Brotherhood of Locomotive Engineers & Trainmen

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BLET Radiation Safety Officer
Final

Environmental Impact Statement
for a
Biological Repository for the Disposal of
Spent Cheddar Cheese and High-Level
Peanut Butter at Yucca Mountain,
Nye County, Nevada

Volume I - Impact Analyses
Chapters 1 through 15

U.S. Department of Large Books
Office of Civilian Cheese Management

DOLB/EIS-0251F

September 2005

Printed on recycled paper with soy ink
No Action Alternative
New Hire Training
New Hire study topics

- GCOR
- ABTH
- SSI
- Employee Safety
- HazMat
- Railroad terminology
- OJT
- 15-week class
- Final test
Hazardous Materials

- Initial new-hire training
- Required by OSHA
- No specified class length
- Open book test
- Triennial module
Locomotive Engineer Training
A little bit older...a little bit wiser...

- Typically 2-4 years’ seniority
- Pass-or-get-fired promotion
- Intensive program
- Perpetually tested to a higher standard
• 20 Weeks of training
• 15 of that is OJT
• General Code of Operating Rules
• Air Brake & Train Handling
• System Special Instructions
• Safety Instructions
• Federal Regulations
• Locomotive Simulators
• Test Ride
• Pass test with 90%
Engineer Recertification

- Every 36 Months
- Eye test
- Hearing test
- DMV license check
- 90% on test
- Check ride
Education & Training needs
We will be the first responders

MERRTT-based training will ease fears and give crews the knowledge they need to incorporate ALARA principles.
Bad things happen…
Health & Safety Concerns

- No Recognized Status
- No Administrative Dose
- No Carrier Radiation Protection Program
- No Dosimetry
- No ALARA Principles
MEI Rail Vs. average yearly doses

Dose/ YR

DOE
Nukes
SFS
Rails
**Physical Safety & Security**

**Locomotives**

- No standard for locking doors or windows
- Window assemblies, even when locked, can often be slid as a unit to gain access to cab
- No requirement for A/C. Open windows nullify the benefit of impact resistant glazing
- Cab is not air tight
Communication

- Historically poor communication with escorts
- Trains do not have a secondary means of communication
- No “guard channel” to speak to emergency responders
- Operating rules require crews to transmit sensitive information over open frequencies
Operational Security

Rail fan networks

- Tracks are easily accessible to trespassers
Operational Security

- Real-time “rail cams”
- Near real-time Broadband scanner transmissions
- Up to the minute Internet reporting
- Information & equipment readily available on Internet
• Switch locks haven’t been changed in years
• Dark Territory offers no protection from open switches, broken rails or fouled track
• Operation situations require the conductor to be off the train for long periods of time
• Operational rules make it easy to stop a train
• Mechanical defects may require crew to separate portions of the train by many miles
A determined status
A realistic administrative dose limit
Dosimetry
MERRTT type training as part of a Radiation Safety Training Program
ALARA-based RPP
Special Locomotive Standards
Improved communication ability
Improved operational security
Questions