

X-ray Advisory Committee Meeting

MEETING MINUTES

Date: March 21, 2018

- Location: Orville Freeman Building 645 Robert St. N. Saint Paul, MN 55155
- Attendees: Beth Schueler (Medical Physicist), Frank Zink (Medical Physicist), Jon Wohlhuter (MN Association of Nurse Anesthetists), Michael Lewandowski (Health Physicist/CHP), Richard Giese (Medical Physicist/PhD), Ronnell Hanson (MN Radiological Society), Tony Murphy (Medical Physicist), Vinton Albers (Chiropractic Association).

Guest: Brett Muehlhauser (Northstar Imaging) (IFGM).

Via Conference Call: Bridgett Anderson (MN Dental Board), William Duppler (Medical Physicist), Julie Sabo (MN Nursing Board).

Absent: Brian Hall (Service Provider), Dan Lind (Service Provider), Louis Saeger (MN Medical Association).

MDH: Bevin Beaver, Jacquie Cavanagh, Kelly Medellin, Mary Navara, Teresa Purrington.

Acronyms and Terms

- ACM Advisory committee member
- CRCPD Council of Radiation Control Program Directors
- CBCT Cone beam computed tomography
- CT Computed tomography
- FDA Federal Drug Administration
- IAC Intersocietal Accreditation Commission
- MDH Minnesota Department of Health
- NCRP National Council on Radiation Protection and Measurements
- QMP Qualified medical physicist
- Revisor Office of the Revisor of Statutes
- SSRCR State Suggested Regulations for Control of Radiation

Welcome and Introductions

Teresa Purrington, X-ray Program Supervisor

Purrington welcomed the Advisory Committee back. MDH staff have been working with the Industrial Focus Group. Next meeting, the committee will be going through Gauging X-ray Systems, Non-Medical Hand-Held X-ray Systems, and Bomb Detection X-ray Systems. The Bomb Detection X-ray Systems rule draft has changed to Suspected Hazards X-ray Systems based on focus group feedback. MDH is currently trying to assemble a Service Provider Focus Group. If there is not enough interested parties to form a focus group, the service provider rules will go directly to the Advisory Committee for review and comment.

Frank Zink (Advisory Committee Group - ACG) asked for a summary of the types of registrants that have industrial equipment. Michael Lewandowski (ACG) explained the different types of industrial equipment. Beth Schueler (ACG) asked how registrants would know which rules to follow when equipment overlaps between different types. Purrington stated that MDH would review this, potentially create different rule parts for this equipment, and provide guidance documents for registrants.

Purrington stated that we would not be discussing inspection time intervals at this meeting (ie - days versus months). She asked all interested parties to provide comments with respect to inspection time intervals.

Rulemaking and Focus Group Update

Jacquie Cavanagh, Section Policy and Rules Analyst

Cavanagh stated that legislation authorizing the use of x-ray for security screening in detention and correctional facilities has been introduced (HF 3338/SF 2585). If enacted, MDH will need to adopt rules governing this use of x-ray equipment. MDH would publish a new Request for Comments and proceed with separate rulemaking. Purrington stated that it is MDH's intent to share any security screening rule drafts with the committee. Ronnell Hanson (ACG) asked if this includes airport security screening. Purrington said it does not and clarified that airport screening falls under federal jurisdiction. Lewandowski explained how airport screening is different from this type of screening and offered to provide documentation to MDH.

Review of Industrial Analytical Rule Draft

Jacquie Cavanagh, Section Policy and Rules Analyst Teresa Purrington, X-ray Unit Supervisor

Subp. 2. Safety device.

Lewandowski stated items B(1) and (2) are redundant and unclear. Suggested replacing it with item H(7).

Subp. 8. Safety device evaluation.

Lewandowski questioned item F(2) and suggested including the list in a procedure for each equipment type and/or manufacturer. Stated this list would be cumbersome for registrants that have a lot of equipment and would need to track the testing of all safety systems. Purrington asked if all facilities would have the same technologies as a larger facility. Lewandowski stated there should be some clarification as to what MDH expects from this list. Brett Muehlhauser (IFGM) stated that it is wise to identify what safety devices to evaluate for each equipment type/manufacturer. Richard Giese (ACG) stated that the accountability is not as robust if the specific safety devices are not listed. Lewandowski stated the specific safety devices lists are not necessary for these systems because if the safety device does not work, then the system shuts down. Purrington asked Bevin Beaver (MDH) if other states have this checklist. She stated that 85-90% of states have a checklist. Lewandowski stated that other states include warning lights and interlocks only, no safety system checks.

Subp. 9. Radiation emission limits.

Zink questioned item C and stated that it is not clear what the violation would be. Lewandowski responded that this would control occupancy operation.

Subp. 11 and 12. Radiation protection survey and Area survey.

Lewandowski asked what the difference was between a radiation survey and an area survey. Purrington stated that radiation survey is at installation once equipment is installed. Area survey are surveys required for routine measurements. Lewandowski questioned item A in both subparts, and stated they are the same. Suggests combining subpart 11 and 12. Giese stated that there is a definition for area survey, but not of radiation survey, so it would seem inappropriate to combine the two. Purrington stated that the word survey is confusing for registrants and stated currently there is a definition for "survey" or "radiation survey" in the general definitions. This definition will be updated to radiation protection survey.

Subp. 15. Repair or modification.

Lewandowski questioned item A and the power switch because it is not possible to lock out and tag out some of these devices. Suggested changing item B "qualified personnel" to "qualified person".

Subp. 16. Training requirements; qualified personnel.

Lewandowski questioned item A and the exemption of qualified personnel. Suggested revising the wording so that it makes sense. Craig Verke (MDH) stated that the definition for qualified personnel would be discussed at the Service Provider Focus Group meetings. Lewandowski stated that the manufacturer does not always provide manufacturer training. Muehlhauser stated that Northstar Imaging provides training, but agreed that there are many manufacturers that do not. He also stated that the training could be outlined in the rule part. Lewandowski agreed, and stated this needs to be discussed further.

Subp. 17. Additional requirements; open-beam analytical x-ray systems.

Lewandowski questioned item A and subpart 2(A), and how they differ. Purrington stated MDH would review this. He also questioned item E and subpart 3(B), as they seem the same as well. Suggested removing 17(E).

Review of Industrial Radiography Rule Draft

Jacquie Cavanagh, Section Policy and Rules Analyst Teresa Purrington, X-ray Unit Supervisor

Subp. 3. Warning lights and devices.

Muehlhauser questioned if any research was found with the x-ray on indicator. Verke stated that there were some on the portable devices researched.

Subp. 8. Radiation protection survey.

Lewandowski questioned item A(2) and if these are local components in the definition. Giese stated that it should specify components that affect radiation output. Lewandowski stated this comes from the definition for local components. Muehlhauser stated that if you replace an x-ray tube, a survey should be conducted afterwards. Suggested looking at local components definition to include x-ray tubes. Giese stated this should be worded as anything that might potentially change the radiation output, with items suggested but not inclusive. Muehlhauser stated the local components definition should not include the word analytical.

Subp. 10. Radiation safety officer; qualifications.

Zink questioned whether all these systems x-ray have an RSO with 2000 hours of training. Purrington stated this is consistent with Radioactive Materials rules. Lewandowski stated that subpart 11 provides for some flexibility. Muehlhauser stated there might be different levels of training, and he could provide documentation. Purrington stated that MDH would need additional justification to deviate from SSRCR and the majority of other states. Muehlhauser asked Verke how many permanent enclosures are in Minnesota. Verke responded that there are two. Muehlhauser stated that there may be others who have permanent enclosures that would fall under this rule part, and their safety requirements should remain the same as a certified cabinet.

Subp. 13. Radiographer requirements.

Lewandowski questioned item E and item D(1), as there seems to be a gap. Purrington stated that the proposed language reflects MDH's research of Radioactive Materials rule and NRC provisions. MDH would need additional information to justify deviating from those provisions. Lewandowski stated that all of the states have copied others' rules over the years and, in some cases, provisions may be missing or were dropped. He suggested consulting with Radioactive Materials to ask to update 4731 rules and Purrington agreed to do so.

Subp. 15. Annual refresher safety training.

Muehlhauser questioned if there should be a number of refresher safety specific number of hours included in the rule part. Purrington stated MDH would review that.

Subp. 16. Job performance review.

Zink asked if there was definition of practical exam. Lewandowski stated that a practical exam should be consistent with the quality of the training program and with the hazard of the equipment. Purrington stated that MDH would review this. Hanson suggested that we keep safety consistency throughout the rule.

Subp. 18. Radiographer certification; certification programs; written examination.

Muehlhauser questioned how other states have resolved the requirement for permanent enclosures. Purrington stated MDH would pose this question to the CRCPD community. Zink stated that the link for Appendix A should not be in the rule part, as that could change. Cavanagh responded that links would be incorporated by reference. Zink responded that there could be approved Commissioner wording or as promulgated by CRCPD. Muehlhauser responded that the rule could reference an Appendix, but not the specific one. Cavanagh responded that MDH will consider these suggestions.

Subp. 19. Utilization data.

Lewandowski stated that there does not seem to be a difference between the items B and E. Suggested adding temporary to item B, since item E appears to be for permanent. Purrington stated MDH would review this.

Subp. 20. Safety procedures.

Lewandowski suggested that the wording in item A(5) should be "responding to equipment malfunctions."

Subp. 22. Permanent radiographic installations.

Lewandowski stated that item C is unclear and asked why alarm systems must be tested each day. Purrington responded this was discussed with MDH's Radioactive Materials unit. Lewandowski stated that it is unclear what alarm system is being referred to in this subpart. Muehlhauser stated he agrees. He also stated there are permanent installations that are not certified cabinet systems, and those permanent installations should be considered. He will provide MDH with some documentation and suggested wording. Purrington stated MDH would review this and look at other systems other than vaults.

Subp. 23. Temporary job site.

Lewandowski questioned item B(3) and the definition of personal supervision. Purrington stated this is consistent with Radioactive Materials and other states. Lewandowski stated the definition refers to direct personal contact, and this subpart states direct visual observation.

Muehlhauser stated MDH also needs to consider the intent of this subpart, and that the assistant and the radiographer could both be operating different equipment at the same time.

Lewandowski stated that items C (1) and (2) are inconsistent. One states "Caution: high radiation area" and the other states "Caution: radiation area". Suggested keeping item C(1). Purrington responded that if there are radioactive materials sources and an x-ray source at some sites, then the "Caution: high radiation area" should remain in this rule part. Lewandowski stated that these requirements would be under subpart 21. Purrington stated MDH would review that when those requirements are finalized.

Lewandowski stated that item C (3) and item D are the same. Purrington stated MDH would review this.

Final Notes

Purrington stated that the industrial definitions would be included with the industrial rule parts. The definitions that are for all registrants will be in a separate section.

Purrington stated that there will not be a fluoroscopy focus group and the provision will go directly to the Advisory Committee Group.

Public Comments

- Kelly Daigle: Asked about industrial training programs in the schools. Are there exemptions
 for those who are in training for schools? Muehlhauser responded that training should be
 handled the same as on the job site and the students should be considered assistants.
 Daigle stated that there are permanent enclosures where this would not apply.
- Kelly Daigle: Asked about subpart 16 and the 180-day review for a seasoned radiographer. She stated there's no value in reviewing someone whose had years of experience. Muehlhauser stated that the wording could be changed to annual review. Zink responded that the RSO does the review, and the radiographer is sometimes the RSO. Purrington stated that is not usually the case. Verke responded that this could be about complacency, and ensuring those with years of experience are following current rules. Hanson responded that with training we need to consider the joint commissions and their expectations for operators.
- Sue McClanahan: Asked about the fluoroscopy meetings, and if veterinary members will be part of the committee. McClanahan stated there is a big issue with veterinary exposure and the number of operators in the room. Purrington stated that once all the provisions are reviewed MDH will go back to discuss Veterinary at the end, like Non-Medical X-ray Systems. Schueler (ACG) mentioned Mayo has Fluoroscopy equipment the use on animals.

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