

Attachment 3  
CHARTER

**Working Group to Evaluate the "Two Person Rule"—10 CFR 34.41(a)**  
July 22, 2002

Objectives:

The objective of WG 34.41 is to evaluate the impact the two person rule (10 CFR 34.41) has had on the health and safety of industrial radiography workers and members of the public since the effective date of the rule on June 27, 1998. The WG will consider the development, interpretation, and implementation of the existing rule. A risk-informed approach will be used to review information about events that involved two-person radiography crews over the last four years. The review effort will be coordinated with the Agreement States. The WG will issue a final report which addresses the efficacy of the current rule and recommends a preferred implementation strategy or rule change, which, in the view of the WG, will most effectively and efficiently meet the stated objectives of the two-person rule, i.e., to enhance the level of protection of radiographers (by providing immediate assistance when needed) and the public (by preventing unauthorized entry into the restricted area) during radiographic operations.

Background:

The Texas IMPEP Final Report, dated December 21, 2001, included the following recommendation for the NRC:

- (1) The review team recommends that NRC, in coordination with the Agreement States, re-evaluate the two-person rule to assess the effectiveness of the intended outcomes, including experience from past events, and propose a strategy and rule interpretation that best achieves the goal of safety. (Section 4.1.2)

With this effort, we are focusing on the development and implementation of the Two Person Rule (pre-1996 to present), the compatibility issues for the Agreement States, and the actual events (from NMED and from the States) as compared to risk information. The report is intended to close out this IMPEP item and provide a basis for further action, if warranted.

Scope of Work:

Working Group members will be assigned to complete the following reviews, and report findings and recommendations to the Team Leader for incorporation into the final report.

1. Review NRC Development and Implementation of the Two Person Rule:
  - a. 10 CFR 34.41, Conducting industrial radiographic operations, and 34.51, Surveillance (To include SOC and related items)
  - b. Information Notices and NMSS Newsletter Articles
  - c. NUREG-1556, Volume 2, Consolidated Guidance about Industrial Radiography Licenses (Final Report, August 1998)
  - d. Inspection Procedure 87120, Industrial Radiography Programs  
(Compare to Agreement State inspection guidance)

2. Review Compatibility Requirements and Status in the Agreement States (Level B)
  - a. Texas Regulations, Other Agreement States Regulations, Suggested State Regulations
  
3. Review events of radiation exposures associated with violations
  - a. Evaluate Nuclear Materials Event Database (NMED) for violations of 34.41 and 34.51 (e.g., events with qualified crew, events with unqualified crew.)
  - b. Explore Agreement State anecdotal information about events, prior to and since the two person rule.
  
4. Develop Risk Comparison
  - a. Compare NMED data to NUREG/CR-6642, "Risk Analysis and Evaluation of Regulatory Options for Nuclear Byproduct Material Systems" and the Byproduct Material System (BMS) Risk Database.

Level of Effort:

WG members and their supervisors should allow ~ 6 days, total, in June, July, and August for work on assignments. WG business will be conducted primarily by teleconference and e-mail.

Schedule:

June: recruitment of WG members, kick-off meeting and assignments  
 July: complete reviews and research, teleconference to discuss findings and recommendations  
 August: WG members written reports to Team Leader, teleconference to discuss draft final report, brief IMNS, prepare final report

Working Group Members:

NMSS/IMNS: Task Leader, Thomas Young, J. Bruce Carrico, Kim Karcagi,  
 NMSS/RTG Jim Smith  
 RIV/DNMS Mark Shaffer  
 OE Sally Merchant  
 OGC Maria Schwartz  
 STP James Myers  
 OAS/CRCPD Jan Endahl