



The Certifier

A Newsletter for Environmental Control Certifying Authorities

AMP's Computer-Based Delivery of ABC Exams

by Clark Vaughn, Account Manager, Applied Measurement Professionals, Inc.

ABC has partnered with Applied Measurement Professionals, Inc. (AMP), a professional testing agency, as the sole national test administrator for ABC's computer-based exams. AMP is a research and development firm that conducts professional competency assessment research and provides examination services to over 100 credentialing programs. In the high stakes computer-based testing (CBT) environment, AMP believes that ease of access, quality of testing experience and security are the three most important issues in the delivery of CBT.

Access

Currently, only South Carolina and Alabama are using AMP to administer ABC computer-based examinations, but more jurisdictions may transition to CBT soon. AMP Assessment Centers operate five days per week, Monday through Friday, throughout

the year at 150 sites geographically distributed across the United States. AMP intentionally built their network to provide as much coverage and access as possible. AMP's 150 Assessment Centers serve 125 unique cities, with only major metropolitan areas such as New York, Los Angeles, Chicago, etc. hosting multiple locations to serve the higher candidate population. With this approach to coverage, AMP has a test center within 2 hours of the top 175 metropolitan service areas.

Another key part of access is availability. AMP has also chosen to build its CBT business in a controlled fashion, focused on customer service. AMP currently has 30 clients testing about 150,000 candidates per year. With a current total capacity of roughly 300,000, we have approximately 150,000 available testing appointments each year. Simply put, AMP candidates usually test when and where they want.

Quality Experience

The second piece to our approach is ensuring that the candidate is provided with a high-quality testing experience. In that regard, we ask every CBT candidate to provide us feedback on their testing experience by voluntarily responding to 16 questions after the timed examination is terminated. These questions allow for feedback on test center location and comfort, proctor, testing software and overall testing environment. With over 600,000 responses, the results indicate an overall 99% approval rating.

Many AMP Assessment Centers are established within H&R Block tax offices, while others are in AMP leased facilities. Regardless of the test center model, AMP is in complete control over the testing environment. Each center is equipped with sufficient computer stations to accommodate the indicated applicant volume and is constantly monitored to ensure adequate coverage. Sites are designed to meet AMP specifications for a professional image and an appropriate and secure testing environment. Sites comply with all federal, state and local laws regarding use of public buildings, ensure accessibility required under the Americans with Disabilities Act and accommodate applicants with disabilities on an individual basis without additional cost to the client or the applicant.

Security

AMP places great emphasis on the security of the entire testing process. Documented and tested security procedures are in place at all AMP Assessment Centers. Tests are delivered to the test sites shortly before the exam using a state-of-the-art 128-bit encryption technique. AMP examinations do not permanently reside on computers at the assessment centers. Every candidate will register with a trained Assessment Center Proctor and must present photo identification. Each candidate will have a digitized picture taken (included on the

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Multiple Entry Compared to Sequential Testing

by Bob Hoyt, Massachusetts Board of Certification of Operators of Drinking Water Supply Facilities

The July 2006 AWWA *Opflow* article titled "Reciprocity: Not All States Equal" expresses concern about why states can't seem to obtain operator reciprocity agreements. I think this is a good time to review one of the many stumbling blocks to reciprocity among states: the issue of sequential operator exams versus multiple entry exams. Hopefully, this article will also bring a solution to this one particular issue in the myriad of difficulties involving operator reciprocity.

Some states require an operator to take exams in order from lowest to highest operator classification level ("sequential" system). Other states allow an applicant to take any level of operator exam that the person is qualified for by education and experience ("multiple entry" system). This has been a bone of contention among states because an operator required to take an exam for each level in a sequential system will answer 400 questions before receiving the highest class of license. An operator with the proper experience in a multiple entry state might only answer 100 questions for the highest level of license. Therefore states that required sequential testing did not consider the certification of a multiple entry state as equivalent.

ABC has developed multiple entry tests that will help bridge the difference between multiple entry and sequential testing. ABC has an item bank of questions for each operator class level. This enables the development of a multiple entry test to cover the specific class level with additional questions coming from the lower class levels. This process will insure that operators taking a higher-level multiple entry test will receive questions from the lower class level tests that may not be part of the higher class level sequential examination. The number of questions per multiple entry exam level is:

Class I (lowest) 100 questions Class III 150 questions
 Class II 120 questions Class IV (highest) 180 questions

The biggest concern I had about the multiple entry test is what would happen to the pass/fail rate of the operators taking it. The following chart is a summary of the 2005 passing rates for ABC standardized multiple entry tests (Class II through IV) compared to the standardized sequential 100-question tests. Also included are the results of multiple entry states that are using sequential tests.

2005 Passing Rates	Class II	Class III	Class IV
Water Treatment Test			
Multiple entry program using sequential exam	43%	31%	23%
Multiple entry program using multiple entry exam	46%	38%	48%
Sequential program using sequential exam	31%	27%	13%
Water Distribution Test			
Multiple entry program using sequential exam	57%	54%	48%
Multiple entry program using multiple entry exam	74%	64%	56%
Sequential program using sequential exam	55%	44%	43%
Wastewater Treatment Test			
Multiple entry program using sequential exam	48%	28%	24%
Multiple entry program using multiple entry exam	79%	53%	69%
Sequential program using sequential exam	40%	31%	27%
Wastewater Collection Test			
Multiple entry program using sequential exam	64%	61%	47%
Multiple entry program using multiple entry exam	46%	56%	83%
Sequential program using sequential exam	66%	54%	51%

The passing rates for multiple entry examinations were actually higher than the sequential 100 question exam for almost every class level. I do want to point out that there is only a limited number of states that are using the multiple entry tests. Also a few of the states that are using the multiple entry exams are states where operators have had an above average passing rate on the sequential 100-question test. However, in my opinion, the additional questions did not appear to make the test more difficult to pass. I believe multiple entry states that are using the sequential exams should not be worried about the increased number of questions on the multiple entry examination having a negative effect on the passing rates for the operator's exam.

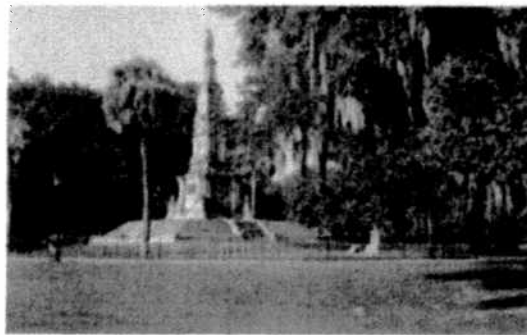
Now I know that this is just one area in the issue of operator reciprocity, but it does provide a means of getting states to compare testing requirements for reciprocity. As an operator who has gone through the reciprocity process, I agree with the author of the July 2006 AWWA *Opflow* article: any operator thinking about moving to another state should inquire about the state's operator requirements before they make a change. Do not expect all states to have the same requirements, because they don't. While EPA has made each state develop a certification program, they did not require the programs to be completely consistent throughout the country. Hopefully this information will help guide certification programs to the best solution for their program. ❖

An upcoming *Certifier* article will focus on the passing rates of multiple entry programs that switched from sequential to multiple entry exams.

ABC 20th Annual Conference

January 16-19, 2007

Savannah Marriott Riverfront
Savannah, Georgia
www.marriott.com/savrf



EPA Pre-conference Workshop, January 16, 2007

Facilitator -- Jenny Bielanski, US EPA

EPA in conjunction with ABC is sponsoring a pre-conference workshop on Tuesday, January 16th, from 1:00-4:00 pm to discuss workforce issues related to the drinking water and wastewater industry. Discussion topics include:

- Operator retention and staffing
- Professionalism of operators
- Rule compliance
- Capacity building
- Educating the public on the important role of certified operators

Please plan on joining EPA staff to provide your perspective on these issues and to provide important input on how we all can work together to support operators!

Preliminary Program Topics, January 17-19, 2007

Compliance

- Compliance of continuing education: Establishing requirements and verifying that they are met
- Development of disciplinary action guidance
- Operators' role in water system compliance

Presentation by 2005-2006 WEF President J. Michael Read

Course Relevancy and Regional Reciprocity

- Results of the Relevancy Workshop
- Regional reciprocity
- Small group discussions on regional standardization to foster regional reciprocity

Exam Administration and Development

- The ABC's of testing
- Guidelines for proctoring
- Online exams -- Web based vs. computer based
- Pennsylvania board-directed research: Results of Penn State research project

Certification Boards

- Role of certification board in enhancing operator professionalism
- Mandatory programs administered by a third party - Creating successful partnerships
- Developing a backflow certification program
- Impact of Hurricane Katrina on Mississippi coast wastewater infrastructure

Voluntary Certification

- Elements and perspectives for developing a voluntary certification program

Future Trends

- Establishing standards for education and experience
- Output from the January 16, 2007 EPA Pre-conference Workshop



ABC reserves the right to make program changes.

Registration materials will be mailed to ABC members in October and posted on the Annual Conference page of ABC's web site, www.abccert.org.

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score report form) and will be monitored throughout the administration by trained staff. In addition to the on-site staff, the area is continuously monitored by audio/video equipment. Verification of candidate identity and other security procedures related to the administration are strictly enforced. No written materials or personal belongings will be allowed within the testing area during the examination.

All assessment center proctors are trained by AMP and required to pass an Assessment Center Proctor certification examination. This examination was developed by AMP to ensure that all proctors understand the procedures and exhibit the decision making skills necessary to provide a standardized testing environment. The certification examination covers five major content areas, including general procedures, checking-in candidates, assisting and monitoring candidates during the testing process, post-examination protocol and troubleshooting.

In providing computer-based testing, AMP will ensure that all testing conditions for all candidates and will monitor the results, examination performance and comments of candidates in order to provide evidence that the testing process is secure and fair at all times. To enhance security, LXR•TEST software scrambles the numbering of items within each form and the options within an individual item. Using this feature, the chances that candidates testing at the same time and place will receive an identical examination in the same question sequence are extremely remote.

AMP employs a revolutionary Assessment Center Network Command and Control System (ACN-CCS) to provide web-based, real-time analysis and feedback regarding over 100 conditions at all 150 of our national assessment center locations. The ACN-CCS allows AMP information technology staff to see the status and condition of all sites at a glance and locate detailed reports with the click of a mouse.

The ACN-CCS also monitors candidate call center volumes, on-line scheduling rates, examinee volume trends, examinee satisfaction levels and test site capacity and utilization. If a test site is consistently running at capacity or candidates have to wait more than a few days to schedule an examination at a particular location, AMP is alerted immediately, so we may address the issue.

If you would like to have more information on ABC's CBT services or the AMP Assessment Center Network, please feel free to contact ABC for more information (Suzanne De la Cruz, 515-232-3623, sdelaclu@abccert.org), view the computer-based testing information at www.abccert.org/pdf/abcampinfo.pdf, and/or visit the AMP web site at www.goAMP.com. ❖

CALENDAR

October 20, 2006

ABC Executive Committee Meeting
Dallas, TX

October 21, 2006

ABC Board of Directors Meeting
Dallas, TX

January 16, 2007

ABC Executive Committee Meeting
Savannah, GA

January 16-19, 2007

ABC Annual Conference
Savannah, GA

January 20, 2007

ABC Board of Directors Meeting
Savannah, GA

For information on ABC activities, call 515/232-3623, fax 515/232-3778, e-mail abc@abccert.org, or visit our web site at www.abccert.org

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