10 CFR Part 830 Nuclear Safety Management Rule

PRESENTATION TO DNFSB INTERFACE WORKSHOP

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What were the major milestones for 10 CFR Part 830?

- n Notice of Proposed Rulemaking issued 12/9/91
- n Quality Assurance Requirements issued 4/5/1994
- n Interim Final Rule
 - issued <u>10/10/2000</u>
 - effective <u>12/11/2000</u>
- n Final Rule
 - issued <u>1/10/2001</u>
 - effective <u>4/10/2001</u>
- Interim Final Rule remains in effect until superseded by the Final Rule on 4/10/2001

What are the major topics addressed by the requirements in PART 830?

- n Subpart A: Quality Assurance (1994) -
 - Quality Assurance Program (QAP)
- Subpart B: Safety Basis (2000) -
 - Documented Safety Analysis (DSA)
 - Technical Safety Requirements (TSAs)
 - Unreviewed Safety Question (USQ) procedure

What happened to the other nuclear safety topics?

- Maintenance, personnel training, conduct of operations, and fire protection
 - 10 CFR 830.204 (b)(5) requires contractors to define safety management programs for these topics in the DSA.
- n Criticality safety
 - 10 CFR 830.204 (b)(6) provides requirements for a criticality safety program to be included in the DSA.
 - DNFSB Tech-28 (3/5/01) requires further guidance on relationship of criticality controls and DSA/TSRs.
- n Occurrence reporting & defect identification
 - Contracts will continue to require ORPS.

Who needs to meet the rule?

	Cat 1, 2, & 3	Rad. Facilities	Subs & Suppliers
QA	Yes	Yes	Yes
Safety Basis	Yes	No	No

How does a contractor determine if a nuclear facility is hazard category 1, 2, or 3?

- n 10 CFR 830.202 requires contractors to use <u>DOE-STD-1027</u> to determine if a nuclear facility is hazard category 1, 2, or 3
- n Use of 1027 is a requirement, *not* a safe harbor

What types of facilities/activities have safe harbors for DSAs listed in Part 830?

- ⁿ Reactor
- n Nonreactor nuclear facility
- n Facilities with a limited operational life
- Deactivation or transition surveillance and maintenance activities
- ⁿ Decommissioning activities
- ⁿ Environmental restoration activities
- n Nuclear explosive facilities
- n Hazard Category 3 nuclear facilities
- n Transportation activities

What is the safe harbor for hazard category 3 nuclear facilities?

Simplified method to develop a safety basis for hazard category 3 nuclear facilities

- basic description of the facility/activity and its operations
- qualitative hazards analysis
- hazard controls (consisting primarily of inventory limits and safety management programs) and their bases.

What is the safe harbor for environmental restoration activities?

- ⁿ DOE-STD-1120-98 and
- n 29 CFR 1910.120 (or 29 CFR 1926.65 for construction activities)

What is the safe harbor for deactivation or transition surveillance and maintenance?

- n DOE-STD-3009 or
- n DOE-STD-3011

What is the safe harbor for decommissioning?

- n DOE-STD-1120-98,
- 29 CFR 1910.120 (or 29 CFR 1926.65 for construction activities), *and*
- n Hazard controls based on
 - Safety and Health Programs
 - Work Plans
 - Health and Safety Plans
 - Emergency Response Plans.

What is the safe harbor for limited operational life facilities?

- n DOE-STD-3009 or
- n DOE-STD-3011-94

What are the safe harbors for transportation activities?

- ⁿ Transportation activities
 - SARP per DOE-O-460.1A and
 - <u>TSD</u> per DOE-G-460.1-1
- n Transportation and onsite transfer of nuclear explosives, etc.
 - SARP per DOE-O-461.1 and
 - <u>TSD</u> per DOE-M-461.1-1

What is the safe harbor for nuclear explosives?

- n DOE-STD-3009 and
- n DOE-STD-3016

May a contractor use a method other than a safe harbor for a DSA?

- Methods other than safe harbors may be used with DOE approval.
- Alternate methods must be approved by PSO with consultation of EH for NNSA activities & concurrence of EH for non-NNSA facilities.

What are the schedule requirements for existing facilities & activities?

April 9, 2001: Contractor notifies DOE if the current safety basis (DSA & TSRs) is to be used to meet the rule [830.207(c)] Must indicate DSA methodology **April 10, 2001**: Contractor submits USQ procedure [830.203(b)]

October 10, 2001: DOE approves continuation of existing safety basis [830.207(c)] - and use of alternative methodology (EH concurrence)

April 10, 2003: Contractor submits safety basis if existing safety basis was not approved on 10/10/01 [830.207(a)] [830.207(c)]

What are the schedule requirements for new facilities & activities?

- Before construction or procurement: Contractor must obtain DOE approval of PDSA
- Before operation: Contractor must obtain DOE approval of USQ procedure, documented safety analysis, & TSRs

What if a contractor does not have a safety basis that reflects current operations?

- Rule (830.207(b)) requires contractors to perform work consistent with the safety basis in effect on 10/10/00, pending DOE approval of the safety basis.
- If existing safety basis does not reflect current operations, it must notify DOE
- Contractor/DOE will establish an interim basis for operations and develop new DSA and TSRs by April 10, 2003
- May submit PAAA non-compliance report if interim basis not approved by April 9, 2001.

What is the impact of the new Part 830 on enforcement?

- Clarifies QA rule applies to
 - all nuclear facilities or activities and
 - work processes adopted to meet either rule or contract
- n Adds safety basis requirements for hazard category 1, 2, or 3
- n Does <u>not</u> allow DOE to apply PAAA enforcement to Federal employees
- Does <u>not</u> expand enforcement to hazards that do not affect nuclear safety

What is the impact of the new PART 830 on SMS & DOE Orders?

- n Requires integration of QAP with SMS
- Confirms SMS requirements for safety bases
- Allows contractors to use safety bases developed to meet SMS when they meet rule requirements
- Provides requirements & guidance consistent with and derived from current DOE Orders 5480.21,.22, .23 and corresponding guidance & standards
- n Orders (.21, .22, .23) will be canceled after implementation period for rule