

## **Nevada Certified Drinking Water Operator's Forum Minutes**

Summary minutes of the meeting of December 9, 2009

The meeting began at 10:06 a.m. in the Nevada Department of Conservation 2<sup>nd</sup> floor Conference Room, 901 S. Stewart Street, Carson City, Nevada.

Videoconference to: NDEP Las Vegas Office, and Great Basin College  
Red Rock Conference Room 1500 College Parkway  
2030 E. Flamingo Rd., Suite 230 Lundberg Hall, Room 114  
Las Vegas, NV Elko, NV

Phone conference to: 1-888-363-4734, access code 1515199

### **1. Call to Order** (Chairman Cameron McKay) and introductions

Chairman McKay called the meeting to order at 10:06 a.m.

Members Present: Chairman Cameron McKay (KGID); Bob Foerster (NRWA); Marcellus Jones (LVVWD)

Members absent: Chet Auckley; John Hulett; Harvey Johnson; Lynn Forsberg (Elko)

Representing the Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water (BSDW): Jennifer Carr, Bureau Chief; Duncan Wright, Environmental Scientist, and Nan Paulson, Administrative Assistant

Telephone attendance: Delite Travis (AWWA); Gina Enriquez (AWWA)

Guests: Ron Penrose; Crystel Montecinos, Tigren Inc.; Jim Kerr (Elko County video conference); Tom Georgi (LVVWD video conference); Greg Reed, RHGID; Bob Loding; Stephen Gustafson; Al Loveland

### **2. Approval of Minutes –September 16, 2009 Meeting**

Motion: Chairman McKay asked for a motion to approve the minutes as presented. Marcellus Jones made a motion, the motion was seconded by Ron Penrose, and the vote was unanimous in favor.

### **3. Introduction of Duncan Wright, NDEP Operator Certification Program (Jennifer Carr)**

Jennifer Carr introduced Duncan Wright. Duncan was hired as the Environmental Scientist to work in the Water Operator Certification Program after Steve Brockway retired. Duncan talked briefly about his employment with Maricopa County Arizona before joining NDEP, and his familiarity with Nevada from growing up in rural Nevada and earning his degree from UNR.

### **4. Report on Exam Analysis, September 2009 (AWWA & NDEP)**

Jennifer Carr talked about the exam results by region, as requested by Chairman McKay at the last meeting. Delite Travis offered to assist the Forum with other improvements to the exam analysis, if requested. Chairman McKay appreciated the most missed topics by grade, specifically because the D-3, D-4, and T-3 appear to have difficulty with Security and Safety Procedure questions in the test.

Jennifer Carr added that the D-1, D-3, and D-4 continue to have problems with math. Cameron McKay explained that operators do not calculate operating values as much as they should, operations become second nature with time so they don't get the practice.

Some discussion pertained to the ABC reports that are sent to operators with their test scores. Stephen Gustafson said he would check with the operators in Hawthorne to see if they received their reports. He was under the impression that they had not. Ron Penrose will contact the test proctors and ask them to find out if operators in other areas received reports, and he will let Gina know. Gina Enriquez said she sent out the reports to each operator.

Regarding the tests, Steve Gustafson advised Ron that returning them via UPS would be easier due to lack of service with Fed-Ex. Ron will supply him with a UPS mailer in the future.

Tom Georgi shared his surprise regarding 100% failure of the D-4 tests in March. There were three test takers. In September, eight of nine failed. Jennifer Carr expressed her hope of better scores in March at the Conference since many operators may study more there. She added that the scores will be discussed at the Training Coalition next Friday, December 11.

#### **5. Report on Exam Exit Survey, September 2009 (Bob Foerster)**

Bob Foerster had compiled and printed the test survey information. The results were shared and reflected upon by the meeting attendees. Some topics of interest were the number of times a tester took the particular test, how much study time was used, and if employers allowed for study time on the job. Bob explained that the prep time was low, except for the T-4. The word about study time needs to be spread that more prep time will help operators pass tests.

Bob added that some of the more difficult areas for testers were in Chemicals, Chlorination, and Calculations. Based on the survey results, it appears that the biggest problem is lack of prep time and poor study habits. Taking a class right before a test does not have the same result as studying on a regular basis. When a review is done, it is to touch on what the testers should already know.

Steve Gustafson was impressed with the number of employers who allow their staff to study at work, according to the survey results. Delite Travis requested a copy of the survey, and Bob will scan and send it to her.

Nan Paulson added that there are some applicants who have taken the same test several times. Jennifer suggested that during application processing, NDEP may be able to identify applicants who repeatedly take the same test, and possibly reach out to ask why they think they are struggling with the exam.

#### **6. Future AWWA On-Line Testing Possibilities (Delite Travis, AWWA)**

Delite Travis talked about the CANV AWWA's decision to move toward on-line testing. This opportunity is extended to the Nevada, if the State is interested. Wastewater uses the on-line testing, and the examinees pay the extra cost, if they choose to do this. The benefits of on-line testing are more secure exams, instant results that can be printed immediately, and testing can be done at any time, as opposed to the current three times per year.

This is not available in rural areas yet, but that is being worked on. Current testing locations are Henderson and Carson City. The tests would be proctored by the same vendors that Wastewater uses, and all proctors are certified by Applied Measurement Professionals (AMP). They are a professional testing organization and that is all they do.

Chairman McKay asked how much notification would be needed for a person to take a test, and if computers could be taken on the road to rural areas. Delite Travis said that if there are test slots open,

testers can be set up immediately. She talked about security and how it could be lost if computers were moved from site to site, so that cannot take place.

Jennifer Carr explained that immediate testing cannot occur because the applications will need to be reviewed and approved before a person can test. The 45 day application deadline before the test is meant to allow for: the application review, mailing of test approval letters, and a list to be established and mailed to Ron Penrose for distribution to proctors. If tests were to be administered on-line, then the last step can be cancelled. Ms. Carr added that this idea would have to be evaluated, and she will talk with Jennifer McMartin regarding the wastewater testing to see what her experience has been.

Delite Travis clarified that the cost would be approximately \$85.00, plus the regular exam fee. The additional fee is a customer service add-on cost. Wastewater testing may be a little lower in price because their exams are not as involved as SDW's. She also stated that there is no rush to move toward this. This information is not on the AWWA website yet, but may be in a couple of months. The primary benefits are to the examinee.

Jennifer Carr agreed that the examinee may want a test between September and March because of promotional opportunities. This would need to be looked into as an option as well.

According to Delite Travis, this idea may take a few months for operators to get used to. The major transition to on-line testing may happen after the first year.

Delite Travis answered a variety of questions pertaining to on-line testing. She said the proctors are only certified proctors from AMP. There are other proctoring companies, an example is the American College of Testing Administrators, and they have their own proctors. Becoming a proctor is not as easy as it sounds.

Duncan Wright noted that Great Basin College in Elko may be an opportunity for proctoring and Jim Kerr concurred, although Delite Travis expressed concerns with proctoring entities other than AMP, which AWWA believes to be the best. Cameron McKay asked if Ron Penrose would be affected by this because his position is voluntary and Ron has a full time job. Jennifer Carr said the on-line testing would not affect Ron, but it may affect examinees that wait until they get their approval to test letter before they start to study.

Steve Gustafson mentioned that having proctors at work locations was helpful in case the operators had to go back to work after the test. Cameron McKay asked if the AWWA would proctor for AMP. Delite Travis will look into this and let the Forum know.

Ron Penrose asked if a written report and memo regarding on-line testing could be made available prior to the next meeting. He thought that it would be helpful to study it beforehand. Delite Travis will send it.

Delite Travis expressed the willingness of the AWWA to post ideas on their website and to offer guidance to operators regarding study habits. Bob Loding said he would like to see this go a step further, such as the how the military uses computers for training. The computers will log when the person is on-line at the training site, and will tell how long they were on there. The on-line idea will help operators because it is hard on operators who have to leave their job to test or train, and it is expensive for employers to let employees leave for this. Cameron McKay noted that some level of proctoring is still necessary to ensure that the proper person is actually taking the exam, and that they are not using books.

Bob Forester concurred that on-line training opportunities would help with time off work issues. Crystal Montecinos brought up the Montana Water Center. She suggested looking into their site because they have great training opportunities. She also asked how we can increase individual operator's pride in their profession and desire to take the tests more seriously.

Jennifer Carr asked about the length of time between tests. Delite Travis explained that this would depend on the State's rules and regulations.

Greg Reed wanted to know if this could replace the NDEP existing process. Jennifer stated this would be something to keep in mind, but this is an added value expense and NDEP would still need fees to process the applications. At this time, the application fee is \$84 but due to testing costs, the NDEP only nets \$4 of that fee per applicant.

#### **7. Report on AWWA/ABPA Cross Connection Program Comparison (Forum Working Group)**

Bob Foerster, Mike Workman, and Lynn Forsberg previously formed a working group to evaluate the subject of cross connection program comparisons for AWWA and ABPA. The following Workgroup's report was a handout at the meeting:

***Working Group / Subcommittee to review Backflow Tester Certification Sources: AWWA and ABPA***

*Mike Workman, Lynn Forsberg, Bob Foerster*

***Recommendation to the Forum:*** *After researching expert opinion, ABPA and AWWA Backflow Certification programs each ensure an equivalent level of Backflow Tester qualification. NAC should be revised to either include ABPA, or to delegate approval of certification agencies to the NDEP-BSDW. No other certification agency programs were reviewed and only ABPA should be considered for inclusion at this time. Approved certification agencies should be required to recognize one another's written and practical exams, and should award full certification where the counterpart exam was completed.*

***Report:***

- (1) *Mike Workman looked into comparison of the two certification programs, including talks with Paul Schwartz, Foundation for Cross-Connection Control and Hydraulic Research, USC, and AWWA Committee members. In conclusion, the ABPA and AWWA Exams and Courses are now equivalent, with some differences in the procedures:*
  - *The written ABPA exam includes troubleshooting scenario type questions, rather than having these as a separate test section.*
  - *On the Practical Exam, some ABPA Proctors may not purposely jam or fail devices, while some do include this as part of the practical.*
- (2) *In discussions, the subcommittee recognized a need for individuals to be able to complete one course, and then take the practical exam from another certification source. The sources would need to accept completion of the other written exam for certification. (Meanwhile, subcommittee is working with proctors to mobilize to Elko for a practical exam).*

- (3) *Other states' Backflow Assembly Tester Certification rules were briefly reviewed. Delegation of approval of certification agencies to the Department (the BSDW counterpart), is common, as opposed to listing certification agencies in the code*
- (4) .

*From web sites:*

### **Oregon**

#### *333-061-0072 Backflow Assembly Tester Certification*

*(1) The Department shall certify individuals who successfully complete all the requirements of these rules for testing backflow prevention assemblies. Only persons certified by the Department to test backflow prevention assemblies shall perform the required field-testing on backflow prevention assemblies, except as otherwise provided that:*

*(a) Journeyman plumbers defined as those who hold a certificate of competency issued under ORS 693 or apprentice plumbers, as defined under ORS 693.010; and (b) Journeyman plumbers or apprentice plumbers who test backflow prevention assemblies shall satisfactorily complete a Department approved Backflow Assembly Tester training course, according to rules adopted by the Director of Consumer and Business Services.*

*(2) Requirements for initial application for Backflow Assembly Tester certification shall include:*

*(a) Satisfactory completion of a Department-approved Backflow Assembly Tester training course within 12 months prior to the Department receiving the applicant's completed application;*

*(b) Satisfactory completion of all written and physical-performance examinations, including questions specific to OAR 333-061-0070 through 333-061-0073, administered by a Department-approved certification agency;*

*(A) A minimum score of 75% is required to pass the Department approved Backflow Assembly Tester written examination;*

*(B) A minimum score of 90% is required to pass the Department approved Backflow Assembly Tester physical-performance examination; and*

*(C) **The Department will make available a list of approved certification training and testing sources.***

### **Washington**

*To become certified as a Backflow Assembly Tester (BAT), an applicant **must pass the Washington State BAT Certification Examination.** The written examination consists of 100 multiple-choice questions developed by the Association of Boards of Certification (ABC). One hour is allowed to demonstrate competency in testing the following four backflow prevention assemblies to standard performance criteria:*

- *Pressure Vacuum Breaker Assembly (PVBA)*
- *Spill-Resistant Pressure Vacuum Breaker Assembly (SVBA)*
- *Double Check Valve Assembly (DCVA)*
- *Reduced Pressure Backflow Assembly (RPBA)*

*During the one-hour examination you will be required to identify and diagnose one simulated failure condition for the RPBA, CVA, and PVBA. There will not be a simulated failure condition for the SVBA.*

*You will be required to fill out a test report of all four backflow prevention assemblies. The test report forms must be complete, accurate, and legible. The forms may be completed after the one -hour time limit for the practical examination.*

### **Utah**

*Certification Requirements: Those individuals seeking certification as a Backflow Technician must participate in **an approved Technician's course of instruction and pass the examination required per class of certification.***

*(a) All individuals who instruct Backflow Technician training courses must hold a current Class III - Backflow Technician certificate.*

*(b) The issuance of a Backflow Technician certificate (Class I, II or III) does NOT authorize that individual to install or replace any backflow prevention assembly. The installation replacement or repair of assemblies must be made by a tester having appropriate licensure from the Department of Commerce, Division of Occupational and Professional Licensing, except when the Backflow Technician is an agent of the assembly owner.*

*CERTIFIED BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction...*

### **Arizona**

*The following provisions shall apply to the testing of backflow-prevention assemblies:*

*1. Testing shall be in accordance with procedures described in Section 9 of the Manual of Cross-Connection Control. The public water system shall notify the water user when testing of backflow-prevention assemblies is needed. The notice shall specify the date by which the testing must be completed and the results forwarded to the public water system.*

*2. Testing shall be performed by a person who is currently certified as a "general" tester by the California-Nevada Section of the American Water Works Association (CA-NV Section, AWWA), the Arizona State Environmental Technical Training (ASETT) Center, **or other certifying authority approved by the Department.***

### **California**

*§116810. Certification of device testers.*

*To assure that testing and maintenance of backflow prevention devices are performed by persons qualified to do testing and maintenance, **local health officers may maintain programs for certification of backflow prevention device testers.** The local health officer may suspend, revoke, or refuse to renew the certificate of a tester, if, after a hearing before the local health officer or his or her designee, the local health officer or his or her designee finds that the tester has practiced fraud or deception or has displayed gross negligence or misconduct in the performance of his or her duties as a certified backflow prevention device tester. The local health officer may collect fees from certified testers to offset the cost of the certification program provided pursuant to this section. **The certification standards shall be consistent with the backflow protection regulations adopted by the department.***

Mike Workman's conclusions are that the AWWA and ABPA courses are now equivalent with some relatively minor differences. He feels that individuals need to be able to take either training course, and then have testing entities accept each other's training for exam eligibility. Research of the State's programs seems to allow judgment by BSDW, although this would need an NAC amendment.

Delite Travis added that the AWWA is going through a validation process for the exams. This will increase their status relative to ABPA and should be considered.

Chairman McKay asked if the ABPA offers a Specialist Certification. Ron Penrose wanted to know if a Tester Certification was required prior to getting the Specialist Certification. Gina Enriquez confirmed this was a requirement. Chairman McKay noted that if someone has both certifications, they don't have to maintain the Tester certificate in order to maintain the Specialist certificate. AWWA concurred.

Delite Travis said the Backflow exam requires a 40 hour class but it does not have to be a CA-NV Section class. She also said the AWWA can do training on the road, in addition to proctored testing.

**8. Members' March 2010 Term Expirations, Volunteers & Nomination Process (All)**

- a. Marcellus Jones, Lynn Forsberg & Cameron McKay
- b. Rotation of Chair & Vice-Chair

NDEP will send an announcement to all operators. Operators wishing to volunteer to fill future vacancies must work for the same sized system. Cameron McKay said he would re-up for another term, but the Chairmanship would rotate to someone else. He also noted that he would like to see a lot of applications from operators.

**9. Member's Open Comments-** There were no member comments

**10. Public Comments-** There were no public comments

**11. Upcoming Meetings**

March Meeting at NvRWA Conference (March 9-11, 2010)

**12. Adjourn Suggested by:** Cameron McKay; Time: 11:37 a.m.