

NUREG-1556, Volume 2
External Comments Resolution Table

Comment No.	Commenter	Location in the Volume	Comment	Resolution
1	Office of Agreement States (OAS) & Commonwealth of Virginia (Va)	General Comment	The abbreviation for hour has been changed from "hr" to "h". It is the Board's understanding that the conventional abbreviation for hour is "hr" and that is used in all other regulatory guides. The Board recommends that the abbreviation for hour be changed from "h" to "hr"	Not accepted. The U. S. Government Publication Office (GPO) says use "h" for hour, so that is standard used in NRC documents.
2	Radiographer – Scott Cargill Valley Industrial X-Ray and Inspection Services, Inc.	Page 3	The first is cosmetic and minor, the map of agreement states on page 3 needs a much higher contrast between the NRC jurisdictional states and agreement states, it is very difficult to separate the two shades.	The shading on the map has been revised to provide a better contrast between the two shades.
3	OAS & Va	Page 3	On page 3 it lists the Region IV address as 612 E. Lamar Blvd. The Board believes this is incorrect due to Region IV's move. The new address is 1600 East Lamar Boulevard in Arlington. The Board recommends the address on page 3 of the NUREG be updated.	The address has been updated
4	American Portable Nuclear Gauge Association (APNGA)	Page 8 (New Page 9)	<p>Trait #5: NUREG Volume 2 Revision states (page 8): "the annual refresher training required for radiographers and radiographer assistants may correspond with the continuous learning safety culture trait in that the training provides an opportunity to learn about ways to ensure that safety is sought out and implemented".</p> <p>This acknowledgement of the importance of annual refresher training in implementing safety culture should be considered to revisions in NUREG Volume 1. I think that annual refresher training should be a vital addition for the portable nuclear gauge industry. I bring it up now because of the need to discuss portable nuclear gauge annual refresher training at the Feb 9th Commission meeting. This is probably the least trained industry sector and inclusion of an annual refresher class would likewise</p>	<p>The regulations in 10 CFR Part 34 require annual refresher training for radiographers. There are no similar requirements in the regulations for portable gauges.</p> <p>Table 3.1 with</p>

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			<p>serve the continuous learning trait.</p> <p>I have had discussions with portable nuclear gauge Radiation Safety Officers (RSOs) and all of them have struggled with the concepts of safety culture as it applies to the gauge industry. I have committed to providing a no cost online annual refresher class (through the American Portable Nuclear Gauge Association - APNGA) that will provide examples of the nine safety culture traits as they apply to gauges. RSOs can perform the annual refresher training in-house and, if they find it beneficial, can utilize the online materials.</p> <p>While the NRC and Agreement States represent the primary role in implementing safety culture the various industries can represent an important supporting role by promoting safety culture in their training offerings, websites and newsletters. Brochures and posters can serve as an introduction to safety culture and intermittent inspections can help RSOs refine safety culture efforts but the sheer number of licensees and end users will always be a challenge for regulatory agencies. Industry should and can be relied upon to provide annual refresher training assistance and website/newsletter coverage of the safety culture initiative.</p>	<p>the nine safety culture traits has been added to the document.</p> <p>A section on Safety Culture has also been added to this and all of the other NUREG-1556 volumes.</p> <p>If you believe that annual refresher training should be added to the regulations for portable gauge users a member of the public may petition the NRC to develop or change its regulations. The NRC's requirements for submitting a petition for rulemaking are included in the NRC's regulations at 10</p>

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				CFR 2.802, "Petition for rulemaking."
5	APNGA	Pages 17-61 (New Pages 19-67)	<p>Embedding Safety Culture into the NUREG series: I noted that safety culture was addressed in Section 3.1, page 8, under Management Responsibility and in Appendix P but not specifically into materials associated with developing a Radiation Safety Program and in the Annual Audit as well as some other key places as noted below. Since the NUREG series is commonly accessed by the licensee primarily during the application process I wonder how much they will return to view aspects of safety culture. Implementation of safety culture terminology directly into the Radiation Safety Program and Annual Audit will provide the primary ongoing focus of the initiative. I think coverage of Safety Culture in the following sections would better serve to advance the concepts of the initiative:</p> <p>Inclusion in "Section 8 - Contents of an Application' that requires acknowledgement of Safety Culture</p> <p>Inclusion on page 24, Radiation Safety Program/RSO</p> <p>Inclusion, Page 26- Figure 8.2 -Typical Duties and Responsibilities of RSOs</p> <p>Inclusion Section 8, Item 8- Training (also page C-4 - especially "Describe the annual refresher training program, including topics to be covered and how the training will be conducted" and inclusion in Radiation Safety Program/Audit Program on C-7). Also page E-1 - E3.</p> <p>Inclusion Section 8, Item 10 - Radiation Safety Program</p> <p>Inclusion Section 8, Item 10.1- Audit Program (including Appendix G, Page G-1)</p>	<p>The Commission has directed the staff to provide education on Safety Culture. However, licensees are not required to implement Safety Culture. Safety Culture information has been placed at the same locations in all of the NUREG-1556 Volumes. This should make it easier for users of any Volume of NUREG-1556 to readily find all applicable Safety Culture information.</p>

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			Inclusion Section 8, Item 10.9 - Operating and Emergency Procedures (List the SC traits)	
6	OAS	Page 17 (New Page 19)	Page 17 and throughout the document state “as low as reasonable achievable” but should be stated as “as low as is reasonably achievable”, These should be corrected throughout the document.	The change was accepted.
7	Va	Pages 19-59 (New Pages 22-65)	Delete Figures 8.1-8.12 as they are outdated, sometimes incorrect, and not always useful.	Partially accepted. Figure 8.6 was deleted. Figures 8.5 and 8.11 (new 8.10) were updated. Figures are viewed as helpful to users of this volume.
8	OAS	Page 40 (New Page 44)	Section 8.10.6: Occupational dose. Second paragraph states that “other personnel dosimetry device are....must be replaced at intervals not to exceed 3 months”. A Mirion Instadose dosimeter does not need to be exchanged for the dosimetry to read. The only time the dosimeter is sent back to the manufacturer is if the device is in need of repairs. The Board recommends that the paragraph be changed to state “must be replaced at intervals provided by the supplier”.	Not accepted. When traditional dosimetry devices are replaced, the dosimetry devices are evaluated. The interval to evaluate exposure should not exceed 3 months.

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9	OAS & Va	Page 40 (New Page 44)	On page 40 of the NUREG it states: "Electronic personal dosimeters may only be used in place of ion-chamber pocket dosimeters." The Board believes this is an inaccurate statement as electronic personal dosimeters may also have the alarming rate feature and thus could replace the alarming ratemeter being used. This would allow radiographic personnel to wear once device instead of two. The regulations in 10 CFR 34.47 do not include any statement that these devices must be independent of each other. The Board recommends the statement on page 40 be removed from the NUREG.	Not accepted. Per 10 CFR 34.47 and the regulatory history associated with this regulation, a device may not be used to serve more than one of the specified functions at a time.
10	OAS	Page 41 (New Page 45)	Figure 8.6 is included to visualize storage of radiographic cameras. Since the inception of Increased Controls this picture is no longer valid and does not add any value to the discussion of Section 8.10.7 Public Dose. The Board recommends this figure be removed from the NUREG.	This comment was accepted and the figure was removed from the NUREG.

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11	Health Physicist from State of Washington Radioactive Materials Section	Page 59 (New Pages 65-66)	<p>Section 8.10.9.11</p> <p>I have a comment on page 59 regarding general emergency procedures. General emergency procedures do not address injured personnel and what to do if you are unable to reach the RSO. In addition, the entire five step procedure can be simplified down to three steps (three figures), with much fewer words to memorize and include the two contingencies you are missing:</p> <ol style="list-style-type: none"> 1. Remove Personnel 2. Secure Area (2 mR/hr) 3. Call Someone <p>This was taught back in 1982 at the Radiological Emergency Response Operation (RERO) class. It's easier to memorize and should be!</p>	Not accepted. The example provided in Volume 2, was for an example only. It is the responsibility of the licensee to develop emergency procedures for their unique situations.
12	Radiographer – Scott Cargill Valley Industrial X-Ray and Inspection Services, Inc.	Appendix E	<p>The second and more substantive in appendix E the requirements for radiographers and assistants list passing a written or oral exam on O&E with an 80% cut score. This cut score is not addressed in regulation .43(c).</p> <p>Though this is a guidance document it should reflect current regulation and not the authors preference. 70% is a standard cut score for most exams given.</p>	The recommended change was accepted.
13	OAS	Appendix F	6 month audit. There is no block available to document who performed the audit. This should be added.	The recommended change was accepted.

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14	OAS & Va	Appendix O	Information needed for transfer of control application contains questions that are not stated in NUREG-1556 Vol. 15 which is the Guidance for change of control. In Vol. 15 section 5 has 6 specific items that must be addressed in the request and includes the 6 questions in Appendix F. This volume and several others list 15 questions to be answered. The Board recommends that the 6 questions from Appendix F of NUREG-1556 Vol. 15 be used or that Appendix O be revised so that they can all be in agreement.	Appendix O was deleted. NUREG-1556, Volume 15 will be the guidance used for transfers of control.