



A REPORT  
TO THE  
ARIZONA LEGISLATURE

Performance Audit Division

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Performance Audit and Sunset Review

# Arizona Radiation Regulatory Agency, Arizona Radiation Regulatory Hearing Board, and Medical Radiologic Technology Board of Examiners

ARRA Needs to Overhaul its X-ray Inspection Approach, and the MRTBE Should Improve its Processes for Issuing Certificates, Resolving Complaints, and Providing Information to the Public

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Report No. 15-115



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**Debra K. Davenport**  
Auditor General

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September 29, 2015

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Dr. Dean Gain, Chair  
Arizona Radiation Regulatory  
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Ms. Shanna Farish, Executive Director  
Medical Radiologic Technology  
Board of Examiners

Transmitted herewith is a report of the Auditor General, *A Performance Audit and Sunset Review of the Arizona Radiation Regulatory Agency, Arizona Radiation Regulatory Hearing Board, and Medical Radiologic Technology Board of Examiners*. This report is in response to an October 3, 2013, resolution of the Joint Legislative Audit Committee and was conducted as part of the sunset review process prescribed in Arizona Revised Statutes §41-2951 et seq. I am also transmitting within this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

This report includes numerous findings and approximately 70 recommendations. As outlined in its response, the Arizona Radiation Regulatory Agency, Arizona Radiation Regulatory Hearing Board, and Medical Radiologic Technology Board of Examiners agree with most of the findings and plan to implement, or implement in a different manner, all but three of the recommendations.

My staff and I will be pleased to discuss or clarify items in the report.

Sincerely,

Debbie Davenport  
Auditor General

Attachment

cc: Arizona Radiation Regulatory Hearing Board Members  
Medical Radiologic Technology Board of Examiners Members



## REPORT HIGHLIGHTS PERFORMANCE AUDIT

## ARRA's continued inability to perform timely x-ray facility inspections threatens public health and safety

### Our Conclusion

One of the Arizona Radiation Regulatory Agency's (ARRA) responsibilities is to inspect x-ray facilities to ensure that x-ray machines operate properly. Although ARRA has established inspection frequencies, it is unable to meet these frequencies and has a large backlog of inspections. The Medical Radiologic Technology Board of Examiners (MRTBE), a division of ARRA, is responsible for certifying qualified people who use x-ray machines, investigating complaints against certificate holders, and providing information to the public. However, the MRTBE should improve its certification process to ensure that only qualified applicants receive certificates. In addition, the MRTBE does not always adequately investigate complaints and may inappropriately dismiss complaints. Further, the MRTBE does not provide accurate and complete public information.

**ARRA not able to meet inspection time frames**—Although ARRA has determined how frequently it should inspect x-ray facilities, it is unable to meet its inspection time frames. In fact, not meeting x-ray inspection frequencies has been a problem for more than 3 decades. According to ARRA's x-ray inspection data, as of June 2015, approximately 49 percent of all x-ray facilities, or nearly 2,700 facilities, were overdue for inspection. Additionally, approximately 44 percent of the high-risk hospital/therapy facilities are overdue for inspection. The primary reason for this backlog is that ARRA does not have the recommended number of experienced inspectors. As of June 2015, ARRA employed only four x-ray inspectors, including only one who was trained to inspect high-risk facilities.

**ARRA needs to overhaul its x-ray inspection approach**—ARRA has initiated some efforts to perform more inspections, such as implementing an electronic filing system for inspection reports and registrations, which saves inspectors time when processing paperwork. However, these steps alone will not allow ARRA to meet its established inspection frequencies.

We surveyed five states to gather examples of different x-ray inspection approaches and found that two states use state inspectors and three use private inspectors. These private inspectors are registered or certified by their respective state radiation agencies to inspect x-ray facilities. These states reported that using registered or certified private inspectors helps to ensure facilities are inspected in a timely manner, and the x-ray facilities pay for inspection costs. ARRA should establish work groups consisting of various stakeholders to research the inspection approaches other states use and develop recommendations for ARRA's review and implementation.

### Recommendations

ARRA should:

- Establish work groups consisting of various stakeholders to research inspection approaches and develop recommendations; and
- Evaluate the recommendations and determine what approach(es) it will adopt.

## MRTBE should improve its process for issuing certificates

**MRTBE responsible for certifying qualified individuals to use x-ray machines**—MRTBE management has not always ensured that it issues certificates to only qualified applicants. We identified the following specific problems:

- Some applicants were given a second chance, on the same day, to reanswer examination questions they missed, which may allow unqualified applicants to pass. Statute allows applicants to reapply to take the examination, but they must submit another application and fee and retake the whole exam.



2015

- Applicants who are certified by an external certifying organization do not have to take the MRTBE's exam, but the MRTBE issued a certificate to an applicant who did not have a valid external certificate and an applicant who had submitted fake external certificates. MRTBE staff can verify the external certificates online but did not.
- We reviewed a random sample of nine initial certificates and found eight that did not meet all the statutory and rule education requirements. In addition, applicants for renewal certificates must provide proof of continuing education. Of the 12 renewals we reviewed, 2 were renewed without proof of the required continuing education, another 2 were renewed even though the continuing education information was unclear or illegible, and another 4 were renewed without verifying the external certificates, which included continuing education.

### Recommendation

The MRTBE should develop and implement policies and procedures for reviewing and processing initial and renewal applications to ensure applicants meet all statutory and rule requirements.

## MRTBE complaint resolution process has several problems

The MRTBE should address complaint resolution issues, such as:

- **Inadequate investigations or inappropriate dismissals**—We reviewed a random sample of 16 complaints and identified 3 complaints that the Executive Director and MRTBE staff did not adequately investigate or inappropriately dismissed.
- **Inconsistent discipline**—Certificate holders who continue to practice after their certificates have expired are in violation of statute. MRTBE staff have inconsistently referred cases of uncertified practice to the MRTBE for action, and the MRTBE has not consistently followed its discipline policy for the cases it has reviewed.
- **Resolving complaints in a timely manner**—For the 16 complaints we reviewed, the MRTBE did not resolve 4 of these complaints within 180 days as our Office recommended. One complaint took more than a year to resolve.

### Recommendations

The MRTBE should:

- Ensure that its staff follow established complaint-investigation policies and procedures;
- Develop or modify and implement policies and procedures regarding complaint investigations, dismissals, discipline for uncertified practice, and tracking and monitoring complaint timeliness; and
- Meet frequently enough to resolve complaints within 180 days.

## MRTBE does not provide accurate and complete complaint and disciplinary information

The public needs accurate, complete, and timely information about certificate holders. However, MRTBE staff do not provide accurate and complete information about a certificate holder's complaint and disciplinary history. We made three anonymous calls to request complaint and disciplinary history information about three certificate holders and received inaccurate or incomplete information for two of these calls. The MRTBE has drafted a public information policy but needs to finalize it.

### Recommendation

The MRTBE should finalize and implement its public information policy for providing disciplinary, nondisciplinary, and dismissed complaint information over the phone.

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# Introduction

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## Audit scope and objectives

The Office of the Auditor General has conducted a performance audit and sunset review of the Arizona Radiation Regulatory Agency (ARRA), the Arizona Radiation Regulatory Hearing Board (Hearing Board), and the Medical Radiologic Technology Board of Examiners (MRTBE) pursuant to an October 3, 2013, resolution of the Joint Legislative Audit Committee. This audit was conducted as part of the sunset review process prescribed in Arizona Revised Statutes (A.R.S.) §41-2951 et seq and addresses ARRA's inspection program for x-ray facilities, the MRTBE's certification and complaint resolution processes, and the MRTBE's provision of information to the public. It also includes responses to the statutory sunset factors for ARRA, the Hearing Board, and the MRTBE.

## ARRA mission and responsibilities

ARRA was established in 1980 to replace the Arizona Atomic Energy Commission, which was established in 1964. ARRA's mission is to protect the health and safety of Arizonans from unnecessary radiation exposure from all natural and manmade sources. Its responsibilities include:

- **Registering, licensing, and certifying radiation sources**—ARRA registers, licenses, and/or certifies sources of ionizing radiation, including particle accelerators, radioactive materials, and x-ray facilities, and sources of nonionizing radiation, such as tanning facilities, laser hair removal facilities, and laser light shows (see textbox for additional information on ionizing and nonionizing radiation). Specifically, ARRA's X-ray Compliance Program is responsible for registering x-ray machines, such as those that are used in mammography, dental, and veterinary facilities, while its Nonionizing Radiation Compliance Program registers nonionizing radiation facilities. In addition, the Radioactive Materials Program licenses users of radioactive materials, such as hospitals and clinics that use radioactive materials to perform diagnostic and therapeutic procedures and industrial applications that use radioactive materials to determine the moisture and density of materials (see Table 1, page 2, for the number of radioactive materials licensees).

### Types of radiation

- **Ionizing radiation**—Ionizing radiation is what people typically think of as “radiation.” It occurs naturally in the environment, in elements such as uranium, or can be produced by x-ray machines and in particle accelerators. Ionizing radiation can cause cancer and other health effects.
- **Nonionizing radiation**—Examples of nonionizing radiation include sound waves, visible light, and radio waves. ARRA regulates nonionizing radiation sources that can cause eye and tissue damage, such as medical lasers and laser light shows.

Source: Auditor General staff analysis of information from the following organizations: ARRA, the U.S. Environmental Protection Agency (EPA), the U.S. Food and Drug Administration, and the U.S. Department of Energy.

**Table 1: Number of active ARRA licenses, certifications, and registrations as of June 2015 and number of inspections conducted between July 1, 2014 and June 22, 2015 (Unaudited)**

Types of licenses, certifications, and registrations	Number of active licenses, certifications, and registrations <sup>1</sup>	Number of inspections conducted
Particle accelerator registrations	71	34
Radioactive materials licenses	365	179
X-ray facility registrations	5,157	800
Mammography facility certifications	158	147
Nonionizing radiation facility registrations	1,428	268
Cosmetic laser technician certifications	1,057	n/a <sup>2</sup>
X-ray installation/service provider registrations	182	n/a <sup>2</sup>

<sup>1</sup> Facilities and individuals whose licenses, certifications, or registrations were expired as of June 2015 are not included in these totals.

<sup>2</sup> Cosmetic laser technicians and x-ray installation/service providers are individuals who are certified and/or registered to practice and do not require inspection.

Source: Auditor General staff analysis of registration and inspection data from ARRA's registration and inspection databases as of June 2015 and inspection logbooks from between July 1, 2014 and June 22, 2015.

- Certifying and registering radiation users and support personnel**—ARRA is responsible for certifying cosmetic laser technicians and registering individuals who install or service x-ray machines. ARRA also maintains a registry of physics support personnel who are qualified to perform specialized tasks, such as evaluating radiation output from therapy x-ray devices used to treat cancer and calculating how much radiation shielding is needed to protect the public. In addition, as part of its responsibility to ensure that cosmetic laser technicians are adequately trained and supervised, ARRA certifies cosmetic laser safety training schools and maintains a registry of medical directors/health professionals who oversee cosmetic laser use.
- Inspecting sources of radiation**—ARRA performs inspections of sources of radiation, including particle accelerators, radioactive materials, x-ray facilities, and nonionizing radiation facilities. Inspectors conduct periodic inspections in order to determine whether the registrant is using radiation sources safely and is in compliance with established standards. For example, x-ray inspections involve a visit to an x-ray facility during which inspectors observe x-rays being taken, interview personnel, and take independent radiological measurements to ensure that machines at the facility are being used safely and are properly shielded. ARRA conducted approximately 1,400 inspections between July 1, 2014 and June 22, 2015 (see Table 1).
- Emergency response**—The Emergency Response Program (Program) prepares, coordinates, and tests portions of the State of Arizona/Maricopa County Offsite Emergency Response Plan, which was developed, with ARRA input, in response to federal requirements

for the Palo Verde Nuclear Generating Station. This Program also provides training to hazardous materials response teams and responds to radiation incidents state-wide. ARRA reported that in fiscal year 2014, the Program responded to 26 radiological incidents and conducted 16 emergency practice drills and training exercises, as well as 55 communications drills with Palo Verde Nuclear Generating Station.

- **Environmental sampling**—The Radiation Measurements Laboratory (Laboratory) is responsible for determining radiation levels throughout the State by analyzing samples of air, water, milk, soil, and vegetation. For example, the Laboratory monitors radiation levels near Palo Verde Nuclear Generating Station. It also provides laboratory support to other ARRA programs and participates in the EPA’s Indoor Radon Grant Program by distributing test kits for radon, a naturally occurring radioactive gas that can collect in buildings and cause cancer. According to ARRA, the Laboratory analyzed 1,134 environmental samples and distributed 625 radon test kits to homeowners who requested them in fiscal year 2014.

## Hearing Board mission and responsibilities

The Hearing Board was established in 1964 to review and approve ARRA’s rules and substantive policy statements. The Hearing Board also hears appeals of any person adversely affected by an ARRA order. It is responsible for conducting hearings involving ARRA enforcement action appeals and reviewing ARRA director or ARRA orders, including orders related to license modification or revocation, civil penalties, and escalated enforcement actions.

The Hearing Board consists of five governor-appointed members who serve 5-year terms with the following expertise: one member with expertise in the field of medicine or health, one member with expertise in the field of nuclear energy, one member with expertise in the field of mammography, and two public members. Further, each member is required to possess at least 4 years of education and experience in radiation use or control. All of the Hearing Board positions were filled as of June 2015.

## MRTBE mission and responsibilities

The MRTBE was established in 1977 as a division of ARRA. Its mission is to protect the health and safety of the people in Arizona against the harmful effects of excessive and improper exposure to medically applied ionizing radiation. The MRTBE’s responsibilities include certifying qualified users of x-ray machines and nuclear medicine; investigating complaints against certificate holders; and providing information to the public. In fiscal year 2014, the MRTBE reported that it had 8,045 active certificate holders and investigated 39 complaints. The MRTBE has statutory authority to issue nine types of certificates, such as radiologic technologist, practical technologist in podiatry, nuclear medicine technologist, and mammography technologist.

As required by A.R.S. §32-2802, ARRA’s Director serves as the MRTBE’s Chair. The MRTBE also consists of ten Governor-appointed members, including four practicing radiologic technologists, two public members, two licensed practitioners, one practical technologist in radiology, and one

practicing nuclear medicine technologist. MRTBE members are appointed for 3-year terms. As of June 2015, the MRTBE had one public member vacancy.

## Organization and staffing

ARRA had a total of 33.5 full-time equivalent (FTE) positions for fiscal year 2015, of which 28.5 FTE positions were filled as of June 2015.<sup>1</sup> These positions include ARRA's Director, who also serves as the MRTBE Chair, 5 administrative personnel who process payments and paperwork, and 4 program managers who oversee the following programs:

- **Emergency Response**—This program, which is responsible for responding to radiation incidents and preparing, testing, and coordinating an emergency response plan, includes 2 personnel in addition to the program manager.
- **Radioactive Materials**—This program, which is responsible for licensing and inspecting radioactive materials and particle accelerators, includes 2 inspectors, 1 licensing individual, and the program manager.
- **X-ray and Nonionizing Compliance**—These programs, which are both managed by the same program manager, are responsible for registering and inspecting sources of x-ray and nonionizing radiation, as well as registering and certifying users of radiation and support personnel. They include 7 inspectors as follows: 4.5 x-ray inspectors, 1 mammography inspector, and 1.5 nonionizing inspectors.<sup>2</sup>
- **Radiation Measurements Laboratory**—The Laboratory, which is responsible for analyzing environmental samples to monitor for radiation, includes 4 personnel in addition to the program manager.

The program manager for the MRTBE is the Executive Director and also serves as the temporary program manager for the Laboratory. MRTBE staff include one staff member for certifying users of ionizing radiation, such as radiologic technologists, one staff member for certifying cosmetic laser technicians, and one half-time complaint investigator.

## ARRA and MRTBE budget

ARRA's revenues, which include the MRTBE's revenues, consist primarily of State General Fund monies and licenses and fees for both sources and users of radiation. A.R.S. §§32-2821(D) and 35-146 require ARRA to remit most of its license and registration fees for radiation sources and

<sup>1</sup> According to ARRA management, 4.5 of ARRA's total FTE positions are unfunded.

<sup>2</sup> Some ARRA staff conduct inspections in more than one area. According to ARRA staff, this allows them to inspect multiple areas at a single facility, such as a dentist who has both x-ray machines and lasers. Specifically, one of ARRA's two staff members who conduct mammography inspections devotes approximately 40 percent of his time to mammography inspections, 40 percent to nonionizing inspections, and 20 percent to x-ray inspections, while the other staff member devotes approximately 50 percent of his time to mammography inspections and 50 percent to training other inspectors in x-ray and nonionizing inspection activities.

all of ARRA's and the MRTBE's civil penalties to the State General Fund. A.R.S. § 32-2823 requires the MRTBE to deposit its certification fees in the State Radiologic Technologist Certification Fund. As shown in Table 2, ARRA's and the MRTBE's combined fiscal year 2015 net revenues totaled approximately \$2.6 million. The MRTBE's revenue totaled approximately \$271,000 of this amount, most of which came from licenses and fees. Personnel and other operating costs, which totaled nearly \$1.9 million and more than \$500,000, respectively, in fiscal year 2015, accounted for the majority of the ARRA's expenditures. The MRTBE's personnel and other operating costs, totaled approximately \$249,000 of this amount.

**Table 2: Schedule of revenues, expenditures, and changes in fund balance  
Fiscal years 2013 through 2015  
(Unaudited)**

	2013	2014	2015
<b>Revenues</b>			
Licenses and fees	\$ 2,006,797	\$ 1,997,860	\$ 2,088,855
State General Fund appropriations	1,436,466	1,466,722	1,467,297
Sales of goods and services	142,069	185,976	167,777
Fines, forfeitures, and penalties	40,981	113,564	59,842
Intergovernmental	100,479	121,655	94,449
Other	2,749	3,812	4,371
Gross revenues	3,729,541	3,889,589	3,882,591
Remittances to the State General Fund <sup>1</sup>	(1,231,330)	(1,255,900)	(1,286,202)
Net revenues	2,498,211	2,633,689	2,596,389
<b>Expenditures and transfers</b>			
Personal services and related benefits	1,837,086	1,876,953	1,893,653
Professional and outside services	23,476	15,837	31,761
Travel	74,593	74,559	70,773
Food	3,306	5,803	5,649
Other operating	496,104	534,570	519,721
Furniture, equipment, and software	145,114	79,052	96,407
Total expenditures	2,579,679	2,586,774	2,617,964
Transfers to other agencies		6,300	
Total expenditures and transfers	2,579,679	2,593,074	2,617,964
Net change in fund balance	(81,468)	40,615	(21,575)
Fund balance, beginning of year	124,018	42,550	83,165
Fund balance, end of year	\$ 42,550	\$ 83,165	\$ 61,590

<sup>1</sup> As required by statutes, ARRA remits to the State General Fund all civil penalties and most license and registration fees for radiation sources, including academic, medical, industrial, waste, distribution, and imaging categories.

Source: Auditor General staff analysis of the Arizona Financial Information System (AFIS) Accounting Event Transaction File and the AFIS Management Information System Status of General Ledger-Trial Balance screen for fiscal years 2013 through 2015.



# X-ray inspections

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*ARRA's continued inability to perform timely x-ray facility inspections threatens public health and safety. Timely inspections of x-ray facilities are important to protect the public health and safety. However, about half of the x-ray facilities in Arizona are overdue for an inspection. In order to ensure it performs timely x-ray facility inspections, ARRA should overhaul its inspection approach.*

## ARRA's continued inability to perform timely x-ray facility inspections threatens public health and safety

One of ARRA's primary responsibilities is to inspect x-ray facilities in a timely manner to ensure that x-ray machines are operating properly. ARRA has the authority to perform inspections on a variety of facilities, including medical, dental, veterinary, and chiropractic offices, as well as hospitals and industrial facilities. To ensure the safe operation of x-ray machines, ARRA inspectors monitor the amount of radiation that x-ray machines emit and assess the adequacy of radiation barriers. The importance of ensuring that x-ray machines are operating properly through timely inspections is further highlighted by research indicating that medical x-rays are the single largest source of man-made radiation exposure.<sup>1</sup>

## X-ray inspection backlog plagues ARRA

Although ARRA has developed frequencies for how often x-ray facilities should be inspected, it has been unable to meet them.<sup>2</sup> In fact, not meeting x-ray inspection frequencies has been a problem for ARRA for more than 3 decades. In part, ARRA is unable to meet these inspection frequencies because it lacks enough qualified inspectors. In addition, ARRA's approach for scheduling inspections for those x-ray facilities that can pose a greater danger to the public does not ensure that these higher-risk facilities are inspected in a timely manner.

ARRA has developed x-ray inspection frequencies—ARRA has developed an inspection schedule, which assigns an inspection frequency to each different x-ray facility type (see Table 3, page 8, for ARRA's inspection frequencies). According to ARRA management, the inspection frequencies that it established for Arizona were based on guidance provided by the Conference of Radiation Control Program Directors, Inc. (CRCPD) (see Appendix A, pages a-1 through a-2, for CRCPD's inspection frequency guidance).<sup>3</sup> The CRCPD recommends that state radiation control programs develop inspection frequencies for inspecting x-ray facilities that take into account

<sup>1</sup> United States Environmental Protection Agency. (2012). *Radiation: Facts, risks, and realities*. Washington, D.C.

<sup>2</sup> In addition to inspecting x-ray facilities, ARRA also inspects nonionizing facilities, particle accelerators, and radioactive material users. Auditors found that approximately 47 percent of nonionizing facilities are overdue for an inspection (see ARRA Sunset Factor 2, page 39, for more information). ARRA reported that approximately 28 percent of particle accelerators are overdue for an inspection, but that no radioactive material user is overdue for an inspection.

<sup>3</sup> Conference of Radiation Control Program Directors, Inc. (2014). *Criteria for an adequate radiation control program*. Frankfort, KY. The CRCPD is an organization consisting of radiation control programs in the United States and individuals with an interest in radiation protection. The CRCPD's primary purpose is to assist its members in their efforts to protect the public, radiation workers, and patients from unnecessary radiation exposure. The CRCPD provides assistance to states through technical and administrative publications.

**Table 3: ARRA x-ray inspection frequencies by facility type and compliance with these frequencies  
As of June 26, 2015  
(Unaudited)**

X-ray facility type	ARRA inspection frequencies	Number of registered facilities	Number of facilities overdue for inspection	Percent of facilities overdue
Mammography	Annually	160	0	0%
Hospital/Therapy	2 years	88	39	44
Medical/Therapy	3 years	1,115	782	70
Chiropractic	3 years	495	292	59
Educational	3 years	44	27	61
Dental	4 years	2,565	1,054	41
Veterinary	4 years	493	231	47
Podiatry	4 years	137	52	38
Industrial	4 years	<u>358</u>	<u>209</u>	58
Total		<u>5,455</u>	<u>2,686</u>	49%

Source: Auditor General staff analysis of ARRA's x-ray inspection data.

various risk factors, such as the potential for patient and personnel exposure and previous facility violations, as well as the availability of agency resources to conduct inspections.<sup>1</sup> In addition, the CRCPD recommends that the inspection frequencies should be reviewed annually and adjusted as necessary. However, ARRA reported that it has not reviewed or updated its inspection schedule for several years.

**ARRA unable to meet x-ray inspection frequencies**—Although ARRA has developed frequencies for how often x-ray facilities should be inspected in Arizona, it has not met them. In fact, according to ARRA's x-ray inspection data, nearly 2,700 registered x-ray facilities in Arizona, which represents approximately 49 percent of the total registered x-ray facilities, are overdue for an inspection (see Table 3). About 169 of these x-ray facilities have been overdue for an inspection for more than 5 years, including a chiropractic office that has not been inspected for more than 14 years. According to ARRA's x-ray inspection data, approximately 44 percent of hospital/therapy facilities—one of the most high-risk facility categories—are overdue for an inspection. In addition, approximately 70 percent of medical/therapy facilities, such as medical clinics or private doctors' offices, are overdue for an inspection. ARRA's inability to inspect x-ray facilities in a timely manner has been a long-standing problem. Specifically, two previous Office of the Auditor General performance audits conducted in 1984 and 1995 identified inadequacies in ARRA's ability to meet inspection frequencies (see Report Nos. 84-9 and 95-8).

In addition to being unable to meet its x-ray inspection frequencies, ARRA has also been unable to inspect nonionizing facilities in a timely manner. Specifically, auditors found that

<sup>1</sup> ARRA indicated that due to insufficient staff resources for inspections, the frequencies developed for Arizona generally allow for additional time between inspections in comparison to the CRCPD's guidance (see Appendix A, page a-2).

approximately 47 percent of nonionizing facilities are overdue for an inspection (see ARRA Sunset Factor 2, page 39, for more information).

ARRA lacks recommended number of experienced inspectors and an effective inspection approach to at least ensure high-risk inspections are conducted in a timely manner—ARRA has not met its x-ray inspection frequencies because it lacks the recommended number of experienced inspectors, and its method for scheduling inspections does not ensure that higher-risk facilities are prioritized for inspection. Specifically:

- **ARRA lacks experienced inspectors**—ARRA is unable to conduct inspections in a timely manner primarily because it lacks the recommended number of experienced staff. In addition to providing guidance to states for establishing inspection frequencies, the CRCPD recommends that individual states employ a certain number of full-time inspectors to meet the inspection frequencies for the various x-ray facility types. Based on ARRA's inspection frequencies and the CRCPD's recommended staffing levels, ARRA would need to employ at least 12 inspectors to meet the various x-ray inspection frequencies that it has established.<sup>1</sup> However, as of June 2015, ARRA employed only 4 full-time inspectors to perform x-ray facility inspections.<sup>2</sup> ARRA management indicated that although they have requested additional appropriations to hire more inspectors, these requests have not been approved by the Legislature.

In addition to lacking the recommended number of staff to perform inspections, ARRA reported that it does not have enough experienced staff to perform its high-risk inspections. Specifically, ARRA indicated that it takes 3 years to fully train an inspector to perform all types of x-ray inspections. As of June 2015, only 1 of ARRA's 4 full-time x-ray inspectors was trained to conduct inspections of ARRA's high-risk facilities, including hospitals and medical facilities. The other 3 inspectors were hired in 2014 and are only trained to perform ARRA's lower-risk inspections, such as dental and veterinary facilities. ARRA reported that the lack of experienced staff who are available to train new inspectors contributes to the time it takes to fully train an inspector.

- **ARRA's approach for scheduling inspections does not ensure that higher-risk facilities are prioritized for inspection**—Given ARRA's lack of inspectors and resulting inability to inspect all facilities, it is critical that ARRA strategically prioritize those inspections that it can perform. However, ARRA's inspection scheduling approach does not consistently ensure that higher-risk facilities, as determined by ARRA's inspection frequency schedule, are inspected prior to or more frequently than lower-risk facilities. Specifically, ARRA staff reported that inspectors typically perform inspections according to geographic area. For example, staff reported that for Maricopa and Pima Counties, ARRA inspectors determine which facilities to inspect by selecting the zip code with the highest number of total overdue inspections, but this method does not account for the different facility types with varying inspection frequencies. With this approach, ARRA focuses its limited inspection resources on both high-risk and lower-risk x-ray facilities. ARRA also reported that it does not have a systematic approach

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<sup>1</sup> These 12 inspectors do not include the additional inspectors ARRA would need to perform mammography inspections.

<sup>2</sup> ARRA employs 2 additional inspectors whose primary duties are to perform mammography inspections, but these inspectors also perform some x-ray inspections.

for scheduling facility inspections outside of Maricopa and Pima Counties and that inspection scheduling is generally determined by individual inspectors.

Further, ARRA management indicated that the only ARRA inspector who is qualified to inspect hospitals inspects only one hospital a month. According to ARRA management, hospital inspections take a significant amount of time, and in order to meet his monthly inspection goals, the inspector needs to inspect other facilities that are not as time-intensive.

Finally, ARRA's inspection approach does not ensure that new facilities or facilities that move to new locations receive their initial inspections in a timely manner. These initial inspections are higher risk. Specifically, according to ARRA's inspection frequencies, new facilities or facilities that move to a new location should be inspected within 6 months of registration. However, auditors found that 773 facilities are overdue for an initial inspection, including a surgery center that is more than 11 years overdue for its initial inspection. Conducting initial inspections within 6 months of registration is important because ARRA verifies that facilities meet certain registration requirements only during the initial inspection (see ARRA Sunset Factor 2, pages 40 through 41, for more information on registration requirements).

## ARRA needs to overhaul its x-ray inspection approach

ARRA's continuing inability to perform x-ray inspections in a timely manner puts the public at risk, and therefore, ARRA should modify its x-ray inspection approach.<sup>1</sup> Although it has identified some steps it can take to perform more x-ray inspections in a timely manner, these steps alone will not allow ARRA to meet its established x-ray inspection frequencies. Other states that auditors reviewed use a variety of approaches that help them more closely meet their respective inspection frequencies. ARRA should establish work groups to identify and recommend a more effective inspection strategy and approach to ensure it can conduct x-ray inspections in a timely manner.

ARRA has initiated some efforts to perform more inspections—In addition to performing the onsite x-ray inspections, ARRA inspectors are also responsible for several administrative tasks, such as writing inspection reports and processing any paperwork for registering an x-ray machine or facility. However, ARRA reported that it has initiated some steps that it believes will reduce this administrative work so that inspectors can devote more time to conducting inspections. For example, ARRA reported that in April 2015, it instituted an electronic filing system for storing x-ray inspection reports and registrations, which saves inspectors time because they can more quickly find documents when processing paperwork. In addition, ARRA reported that in June 2015, it contracted with a company to develop a new database that will provide ARRA with the ability to accept credit card payments for annual registration fees, thereby reducing the amount of administrative time inspectors and the program manager spend processing the annual fees. Finally, ARRA indicated that it has begun imple-

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<sup>1</sup> ARRA performs mammography inspections on behalf of the U.S. Food and Drug Administration and should continue to perform these inspections in accordance with federal guidelines.

menting a new process where inspectors can automatically upload x-ray machine measurements into inspection reports. Part of an x-ray machine inspection involves using instruments to test the x-ray machine to ensure it is operating correctly. Previously, inspectors would have to write down the measurements from their instruments and then later enter these measurements in their inspection report. However, ARRA reported that the new process will allow inspectors to automatically enter measurements into an electronic report, thus saving the inspector time in writing inspection reports. ARRA should continue to identify and implement steps that will reduce inspectors' administrative work so that they can devote more time to conducting inspections.

Although these efforts should improve the efficiency of ARRA's x-ray inspection program, especially the administrative aspects of the program, ARRA management acknowledged that these steps alone will not allow them to meet their established inspection frequencies.

**Other states provide examples of alternate strategies for conducting x-ray inspections**—Other states that auditors contacted reported varying approaches in conducting x-ray inspections. Specifically, auditors contacted five states to determine the methods or strategies they employ to meet their x-ray inspection frequencies.<sup>1</sup> Similar to Arizona, two of the five states reported that they conduct x-ray inspections using state employees, but they also reported some notable differences that help them meet their respective inspection frequencies (see Appendix A, page a-2, for detailed information on other states' inspection frequencies).<sup>2</sup> The other three states reported allowing registered or certified private inspectors to conduct inspections. Specifically:

- **Tennessee staffed to meet established inspection frequencies**—Tennessee reported that because it has 23 state inspectors who are able to inspect the approximately 6,000 registered x-ray facilities across the state, it has sufficient staff to perform inspections within Tennessee's established inspection frequencies.<sup>3</sup> As indicated previously, Arizona has 4 inspectors to inspect 5,455 registered x-ray facilities.
- **Washington developed an information technology (IT) system to support inspections**—Washington reported that it developed an IT system in 2012 that allows its nine state inspectors to complete their inspections and associated administrative work in an efficient manner. The system allows Washington's inspectors to collect information during the inspection and then later upload the inspection data directly to its database rather than recording the information on paper and then manually transferring it to the database. Washington has approximately 6,200 registered x-ray facilities and reported that it is generally able to meet its inspection frequencies. ARRA may be implementing a similar system. Specifically, as indicated previously, ARRA reported that it has started implementing a new process that will allow inspectors to automatically upload x-ray machine measurements. However, ARRA reported that it will take 6 months to a year to develop this system.

<sup>1</sup> Auditors contacted Colorado, Indiana, Missouri, Tennessee, and Washington because, according to the U.S. 2010 census, these states have similar population sizes to Arizona.

<sup>2</sup> For the higher-risk facilities, such as hospital/therapy facilities, Arizona's inspection frequencies are longer than those in four of the five states, with the exception of mammography facilities, which Arizona inspects annually in compliance with federal requirements. The fifth state, Washington, inspects hospitals every 2 years, the same frequency at which Arizona inspects them. Washington does not conduct therapy facility inspections.

<sup>3</sup> Tennessee reported that although these 23 staff are trained to perform inspections of at least one type of x-ray facility, these staff members also perform other tasks including radioactive materials inspections, responding to incidents, and participating in training exercises related to a nuclear power plant emergency.

- Colorado, Indiana, and Missouri register or certify private inspectors**—In contrast to employing state inspectors, the Colorado, Indiana, and Missouri radiation control programs all reported allowing registered or certified private inspectors to conduct x-ray inspections.<sup>1</sup> Both Colorado and Indiana have allowed registered private inspectors to conduct x-ray inspections since the inception of their respective x-ray inspection programs, while Missouri began using private inspectors in 2014 (see textbox for more information about Missouri’s state radiation control program).<sup>2</sup> Officials from all three states indicated that allowing registered or certified private inspectors to perform inspections helps to ensure that facilities are generally inspected in a timely manner.<sup>3</sup> They also indicated that it can save the state money because it places the responsibility of paying for the inspection directly on the x-ray facility.

### State example of using private inspectors

**Missouri**—In 2012, Missouri’s state radiation control program had four state x-ray inspectors and was not able to meet its required inspection frequencies. In addition, the program was unsuccessful in seeking additional state funding to hire more staff and was unable to charge fees to x-ray facilities. As a result, and consistent with its established authority, in October 2012, the Missouri program began efforts to certify private x-ray inspectors. In December 2012, Missouri notified all 5,000 x-ray facilities that the state would no longer be conducting most inspections and informed them that they would need to be inspected by qualified private sector inspectors. Missouri developed qualifications for the private inspectors and began certifying private inspectors to conduct inspections. In January 2014, Missouri began accepting inspections from certified inspectors for hospitals and large imaging facilities, and is in the process of implementing the program across all facility types incrementally over several years. Missouri’s state inspectors have now largely transitioned to providing guidance and oversight for the private inspectors, including conducting compliance reviews of private inspections. However, Missouri state inspectors are still conducting all mammography inspections, as well as a small number of facilities with a history of compliance issues. According to a Missouri official, this transition to private inspectors is allowing the state’s x-ray facility inspections to be conducted in a timely manner. This official also reported that the transition to allowing qualified private inspectors to perform inspections has only received relatively minor pushback from the regulated community.

Source: Auditor General staff interviews with a Missouri Radiation Control Program official.

Although the specifics of a regulatory model that allows qualified private inspectors to perform inspections can vary from state to state, the CRCPD recommends that the state radiation control program establish the qualification standards for certified private inspectors, the type of written report formats to be used, the items the inspector will assess as part of the inspection, how measurements should be made, and what type of instruments should be used. After establishing the qualifications, the state would then be responsible for verifying that the registration or certification qualifications are met and

<sup>1</sup> As a condition for coverage for Medicare and Medicaid, the federal government requires portable x-ray equipment to be inspected every 24 months. The inspection can either be performed by a radiation health specialist who is employed by state or local government or by a private radiation health specialist who has been approved by an appropriate state or local government agency.

<sup>2</sup> Colorado indicated that its inspection program was started in 1988. Indiana indicated that its inspection program was started in 1985.

<sup>3</sup> As of June 2015, Colorado, Indiana, and Missouri reported having 110, 450, and 200 registered or certified private inspectors, respectively.

issuing registrations or certificates to private inspectors. The state also needs to ensure that x-ray facilities are aware that they would need to have their inspections conducted within established frequencies by a registered or certified private inspector. Once certified by the state, the private inspectors can then be selected and paid directly by x-ray facilities to conduct an inspection. All three states reported that they do not regulate the fees that private inspectors can charge.

The CRCPD recommends that state radiation control programs also develop a program for periodically reviewing private inspectors' work. All three states reported that the registered or certified inspectors' inspection report must be provided to the state by either the inspector or the inspected facility. These states also reported that not all facilities hire a registered or certified inspector to complete the inspection within the required frequencies, and in these cases, the states contact the facility and notify them that they are noncompliant. Indiana and Missouri reported that they have the option of ordering a noncompliant facility to cease using x-ray machines until they have completed the required inspection. Colorado indicated that if the facility does not hire a certified inspector to perform the inspection after it receives a warning, then Colorado state inspectors will inspect the facility and charge the facility a nonroutine inspection fee.

ARRA should establish work groups to identify and establish an alternative x-ray inspection approach—ARRA should overhaul its inspection approach with input and participation from external stakeholders. Specifically, it should establish and coordinate with work groups to determine what inspection approach(es) it should adopt to ensure it can meet its x-ray inspection frequencies. These work groups should comprise ARRA personnel, as well as representatives from various external stakeholder groups and professional organizations who are affected by the x-ray inspection program. For example, depending on the facility type discussed, the work groups could include, but are not necessarily limited to:

- Representative(s) from hospitals;
- Representative(s) of medical, osteopathic, and/or naturopathic physicians, chiropractors, veterinarians, and podiatrists;
- Representative(s) of the dental community;
- Representative(s) of industrial and/or educational facility registrants;
- Representative(s) of certified technologists who operate x-ray machines; and
- Representative(s) of the general public.

ARRA should ensure that the work groups research the inspection approaches other states employ, evaluate the various approaches, and determine what approach(es) ARRA should adopt to ensure that x-ray facilities are inspected in a timely manner. As part of their evaluation, the work groups should assess and develop recommendations regarding:

- **Inspection approach**—The work groups should evaluate whether ARRA should seek authority and funding to hire additional inspectors, allow qualified private inspectors to perform

inspections, or take a hybrid approach that could involve state inspectors performing high-risk inspections, such as hospitals and medical facilities, while qualified private inspectors could perform low-risk inspections such as dental facilities, or vice versa. In addition, although none of the five states auditors contacted used this approach, the work groups could also assess whether ARRA should hire private contractors to perform inspections on its behalf. Under this approach, the State would hire and pay private inspectors to perform inspections. As part of this assessment, the work groups should also determine what quality assurance processes would be needed to ensure that inspections are being adequately performed. For example, if the work groups recommend using qualified private inspectors, they should also determine what quality assurance processes ARRA should establish to ensure that private inspectors are performing adequate inspections.

- **Financial resources**—The work groups should also assess what financial resources, including fees and appropriations, would be necessary to cover the cost of its recommended inspection approach(es). Specifically, the monies required for using state inspectors may vary from the monies needed for using certified private inspectors. Two states that use state inspectors—Tennessee and Washington—reported charging higher fees to register x-ray facilities than Arizona, which helps them fund their inspection programs. For example, Arizona charges hospitals \$75 per x-ray tube, but Tennessee charges hospitals \$286 per x-ray tube.<sup>1</sup> However, Missouri, a state that uses certified private inspectors, reported that it does not charge fees to x-ray facilities or fees to private inspectors for certification.
- **Training**—As part of their assessment, the work groups should evaluate the training requirements necessary to implement their recommended inspection approach(es). For example, if the work groups recommend that ARRA maintain state inspectors, the work groups should evaluate if ARRA could more quickly train staff and make recommendations as applicable. Conversely, if the work groups recommend that ARRA allow certified private inspectors, the work groups should evaluate if it would be appropriate to train ARRA’s inspectors on how to oversee certified private inspectors.
- **Inspection frequencies**—The work groups should also evaluate ARRA’s inspection frequencies and determine whether more or less frequent facility inspections are warranted to achieve compliance with radiation regulations and to best protect the public.

Once the work groups have developed their recommendations, ARRA should evaluate them and implement the recommendations that will help ensure that the public is adequately protected, working with its Attorney General representative to make recommendations to the Legislature, as necessary. For example, if ARRA determines that it will continue to use state inspectors, it should develop a plan for how it will conduct x-ray inspections according to its specified x-ray inspection frequency schedule, including potentially hiring additional inspectors. Conversely, if ARRA determines that it will move to an inspection approach where qualified private inspectors perform inspections, ARRA should seek statutory authority to certify private inspectors and require facilities to hire qualified private inspectors to perform inspections.

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<sup>1</sup> An x-ray tube is a tube in which a concentrated stream of electrons strikes a metal target and produces x-rays. An x-ray machine is a machine capable of producing radiation. According to ARRA management, an x-ray machine may contain one or more x-ray tubes. X-ray facilities are required to pay an annual fee based on the number of tubes the facility has.

## Recommendations:

1. ARRA should continue to identify and implement steps that will reduce inspectors' administrative work so that they can devote more time to conducting inspections.
2. ARRA should establish and coordinate with work groups to determine what inspection approach(es) it should adopt to ensure it can meet inspection frequencies. These work groups should comprise ARRA personnel as well as representatives from various external stakeholder groups and professional organizations who are affected by the x-ray inspection program. For example, depending on the facility type discussed, the work groups could include, but are not necessarily limited to:
  - Representative(s) from hospitals;
  - Representative(s) of medical, osteopathic, and/or naturopathic physicians, chiropractors, veterinarians, and podiatrists;
  - Representative(s) of the dental community;
  - Representative(s) of industrial and/or educational facility registrants;
  - Representative(s) of certified technologists who operate x-ray machines; and
  - Representative(s) of the general public.
3. ARRA should ensure that the work groups research the inspection approaches employed by other states, evaluate the various approaches, and determine what approach(es) ARRA should adopt to ensure that x-ray facilities are inspected in a timely manner. As part of their evaluation, the work groups should assess and develop recommendations regarding:
  - The inspection approach(es) that will help ensure the public is adequately protected, such as using certified private inspectors, and what quality assurance processes would be needed to ensure that inspections are being adequately performed;
  - What financial resources, including fees and appropriations, would be necessary to cover the cost of its recommended inspection approach(es);
  - What training requirements would be necessary to implement its recommended inspection approach(es); and
  - The inspection frequencies and whether more or less frequent facility inspections are warranted.
4. Once the work groups have developed their recommendations, ARRA should evaluate them and implement the recommendations that will help ensure that the public is adequately protected, working with its Attorney General representative to make recommendations to the Legislature, as necessary.



# Certification

## MRTBE should improve its process for issuing certificates

*The MRTBE should improve its process for issuing certificates to users of radiation to ensure that certificates are issued only to qualified applicants and should better oversee its processes for issuing these certificates. Additionally, because the MRTBE only formally tracks whether certificates are issued within required time frames once a year, this may not ensure that certificates are issued within required time frames. Therefore, the MRTBE should improve its tracking to ensure that certificates are issued within required time frames.*

The Medical Radiologic Technology Board of Examiners (MRTBE) is responsible for certifying qualified individuals who use sources of radiation, such as x-ray machines. The MRTBE certifies applicants based on the radiation source the applicant is using. For example, a mammography certificate allows the certificate holder to perform mammograms. As allowed by Arizona Revised Statutes (A.R.S.) §32-2812(E), MRTBE management—the Executive Director and the MRTBE Chair—make the determination of whether an applicant meets the requirements for certification specified in statute and rule (see textbox for example certification requirements). For example, radiologic and nuclear medicine technologist certification applicants are required to graduate from an MRTBE-approved school or training program. In addition, applicants must either pass an MRTBE examination or have a certificate from an external certifying organization that demonstrates the applicant has passed the external certifying organization’s examination. An external certifying organization is a non-MRTBE entity that grants certificates to technologists who use ionizing radiation. MRTBE management is responsible for determining that an applicant meets these qualifications before issuing a certificate. Applications are not forwarded to the full MRTBE for review and approval, nor does the MRTBE oversee management’s issuance of certificates.

### Example certification requirements

- Pay application fee;
- Be of good moral character;
- Graduate from high school or its equivalent;
- Graduate from an MRTBE-approved school or training program; and
- Pass an MRTBE examination or have a valid external certificate.

Source: Auditor General staff analysis of A.R.S. §32-2812.

However, auditors found that MRTBE management has not always ensured that certificates are issued only to qualified applicants. Specifically:

- **Administration of MRTBE examinations may allow unqualified applicants to pass—** Auditors identified weaknesses with MRTBE management’s administration and scoring of examinations that may allow unqualified applicants to pass.<sup>1</sup> For example, applicants are given a second opportunity on the same day to reanswer the multiple choice questions they missed. Specifically, according to an MRTBE official, some applicants were allowed to go back over the questions they missed and verbally respond with a new answer. In those instances, if the applicant verbally answered the questions correctly, the applicant was given credit for a correct response. Although A.R.S. §32-2813 allows applicants to reapply to take the examination, it does not allow applicants to retake only the questions they missed. Additionally, statute

<sup>1</sup> According to the MRTBE’s Executive Director, the MRTBE administers examinations only to podiatry, practical technologists in radiology, and practical technologist in bone density applicants.

requires applicants who fail an examination to reapply by submitting another application for examination and paying another \$70 examination fee.

Auditors also reviewed a sample of four examinations that the MRTBE administered between January 2011 and September 2013. Based on this review, auditors identified one instance where the Executive Director allowed an applicant to retake a failed examination on the same day without requiring the applicant to reapply to take it. Further, although it did not impact whether these applicants passed, applicants for two examinations were mistakenly given credit for one question they missed. According to an MRTBE official, the applicants received credit because of a mistake in grading the applicants' examinations. During the course of the audit, the MRTBE developed a policy that requires two staff members to grade an examination. However, the policy does not require applicants who fail examinations to reapply as required by A.R.S. §32-2813. In addition, the MRTBE has not developed procedures directing staff on how to administer an examination.

- **Certificates issued to applicants who did not take MRTBE examination and did not have valid external certificates**—According to the MRTBE's statutes and rules, applicants who do not take an MRTBE-administered examination must have a valid certificate from an external certifying organization demonstrating that the applicant has passed the external certifying organization's examination. However, based on a review of a random sample of 16 complaint cases the MRTBE investigated between July 2012 and October 2014, auditors found 2 cases where MRTBE management issued certificates to applicants who did not take the MRTBE examination and did not have valid external certificates. In one of these cases, MRTBE management accepted an applicant's external certificate that had been expired for 2 years. However, an expired certificate is not a valid certificate as required by statute. In fact, the MRTBE's own application form specifies that the external certificate has to be current.

For the other case, MRTBE management issued two different types of certificates to an applicant on the basis that the applicant had valid certificates issued by an external certifying organization, but later discovered that the applicant had submitted fake external certificates. Although external certifying organizations have online systems that allow for verification of a certificate, staff reported that they did not use this feature. During the audit, an MRTBE official reported that this practice has changed and that MRTBE staff have started verifying external certificates using the online verification systems. In addition, the MRTBE developed a policy specifying that external certificates should be verified online. However, the MRTBE has not developed procedures directing staff how to verify the certificate online or for documenting that this verification was performed.

- **One applicant received an incorrect certificate**—Based on a review of a sample of 53 certificates that the MRTBE's Web site showed as current on January 21, 2015, but whose expiration date had passed, auditors found that one applicant applied for a radiation therapy certificate, but instead was issued a radiologic technologist certificate. According to an MRTBE official, she was unsure of how this mistake occurred, but stated that because the certificate was now expired, notes have been made in the database and in the certificate holder's file that if the applicant reapplied, the certificate would be changed to the correct type if all registration criteria are met.

- **Some applicants did not meet statutory and rule education requirements**—Auditors reviewed a random sample of 21 certificates from a January 26, 2015, list of active certificates provided by the MRTBE. Nine of these 21 certificates were initial certificates. Auditors found that MRTBE management did not require eight of the initial applicants to meet all statutory and rule education requirements.<sup>1</sup> For example, the MRTBE’s statutes and rules require some certificate applicants, such as radiologic and nuclear medicine technologist applicants, to have graduated from an MRTBE-approved school or training program. However, auditors found that four of the eight certificate applicants graduated from a school that was not approved by the MRTBE. In addition, auditors found that six of the eight applicants did not submit any documentation, such as a diploma, demonstrating graduation from an MRTBE-approved school or training program as required by Arizona Administrative Code (AAC) R12-2-301. Further, seven applicants did not provide any indication that they completed high school or its equivalent, although this also is required by the MRTBE’s statutes.<sup>2</sup>

The four applicants who did not graduate from an MRTBE-approved school or training program graduated from a school or training program outside of Arizona. An MRTBE official indicated that MRTBE management does not require out-of-state applicants to graduate from an MRTBE-approved school and instead rely on external certifying organizations to verify that applicants graduated from a credible school. However, the MRTBE’s statutes and rules do not provide such an exception for out-of-state applicants.

The MRTBE’s certificate applications do not include all statutory and rule education requirements, which explains the remaining problems for these certificates. Specifically, the MRTBE’s applications do not require applicants for most certificate types to provide documentation, such as a diploma, demonstrating that they have completed a training program or that they completed high school or its equivalent.<sup>3</sup>

- **Some renewal applicants may not have met the continuing education requirement**—Certificate holders must renew their certificate every 2 years in order to continue practicing.<sup>4</sup> As part of the renewal process, certificate holders must complete a certain number of continuing education hours. In order to demonstrate that they have completed the continuing education, applicants may submit either a copy of their valid external certificate card, which shows the applicant is compliant with the external certifying organization’s continuing education requirements, or provide evidence of completing the required number of hours. Auditors reviewed a random sample of 21 certificates from a January 26, 2015, list of active certificates provided by the MRTBE. Twelve of these 21 certificates were renewal certificates. Auditors found that 2 of the 12 certificates were renewed even though there was no documentation to indicate compliance with the continuing education requirement.

In addition, for two other renewal applications, it is unclear from the documentation applicants submitted whether they met the continuing education requirements. Specifically, for one of

<sup>1</sup> One of the nine initial certificates auditors reviewed was for a special permit. Applicants for special permit are not required to meet the statutory and rule requirement of graduating from an MRTBE-approved school.

<sup>2</sup> For two of the nine initial certificates auditors reviewed, a radiologist assistant and a special permit, the applicants were not required by statute or rule to complete high school or its equivalent.

<sup>3</sup> The MRTBE’s application asks practical technologists in radiology and practical technologists in podiatry to submit a completion letter from the applicant’s school.

<sup>4</sup> A certificate’s expiration date is based on two things: (1) the first letter of the certificate holder’s last name, and (2) the certificate holder’s birth date. Based on these two factors and the date of initial application, the initial certificate may expire in less than 2 years.

these applications, the certificate holder submitted a photocopy of his external certificate, but the photocopy is too dark to read. For the other renewal application, the certificate holder submitted a certificate showing that he completed a class, but the certificate does not indicate how many hours the class represented.

Further, for four other applications, the applicants submitted copies of an external certificate as evidence of meeting the continuing education requirement, but MRTBE staff did not verify the validity of the external certificate. In order for applicants to maintain their external certificate, they must complete a certain number of continuing education hours.<sup>1</sup> For example, the external certifying organization that certifies technologists in radiography requires these technologists to complete 24 hours of continuing education every 2 years. By presenting a valid external certificate, an applicant for renewal is demonstrating that at the time the certificate was issued, the certificate holder was in compliance with the external certifying organization's continuing education requirements. During the audit, an MRTBE official reported that staff have started verifying certificate holders' external certificates using the external certifying organizations' online verification systems.

- **One renewal applicant submitted an incorrect renewal form**—For 1 of the 12 renewal applications auditors reviewed, auditors found that the applicant used the wrong renewal form to apply for renewal and, as a result, he was not required to answer questions about his moral conduct for the preceding 2 years. Rather than requiring the applicant to reapply for renewal using the correct form and answer moral conduct questions, MRTBE management processed the incorrect renewal application and renewed his certificate.

## MRTBE should oversee certification process

To ensure it issues certificates only to qualified applicants, the MRTBE should develop and implement several policies and procedures, and should better oversee the certification application process. The MRTBE's existing policies and procedures for processing certificates list only which documents applicants must submit with their applications, but do not provide any guidance or direction to MRTBE staff regarding the review of the submitted materials, such as verifying an applicant's external certificate. Therefore, to help ensure that certificates are issued only to qualified applicants, the MRTBE should develop and implement the following policies and procedures:

- Administration and scoring of exams. Specifically:
  - Prohibiting MRTBE staff from allowing applicants a second chance to answer questions they miss or allowing applicants to retake the entire test without reapplying;
  - Requiring applicants who fail examinations to reapply and repay the examination fee in order to retake the test as required by A.R.S. §32-2813(D); and

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<sup>1</sup> For 5 of the 12 renewal applications auditors reviewed, the applicants submitted external certificates from an external certifying organization as evidence of meeting the continuing education requirements. These external certifying organizations required at least the same number of continuing education hours as the MRTBE.

- Directing staff on how to administer an examination.
- Accepting external certificates. Specifically:
  - Requiring MRTBE staff to only accept certificates that are valid and current at the time of application; and
  - Developing procedures for verifying and documenting an applicant's external certificate prior to issuing a certificate.
- Establishing a reconciliation procedure to ensure that the correct certificate is issued based on the application.
- Ensuring applicants complete an MRTBE-approved school or training program. Specifically:
  - Developing a method, in consultation with its Attorney General representative, for approving out-of-state schools and training programs; and
  - Requiring all applicants, including out-of-state applicants, to graduate from an MRTBE-approved school or training program as required by statute and rule.
- Modifying its application forms to require applicants to provide appropriate documentation demonstrating completion of an MRTBE-approved school or training program and completion of high school or its equivalent.
- Specifying what documentation must be submitted to demonstrate compliance with continuing education requirements, as well as verifying and documenting a valid external certificate showing completion of the continuing education requirements.
- Requiring that applicants renew their certificates on the appropriate renewal form prior to issuing the renewal.

Finally, the MRTBE should better oversee its processes for reviewing and issuing certificates. Although MRTBE management has been responsible for appropriately issuing certificates to qualified applicants, MRTBE management has not consistently ensured that certificates were appropriately issued, and the MRTBE is ultimately responsible for ensuring that certificates are issued to qualified applicants. Therefore, the MRTBE should develop and implement oversight mechanisms to ensure that MRTBE management issues certificates only to qualified applicants. These oversight mechanisms could include requiring MRTBE management to submit management reports to the MRTBE that provide information about issued certificates and denied certificate applications and/or periodic review of issued certificates by the MRTBE to ensure that MRTBE management issued the certificates to qualified applicants.

## MRTBE should improve its tracking of certificates to ensure they are issued within required time frames

The MRTBE uses a database to track its compliance with statutorily required time frames for issuing certificates, but only assesses its compliance with these time frames once a year, which may not allow it to ensure that certificates are issued in a timely manner. As required by statute, the MRTBE has established time frames for issuing certificates in its rules. These time frames are important because they inform and assure the public about what to expect in regard to having a certificate approved or denied, and increase the MRTBE's accountability if it does not meet time frames. Specifically, if the MRTBE does not meet its time frames, A.R.S. §41-1077 requires it to refund license and certificate fees to applicants and pay a penalty of 2.5 percent of the applicant's fees to the State General Fund for each month that it does not issue or deny the certificate within the established time frames.

Auditors reviewed the MRTBE's database to determine whether the MRTBE issued certificates in a timely manner, but identified 95 errors or incomplete information out of the 677 entries in the database. For example, 45 of these errors were instances where data was entered into the wrong fields, such as the date the initial certificate was mailed. In addition, 36 errors involved instances where only the application-received date was recorded, but not a date when the certificate was mailed. As a result, not only could auditors not rely on this information for audit purposes, these types of errors or incomplete information make it difficult for the MRTBE to use its database to determine compliance with its time frames as these errors must first be corrected before staff can run a timeliness report. According to the Executive Director, she officially determines the MRTBE's compliance with required time frames once a year but stated that she will informally and manually track all applications and how long it takes to process them. The Executive Director reported that she only officially determines the MRTBE's compliance once a year because of the number of certificate applications it receives annually.

Although auditors' review of a random sample of 21 certificates from a January 26, 2015, list of active certificates provided by the MRTBE found that the certificates were issued within the required time frames, the MRTBE should take steps to better track its compliance with time frames. Specifically, the MRTBE should develop and implement policies and procedures that establish a reconciliation procedure to ensure that data is entered into the database correctly. Frequent tracking of certification time frames will allow MRTBE management to quickly identify and address any problems that lead to late certificate processing and to determine in a timely manner whether it should refund an applicant's certification fees and remit a penalty to the State General Fund, as A.R.S. §41-1077 requires. Additionally, the Executive Director stated that information about whether certificates are issued within required time frames is not shared with the MRTBE. During the audit, MRTBE management developed a policy requiring staff to submit quarterly timeliness reports to the MRTBE. The MRTBE should implement this new policy. In addition, the MRTBE should develop and implement procedures directing staff on how to prepare these reports, such as the information that should be included in these reports, and who is responsible for preparing and sending these reports.

## Recommendations:

1. The MRTBE should develop and implement the following policies and procedures for reviewing and processing initial and renewal certificate applications:
  - a. Administration and scoring of exams. Specifically:
    - Prohibiting MRTBE staff from allowing applicants a second chance to answer questions they miss or allowing applicants to retake the entire test without reapplying;
    - Requiring applicants who fail examinations to reapply and repay the examination fee in order to retake the test as required by A.R.S. §32-2813(D); and
    - Directing staff on how to administer an examination.
  - b. Accepting external certificates. Specifically:
    - Requiring MRTBE staff to only accept certificates that are valid and current at the time of application; and
    - Developing procedures for verifying and documenting an applicant's external certificate prior to issuing a certificate.
  - c. Establishing a reconciliation procedure to ensure that the correct certificate is issued based on the application.
  - d. Ensuring applicants complete an MRTBE-approved school or training program. Specifically:
    - Developing a method, in consultation with its Attorney General representative, for approving out-of-state schools and training programs;
    - Requiring all applicants, including out-of-state applicants, to graduate from an MRTBE-approved school or training program as required by statute and rule.
  - e. Modifying its application forms to require applicants to provide appropriate documentation demonstrating completion of an MRTBE-approved school or training program and completion of high school or its equivalent.
  - f. Specifying what documentation must be submitted to demonstrate compliance with continuing education requirements and verifying and documenting a valid external certificate when it is submitted showing completion of the continuing education requirements.
  - g. Requiring that applicants renew their certificates on the appropriate renewal form prior to staff issuing the renewal.

2. The MRTBE should develop and implement oversight mechanisms to ensure that MRTBE management issues certificates only to applicants who meet the qualifications established in statute and rule. These oversight mechanisms could include requiring MRTBE management to submit management reports to the MRTBE that provide information about issued certificates and denied applications and/or periodic review of issued certificates by the MRTBE to ensure that MRTBE management issued the certificates to qualified applicants.
3. The MRTBE should develop and implement policies and procedures that establish a reconciliation procedure to ensure that data is entered into the database correctly.
4. The MRTBE should implement its new policy requiring staff to submit quarterly timeliness reports to the MRTBE.
5. The MRTBE should develop and implement procedures directing staff on how to prepare these reports, such as the information that should be included in these reports, and who is responsible for preparing and sending these reports.

# Complaint resolution

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MRTBE does not always adequately investigate and may inappropriately dismiss complaints

*Although the MRTBE investigates complaints against individuals certified to use radiation, it does not always adequately and consistently investigate and resolve all complaints. The MRTBE should improve its complaint resolution process to ensure that complaints are adequately investigated and appropriately and consistently resolved, that complainants are notified of a complaint's progress, and that it investigates complaints in a timely manner. In addition, the MRTBE should better enforce certificate-holder compliance with its consent agreements, including drug testing.*

Auditors reviewed a random sample of 16 complaint cases that the Medical Radiologic Technology Board of Examiners' (MRTBE) Executive Director and staff investigated between July 2012 and October 2014 and identified 3 cases where the Executive Director and MRTBE staff did not adequately investigate and/or inappropriately dismissed the complaints. Specifically,

- **Executive Director dismissed a complaint without an investigation**—The MRTBE received a complaint from a patient who claimed to be injured after a certificate holder performed her mammogram. However, contrary to MRTBE policy, there is no documentation that MRTBE staff took steps to adequately investigate the complaint, such as determining who performed the mammogram or interviewing the certificate holder about the allegation(s), before the Executive Director dismissed the complaint. The National State Auditors Association (NSAA) recommends that regulatory agencies investigate complaints as needed to determine whether problems exist and how serious they are.<sup>1</sup>
- **MRTBE staff did not verify respondent's claim**—MRTBE staff investigated a complaint against a certificate holder who allegedly allowed an uncertified individual to use radiation on a patient. Arizona Revised Statutes (A.R.S.) §32-2821 allows the MRTBE to take action against a certificate holder who knowingly aids or abets a person who is not certified by the MRTBE in engaging in the activities of a certificate holder. In her response to the complaint allegation, the certificate holder stated that she was not the other individual's supervisor and that she had never met the individual. However, there is no documentation in the file that MRTBE staff took any steps to verify the respondent's claim that she was not the individual's supervisor, such as calling the certificate holder's employer to determine who supervised the uncertified individual. The MRTBE voted to dismiss this complaint. According to an MRTBE official, staff took steps to verify the respondent's claim, but did not document their actions.
- **Executive Director has inappropriately dismissed complaints**—Auditors found two cases that appear to have been dismissed by the Executive Director, even though the Executive Director does not have authority to dismiss complaints. Specifically, as previously mentioned, the Executive Director dismissed a complaint from a patient who alleged an injury while

<sup>1</sup> National State Auditors Association. (2004). *Carrying out a state regulatory program: A National State Auditors Association best practice document*. Lexington, KY. The National State Auditors Association is an organization that assists state auditors by providing opportunities to exchange information at the state and federal government levels. The NSAA states that although this document addresses many of the best practices that could apply in these situations, it should not be considered exhaustive.

undergoing a mammogram. In the second case, the Executive Director dismissed a complaint that she investigated alleging that a certificate holder altered medical records, such as indicating how long the physician ran an x-ray machine, for procedures where she was not present. According to A.R.S. §32-2821, once a complaint has been investigated, it shall be referred to the MRTBE Chair for review, and he/she will determine whether the case should be heard by the MRTBE or dismissed. However, in both of these cases, there is no documentation indicating that the MRTBE Chair reviewed these complaints or made the determination to dismiss these complaints.

In order to protect the public, it is important that the MRTBE adequately investigate and resolve all the complaints it receives. Therefore, to help ensure that complaints are adequately investigated, the MRTBE should ensure that its staff follow the MRTBE's established complaint investigation policies and procedures, which require staff to identify the certificate holder who is the subject of the complaint and document their investigative activities on each case. In addition, the MRTBE should develop and implement complaint investigation policies and procedures requiring staff to make reasonable efforts to verify the certificate holder's response. During the course of the audit, the Executive Director developed a draft policy that states that complaints will be reviewed by the MRTBE Chair and documented. However, the draft policy does not indicate that the MRTBE Chair should either dismiss a complaint or forward it to the MRTBE for review, nor does it require that the basis for the MRTBE Chair's decision be documented. Therefore, the MRTBE should modify this draft policy to include these items and then implement it.

## Complaints regarding uncertified practice are inconsistently resolved

A.R.S. §32-2811 requires that individuals who use ionizing radiation sources, such as x-ray machines, on human beings be certified by the MRTBE.<sup>1</sup> When an individual uses radiation on a human but is not certified by the MRTBE, the individual is alleged to have practiced uncertified. Auditors found that the MRTBE does not consistently resolve cases of uncertified practice. Specifically:

- **Staff does not consistently refer cases of uncertified practice to the MRTBE**—As allowed by A.R.S. §32-2816, the MRTBE may take action against a certificate holder who does not renew his/her certificate within 30 days of the certificate's expiration. However, auditors found that these cases are not consistently referred to the MRTBE. For example, in one case auditors reviewed, the certificate holder stated that she worked only 26 days during the 40 days that her certificate was expired. The Executive Director decided to close this case and charge a \$50 late fee rather than referring the case to the MRTBE for resolution. In another case that auditors observed during an MRTBE meeting, the certificate holder stated that she worked only 6 days during the 72 days that her certificate was expired, but for this case, MRTBE staff referred it to the MRTBE for resolution, citing the

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<sup>1</sup> A.R.S. §32-2811 provides that certain people, such as medical doctors, naturopaths, and dental hygienists, do not have to obtain certification from the MRTBE.

entire 72 days the certificate was expired. Through a consent agreement, the MRTBE imposed \$155 in fees and penalties and 2 years' probation for this certificate holder.

Further, the MRTBE has not established any policies and procedures to guide staff on how to determine the duration of uncertified practice. Auditors reviewed seven complaints the MRTBE investigated between September 2012 and October 2014 regarding certificate holders who practiced after their certificate expired. For two of the complaints, MRTBE staff determined that certificate holders practiced uncertified from the date the certificate expired to the date the certificate was renewed. For the other five complaints, MRTBE staff subtracted time during the period of uncertified practice. According to MRTBE staff, they subtract time for weekends. However, auditors determined that in three of the five complaints, MRTBE staff subtracted more days than can be accounted for by the number of weekend days. However, MRTBE staff should consistently determine the duration of uncertified practice because, according to the MRTBE's disciplinary policy, the duration of uncertified practice factors into the MRTBE's disciplinary decision. During the course of the audit, the Executive Director developed a draft policy regarding how staff should calculate days of uncertified practice. Although this draft policy states that a certificate holder's work schedule must be determined prior to calculating the days of uncertified practice, it does not provide guidance on how staff should determine a certificate holder's work schedule.

- **MRTBE does not follow its own policy regarding discipline**—During its November 2014 meeting, the MRTBE voted to adopt a policy containing guidance for imposing discipline for individuals who practice uncertified for the first time. However, after adopting the policy, auditors observed that the MRTBE did not follow it. For example, the policy requires individuals who practice uncertified to pay a certain amount in fees and penalties based on the duration of the uncertified practice. However, when issuing discipline to resolve seven cases, the MRTBE decreased the amount of fees and penalties prescribed by its policy and instead added 2 years of probation. The MRTBE did not provide any justification for why it deviated from the established policy. Because the MRTBE did not follow its policy, it is at risk for issuing inconsistent discipline in the future.

To help ensure that the MRTBE resolves cases of uncertified practice in a consistent manner, the MRTBE should develop and implement policies and procedures that specify when it will charge a certificate holder with uncertified practice and when it will require the certificate holder to pay a late fee, as well as how staff should determine the duration of a certificate holder's uncertified practice. The MRTBE should also review and modify as necessary its new policy for disciplining individuals who practice uncertified for the first time and then adhere to this policy to ensure that it consistently disciplines instances of uncertified practice.

## MRTBE staff do not always notify complainants of complaint's progress

MRTBE staff do not always inform complainants of the progress of their complaint and how it has been resolved. Seven of the 16 complaints auditors reviewed that MRTBE staff investigated between July 2012 and October 2014 were initiated by a member of the public. However, for 6 of

these complaints, there was no documentation in the file indicating that MRTBE staff informed the complainant about the progress of his/her complaint.<sup>1</sup> For example, in one complaint, the complainant requested to be informed about the progress of the complaint investigation. Yet, there was no indication that MRTBE staff kept the complainant informed or notified the complainant regarding the decision to dismiss the complaint. The NSAA recommends that regulatory agencies should provide timely feedback to the person who submitted the complaint about the outcome of the complaint investigation. Providing timely feedback is important so that the public knows that the MRTBE has performed its due diligence to determine whether the certificate holder is safe to practice. During the audit, MRTBE management developed a policy requiring staff to notify complainants of the results of the investigation within 30 days of the investigation's completion. The MRTBE should implement this new policy.

## MRTBE has not resolved all complaints in a timely manner

Failure to resolve complaints in a timely manner does not protect the public health and safety because certificate holders alleged to have violated MRTBE statutes and rules can continue to practice while under investigation, even though they may be unfit to do so. The Office of the Auditor General has found that Arizona regulatory boards should resolve complaints within 180 days of receiving them, which includes the time to both investigate and adjudicate complaints. Auditors' review of the sample of 16 complaints found that the MRTBE took more than 180 days to resolve 4 of these complaints, including 1 complaint that the MRTBE took more than a year to resolve. For the 4 complaints that were not resolved in a timely manner, it took MRTBE staff between 15 and 64 days to complete their investigations. However, it took between 168 and 474 days after MRTBE staff had completed their investigations before the MRTBE resolved the complaints.<sup>2</sup> An MRTBE official explained that some complaints may take longer than 180 days to resolve because MRTBE staff will hold onto complaint investigations for several months until they have enough investigations pending to hold an MRTBE meeting where the MRTBE will review the complaints and determine whether or not to take disciplinary action. The MRTBE is statutorily required to meet at least once every 180 days, but it has not always met this requirement. Specifically, there were two instances between December 2012 and May 2015 where the MRTBE did not meet once every 180 days.<sup>3</sup> Therefore, in order to better protect the public health and safety, the MRTBE should meet and review complaint investigations frequently enough to ensure complaints are resolved within 180 days.

In addition, auditors found that MRTBE staff had not tracked complaints through the complaint resolution process to ensure that complaints were processed in a timely manner. Further, an MRTBE official reported that the MRTBE is not informed of how long it takes to process complaints. During the audit, MRTBE staff modified the complaint log spreadsheet they use to record information about complaints to include fields to track the date that the complaint was closed and calculate the number of days it takes to resolve a complaint. According to an MRTBE

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<sup>1</sup> For the seventh complaint, the complainant requested to remain anonymous; therefore, there was no one to keep informed.

<sup>2</sup> For the complaint that took 474 days for the MRTBE to resolve, the MRTBE heard this case twice during 474 days, once to vote to offer the certificate holder a consent agreement to surrender his certificate and a second time a year later after he never returned the consent agreement.

<sup>3</sup> The MRTBE did not meet for 203 days between its April 2013 and November 2013 meetings and did not meet for 300 days between its January 2014 and November 2014 meetings.

official, staff were not tracking how long it took to resolve complaints and were not reporting this information to the MRTBE because the MRTBE had not asked for this information.

In addition to the steps it has taken, the MRTBE should develop and implement policies and procedures that establish requirements for tracking and monitoring complaint timeliness and require staff to actively monitor the progress of complaint investigations and address the reasons for any delays. Further, these policies and procedures should require that staff submit reports to the MRTBE at its meetings regarding complaint-processing timeliness to help the MRTBE identify and address factors in the complaint-handling process that may impact timeliness.

## MRTBE staff have not always ensured compliance with consent agreements

MRTBE staff lack an effective process for ensuring that certificate holders who have entered into consent agreements with the MRTBE comply with the terms of the agreement. The MRTBE may enter into a consent agreement with certificate holders to resolve a complaint and as part of the consent agreement, certificate holders agree to comply with the terms specified in the consent agreement. The MRTBE entered into consent agreements in 8 of the 16 complaint cases auditors reviewed. However, in one case, MRTBE staff did not ensure that all terms of the consent agreement were met. Specifically, within 14 days of the agreement becoming effective, the certificate holder was required to submit a complete copy of his consent agreement to his employer and request that his employer submit a letter to the MRTBE acknowledging that the employer had received a copy of the consent agreement. An MRTBE official indicated that the employer acknowledgement letter's purpose is to ensure that the employer is aware of his/her employee's consent agreement with the MRTBE. Although this particular consent agreement became effective in May 2013, MRTBE staff never received an acknowledgement letter from the certificate holder's employer until auditors asked about the letter in April 2015. MRTBE staff then obtained the letter.

MRTBE staff explained that they periodically review hard copy files and handwrite reminders on a whiteboard to ensure certificate holders are complying with the terms of consent agreements. However, to better ensure certificate holders fulfill the requirements of their consent agreements, the MRTBE should develop and implement an electronic tracking system or modify its electronic complaint-tracking log to track the terms of consent agreements, including when these terms are required to be met. For example, the MRTBE could modify its complaint-tracking log to include the date that the employer acknowledgement letter and any other requirement, such as fees and penalties, are due so that MRTBE staff can quickly determine if a requirement has not been satisfied. The MRTBE should also develop and implement policies and procedures for tracking certificate holder compliance with the terms of consent agreements. These policies and procedures should require staff to enter information into the electronic tracking system and regularly review the cases to ensure timely followup if a consent agreement requirement has not been satisfied in a timely manner.

## MRTBE's method for monitoring MRTBE-ordered drug testing may not ensure these tests occur

Instead of using an outside organization to randomly select certificate holders for drug testing, MRTBE staff determine when a certificate holder, as part of his/her consent agreement, should be drug tested. Specifically, in cases where a consent agreement requires random drug testing at the discretion of the MRTBE, MRTBE staff write the name of the certificate holder on a whiteboard as a reminder that this certificate holder should receive drug testing at some point. Although the number of certificate holders it needs to monitor may be low, the MRTBE's method for doing so may not ensure sufficient testing. For example, in one case where the MRTBE was responsible for ordering a random drug test, auditors found that MRTBE staff had not ordered a drug test in the 98 days since the consent agreement became effective. Other Arizona regulatory boards require licensees to call an outside organization every day and see if he/she has been randomly selected for drug testing.<sup>1</sup> Therefore, to help ensure that certificate holders who have been ordered to complete random drug testing are randomly tested, the MRTBE should establish agreements with one or more outside organization(s) that provide drug-monitoring services and require certificate holders to use this outside organization(s) for these services. The MRTBE should also require that the certificate holders pay for their own drug testing.

### Recommendations:

1. The MRTBE should ensure that its staff follow the MRTBE's established complaint investigation policies and procedures, which require staff to identify the certificate holder who is the subject of the complaint and document their investigative activities on each case.
2. The MRTBE should develop and implement complaint investigation policies and procedures requiring staff to make reasonable efforts to verify the certificate holder's response.
3. The MRTBE should modify and implement its draft policy to provide direction on whether the MRTBE Chair should either dismiss a complaint or forward it to the MRTBE for review and require that the basis for the MRTBE Chair's decision be documented.
4. The MRTBE should develop and implement policies and procedures that specify when it will charge a certificate holder with uncertified practice and when it will require the certificate holder to pay a late fee, as well as how staff should determine the duration of a certificate holder's uncertified practice.
5. The MRTBE should review and modify as necessary its new policy for disciplining individuals who practice uncertified for the first time and then adhere to this policy to ensure that it consistently disciplines instances of uncertified practice.

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<sup>1</sup> Auditors contacted the Arizona Medical Board and the Arizona State Board of Nursing. These boards reported having a contract with an outside organization to perform these services, but reported that licensees and certificate holders are required to pay the outside organization for the drug-monitoring services.

6. The MRTBE should implement the new policy it developed that requires staff to notify complainants of the results of an investigation within 30 days of the investigation's completion.
7. The MRTBE should meet frequently enough to ensure complaints are resolved within 180 days.
8. The MRTBE should develop and implement policies and procedures that:
  - a. Establish requirements for tracking and monitoring complaint timeliness and require staff to actively monitor the progress of complaint investigations and address the reasons for any delays; and
  - b. Require staff to submit reports to the MRTBE at its meetings regarding complaint-processing timeliness to help the MRTBE identify and address factors in the complaint-handling process that may impact timeliness.
9. The MRTBE should develop and implement an electronic tracking system, or modify its electronic complaint tracking log, to track the terms of consent agreements, including when these terms are required to be met.
10. The MRTBE should develop and implement policies and procedures for tracking certificate holder compliance with the terms of consent agreements. These policies and procedures should require staff to enter information into the electronic tracking system and regularly review the cases to ensure timely followup if a consent agreement requirement has not been satisfied in a timely manner.
11. The MRTBE should establish agreements with one or more outside organization(s) that provide drug-monitoring services and require certificate holders who have been ordered to complete random drug testing to use this outside organization(s) for these services. The MRTBE should also require that the certificate holders pay for their own drug testing.



# Public information

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*The MRTBE has not always provided accurate information to the public. Specifically, its Web site has not always provided the accurate status of certificates. In addition, the MRTBE has not ensured that its staff provide accurate and complete information over the phone. Therefore, the MRTBE should improve its provision of public information.*

## MRTBE's Web site has not always provided accurate certificate status

Although access to accurate, complete, and timely information about certificate holders is important so the public can make informed decisions, the Medical Radiologic Technology Board of Examiners (MRTBE) does not always provide the public with accurate information. The MRTBE's Web site provides some information about certificate holders, such as the status of the certificate holder's certificate, but this status is not always accurate. For example, auditors identified approximately 2,100 instances where a certificate's status, as reflected on the MRTBE's Web site, was inaccurate because it showed that the certificate was current even though the expiration date had passed. Auditors reviewed the files for a random sample of 53 of these certificates to confirm that they were expired and found that all 53 certificates had expired. According to the Executive Director, some expired certificates were still listed as current on the MRTBE's Web site because the database that supported the Web site did not automatically change a certificate's status to expired after the expiration date had passed. During the audit, the Executive Director asked the MRTBE's database administrator to automate the feature. Auditors reviewed certificate statuses on the MRTBE's Web site and found that as of June 2015, this problem had been addressed.

In addition, auditors reviewed a random sample of 14 certificates that were issued between April 2, 2015 and May 14, 2015, according to the Web site's online verification search feature. This review identified one certificate where the online verification system incorrectly showed that the certificate had been issued even though it had not yet been issued. In this case, the Web site incorrectly showed that the certificate was issued 16 days before it was actually issued.<sup>1</sup> The Executive Director stated that once staff enter an applicant's information into the database, it shows up as issued even if the certificate is still being reviewed and processed, which may take a few days. However, this process could result in some applicants incorrectly appearing on the Web site as being certified. For these cases, staff would have to manually delete the database entry after it was determined the applicant did not meet the certification requirements. During the audit, MRTBE began developing a method that will indicate on the Web site which certificates are still waiting for approval. However, under this method the certificate's status will still appear as issued, which may confuse the public.

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<sup>1</sup> The Executive Director reported that this incident was rare as she was out of town and was not able to review the application to determine if the applicant met the requirements.

## MRTBE does not provide accurate and complete complaint and disciplinary information

MRTBE staff do not provide accurate and complete information about certificate holders' complaint and disciplinary history. In April 2015, auditors placed three anonymous phone calls to MRTBE staff to request complaint and disciplinary history information about three certificate holders; however, MRTBE staff provided inaccurate or incomplete information for two of these calls. Specifically, in one call, MRTBE staff reported that a certificate holder had probably been disciplined because he did not renew his certificate on time; however, the certificate holder had been disciplined because he tested positive for cocaine. In the other call, MRTBE staff told auditors that no one had ever filed a complaint against the certificate holder. However, the certificate holder had been the subject of a complaint that was dismissed.

During the course of the audit, the Executive Director drafted a policy that directs staff on what information staff may provide over the phone to callers. The draft policy indicates that if the caller wants information about a certificate holder's complaint history, such as why a certificate holder was disciplined or whether the certificate holder has ever been the subject of a dismissed complaint, MRTBE staff should either forward the call to management to provide the requested information or tell the caller that he/she can submit a public records request. However, prior to developing this draft policy, MRTBE management modified the MRTBE's Web site to require the public to submit a notarized public records request in order to obtain information. Imposing such a requirement will cause the public to have greater difficulty obtaining timely access to information about certificate holders. Additionally, the Office of the Auditor General has found that other Arizona regulatory boards do not require their public records request form to be notarized.

## MRTBE should improve its provision of public information

As previously mentioned, access to accurate, complete, and timely information about certificate holders is important so the public can make informed decisions. Although statute does not dictate the public information the MRTBE must share over the phone, auditors have found that other regulatory boards provide complaint and disciplinary history information over the phone. Therefore, the MRTBE should take three steps to ensure that it provides accurate, complete, and timely information to the public. First, the MRTBE should develop and implement a mechanism to ensure that certificates do not show as issued on its Web site when they have not been issued. For example, it could develop and implement policies and procedures to direct staff not to enter information about an applicant into the database until after the certificate is approved or add a database feature that would not publish new certificates on its Web site until MRTBE management approves them. Second, the MRTBE should finalize and implement its draft public information policy for providing disciplinary, nondisciplinary, and dismissed complaint information. Third, the MRTBE should modify the notice on its Web site that requires the public to submit a notarized public records request to obtain information about certificate holders to instead inform the public that they can obtain information about certificate holders by contacting the MRTBE directly.

## Recommendations:

1. The MRTBE should ensure it provides accurate, complete, and timely information to the public by:
  - a. Developing and implementing a mechanism to ensure that certificates do not show as issued on its Web site when they have not been issued. For example, the MRTBE could develop and implement policies and procedures to direct staff not to enter information about an applicant into the database until after the certificate is approved or add a database feature that would not publish new certificates on its Web site until MRTBE management approves them;
  - b. Finalizing and implementing its public information policy for providing disciplinary, nondisciplinary, and dismissed complaint information over the phone; and
  - c. Modifying the notice on its Web site that requires the public to submit a notarized public records request to obtain information about certificate holders to instead inform the public that they can obtain information about certificate holders by contacting the MRTBE directly.



# ARRA sunset factor analysis

*The analysis of ARRA Sunset Factors includes 26 recommendations not discussed earlier in this report. These recommendations include improving ARRA's process for inspecting nonionizing radiation sources and issuing registrations to qualified applicants for sources of radiation (see Sunset Factor 2, pages 39 through 42); posting on ARRA's Web site its substantive policy statements (see Sunset Factor 5, pages 43 through 44); better tracking its resolution of complaints (see Sunset Factor 6, pages 44 through 45); and seeking statutory changes to give ARRA the authority to issue civil penalties to cosmetic laser technicians or to transfer the regulation of cosmetic laser technicians to the Medical Radiologic Technology Board of Examiners (MRTBE) and to give ARRA explicit authority to investigate complaints (see Sunset Factor 9, pages 45 through 46).*

In accordance with Arizona Revised Statutes (A.R.S.) §41-2954, the Legislature should consider the following 12 factors in determining whether the Arizona Radiation Regulatory Agency (ARRA) and the Arizona Radiation Regulatory Hearing Board (Hearing Board) should be continued or terminated.

**1. The objective and purpose in establishing ARRA and the Hearing Board and the extent to which the objective and purpose are met by private enterprises in other states.**

Established in 1980, ARRA's mission is to protect the health and safety of Arizonans from unnecessary radiation exposure from all natural and manmade sources. Its responsibilities include registering, licensing, and/or certifying sources and users of radiation; conducting inspections of radiation sources; preparing, testing, and coordinating an emergency response program for radiological incidents; and conducting environmental sampling to monitor radiation levels throughout the State.

ARRA also includes a five-member Hearing Board, which was established in 1964 to serve as a vehicle for persons to appeal an order of ARRA. The Hearing Board is responsible for conducting hearings involving appeals of ARRA enforcement actions, reviewing ARRA director or ARRA orders, and approving changes to rule and policy.

Some states have privatized a specific regulatory activity that ARRA performs. Auditors contacted five states—Colorado, Indiana, Missouri, Tennessee, and Washington—and found that three of these states—Colorado, Indiana, and Missouri—allow registered or certified qualified private inspectors to perform inspections of x-ray facilities. For example, the states establish qualifications for and issue registrations or certificates to qualified private inspectors. X-ray facilities are then required to hire these state-certified qualified inspectors to perform any necessary inspections, and pay the inspectors directly. Once the inspection is complete, either the inspector or the facility sends a copy of the inspection report to the state. Missouri reported that once the state receives the report, they may review the report to ensure that the qualified private inspector conducted an adequate inspection. Indiana reported that they review inspections to ensure the facility is in compliance with rules.<sup>1</sup>

In addition, Arizona is a United States Nuclear Regulatory Commission (NRC) Agreement State. Under section 274 of the Atomic Energy Act of 1954, the NRC may enter into agreement with

<sup>1</sup> Colorado reported that it has plans to perform reviews of inspection reports but that as of June 2015, they were not being performed because of staff shortages.

a state that allows the state to license and regulate some radioactive materials if the state demonstrates that its regulatory program is compatible with the NRC's and is adequate to protect public health and safety. Thirty-seven states are currently Agreement States. In the remaining states, the NRC regulates radioactive materials.

Auditors contacted the same five states listed earlier and found that none of the states met the Hearing Board's objectives and purposes through private enterprises.

**2. The extent to which ARRA and the Hearing Board have met their statutory objective and purpose and the efficiency with which they have operated.**

ARRA has, in part, met its statutory objective and purpose by registering, licensing, and/or certifying sources and users of radiation and by conducting inspections of radiation sources. In addition, the Hearing Board has met its statutory objective and purpose by hearing appeals and reviewing ARRA orders and rule changes. However, ARRA should improve its performance in several areas. As discussed in the report, ARRA continues to fail to inspect x-ray facilities in a timely manner (see X-ray inspections, pages 7 through 15). Further, an Office of the Auditor General May 2015 procedural review, conducted in conjunction with this audit, made three recommendations based on its findings (see Report No. 15-302). Specifically, ARRA should:

- **Comply with the State's procurement policies**—The procedural review found that ARRA contracted for information technology (IT) support services and equipment maintenance support services without soliciting written quotations or maintaining written sole source determinations as required by statute and rule. Further, purchases made for one of the above services exceeded ARRA's delegated purchasing authority of \$10,000 without the State Procurement Office's written permission. Therefore, ARRA should maintain evidence of written quotations or written sole source determinations, as applicable, in the contract file. In addition, ARRA should consult with the State Procurement Office in making sole source determinations and request written permission before exceeding its delegated purchasing authority.
- **Strengthen its controls over capital assets**—In addition, the procedural review identified several weaknesses in ARRA's inventory procedures and documentation, and recommended that ARRA require that two personnel who do not have direct custodial responsibility for the assets perform a physical inventory annually; document the physical inventory results on the capital assets list; document management reviews and the property control officer's tests on the capital list to test the list's accuracy; and retain all documentation supporting the physical inventory.
- **Comply with statutes governing the use of restricted monies**—Finally, the procedural review found that ARRA is using restricted monies from the State Radiologic Technologist Certification Fund for payroll expenditures for employees whose duties fall outside the area where statute authorizes ARRA to use the funds, such as certifying cosmetic laser technicians. In addition, contrary to statute, ARRA has used restricted monies from the Nuclear Emergency Management Fund to cover motor pool charges. Further, ARRA distributes payroll costs to all of its funds based upon budgeted amounts instead of the actual time employees worked on each program or project.

Therefore, ARRA should use restricted monies only for their authorized purposes. ARRA should also prepare detailed personnel activity reports demonstrating that the payroll costs ARRA charges for its employees to each funding source represent the actual time the employees worked on the project. If ARRA distributes payroll costs based on budgeted amounts for interim accounting purposes, it should adjust payroll costs at least quarterly to reflect actual costs.

Additionally, ARRA should take the following steps to better meet its statutory objective and purpose. Specifically, ARRA should:

- **Ensure it performs nonionizing inspections in a timely manner**—In addition to the continued lack of timely inspections of x-ray facilities (see X-ray inspections, pages 7 through 15), ARRA has been unable to perform inspections of nonionizing facilities, such as tanning facilities, in a timely manner. According to ARRA's inspection data, approximately 694 nonionizing facilities, or 47 percent of the total number of registered facilities, are overdue for an inspection. This includes 268 high-risk facilities, such as hospitals and medical facilities, some of which have not been inspected for extended periods of time. For example, one ophthalmology facility with 6 medical lasers has not been inspected since April 2004, and a hospital with 93 lasers has not been inspected since January 2006. ARRA management cited a lack of staff as the reason for not inspecting nonionizing facilities in a timely manner. Specifically, ARRA has one full-time inspector and another inspector who spends part of his time performing nonionizing facility inspections.<sup>1</sup> Based on ARRA's risk-based inspection frequencies, approximately 600 Arizona nonionizing facilities should be inspected each year.

Because improperly used nonionizing radiation can cause eye and tissue damage, it is important that nonionizing inspections are performed in a timely manner. Therefore, in conjunction with establishing work groups to examine options for resolving ARRA's x-ray inspections backlog (see X-ray inspections, page 13), ARRA should also establish work groups to examine options for performing nonionizing inspections in a timely manner. These work groups should include various stakeholders, such as nonionizing radiation experts and representatives from relevant professional associations, and should research and evaluate the inspection approaches other states take and make recommendations about what approach(es) ARRA should adopt. Additionally, as part of their evaluation, the work groups should assess and prepare recommendations about what financial resources, including fees and appropriations, would be necessary to cover the cost of the work groups' recommended inspection approach(es). Once the work groups make their recommendations, ARRA should evaluate the work groups' recommendations and implement the recommendations that will help ensure that the public is adequately protected, working with its Attorney General representative to make recommendations to the Legislature, as necessary.

- **Improve its processes for registering sources of radiation**—ARRA registers sources of radiation, such as x-ray facilities and cosmetic laser facilities, to help ensure they are operated in a way that protects the public from radiation exposure. Auditors found that

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<sup>1</sup> According to ARRA staff, one of ARRA's two mammography inspectors contributes approximately 40 percent of his time to conducting nonionizing radiation facility inspections.

ARRA can improve its processes for registering sources of radiation to better ensure that applicants meet established requirements and for issuing registrations in a timely manner. Specifically, ARRA should:

- **Evaluate its registration forms and rules to ensure the registration process both protects the public health and safety and complies with rule**—Auditors found that ARRA's registration forms for x-ray and nonionizing radiation sources do not include all rule requirements. As a result, ARRA will issue a registration without ensuring that an applicant has satisfied all rule requirements. According to ARRA staff, the discrepancies between ARRA's registration forms and its rules are because of outdated rules that do not reflect accepted standards and practices in the field. To address these discrepancies, ARRA does two things. First, according to ARRA staff, rather than requiring applicants to submit all of the documentation required for registration by rule, inspectors check for some requirements when they conduct facility inspections. For example, laser hair reduction and other cosmetic laser facilities are required by Arizona Administrative Code (AAC) R12-1-1438(A) (5) to submit evidence that they have adopted procedures for emergency medical care. According to ARRA staff, emergency procedures need to be updated yearly, which makes checking for them at inspection more useful than checking for them at the time of registration. However, because of ARRA's inspection backlog, the elements required for registration that are instead reviewed during inspections may not be checked or reviewed for extended periods of time (see X-ray inspections, pages 7 through 15, and Sunset Factor 2, page 39).

Second, there are some registration requirements that, in practice, ARRA does not require applicants to meet. Specifically, ARRA staff reported that some rules for the registration of x-ray and nonionizing radiation machines are not applicable. For example, AAC R12-1-1104 lists registration requirements for certain types of industrial x-rays. ARRA is not complying with those requirements because, according to ARRA staff, the language of the rule was copied from the radioactive materials program rules and does not apply to all types of industrial radiography. For example, the rule requires applicants to submit the names and qualifications of each individual designated as a Radiation Safety Officer and that those qualifications meet the specifications of AAC R12-1-1120, which include 2,000 hours of hands-on experience as a qualified radiographer and formal training in the establishment and maintenance of a radiation safety program. According to ARRA staff, such training is relevant to powerful industrial x-rays with open radiation beams that pose a high risk of human exposure, but is not relevant to other types of industrial x-rays with relatively low risk of exposure. Additionally, according to ARRA staff, rules establishing the registration requirements for nonionizing radiation sources, such as tanning facilities and laser light shows, were also borrowed from the radioactive materials program and include elements that are not applicable to nonionizing radiation. For example, rule requires applicants to submit shielding information to indicate what kinds of barriers are in place to protect the public from radiation exposure. However, shielding for ionizing radiation, such as x-rays and radioactive materials, is typically accomplished through barriers, while ARRA staff indicated that shielding for nonionizing radiation is typically accomplished through such means as distance, protective eyewear, or

covering reflective surfaces. As a result, ARRA does not require nonionizing radiation machine registrants to provide shielding information.

Because ARRA's application forms and processes do not comply with rules, ARRA should evaluate its registration requirements against accepted standards and practices. Once ARRA determines what requirements are necessary to protect the public health and safety, it should seek to remove unnecessary requirements and update its registration forms. According to ARRA staff, ARRA was unable to make necessary changes to rule because of moratoriums on rulemaking and a new law that prohibits any rulemaking that increases regulatory restraints.<sup>1</sup> However, it appears that removing unnecessary rules would reduce the regulatory burden placed on registrants. Consequently, ARRA should consult with its Attorney General representative to assess whether and when it can make the rule changes necessary to update its registration process, as well as the other rule changes suggested throughout this report.

- **Strengthen its policies and procedures for processing x-ray and nonionizing machine registrations**—ARRA has developed written policies and procedures for processing x-ray and nonionizing radiation machine registrations. However, the procedures for x-ray registrations do not cover all of the forms that applicants submit, and the procedures for nonionizing registrations do not include instructions on which forms and attachments ARRA staff should check when they process registrations. Further, ARRA staff indicated that the registration process includes a peer review process where a second ARRA staff person will review the application, an important step to ensure that the applicant met all requirements before the registration is issued. However, the peer review process is not reflected in ARRA's policies and procedures for either x-ray or nonionizing radiation. Therefore, ARRA should develop and implement policies and procedures for the practices it already has in place, such as instructions on the information and forms staff review for all types of x-ray and nonionizing registrations, and procedures for how the peer review process should be conducted.
- **Improve its process for tracking its registration issuance time frames**—Similar to auditors' findings regarding the MRTBE tracking how long it takes to issue certificates, auditors found that although ARRA has a mechanism for tracking how long it takes to issue an x-ray or nonionizing registration, this mechanism needs to be improved (see Certification, page 22). AAC R12-1-1223 requires ARRA to review most types of x-ray and nonionizing machine registration applications and issue approved registrations within 60 days.<sup>2</sup> If ARRA does not issue the registration within 60 days, A.R.S. §41-1077 requires ARRA to refund the applicant's registration fee and pay a penalty of 2.5 percent of the applicant's fees to the State General Fund for each month that the registration is overdue. In addition, AAC R12-1-1309 specifies that applicants who do not supply a complete application or the required fees have 90 days after receiving a deficiency notice from ARRA to supply the requested information before their

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<sup>1</sup> Laws 2015, Ch. 240 prohibits any rulemaking that increases regulatory restraints. Executive Order 2015-01 establishes the most recent moratorium on rulemaking.

<sup>2</sup> For nonionizing registrations, the exceptions are laser light shows and demonstrations, which must be issued within 30 days, and other nonionizing radiation devices that do not fit into other registration categories, which must be issued within 120 days. For x-ray registrations, the exceptions are accelerators and other ionizing radiation machines that do not fit into other registration categories, both of which must be issued within 120 days.

application is considered abandoned, at which point the applicant would have to submit a new application with the appropriate fee.

However, the x-ray and nonionizing registration tracking mechanisms do not accurately assess either ARRA's timeliness or the applicant's timeliness. Specifically, ARRA staff record in a database the date when they request additional information or payment from applicants who do not submit complete registration applications or fees, but staff do not consistently record the date when the additional information and/or payment is received. In addition, dates in the database do not always accurately reflect dates recorded in ARRA's registration files. For example, the x-ray registration database showed that ARRA received an incomplete x-ray registration and notified the applicant of the deficiency, but the database did not show that ARRA had received the requested additional information or mailed the completed registration. The database therefore reflected that ARRA had been waiting for the applicant to supply additional information for approximately 224 days. However, the paper file of the registration showed that the registration was complete and had been mailed after just 26 days. Because database information is often missing or incorrect, it makes it difficult for ARRA to track how long it takes to process an application, how long applicants take to supply requested information, and what actions it should take, such as paying any penalties or terminating abandoned applications.

Therefore, ARRA should consistently and accurately track all dates regarding its timeliness in processing x-ray and nonionizing registration applications, such as the date an application is received, the date more information is requested and received, the date payment is requested and received, the date the registration is approved or denied, and the date the registration is mailed. ARRA should also develop and implement policies and procedures that require staff to periodically assess timeliness to ensure that ARRA is complying with its required time frames.

### **3. The extent to which ARRA and the Hearing Board serve the entire State rather than specific interests.**

ARRA serves licensees, registrants, certificate holders, their clients, and the public throughout the State by registering sources and users of radiation, preparing, testing, and coordinating an emergency response program, and conducting environmental sampling. However, auditors found that ARRA could better serve the State's interests by conducting x-ray and nonionizing radiation inspections in a timely manner (see X-ray inspections, pages 7 through 15, and Sunset Factor 2, page 39). In addition, the Hearing Board serves licensees, registrants, and certificate holders by hearing appeals of ARRA enforcement actions and reviewing ARRA orders. The Hearing Board also serves licensees, registrants, certificate holders, and the public throughout the State by reviewing changes to rule that affect the regulation of radiation in Arizona.

**4. The extent to which rules adopted by ARRA and the Hearing Board are consistent with the legislative mandate.**

General Counsel for the Office of the Auditor General has analyzed ARRA's rule-making statutes and believes that ARRA has established rules required by statute. However, as mentioned in Sunset Factor 2, ARRA should seek to remove from its rules facility-registration requirements that are not necessary to protect the public health and safety (see Sunset Factor 2, pages 40 through 41).

The Hearing Board's statutes do not require it to adopt rules.

**5. The extent to which ARRA and the Hearing Board have encouraged input from the public before adopting their rules and the extent to which they have informed the public as to their actions and their expected impact on the public.**

Auditors found that ARRA has encouraged input from the public before adopting its rules. Specifically, ARRA submitted proposed rules to the Arizona Administrative Register during fiscal years 2010 through 2014. In each instance of rulemaking, ARRA provided the public with the opportunity to submit comments regarding the proposed rules, and in some cases, made specific changes to the proposed rules as a result of public input. For example, in July 2013, ARRA held a public hearing regarding proposed rules related to electronic brachytherapy devices.<sup>1</sup> During the hearing, a request was made to change one of the proposed rules to require that radiation quality assurance checks on electric brachytherapy devices be conducted before every patient use instead of every 2 days. ARRA made the requested change.

The Hearing Board is responsible for reviewing and approving ARRA rules and substantive policy statements. However, because the Hearing Board has not adopted its own rules, it has not needed to encourage input from the public.

Auditors assessed the Hearing Board's compliance with some provisions of the State's open meeting law for Hearing Board meetings held between December 2012 and September 2014 and found that the Hearing Board was not in compliance with some aspects of the open meeting law.<sup>2</sup> Specifically, although statute requires boards to be able to provide meeting minutes to the public, staff were unable to provide auditors with meeting minutes for one of the Hearing Board's meetings. Further, some meeting minutes did not include all of the elements required by statute. Therefore, in order to comply with the State's open meeting law, the Hearing Board should ensure that it has meeting minutes with all required elements for all of its meetings and that it can provide a copy of its meeting minutes within 3 business days following its meetings, if requested.

In addition, ARRA is required to inform the public of its existing rules and policies. Specifically, A.R.S. §41-1091.01 requires agencies to post on their Web site (1) the full text, or the Web site address and location of the full text, of each rule in use; (2) each substantive policy statement in use, including the full text, if practicable; and (3) a notice that the substantive policy statement is

<sup>1</sup> Electronic brachytherapy devices are used to treat cancer by electronically delivering radiation on or into the target.

<sup>2</sup> Because no Hearing Board meetings were held during the course of the audit, auditors could not assess the Hearing Board's compliance with all aspects of the State's open meeting law. For example, auditors could not assess whether meeting notices were posted 24 hours in advance of the meeting.

advisory only. Although ARRA posts the full text of its rules and a notice that the substantive policy statements are advisory only, ARRA does not comply with the requirement to post the full text, if practicable, of each substantive policy statement currently in use. Therefore, to comply fully with A.R.S. §41-1091.01, ARRA should post on its Web site the full text, if practicable, of each substantive policy statement currently in use. Additionally, ARRA's notice that substantive policy statements are advisory only is out of date because it cites A.R.S. §41-1091 before it was amended. Therefore, ARRA should update its advisory statement to cite the amended version of A.R.S. §41-1091.

Finally, it is important for the public to have access to timely, accurate, and complete information about licensees and registrants in order to make informed decisions. Auditors placed three phone calls to ARRA staff from April to June 2015 to request information about three registered medical facilities. ARRA staff appropriately provided the requested information for two of these calls. However, ARRA staff did not return one of these phone calls. In order to ensure that the public has access to information, ARRA should respond to public requests in a timely manner.

**6. The extent to which ARRA and the Hearing Board have been able to investigate and resolve complaints that are within their jurisdiction.**

ARRA may investigate and resolve complaints within its jurisdiction (see Sunset Factor 9, pages 45 through 46) and has various nondisciplinary and disciplinary options available to use to address violations of statute and/or rule, such as imposing a civil penalty; suspending, revoking, or modifying a license or registration; or impounding the radiation source. According to ARRA's complaint data, it received a total of 29 complaints against x-ray registrants and 28 complaints against nonionizing registrants from January 2013 to June 2015. According to ARRA staff, these complaints were related to injury or the application of radiation by uncertified personnel. Staff indicated complaints are investigated by conducting a site visit or inspection and are typically resolved through the issuance of citations and associated penalties. Inspections conducted as part of a complaint investigation regarding injury or uncertified practice take precedence over routine inspections and, according to ARRA staff, are generally conducted within 30 days. However, according to ARRA staff, lower-priority complaints regarding unregistered machines may take longer, especially outside of Maricopa County, because of ARRA's limited staff resources.

The Office of the Auditor General has found that Arizona regulatory entities should resolve complaints within 180 days of receiving them, which includes the time to both investigate and adjudicate complaints. However, ARRA's tracking mechanism for complaint resolution does not consistently record the date the complaint was resolved, making complaint resolution timeliness difficult to track. As a result, ARRA should develop and implement policies and procedures to require staff to track the dates when a complaint was resolved and determine the time it takes to resolve complaints, so that ARRA can ensure that complaints are resolved in a timely manner.

In addition, ARRA has not taken action to resolve the 29 complaints it received between April 2014 and June 2015 regarding cosmetic laser technicians. According to ARRA management, they do not believe they have the necessary disciplinary options to address

violations because they are not able to issue civil penalties to cosmetic laser technicians (see Sunset Factor 9, pages 45 through 46, for additional information).

Although the Hearing Board does not have statutory authority to investigate and resolve complaints, it hears appeals of ARRA orders. Specifically, it is responsible for conducting hearings involving ARRA enforcement action appeals and reviewing ARRA director or ARRA orders (see Introduction, page 3, for more information).

**7. The extent to which the Attorney General or any other applicable agency of state government has the authority to prosecute actions under the enabling legislation.**

The Attorney General is ARRA's attorney according to A.R.S. §41-192(A)(1). Pursuant to A.R.S. §41-192(A)(1), the Attorney General is required to provide the legal services ARRA and the Hearing Board require, including representing ARRA at meetings, prosecuting disciplinary actions, handling appeals from orders, defending against lawsuits, advising ARRA on rulemaking, and filing petitions for injunctive relief.

**8. The extent to which ARRA and the Hearing Board have addressed deficiencies in their enabling statutes that prevent them from fulfilling their statutory mandate.**

The ARRA Director reported that ARRA has not addressed any deficiencies in its enabling statutes that prevent it from fulfilling its statutory mandate.

The Hearing Board Chair indicated that the Hearing Board has not identified any deficiencies in its enabling statutes that prevent it from fulfilling its statutory mandate.

**9. The extent to which changes are necessary in the laws of ARRA and the Hearing Board to adequately comply with the factors listed in the sunset law.**

In addition to the potential need for ARRA to propose statutory changes to address the inspection work groups' recommendations (see Sunset Factor 2, page 39, and X-ray inspections, pages 7 through 15), auditors identified two other areas where ARRA should work with its Attorney General representative to seek statutory revisions. Specifically:

- **Regulations for cosmetic laser technicians should be strengthened**—Although ARRA was given the authority to investigate and resolve complaints against cosmetic laser technicians in 2008, it has not resolved the 29 complaints it has received against cosmetic laser technicians.<sup>1</sup> According to ARRA management, ARRA has not resolved these complaints because management does not believe ARRA has the necessary disciplinary options. Although ARRA has the authority to suspend or revoke a certificate, or issue probation, ARRA management stated that they did not use these disciplinary options because a civil penalty would be the most appropriate disciplinary action to resolve these 29 complaints. However, ARRA does not have the authority to issue civil penalties to cosmetic laser technicians.

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<sup>1</sup> Laws 2008, Ch. 232, §3.

In addition, although statute allows ARRA to investigate complaints involving training, education, practice, or harm, it does not specifically define what constitutes unprofessional conduct. Many regulatory entities, including the Medical Radiologic Technology Board of Examiners (MRTBE), have statutes defining what constitutes unprofessional conduct, such as habitual substance abuse or conviction of crimes involving moral turpitude. These regulatory entities then use their unprofessional conduct statutes to determine whether a certificate holder's conduct violated statute or rule. Because ARRA lacks unprofessional conduct statutes, it is unclear whether ARRA would be able to investigate complaints, such as habitual substance abuse, that do not fall within the broad categories of training, education, and practice.

To address these deficiencies and ensure that ARRA can appropriately investigate and resolve complaints involving cosmetic laser technicians, ARRA should seek an amendment to statute and rule to (1) provide ARRA with the ability to issue civil penalties and (2) define unprofessional conduct.

Alternatively, ARRA should consider proposing statutory changes to transfer the responsibility for regulating cosmetic laser technicians to the MRTBE because the MRTBE already has unprofessional conduct statutes and the ability to issue civil penalties. In addition, the MRTBE already has an established mechanism for investigating and resolving complaints against certificate holders. In fact, MRTBE staff assisted ARRA by investigating the 29 complaints against cosmetic laser technicians that ARRA did not investigate. The MRTBE's Executive Director indicated that MRTBE staff were tasked with investigating these complaints, as well as certifying cosmetic laser technicians, because MRTBE staff are already trained to regulate people, whereas ARRA primarily regulates facilities. If ARRA decides to seek legislation to transfer the responsibility for regulating cosmetic laser technicians to the MRTBE, it should propose statutory changes to modify the membership of the MRTBE to include at least one certified cosmetic laser technician. Additionally, before the MRTBE takes on the responsibility of regulating cosmetic laser technicians, it should address the various issues with its performance that are discussed in this report (see Certification, pages 17 through 24; Complaint resolution, pages 25 through 31; Public information, pages 33 through 35; and the MRTBE sunset factor analysis, pages 53 through 61).

- **ARRA's authority to investigate complaints against sources of radiation could be strengthened**—Although pursuant to A.R.S. §§30-682, 30-687, and 30-688, ARRA has the statutory authority to take nondisciplinary and disciplinary actions, such as imposing a civil penalty, against sources of radiation, such as medical facilities, in order to address violations of statute or rule, it does not have specific authority to investigate complaints involving sources of radiation. Therefore, ARRA should propose statutory and/or rule changes that would provide it with explicit authority to investigate complaints involving sources of radiation.

The audit did not identify any needed changes to the Hearing Board's statutes.

**10. The extent to which the termination of ARRA and the Hearing Board would significantly affect the public health, safety, or welfare.**

Terminating ARRA would affect the public's health, safety, and welfare if its regulatory responsibilities were not transferred to another entity.<sup>1</sup> ARRA is responsible for registering, certifying, and licensing sources and users of radiation; conducting inspections of radiation sources; preparing, testing, and coordinating an emergency response program; and conducting environmental radiation monitoring throughout the State. These functions help protect the public from unnecessary exposure to radiation.

Terminating the Hearing Board would not significantly affect the public health, safety, or welfare. Specifically, the Hearing Board's functions include reviewing and approving ARRA rules and substantive policy statements and hearing appeals of ARRA orders. The Hearing Board met six times from December 2012 to September 2014. Of those meetings, four were held to discuss rules and policies, and two were held to consider appeals. ARRA management indicated that the Hearing Board's review and approval of rules and substantive policy statements provides important technical expertise for a rule- and policy-making process that helps ensure that public health and safety are protected. However, although the Hearing Board provides feedback on ARRA's rules, if the Hearing Board were terminated, the rule-making process would still allow members of the public to comment on proposed rules, as mentioned in Sunset Factor 5 (see page 43). In addition, although ARRA is not required to use the Office of Administrative Hearings (OAH) in situations where there is an appeal of an ARRA order, according to ARRA's Director, the Hearing Board usually refers the appeal of an ARRA order to the OAH and then makes a decision based on the recommendations of the Administrative Law Judge. Auditors found that the Hearing Board appears to generally uphold the decisions of the Administrative Law Judge. For example, in the two most recent appeals, one in December 2012 and one in May 2014, the Hearing Board voted to accept the Findings of Facts, Conclusions of Law, and recommended Order of the Administrative Law Judge without modification.

**11. The extent to which the level of regulation exercised by ARRA and the Hearing Board compares to other states and is appropriate and whether less or more stringent levels of regulation would be appropriate.**

The audit found that the level of regulation exercised by ARRA appears to be generally appropriate and is similar to, but in some instances less stringent than, the level of regulation in other states. Specifically:

- **Radiation machine registrations**—As part of conducting a review of ARRA's x-ray inspection process (see X-ray inspections, pages 7 through 15), auditors contacted five states with population sizes similar to Arizona—Colorado, Indiana, Missouri, Tennessee, and Washington—and found that all five states regulate and register x-ray machines.
- **X-ray inspection frequencies**—All five states auditors contacted above either conduct or certify private inspectors to conduct inspections of x-ray machines. None of the five states schedules x-ray inspections at exactly the same frequency for each facility type. For the

<sup>1</sup> However, because the federal government delegates its responsibility for regulating radioactive materials and mammography facilities to Arizona, that responsibility would revert to the federal government if ARRA were terminated.

higher-risk facilities, including hospital/therapy facilities, ARRA's inspection frequencies are consistently longer than those in four of the five states reviewed, with the exception of mammography facilities, which Arizona inspects annually in compliance with federal requirements (see Appendix A, page a-2).<sup>1</sup> ARRA reported that its inspection frequencies were adjusted to account for lack of inspection staff.

- **Cosmetic laser technicians**—In addition, auditors contacted state officials or reviewed the statutes and rules governing the certification of cosmetic laser technicians in five western states—California, Colorado, Nevada, New Mexico, and Utah—and found that in four states—California, Colorado, Nevada, and New Mexico—only licensed medical personnel, such as physicians, and those they delegate to and/or supervise, such as physician assistants and medical assistants, may use cosmetic lasers. In Utah, other personnel, such as cosmetologists, may use cosmetic lasers, but their use must be under the supervision of a physician. Similarly, in Arizona, nonmedical personal may use cosmetic lasers under the supervision of a health professional acting within his/her scope of practice.

This factor does not apply to the Hearing Board because it is not a regulatory agency.

**12. The extent to which ARRA and the Hearing Board have used private contractors in the performance of their duties as compared to other states and how more effective use of private contractors could be accomplished.**

ARRA and the Hearing Board have used private contractors for various services, including information technology services, court reporter services for transcribing Hearing Board meetings, and for temporary staff to assist in processing annual fees. ARRA's rules require that ARRA licensees and registrants pay an annual fee that is due by January 1 of each year. ARRA could potentially eliminate its need to hire temporary staff to help process these annual fees by changing its rules to allow fees to be assessed throughout the year, such as on the date the license or registration was issued.

In addition, the audit identified a potential area where ARRA could consider using private contractors. Specifically, as previously mentioned, ARRA is behind in performing x-ray and nonionizing inspections. ARRA could consider hiring private contractors to perform inspections on its behalf (see X-ray inspections, pages 7 to 15). Auditors contacted five states—Colorado, Indiana, Missouri, Tennessee, and Washington—and found that although none of these states contract with private contractors for inspections, three of the states register or certify private x-ray machine inspectors that the facilities hire to perform inspections (see X-ray inspections, pages 7 through 15; Sunset Factor 1, page 37; and Sunset Factor 2, page 39).

The audit did not identify any additional areas where the Hearing Board should consider using private contractors.

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<sup>1</sup> The fifth state, Washington, inspects hospitals every 2 years, the same frequency at which Arizona inspects them. Washington does not conduct therapy inspections.

## Recommendations:

1. ARRA should implement the recommendations of the Office of the Auditor General's May 2015 procedural review, conducted in conjunction with this audit (see Report No. 15-302). Specifically, ARRA should:
  - a. Maintain evidence of written quotations or written sole source determinations, as applicable, in the contract file;
  - b. Consult with the State Procurement Office in making sole source determinations and request written permission before exceeding its delegated purchasing authority;
  - c. Require that two personnel who do not have direct custodial responsibility for the assets perform a physical inventory annually, document the physical inventory results on the capital assets list, document management reviews and the property control officer's tests on the capital list to test the list's accuracy, and retain all documentation supporting the physical inventory;
  - d. Use restricted monies only for their authorized purposes;
  - e. Prepare detailed personnel activity reports demonstrating that the payroll costs ARRA charges for its employees to each funding source represent the actual time the employees worked on the project; and
  - f. If ARRA distributes payroll costs based on budgeted amounts for interim accounting purposes, it should adjust payroll costs at least quarterly to reflect actual costs (see Sunset Factor 2, pages 38 through 39).
2. In conjunction with establishing work groups to identify, research, and evaluate an alternative x-ray inspection approach(es) for ARRA as recommended on page 13, ARRA should also establish work groups to examine options for performing nonionizing inspections in a timely manner. In assessing these options, these work groups should:
  - a. Include various stakeholders, such as nonionizing radiation experts and representatives from relevant professional associations;
  - b. Research and evaluate the inspection approaches taken by other states, and make recommendations about what approach(es) ARRA should adopt; and
  - c. Determine what financial resources, including fees and appropriations, would be necessary to cover the cost of the work groups' recommended inspection approach(es) (see Sunset Factor 2, page 39).
3. Once the work groups make their recommendations, ARRA should evaluate the work groups' recommendations and implement the recommendations that will help ensure that the public is adequately protected, working with its Attorney General representative to make recommendations to the Legislature, as necessary (see Sunset Factor 2, page 39).

4. ARRA should evaluate its registration requirements against accepted standards and practices (see Sunset Factor 2, pages 40 through 41).
5. Once ARRA determines what rules are necessary to protect the public health and safety, it should:
  - a. Seek to remove unnecessary rules; and
  - b. Update its registration forms (see Sunset Factor 2, pages 40 through 41).
6. ARRA should consult with its Attorney General representative to determine whether and when it can make the rule changes necessary to update its registration process, as well as the other rule changes suggested throughout this report (see Sunset Factor 2, page 41).
7. ARRA should develop and implement policies and procedures for the practices it already has in place in its x-ray and nonionizing programs, such as instructions on the information and forms staff review for all types of x-ray and nonionizing registrations, and procedures for how the peer review process should be conducted (see Sunset Factor 2, page 41).
8. ARRA should consistently and accurately track all dates regarding its timeliness in processing x-ray and nonionizing registration applications, such as the date an application is received, the date more information is requested and received, the date payment is requested and received, the date the registration is approved or denied, and the date the registration is mailed (see Sunset Factor 2, pages 41 through 42).
9. ARRA should develop and implement policies and procedures that require staff to periodically assess timeliness to ensure that ARRA is complying with its required time frames for processing and issuing x-ray and nonionizing registrations (see Sunset Factor 2, pages 41 through 42).
10. To comply with the State's open meeting law, the Hearing Board should ensure that it has meeting minutes with all required elements for all of its meetings and that it can provide a copy of its meeting minutes within 3 business days following its meetings, if requested (see Sunset Factor 5, page 43).
11. To comply fully with A.R.S. §41-1091.01, ARRA should post on its Web site the full text of each substantive policy statement currently in use, if practicable (see Sunset Factor 5, pages 43 through 44).
12. ARRA should update its notice that substantive policy statements are advisory only, consistent with the amended version of A.R.S. §41-1091 (see Sunset Factor 5, pages 43 through 44).
13. ARRA should respond to public information requests in a timely manner (see Sunset Factor 5, page 44).

14. ARRA should develop and implement policies and procedures to require staff to track the dates when a complaint was resolved and determine the time it takes to resolve complaints (see Sunset Factor 6, page 44).
15. To appropriately investigate and resolve complaints against cosmetic laser technicians, ARRA should work with its Attorney General representative to pursue one of two options:
  - a. Seek an amendment to statute and rule to:
    - Provide ARRA with the ability to issue civil penalties; and
    - Define unprofessional conduct.
  - b. Propose statutory changes to transfer the responsibility for regulating cosmetic laser technicians to the MRTBE. If ARRA decides to seek legislation to transfer the responsibility for regulating cosmetic laser technicians to the MRTBE, it should propose statutory changes to modify the membership of the MRTBE to include at least one certified cosmetic laser technician (see Sunset Factor 9, pages 45 through 46).
16. Before the MRTBE takes on the responsibility of regulating cosmetic laser technicians, it should address the various issues with its performance that are discussed in this report (see Sunset Factor 9, page 46).
17. ARRA should work with its Attorney General representative to propose statutory and/or rule changes that would provide it with explicit authority to investigate complaints regarding sources of radiation (see Sunset Factor 9, page 46).



# MRTBE sunset factor analysis

In accordance with Arizona Revised Statutes (A.R.S.) §41-2954, the Legislature should consider the following 12 factors in determining whether the Medical Radiologic Technology Board of Examiners (MRTBE) should be continued or terminated.

- 1. The objective and purpose in establishing the MRTBE and the extent to which the objective and purpose are met by private enterprises in other states.**

The MRTBE was established in 1977 as a division of the Arizona Radiation Regulatory Agency (ARRA). The MRTBE's mission is to protect the health and safety of the people in Arizona against the harmful effects of excessive and improper exposure to medically applied ionizing radiation, such as x-rays. It strives to accomplish this mission by certifying users of radiation, investigating and resolving complaints against certificate holders, and providing information to the public regarding certificate holders (see pages 17 through 35 for more information).

Auditors did not identify any states that met the MRTBE's objective and purpose through private enterprises. Specifically, auditors contacted five western states surrounding Arizona—California, Colorado, Nevada, New Mexico, and Utah—and found that none used private enterprises to regulate users of radiation.

- 2. The extent to which the MRTBE has met its statutory objective and purpose and the efficiency with which it has operated.**

The MRTBE has, in part, met its statutory objective and purpose by issuing certificates to users of radiation, investigating and resolving complaints against certificate holders, and providing information to the public about the status of certificates. However, as discussed earlier in this report, the MRTBE should better ensure that applicants are qualified to obtain certification (see Certification, pages 17 through 21). In addition, the MRTBE only assesses whether it issues certificates in compliance with statutorily required time frames once a year (see Certification page 22). Further, the MRTBE does not adequately and consistently investigate and resolve all complaints (see Complaint resolution, pages 25 through 31). Finally, the MRTBE does not always provide accurate information to the public (see Public information, pages 33 through 35).

In addition, the MRTBE should take the following steps to better meet its statutory objective and purpose. Specifically, the MRTBE should:

*The analysis of the MRTBE Sunset Factors includes 13 recommendations not discussed earlier in this report. Specifically, the MRTBE should stop issuing certificates and imposing application requirements or fees it does not have authority to issue or impose (see Sunset Factor 2, page 54, and Sunset Factor 9, page 58); develop and implement policies and procedures to ensure certificates are not valid for more than the statutorily allowed length of time (see Sunset Factor 2, pages 54 through 55); modify its initial mammography application form and develop and implement policies and procedures for obtaining the necessary inspection results to ensure all statutory and rule requirements are met (see Sunset Factor 2, page 55); and add the full text of the MRTBE's substantive policy statements to the MRTBE's Web site as required by statute (see Sunset Factor 5, pages 56). In addition, the MRTBE should propose various statutory changes to its regulatory authority (see Sunset Factor 9, pages 57 through 58).*

- **Stop issuing certificates it does not have authority to issue**—The MRTBE issues certificates for radiation therapy, computed tomography, and student mammography, but it does not have statutory authority to do so. A radiation therapy technologist is responsible for administering radiation for the purposes of treating diseases, while a computed tomography technologist uses a CT machine for diagnostic purposes. Statute requires individuals performing mammography to be certified by the MRTBE. MRTBE staff reported that issuing student mammography certificates allows individuals who have not yet completed the training required to be certified in mammography to perform mammograms under supervision. The MRTBE also asserts that A.R.S. §32-2811, which prohibits a person from using ionizing radiation on a human, and A.R.S. §32-2801(14), which defines radiologic technology as the science and art of applying ionizing radiation to humans for general diagnostic or therapeutic purposes, provide authority for issuing certificates for radiation therapy and computed tomography. As a result, the MRTBE believes that they have the authority to issue these specific certificates because a person must be certified by the MRTBE to use ionizing radiation. However, statute does not specifically grant the MRTBE authority to issue these three types of certificates, nor does it prescribe the educational, training, and other qualifications for them. Therefore, the MRTBE should consult with its Attorney General representative to identify the necessary statutory changes needed to give MRTBE the specific authority to issue these certificates. The MRTBE should then work with the Legislature to make these statutory changes. Although the MRTBE believes that ceasing to issue these certificates may endanger the public health and safety, until it has statutory authority to do so, it should stop issuing these certificates.
- **Stop imposing application requirements on nuclear medicine and practical technologist in bone density applicants that it does not have authority to impose**—The MRTBE requires applicants for nuclear medicine and practical technologist in bone density to meet the application requirements established in Arizona Administrative Code (AAC) R12-2-301. However, AAC R12-2-301 does not apply to applicants for nuclear medicine and practical technologist in bone density. Rather, it applies to other applicants, such as applicants for radiologic technologist, practical technologist in podiatry, practical technologist in radiology, and radiologist assistants. Specifically, the rule requires applicants to submit information about their criminal and moral history. Because the MRTBE does not have authority to impose these requirements on nuclear medicine and practical technologist in bone density applicants, it should stop doing so.
- **Establish policies and procedures to ensure certificates are not valid for more than the statutorily allowed length of time**—Contrary to statute, the MRTBE has issued certificates that are valid for more than 2 years.<sup>1</sup> Specifically, auditors' reviewed a random sample of 21 certificates from a January 26, 2015, list of active certificates provided by the MRTBE. Nine of these 21 certificates were initial certificates. Auditors found that four of the nine initial certificates were issued for more than 2 years.<sup>2</sup> The

<sup>1</sup> Two of the nine certificate types MRTBE has statutory authority to issue expire in less than 2 years. Specifically, special permits, which are issued to individuals not required to be licensed by MRTBE, are only valid for 1 year before they must be renewed. Temporary mammography certificates are valid for only 30 days from the date of issuance but can be renewed for an additional 6 months.

<sup>2</sup> Three of the four certificates were for radiologic technologists, and one was for a practical technologist in radiology.

Executive Director reported that she was not aware that a certificate could not be valid for more than 2 years and reported that she directed staff to cease this practice during the audit. However, after she provided that direction, auditors reviewed a random sample of 14 certificates the MRTBE issued between April 2, 2015 and May 14, 2015, and found that two certificates were issued for longer than 2 years.<sup>1</sup> To ensure that MRTBE management appropriately issues certificates, the MRTBE should develop and implement policies and procedures to help ensure that certificates are issued for the appropriate length of time.

- **Better ensure that all mammography applicants meet training and education requirements**—The MRTBE’s statutes and rules require mammography certificate applicants to complete 40 hours of didactic instruction and at least 160 hours of clinical instruction. However, the MRTBE’s application does not require applicants to demonstrate that they have completed this initial training. To help ensure that initial mammography applicants meet all statutory and rule requirements, the MRTBE should modify its initial application to require applicants to demonstrate that they have completed the required initial training.

In addition, according to AAC R12-2-206, mammography technologists are required to complete 24 hours of continuing education, with at least 8 hours of mammography-specific continuing education, every 2 years. Renewal mammography applicants have the option of presenting a valid external certificate from an external certifying organization to demonstrate that they have completed this continuing education. However, these external certifying organizations may not require that applicants complete eight hours of mammography-specific continuing education. According to MRTBE management, they do not verify whether mammography applicants have completed the required eight hours of mammography-specific education because ARRA’s mammography inspectors verify this information. Specifically, during the annual inspection of mammography facilities, ARRA’s mammography inspectors verify whether a mammography technologist has completed mammography-specific continuing education. Nonetheless, because statute requires that mammography renewal applicants complete eight hours of mammography-specific continuing education, the MRTBE should develop and implement policies and procedures for obtaining the necessary inspection results from ARRA inspectors to show that renewal applicants have completed the required continuing education.

### 3. The extent to which the MRTBE serves the entire State rather than specific interests.

The MRTBE, in part, serves certificate holders and the public throughout the State by issuing certificates to qualified individuals who use sources of radiation. In addition, it receives and investigates complaints filed by the public against certificate holders and may impose discipline. Further, the MRTBE provides the public with information on its Web site regarding individuals’ certificate status. However, auditors found that the MRTBE can do more to ensure it issues certificates to qualified applicants, adequately investigates and resolves complaints in a timely manner, and provides accurate, complete, and timely information to the public (for more information, see pages 17 through 35).

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<sup>1</sup> One of the certificates was for a radiologic technologist, and the other was for a practical technologist in radiology.

**4. The extent to which rules adopted by the MRTBE are consistent with the legislative mandate.**

General Counsel for the Office of the Auditor General has analyzed the MRTBE's rule-making statutes and believes that the MRTBE has generally established administrative rules as required by statute. However, the MRTBE has established some administrative rules that it may not have had sufficient authority to establish. Specifically, the MRTBE's administrative rules provide that applicants may apply for a radiation therapy technologist, a bone density technologist, and a computed tomography technologist certificate pursuant to A.R.S. §32-2811, which prohibits a person from using ionizing radiation on a human, and A.R.S. §32-2801(14), which defines radiologic technology. MRTBE believes that it can prescribe an application process for these certificates because a person must be certified to practice these disciplines. However, there is no statutory provision for these certificate types, and because there is no statutory authority, there is also no authority to adopt rules for issuing these certificates. Therefore, the MRTBE should consult with its Attorney General representative and seek statutory authority to issue these certificates and/or modify the administrative rules for these certificate types.

**5. The extent to which the MRTBE has encouraged input from the public before adopting its rules and the extent to which it has informed the public as to its actions and their expected impact on the public.**

Auditors found that the MRTBE has encouraged input from the public before adopting its rules. Specifically, in fiscal year 2015, the MRTBE revised its rules regarding certification requirements. As part of its process, the MRTBE submitted its proposed rules to the Arizona Administrative Register and in December 2014, held a board meeting to allow the public to comment on the proposed rules.

Auditors also assessed the MRTBE's compliance with some provisions of the State's open meeting law for two board meetings held in November and December 2014 and found that the MRTBE was in compliance with those aspects of the open meeting law.

Further, the MRTBE is required to inform the public of its existing rules and policies. Specifically, A.R.S. §41-1091.01 requires the MRTBE to post on its Web site (1) the full text, or the Web site address and location of the full text, of each rule in use; (2) each substantive policy statement in use, including the full text, if practicable; and (3) a notice that the substantive policy statement is advisory only. Although the MRTBE posts the full text of its rules and a notice that the substantive policy statements are advisory only, the MRTBE does not comply with the requirement to post the full text of each substantive policy statement currently in use, if practicable. Therefore, to comply fully with A.R.S. §41-1091.01, the MRTBE should post on its Web site the full text of each substantive policy statement currently in use, if practicable. Additionally, the MRTBE's notice that substantive policy statements are advisory only is out of date because it cites A.R.S. §41-1091 before it was amended. Therefore, the MRTBE should update its advisory statement to cite the amended version of A.R.S. §41-1091.

**6. The extent to which the MRTBE has been able to investigate and resolve complaints that are within its jurisdiction.**

The MRTBE may investigate and resolve complaints within its jurisdiction (see Sunset Factor 9, page 58) and has nondisciplinary and disciplinary options available to use to address violations of statute and/or rule, such as issuing a nondisciplinary order for continuing education or revoking a certificate. However, auditors found that the MRTBE has not adequately investigated and resolved all complaints it received in a timely manner (see Complaint resolution, pages 25 through 31, for additional information).

**7. The extent to which the Attorney General or any other applicable agency of state government has the authority to prosecute actions under the enabling legislation.**

The Attorney General is the MRTBE's attorney according to A.R.S. §41-192(A)(1). Pursuant to A.R.S. §41-192(A)(1), the Attorney General is required to provide the legal services the MRTBE requires, including representing the MRTBE at meetings, prosecuting disciplinary actions, handling appeals from orders, defending against lawsuits, advising the MRTBE on rulemaking, and filing petitions for injunctive relief.

**8. The extent to which the MRTBE has addressed deficiencies in its enabling statutes that prevent it from fulfilling its statutory mandate.**

The MRTBE's Executive Director reported that the MRTBE has not addressed any deficiencies in its enabling statutes that prevent it from fulfilling its statutory mandate.

**9. The extent to which changes are necessary in the laws of the MRTBE to adequately comply with the factors listed in the sunset law.**

Auditors identified four areas where the MRTBE should propose statutory revisions. Specifically, the MRTBE, in consultation with its Attorney General representative, should propose:

- **Removing the requirement for it to approve high schools for radiologic technologist applicants**—In addition to the statutory requirement to approve radiologic training schools and training programs, statute also requires the MRTBE to approve high schools. Specifically, A.R.S. §32-2812(A)(3)(a) requires that applicants for a radiologic technologist certificate graduate from an MRTBE-approved high school. However, according to the Executive Director, the MRTBE does not approve high schools, and she does not know the purpose of this requirement. Additionally, the Arizona State Board of Education establishes Arizona high school curriculum. Because the MRTBE does not have any authority regarding a high school's curriculum, it should propose a statutory change to remove the requirement for it to approve high schools for radiologic technologist applicants.
- **Removing the requirement for external certifying organizations to be approved by the American Medical Association or the American Osteopathic Association**—A.R.S. §32-2812(C) indicates that the MRTBE may accept, in lieu of its own examination, a valid certificate issued by an external certifying organization recognized by the American Medical Association (AMA) or the American Osteopathic Association (AOA). However, an AMA

representative reported that the AMA does not recognize these external certifying organizations. In addition, an AOA representative reported that the AOA does not recognize these types of organizations because these external certifying organizations issue certificates only to technologists who use radiation on humans; they do not issue certificates to doctors. Therefore, the MRTBE should propose a statutory change to remove the requirement that external certifying organizations be approved by the AMA or the AOA.

- **Authorizing the MRTBE to charge an application fee to nuclear medicine technologists**—Despite lacking the statutory authority, the MRTBE charges nuclear medicine applicants an application fee. The MRTBE should stop imposing an application fee for nuclear medicine applicants until it has the authority to do so. Accordingly, because application fees help pay for the cost of processing certificate applications and investigating complaints, the MRTBE should seek statutory changes to allow it to charge an application fee for nuclear medicine certificates.
- **Specifically authorizing the MRTBE to investigate complaints against certificate holders**—Pursuant to A.R.S. §32-2821, the MRTBE has statutory authority to take nondisciplinary and disciplinary actions, such as imposing a civil penalty. However, the MRTBE does not have specific authority to investigate complaints against certificate holders. Therefore, to ensure it has the authority to adequately investigate complaints and take disciplinary action when appropriate, the MRTBE should propose statutory and/or rule changes to provide it with explicit authority to investigate complaints against certificate holders.

**10. The extent to which the termination of the MRTBE would significantly affect the public health, safety, or welfare.**

Terminating the MRTBE would affect the public's health, safety, and welfare if its regulatory responsibilities were not transferred to another entity. The MRTBE is responsible for certifying qualified individuals who use radiation, receiving and investigating complaints against certificate holders, and providing information to the public. These functions help protect the public from potential harm. For example, auditors reviewed complaints investigated by the MRTBE alleging actions that posed a threat to the public, including a case where the certificate holder tested positive for cocaine. However, auditors found that the MRTBE could better ensure that applicants are qualified prior to certification, adequately investigate and resolve complaints in a timely manner, and better provide information to the public (for more information, see pages 17 through 35).

**11. The extent to which the level of regulation exercised by the MRTBE compares to other states and is appropriate and whether less or more stringent levels of regulation would be appropriate.**

The audit found that the level of regulation the MRTBE exercises over technologists who use radiation on humans appears to be appropriate and is similar to the level of regulation in other states. Specifically, auditors contacted five western states surrounding Arizona—California, Colorado, Nevada, New Mexico, and Utah—and found that all of these states provide some level of regulation over technologists who use radiation on humans. For

example, California certifies several types of technologists, such as radiologic, nuclear medicine, and mammography technologists. However, another state auditors contacted, Nevada, certifies only mammography technologists. Although the types of technologists these states regulate vary, for the types of technologists they do regulate, the level of regulation appears to be generally similar to Arizona's level of regulation.

Auditors' review of the five western states identified the following:

- **Examinations**—Similar to Arizona, four of the states require applicants to either take an examination administered by an external certifying organization and then provide a copy of an external certificate from the external certifying organization or pass a state examination. Nevada requires applicants to take an examination administered by an external certifying organization and then provide a copy of the external certificate from the external certifying organization and does not provide an option to take a state examination.
- **Background checks**—Similar to Arizona, all five states auditors reviewed do not require applicants to undergo a fingerprint background check.
- **Continuing education**—Similar to Arizona, the three states that regulate radiography also require these technologists to complete 24 hours of continuing education prior to renewing their certificates.

In addition, in order to demonstrate completion of continuing education, two of the five states require applicants to submit certificates demonstrating completion. One state requires applicants to list their continuing education and attest that they have earned their continuing education. The other two states require applicants to maintain a valid external certificate showing that they have completed the continuing education requirement. Arizona allows applicants to either submit a valid external certificate showing they have completed the required continuing education or submit other documentation demonstrating completion of the continuing education.

## 12. The extent to which the MRTBE has used private contractors in the performance of its duties as compared to other states and how more effective use of private contractors could be accomplished.

The MRTBE has used private contractors for various services, including information technology services and to hire temporary staff to assist in performing various administrative functions, such as filing paperwork.<sup>1</sup> Auditors contacted five states surrounding Arizona—California, Colorado, Nevada, New Mexico, and Utah—and these states reported that they do not use private contractors in their regulation of the types of licenses, certificates, or registrations they issue.

The audit did not identify any additional areas where the MRTBE should consider using private contractors.

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<sup>1</sup> The MRTBE contracts for these services together with ARRA. As mentioned in ARRA Sunset Factor 12 (see page 48), ARRA hires temporary staff to help process annual fees, which ARRA's rules require licensees and registrants to pay by January 1 of each year. These temporary staff also assist in performing various administrative functions for the MRTBE.

## Recommendations:

1. The MRTBE does not have statutory authority to issue certificates for radiation therapy, computed tomography, and student mammography and should:
  - a. Consult with its Attorney General representative to identify the necessary statutory changes needed to give MRTBE the specific authority to issue these certificates;
  - b. Work with the Legislature to make these changes; and
  - c. Stop issuing these certificates until it has the authority to do so (see Sunset Factor 2, page 54).
2. The MRTBE should stop imposing the application requirements of AAC R12-2-301 on nuclear medicine and practical technologist in bone density applicants because these requirements do not apply to these applicants (see Sunset Factor 2, page 54).
3. The MRTBE should develop and implement policies and procedures to help ensure that certificates are issued for the appropriate length of time (see Sunset Factor 2, pages 54 through 55).
4. The MRTBE should modify its initial application to require mammography applicants to demonstrate that they have completed the required initial training (see Sunset Factor 2, page 55).
5. The MRTBE should develop and implement policies and procedures for obtaining the necessary inspection results from ARRA inspectors to show that renewal applicants have completed the required continuing education (see Sunset Factor 2, page 55).
6. The MRTBE should consult with its Attorney General representative and seek statutory authority to issue a radiation therapy technologist, a bone density technologist, and a computed tomography technologist certificate and/or modify the administrative rules for these certificates types (see Sunset Factor 4, page 56).
7. To comply fully with A.R.S. §41-1091.01, the MRTBE should post on its Web site the full text of each substantive policy statement currently in use, if practicable, and should update its advisory statement that substantive policy statements are advisory only to cite the new law (see Sunset Factor 5, page 56).
8. The MRTBE, in consultation with its Attorney General representative, should propose the following statutory changes:
  - a. Removing the requirement for it to approve high schools for radiologic technologist applicants;
  - b. Removing the requirement that external certifying organizations be approved by the American Medical Association or the American Osteopathic Association; and

- c. Authorizing the MRTBE to charge an application fee for nuclear medicine certificates. Until it has the authority, the MRTBE should stop imposing this fee (see Sunset Factor 9, pages 57 through 58).
9. The MRTBE should, in consultation with its Attorney General representative, propose statutory and/or rule changes specifically authorizing it to investigate complaints against certificate holders (see Sunset Factor 9, page 58).

# Appendix A

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## Comparison of inspection frequencies

The Conference of Radiation Control Program Directors (CRCPD) recommends that state radiation control programs develop a written policy that describes how frequently inspections should occur. According to the CRCPD, states should consider, among other things, the potential for radiation exposure to patients and personnel, the workload of the facility, the facility's violation history, and the state's inspection resources in developing inspection frequencies. To help states develop an appropriate inspection frequency, the CRCPD provided guidance on how frequently states may want to inspect x-ray facilities.<sup>1</sup> Auditors contacted five states—Colorado, Indiana, Missouri, Tennessee, and Washington—and found that all five states have established different inspection frequencies. Table 4 (see page a-2) shows the CRCPD's recommended inspections frequencies and the inspection frequencies for these five states as compared to the Arizona Radiation Regulatory Agency's (ARRA) inspection frequencies.

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<sup>1</sup> Conference of Radiation Control Program Directors, Inc. (2014). *Criteria for an adequate radiation control program*. Frankfort, KY.

**Table 4: Comparison of state x-ray facility inspection frequencies  
As of 2015<sup>1</sup>**

X-ray facility/ machine type	Number of years between inspections						
	CRCPD guidance	Arizona	Colorado	Indiana	Missouri	Tennessee	Washington
Mammography	1	1	1	1	1	1 or 2 <sup>2</sup>	1
Hospital	1	2	1	1	1	1	2
Therapy	1	2 or 3 <sup>3</sup>	1	1	1	1	No inspection
Medical	2	3	1	1	2 or 4 <sup>4</sup>	2	2
Chiropractic	2	3	1	1	2 or 4 <sup>4</sup>	2	4
Educational	No guidance <sup>5</sup>	3	2	Depends on facility <sup>6</sup>	2 or 6 <sup>7</sup>	1	2
Dental	4	4	3	3	1 or 6 <sup>8</sup>	4	4
Veterinary	3	4	3	2	4	2	4
Podiatry	No guidance <sup>5</sup>	4	3	2	2 or 4 <sup>4</sup>	2	4
Industrial	5	4	2	No inspection	6 <sup>9</sup>	1	4

<sup>1</sup> The state x-ray inspection frequencies are as of 2015. The CRCPD recommended inspection frequencies are from 2014.

<sup>2</sup> Tennessee reported that mammography machines in hospitals must be inspected every year, but machines in private practice are inspected every 2 years.

<sup>3</sup> Inspection frequencies for therapy machines are tied to the type of facility. For example, a therapy machine in a hospital would need to be inspected every 2 years, and a therapy machine in a medical facility would need to be inspected every 3 years.

<sup>4</sup> Missouri reported that medical, chiropractic, and podiatry facilities are inspected every 2 years, except when they conduct under 300 exams per year, in which case they are inspected every 4 years.

<sup>5</sup> The CRCPD publication does not provide states guidance on how frequently to inspect educational and podiatry facilities.

<sup>6</sup> Inspection frequencies for educational facilities are tied to the type of facility. For example, medical education facilities would need to be inspected every year.

<sup>7</sup> Missouri reported that if an educational facility uses its x-ray machines on patients, then the facility is inspected every 2 years. However, the facility is inspected every 6 years if the x-ray machines are not used on patients.

<sup>8</sup> Missouri reported that if the dental facility is using a cone beam computed tomography (CBCT) machine, then the facility should be inspected every year. If the machine is not a CBCT machine, then the facility can be inspected once every 6 years.

<sup>9</sup> Missouri reported that in general, industrial facilities should be inspected once every 6 years, but that some of their industrial facilities are inspected more frequently.

Source: Auditor General staff analysis of the CRCPD's *Criteria for an adequate radiation control program* May 2014 publication, information reported by other states during interviews, and ARRA's policies and procedures manual for performing inspections.

# Appendix B

## Methodology

*This appendix provides information on the methods auditors used to meet the audit objectives. The Auditor General and staff express appreciation to the Arizona Radiation Regulatory Agency, its Director, its staff, as well as the Arizona Radiation Regulatory Hearing Board (Hearing Board), and the Medical Radiologic Technology Board of Examiners (MRTBE), its Executive Director, and its staff for their cooperation and assistance throughout the audit.*

Auditors conducted this performance audit of the Arizona Radiation Regulatory Agency (ARRA), the Hearing Board, and the MRTBE in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Auditors used various methods to study the issues in the performance audit and sunset review. These methods included reviewing ARRA's, the Hearing Board's, and the MRTBE's statutes; ARRA's and the MRTBE's rules; ARRA's and the MRTBE's policies and procedures; and information from ARRA's, the Hearing Board's, and the MRTBE's Web site. Auditors also interviewed the Hearing Board's and MRTBE's chairs, and ARRA's and the MRTBE's staff. In addition, auditors reviewed the Hearing Board's meeting minutes from December 2012 to September 2014 and attended two of the MRTBE's meetings held in November and December 2014.

In addition, auditors used the following specific methods to meet audit objectives:

- To determine whether ARRA's processes and practices helped ensure that x-ray inspections are performed efficiently and effectively, auditors observed five x-ray facility inspections in January 2015. In addition, auditors reviewed ARRA's x-ray inspection policies and procedures, and analyzed ARRA's inspection data for all x-ray facilities registered as of June 2015. Auditors also reviewed the Office of the Auditor General's 1984 and 1995 reports on the Arizona Radiation Regulatory Agency (see Report Nos. 84-9 and 95-8). Further, auditors reviewed information about establishing an inspection frequency schedule from the Conference of Radiation Control Program Directors (CRCPD).<sup>1</sup> Auditors also contacted five states with populations similar in size to Arizona according to the U.S. 2010 census to gather information about how these states inspect x-ray facilities.<sup>2</sup>
- To determine whether the MRTBE's processes and practices helped ensure that certificates are issued to qualified applicants in a timely manner, auditors reviewed a random sample of 21 certificates from a January 26, 2015, list of active certificates provided by the MRTBE. Nine of these 21 certificates were initial certificates and 12 were renewal certificates. In addition, auditors reviewed a sample of four examinations that the MRTBE administered between January 2011 and September 2013. Auditors also reviewed the MRTBE's initial and renewal applications and

<sup>1</sup> Conference of Radiation Control Program Directors, Inc. (2014). *Criteria for an adequate radiation control program*. Frankfort, KY.

<sup>2</sup> Auditors contacted state radiation control staff in Colorado, Indiana, Missouri, Tennessee, and Washington.

compared them with statutes and rules, and reviewed application processing timeliness information from the MRTBE's database for fiscal years 2013 and 2014.

- To determine whether the MRTBE processes complaints in an appropriate and timely manner, auditors analyzed the MRTBE's complaint data for fiscal years 2013 through 2015 and reviewed a random sample of 16 of the 122 complaints the MRTBE investigated between July 2012 and February 2015. Auditors also contacted two other Arizona regulatory boards—the Arizona Medical Board and the Arizona State Board of Nursing—to determine how these boards ensure licensees are randomly selected for drug testing. Further, auditors also reviewed the National State Auditors Association's *Best Practices in Carrying Out a State Regulatory Program*.<sup>1</sup>
- To determine whether the MRTBE shares appropriate information with the public, auditors placed three anonymous phone calls to MRTBE staff in April 2015 requesting information about three certificate holders and compared the information provided to MRTBE records. Auditors also analyzed information about the status of certificate holders' certificates on the MRTBE's Web site. As part of this review, auditors reviewed a random sample of 53 certificates that the MRTBE's Web site said were current even though the expiration date had passed.
- To obtain information for the Introduction, auditors analyzed unaudited ARRA data for the number of registrations, licenses, and certificates issued as of June 2015, and reviewed unaudited ARRA reports and logbooks for the number of inspections performed in fiscal year 2015. Auditors also reviewed unaudited reports from ARRA and the MRTBE for the number of staff positions for fiscal year 2015, as well as ARRA's 2014 annual report. For information on ionizing and nonionizing radiation, auditors reviewed the Web sites of the United States Environmental Protection Agency, the United States Food and Drug Administration, and the United States Department of Energy. In addition, auditors compiled and analyzed unaudited information from the Arizona Financial Information System (AFIS) *Accounting Event Transaction File* for fiscal years 2013 through 2015 and the AFIS *Management Information System Status of General Ledger—Trial Balance* screen for fiscal years 2013 through 2015.
- To obtain information for ARRA's and the Hearing Board's Sunset Factors, auditors reviewed the Office of the Auditor General's July 2015 procedural review. Auditors compared applications for x-ray and nonionizing registration to statute and rule, and analyzed ARRA data from fiscal years 2013, 2014, and 2015 through November 2014 on whether x-ray and nonionizing registrations were issued in a timely manner. In addition, auditors analyzed ARRA's inspection data for all nonionizing facilities registered as of May 2015 to determine whether nonionizing inspections were performed in a timely manner. To assess ARRA's provision of information to the public, auditors placed anonymous phone calls to ARRA staff in April, May, and June 2015 requesting information about three licensees or registrants. To assess the Hearing Board's compliance with the State's open meeting law, auditors reviewed the Hearing Board meeting notices and minutes for meetings held between December 2012 and September 2014. To assess ARRA's provision of opportunities for public input during rulemaking, auditors reviewed the Arizona Administrative Register for

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<sup>1</sup> National State Auditors Association. (2004). *Best practices in carrying out a state regulatory program*. Lexington, KY.

fiscal years 2010 through 2014. Auditors also analyzed ARRA's x-ray and nonionizing complaint-tracking mechanisms for the time period January 2013 to June 2015 and reviewed 29 cosmetic laser technician complaints received between April 2014 and June 2015. Finally, auditors reviewed cosmetic laser information from five western states—California, Colorado, Nevada, New Mexico, and Utah.

- To obtain information for the MRTBE's Sunset Factors, auditors reviewed a random sample of 14 certificates the MRTBE issued between April 2015 and May 2015 to assess certificate expiration dates. To assess the MRTBE's compliance with the State's open meeting law, auditors reviewed the MRTBE's meeting notices and agendas and attended the MRTBE's November and December 2014 meetings. To assess the MRTBE's provision of opportunities for public input during rulemaking, auditors reviewed the Arizona Administrative Register for fiscal years 2010 through 2015. Auditors also contacted five western states, and the American Medical Association and the American Osteopathic Association.<sup>1</sup>
- Auditors' work on internal controls included assessing the MRTBE's controls for ensuring that certificates are given to qualified applicants and that complaints are consistently resolved, and assessing ARRA's controls for ensuring that x-ray and nonionizing facilities meet registration requirements and that x-ray facilities are inspected in a timely manner. Auditors report their conclusions on these internal controls as well as ARRA and the MRTBE's efforts to improve their controls in the report chapters and Sunset Factors.

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<sup>1</sup> Auditors contacted state radiology officials and staff in five western states—California, Colorado, Nevada, New Mexico, and Utah.

# AGENCY RESPONSE

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**Douglas A. Ducey**  
Governor

**Aubrey V. Godwin**  
Director

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September 24, 2015

Debra K. Davenport, CPA  
Auditor General  
2910 N 44<sup>th</sup> St., Suite 410  
Phoenix, AZ 85040

Dear Auditor General Davenport:

Thank you for the opportunity to offer comments on the revised draft of the report *A Performance Audit and Sunset Review of the Arizona Radiation Regulatory Agency, Hearing Board, and Medical Radiologic Technology Board of Examiners*. Our comments are attached.

If you or your staff have any questions please contact me.

Sincerely

Aubrey V. Godwin, CHP  
Director

## ATTACHMENT

### Page 15, Recommendations:

1. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
2. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
3. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
4. The finding of the Auditor General is agreed to and the audit recommendation will be implemented

### Page 23, Recommendations

1. a. The finding of the Auditor General is agreed to and the audit recommendations will be implemented.  
b. The finding of the Auditor General is agreed to and a different method of dealing with the finding will be implemented.  
c. The finding of the Auditor General is agreed to and the audit recommendations will be implemented.  
d. The finding of the Auditor General is agreed to and a different method of dealing with the finding will be implemented.  
e. The finding of the Auditor General is agreed to and a different method of dealing with the finding will be implemented  
f. The finding of the Auditor General is agreed to and the audit recommendations will be implemented.  
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### Page 30, Recommendations

1. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
2. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
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10. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
11. The finding of the Auditor General is agreed to and a different method of dealing with the finding will be implemented

Page 35, Recommendations:

1. a. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.  
b. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.  
c. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Page 49, Recommendations

1. a. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.  
b. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.  
c. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.  
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  16. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
  17. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Page 60, Recommendations

1.
  - a. The finding of the Auditor General is not agreed to and a different method of dealing with the finding will be implemented.
  - b. The finding of the Auditor General is not agreed to and a different method of dealing with the

finding will be implemented.

c. The finding of the Auditor General is not agreed to and a different method of dealing with the finding will be implemented

2. The finding of the Auditor General is not agreed and a different method of dealing with the finding will be implemented.
3. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
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6. The finding of the Auditor General is not agreed to and the recommendation will not be implemented.
7. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
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  - a. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
  - b. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
  - c. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.
9. The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

## Performance Audit Division reports issued within the last 18 months

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<b>14-102</b>	Gila County Transportation Excise Tax
<b>14-103</b>	Arizona State Board of Dental Examiners
<b>14-104</b>	Arizona Office of Administrative Hearings
<b>14-105</b>	Arizona Board of Executive Clemency
<b>14-106</b>	State of Arizona Naturopathic Physicians Medical Board
<b>14-107</b>	Arizona Department of Child Safety—Children Support Services—Emergency and Residential Placements
<b>14-108</b>	Arizona Department of Administration—Arizona State Purchasing Cooperative Program
<b>15-101</b>	Arizona Department of Child Safety—Child Abuse or Neglect Reports, Substantiation Rate, and Office of Child Welfare Investigations
<b>15-102</b>	Arizona Department of Administration—State-wide Procurement
<b>15-103</b>	Arizona Medical Board—Licensing and Registration Processes
<b>15-104</b>	Arizona Department of Transportation—Motor Vehicle Division
<b>15-105</b>	Arizona Department of Revenue—Use of Information Technology
<b>15-CR1</b>	Independent Review—Arizona’s Child Safety System and the Arizona Department of Child Safety
<b>15-CR1SUPP</b>	Supplemental Report to the Independent Review—Arizona’s Child Safety System and the Arizona Department of Child Safety
<b>15-106</b>	Arizona State Retirement System
<b>15-CR2</b>	Independent Operational Review of the Arizona State Retirement System’s Investment Strategies, Alternative Asset Investment Procedures, and Fees Paid to External Investment Managers
<b>15-107</b>	Arizona Sports and Tourism Authority
<b>15-108</b>	Arizona Department of Administration—Personnel Reform Implementation
<b>15-109</b>	Arizona Department of Administration—Sunset Factors
<b>15-110</b>	Arizona Foster Care Review Board
<b>15-111</b>	Public Safety Personnel Retirement System
<b>15-CR3</b>	Independent Operational Review of the Public Safety Personnel Retirement System Investment Strategies, Alternative Asset Investment Procedures, and Fees Paid to External Investment Managers
<b>15-112</b>	Arizona Commerce Authority
<b>15-113</b>	Arizona Department of Transportation—Transportation Revenues
<b>15-114</b>	Arizona Department of Transportation—Sunset Factors

## Future Performance Audit Division reports

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Arizona Department of Revenue—Security of Taxpayer Information  
Arizona Department of Revenue—Sunset Factors