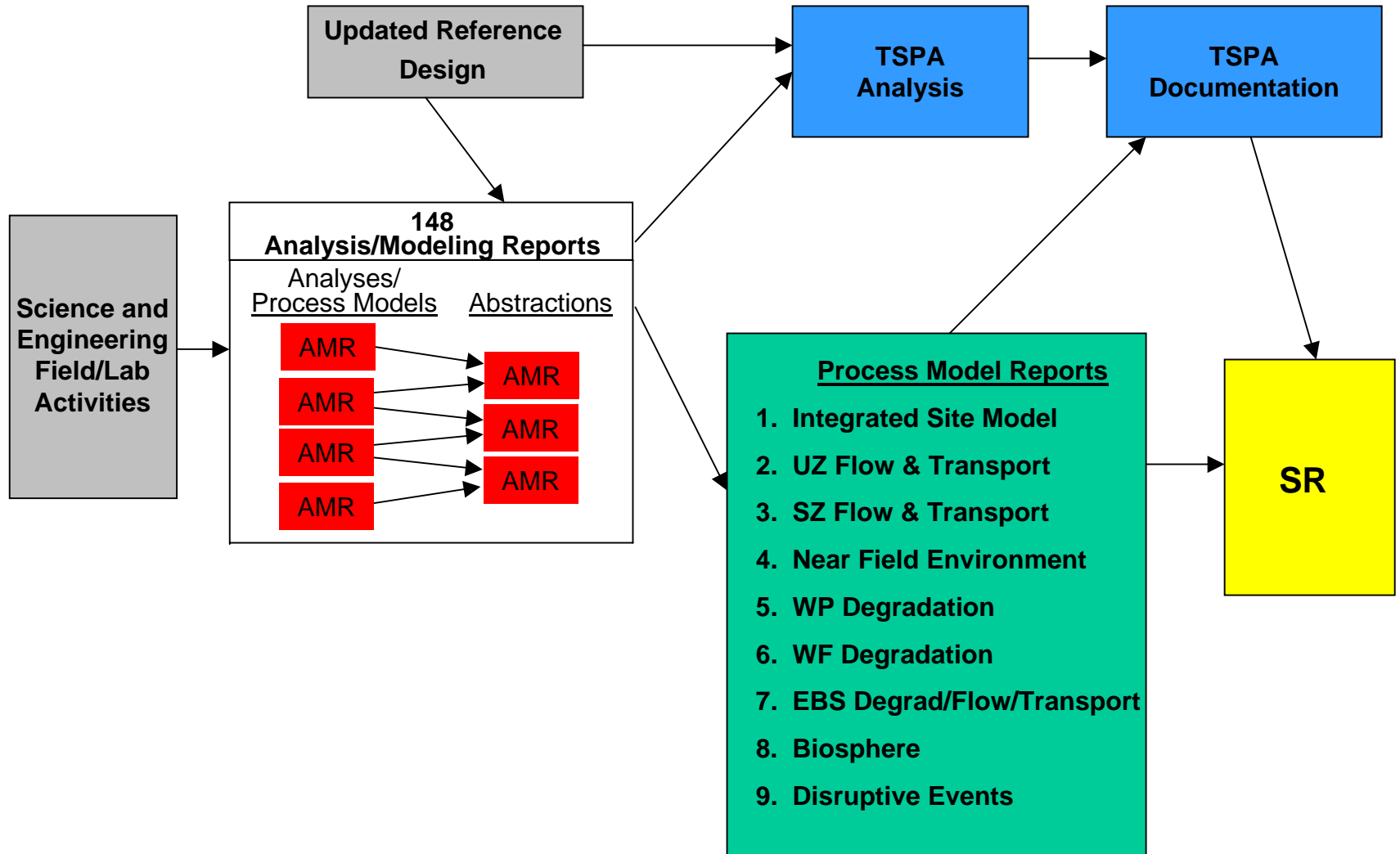
Purpose

- **The purpose is to document the technical basis supporting each TSPA process model**
 - **Supports the postclosure safety case for SR/LA**
- **PMRs will focus the development of technical information on what is relevant to developing a defensible TSPA**
 - **i.e., the information the Project is relying upon to demonstrate postclosure compliance**
- **The PMR development process will ensure transparency and traceability of data, information, and references**

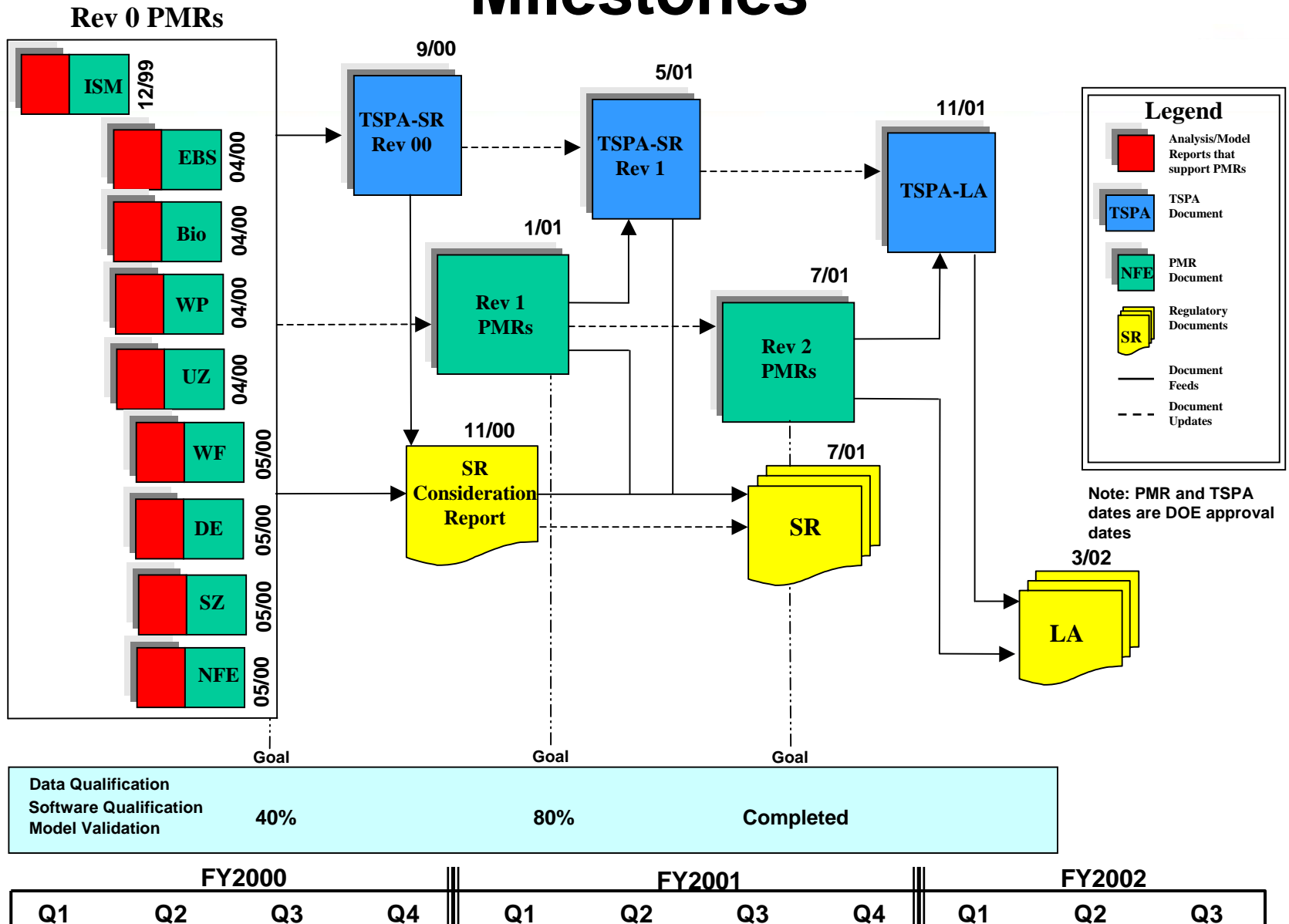
PMR Scope

- **PMRs will address:**
 - **Descriptions of the models, submodels, and abstractions**
 - **Relevant data and data uncertainties**
 - **Assumptions and bases**
 - **Model results (outputs)**
 - **Software qualification**
 - **Model validation**
 - **Opposing views/alternative interpretations**
 - **Information to support regulatory evaluations**

PMR/AMR/TSPA Relationship



Linkage of Major Programmatic SR/LA Milestones



PMR Team

PMR Manager – Mike Lugo

PMR Production Coordinator – Jeff Weaver

<u>PMR</u>	<u>PMR Lead/ DOE Lead</u>	<u>PA Representative</u>	<u>Reg. Representative</u>	<u>QA Representative</u>
1. Integrated Site Model	Clinton Lum/ Mark Tynan	Cliff Ho	Terry Crump	Harvey Dove
2. Unsaturated Zone Flow/Transport	Bo Bodvarsson/ Russ Patterson	Cliff Ho	Martha Pendleton	Harvey Dove
3. Saturated Zone Flow/Transport	Al Eddebarh/ Russ Patterson	Bill Arnold	Augie Matthusen	Mike Eshleman
4. Near Field Environment	Dale Wilder/ Deborah Barr	Nick Francis	Pete Gaillard	Richard Powe
5. Waste Package Degradation	Joe Farmer/ Paige Russell	Joon Lee	Ali Haghi	Dan Tunney
6. Waste Form Degradation	Christine Stockman/ Paige Russell	Rob Rechard	Mike Scott	Dan Tunney
7. EBS Degradation/ Flow/Transport	Dwayne Chesnut/ Jaime Gonzalez	Bob MacKinnon	Jerry Self	Dennis Threatt
8. Biosphere	John Schmitt/ Russ Patterson	Tony Smith	Kayce Prince	Steve Swenning
9. Disruptive Events	Richard Quittmeyer/ Russ Patterson	Rally Barnard	Terry Crump	Steve Swenning