

## NDEP BUREAU OF SAFE DRINKING WATER OPERATOR CERTIFICATION

NVRWA 28<sup>TH</sup> ANNUAL TRAINING & TECHNICAL CONFERENCE MARCH 2018

WATER OPERATOR CERTIFICATION UPDATES AND REGULATION REVISIONS



#### MY-LINH NGUYEN - BSDW BUREAU CHIEF

LINH KIEU – DATA MANAGEMENT / CERTIFIED OPERATOR
SUPERVISOR

MAX SOSA – CERTIFIED OPERATOR PROGRAM MANAGER
CALL FOR TECHNICAL QUESTIONS
P: 775.687.9527 MSOSA@NDEP.NV.GOV

RACHEL WEINGART – ADMINISTRATIVE ASSISTANT

CALL FOR ADMINISTRATIVE QUESTIONS

P: 775.687.9519 F: 775.687.5699
RWEINGART@NDEP.NV.GOV

## THE GOAL OF THE DRINKING WATER CERTIFICATION PROGRAM?

THE GOAL OF THE DRINKING
WATER CERTIFICATION PROGRAM
IS THE PROTECTION OF HUMAN
HEALTH AND THE ENVIRONMENT

. . . . . . .

## THE GOAL OF THE DRINKING WATER OPERATOR?

THE GOAL OF THE DRINKING
WATER OPERATOR IS THE
PROTECTION OF HUMAN HEALTH
AND THE ENVIRONMENT .....

## THE GOAL OF BOTH THE DRINKING WATER OPERATOR AND THE CERTIFICATION PROGRAM?

THE GOAL OF BOTH THE DRINKING
WATER OPERATOR AND THE
CERTIFICATION PROGRAM IS THE
PROTECTION OF ......

#### ....HUMAN HEALTH



#### ....THE ENVIRONMENT



## THE GOAL OF BOTH THE DRINKING WATER OPERATOR AND THE CERTIFICATION PROGRAM IS ACHIEVED.....

.....through the certification of qualified drinking water operators.

## THE GOAL OF THE DRINKING WATER OPERATOR

IS ACHIEVED.....

....How?

<u>USING GUIDANCE PROVIDED</u>
<u>BY.....</u>

## THE DRINKING WATER OPERATOR CERTIFICATION PROGRAM

AND THE BUREAU OF SAFE DRINKING WATER ...

...WE ARE HERE TO HELP THE OPERATORS BY PROVIDING THE GUIDANCE NEEDED TO PROTECT THE PUBLIC HEALTH AND THE ENVIRONMENT

GUIDANCE IS FOUND IN NEVADA

ADMINISTRATIVE CODE NAC 445A.617 TO

445A.652

<u>& NEVADA REVISED STATUTES NRS 445A.860,</u> 445A.880

## THE DUTIES OF THE DRINKING WATER OPERATOR

 NRS 445A.830 "Operator" defined. "Operator" means a person regularly in charge of the day-to-day operations of a public water system.

#### WHAT IF ??? RESPONSIBLE CHARGE!!!!!

- NAC 445A.624 "Responsible charge" defined.
   "Responsible charge" means:
- 1. <u>Actively engaged in on-site supervision and</u> performance of operation activities including the treatment or distribution of water; and
- Independently making process control or system integrity decisions about water quality or quantity that affect public health.

## THE DUTIES OF THE RESPONSIBLE CHARGE DRINKING WATER OPERATOR

- NAC 445A.6275 Requirements for persons in responsible charge; notification of noncompliance.
- 1. A public water system which is:
- (a) Classified as a community water system or a non-transient, noncommunity water system; or
- (b) Designated by the Division or the appropriate district board of health as being supplied by surface water or groundwater under the direct influence of surface water,
- must have a person in responsible charge at the facility or on call at all times. the person in responsible charge of the public water system must hold a full certificate in the same classification as, or a higher classification than, the classification of the public water system

## THE DUTIES OF THE BOTH RESPONSIBLE CHARGE & DRINKING WATER OPERATORS

NAC 445A.6267 MINIMUM CERTIFICATION REQUIRED; CERTIFICATION OF PERSONS MAKING CERTAIN DECISIONS.

#### IN SUMMARY:

THE STAFF OF A <u>GRADE 1</u> WATER DISTRIBUTION OR TREATMENT FACILITY MUST HAVE A MINIMUM CERTIFICATION AS FOLLOWS:

- A person in responsible charge must have at least a <u>Grade 1</u> certification
- A supervisor or foreperson must have at least a Grade 1 certification
- A shift operator must have at least a <u>Grade 1</u> certification;

#### THE STAFF OF A GRADE 2 WATER DISTRIBUTION OR TREATMENT FACILITY MUST HAVE A MINIMUM CERTIFICATION AS FOLLOWS:

- A person in responsible charge must have at least a Grade 2 certification
- A supervisor or foreperson must have at least a <u>Grade 2</u> certification
- A shift operator must have at least a <u>Grade 1</u> certification;

## THE DUTIES OF THE BOTH RESPONSIBLE CHARGE & DRINKING WATER OPERATORS

NAC 445A.6267 MINIMUM CERTIFICATION REQUIRED; CERTIFICATION OF PERSONS MAKING CERTAIN DECISIONS.

#### IN SUMMARY:

THE STAFF OF A <u>GRADE 3</u> WATER DISTRIBUTION OR TREATMENT FACILITY MUST HAVE A MINIMUM CERTIFICATION AS FOLLOWS:

- A person in responsible charge must have at least a <u>Grade 3</u> certification
- A supervisor or foreperson must have at least a **Grade 3** certification
- A shift operator must have at least a <u>Grade 2</u> certification;

#### THE STAFF OF A GRADE 4 WATER DISTRIBUTION OR TREATMENT FACILITY MUST HAVE A MINIMUM CERTIFICATION AS FOLLOWS:

- A person in responsible charge must have at least a <u>Grade 4</u> certification
- A supervisor or foreperson must have at least a <u>Grade 3</u> certification
- A shift operator must have at least a <u>Grade 2</u> certification;

## THE ROLE OF THE RESPONSIBLE CHARGE DRINKING WATER OPERATOR AT A PWS

- 4. PUBLIC WATER SYSTEMS MUST USE CERTIFIED WATER DISTRIBUTION OPERATORS OR WATER TREATMENT OPERATORS TO MAKE <u>DECISIONS</u> CONCERNING:
- (A) <u>THE DETERMINATION AND CONTROL OF APPROPRIATE</u>

  <u>RATES OF CHEMICAL DOSAGE</u> FOR WELLHEAD DISINFECTION

  AND RESIDUAL MAINTENANCE; AND

(B) ANY INVESTIGATION OF PROBLEMS RELATING TO WATER QUALITY IN THE TREATMENT OR DISTRIBUTION SYSTEM.

## THE DUTIES OF THE RESPONSIBLE CHARGE DRINKING WATER OPERATOR

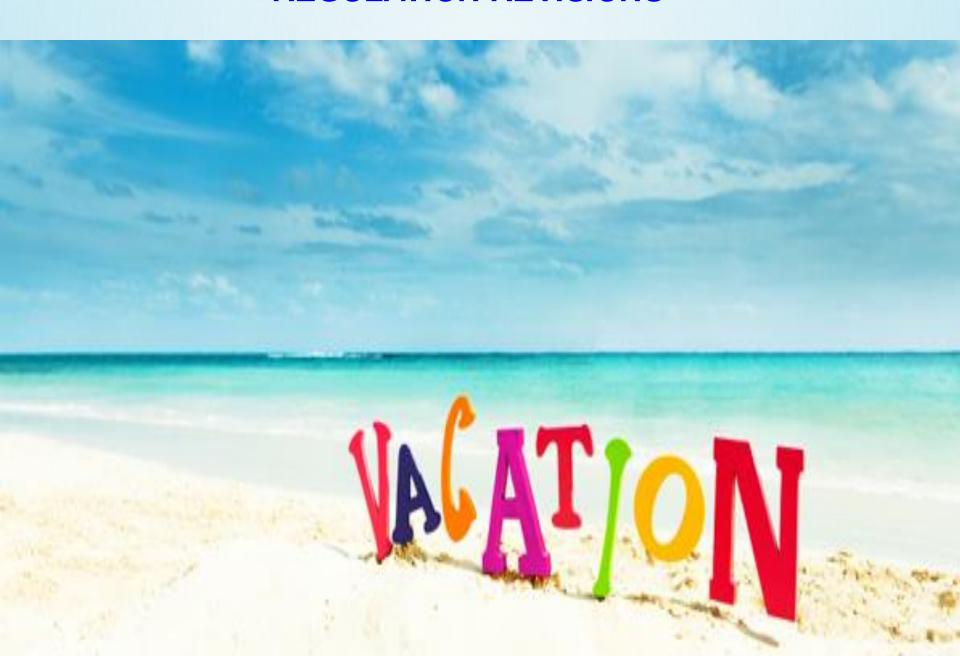
- NAC 445A.6275 Requirements for persons in responsible charge;
- 3. If a person in responsible charge is on call, the person must be able to:
  - (a) Be contacted immediately; and....
  - (b) Respond at the site within 4 hours.
  - must have a person in responsible charge at the facility or on call at all times. The person in responsible charge of the public water system must hold a full certificate in the same classification as, or a higher classification than, the classification of the public water system

## THE DUTIES OF THE DRINKING WATER AND RESPONSIBLE CHARGE OPERATORS



...YOU HAVE TO HAVE A BREAK SOMETIME!!!

## WATER OPERATOR CERTIFICATION UPDATES AND REGULATION REVISIONS



## THE DUTIES OF THE RESPONSIBLE CHARGE DRINKING WATER OPERATOR

...WHEN YOU DO TAKE A BREAK...

NAC 445A.6275 Requirements for persons in responsible charge (d)... any additional person in responsible charge ...

... Must be certified in the same classification as, or a higher classification than, the classification of the public water system

• RENEWAL WALLET CARDS WERE MAILED OUT JANUARY 4, 2018 !!!

• IF YOU DID NOT RECEIVE IT....

• DID YOU CHANGE YOUR ADDRESS OR E-MAIL?



\* TO OUR NEW WEBSITE! \*



We've been expecting you.

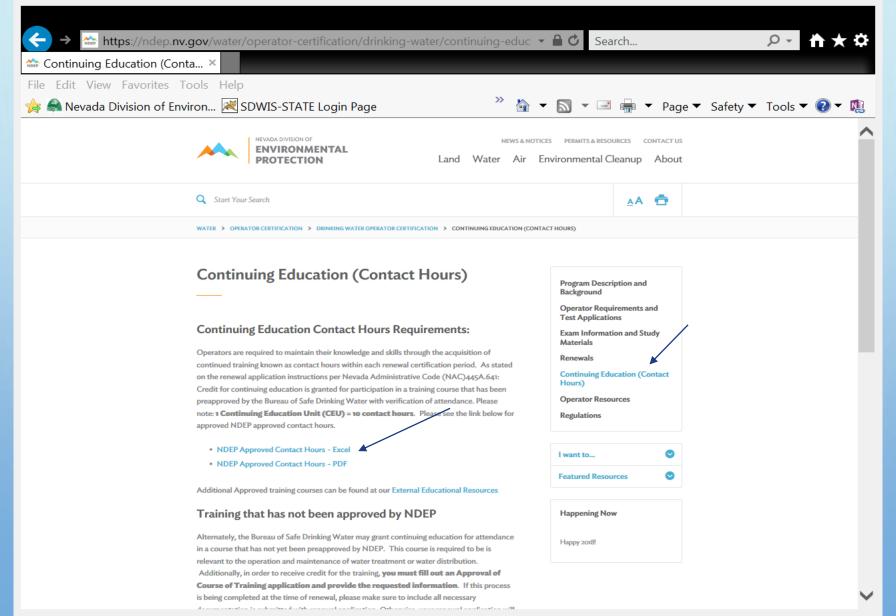
https://ndep.nv.gov/water/operator-certification/drinking-water

**To find NDEP Approved Courses:** 

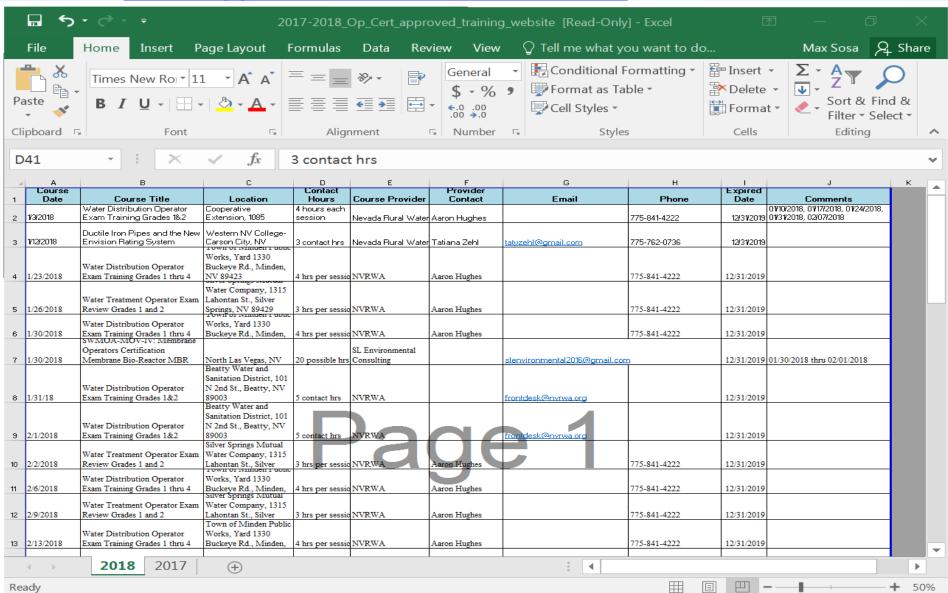
Go to the <u>NDEP Operator Certification</u>
<u>Website</u> and <u>select Continuing Education</u>
(Contact Hours):

- NDEP Approved Contact hours Excel
- NDEP Approved Contact hours PDF

## **GREAT NEWS REGARDING 2017! To find NDEP Approved Courses:**



NDEP Approved Contact hours – Excel





- I am happy to announce that in 2017 the Nevada Drinking Water Operator certification Program was approved by the Veterans Affairs (VA) so that:
- Veterans are now able to obtain certification testing reimbursement from the VA by going to:
- HTTPS://WWW.BENEFITS.VA.GOV/BENEFITS/APPLYING.ASP

## NEWS updates



# WATER OPERATOR CERTIFICATION UPDATES AND REGULATION REVISIONS

## WATER OPERATOR CERTIFICATION UPDATES AND REGULATION REVISIONS

At the December 2016 Drinking Water and Wastewater Operators Forum meeting, a guest operator asked how often are the certification requirements revisited?

The last certification review was in 2003. As a result, a motion was made by attendees that a committee should be formed to review our current regulations, and to help BSDW streamline operator certification policies

- From March 2017 to January 2018 the Program Review Committee, consisting of volunteer operators, forum board members, and BSDW staff
- Reviewed policies and regulations governing drinking water operator certification in NAC 445A.617 thru .652
- considering the input from the operators who participated

### WATER OPERATOR CERTIFICATION UPDATES AND REGULATION REVISIONS

#### Thank you to everyone and the committee members!

Greg Reed, Round Hill GID, Chairman

Max Sosa, NDEP - BSDW

Linh Kieu, NDEP - BSDW

Jackie Boado, TMWA

Dale Johnson, City of Elko

Michael Boney, NvRWA

Bob Foerster, NvRWA

Supporting Staff – NDEP - BSDW Rachel Weingart

#### PROGRAM REVIEW PUBLIC WORKSHOPS

#### Were held in:

- Carson City January 8<sup>th</sup>, 2018
- Elko January 10th, 2018
- Las Vegas January 11th, 2018

Written comments were accepted until 5:00 pm, January 17, 2018.

Petition, Form 1, Form 4 (SBIS), Workshop Notice and Agenda can be found online:

http://sec.nv.gov/main/hearing\_0218.htm

- Additional information workshops were held at:
- The Reno Nevada Rural Water and at the Las Vegas Tri-State 2017 Conferences

#### COMMITTEE RECOMMENDED CHANGES

- Clarifications to existing regulations
- Increasing contact hours required for renewals
  - Adding time requirements to operator grades (3 and 4)
    - Modifying operators' ability to upgrade licensures
      - Increasing fees

#### RESULTING IN 7 PROPOSED REG REVISIONS

- Section 1: NAC 445A.6285.5 Clarification to conditional staffing
- Section 2: NAC 445A.629.2 and .3 Clarification that any public water system, regardless of sources, must be have a distribution classification
- Section 3: NAC 445A.632.1 Clarification on the requirements of a passing score
- Section 4: NAC 445A.633.1 and .3 Revises the requirement for education and experience that an applicant must possess to obtain a certification in certain classifications
- Section 5: NAC 445A.639.2 and .3 Increases the number of hours of continuing education required to renew certifications
- Section 6: NAC 445A.640.1 and 2 Revises continuing education requirements for an operator who holds multiple certifications
- Section 7: NAC 445A.651.1 and 2 Increase of fees charged by the Division

#### **SECTION 1: NAC 445A.6285.5**

- 445A.6285.5—"Upon request from a public water system, the division may approve a certified operator at one classification lower than the (person in responsible charge of a)
- classification of the public water system pursuant to NAC445A.629
- to accommodate for vacation and temporary relief of the person in responsible charge during a 12-month period."

This reg does not have any impact on the operators it is clarification of language to NAC445A.6285 #5 it pertains to the APPROVAL of conditional staffing making reference to NAC445A.629 that defines the REQUIREMENTS for classification of public water systems

#### **SECTION 2: NAC 445A.629**

- NAC 445A.629.2 A public water system which:
- (A) uses only uses groundwater, surface water, groundwater under the direct influence of surface water, or water provided by another public water system [and (B) does not provide treatment of the water or groundwater or provides only disinfection by chlorination,] must be classified for distribution on a point system...

Again, this reg does not have any impact on the operators / it is clarification of language The changes in language to subsection 2 further clarifies that any water source used by a PWs will have a distribution classification. Subsection 3 applies to PWS with treatment classifications / the purpose of these modifications is to make the language more consistent.

#### **SECTION 3: NAC 445A.632.1**

- NAC 445A.632.1 The division shall proctor, review and grade, or enter into a contract with a person, organization or agency to proctor, review and grade, the examinations for certification.
- A score of not less than [70 percent] the passing score established by the testing company that created the examination is required to pass the examination.

 The fact that this standard is being set by a national testing agency, it is beneficial to operators in that it raises level of competence and recognition to having qualified to obtain a State of Nevada Drinking Water Operator Certification by other entities.

#### **SECTION 3: ABC EXAMS**

- The 2017 ABC standardized exam version includes 10 new extra questions that are being evaluated and they are known as Pre test items.
- These questions are mixed in throughout the exam and they are not counted in the final score. Only 100 questions are used to determine the passing score.
- It is a method for ABC to evaluate their test questions.
- In order to pass Operators can not miss more than 30 questions
- The Drinking Water Operator Certification Program has not transitioned to the new exams. Earliest is January 1, 2019

#### **SECTION 4: NAC 445.633.1**

- NAC 445A.633.1 The Division shall issue a full certificate to an applicant who qualifies for a full certificate. Except as otherwise provided in this section, to qualify for a full certificate, an applicant must, in addition to passing the examination for certification for his or her specific classification, [have a high school diploma or a general equivalency diploma] meet the education requirements set forth in NAC 445A.6293 and have the following experience in operating the water treatment system or distribution system of a public water system of that classification:
- NAC 445A.6293 Minimum age and education of applicants; timetable for certain requirements.
- "high school diploma, general education development certificate or equivalent"

 This reg change benefits the operators. It adds the word equivalent to the language of NAC 445A.633.1.

CLASSIFICATION	YEARS OF
	EXPERIENCE
Distribution-1	6 months
Distribution-2	1 year
Distribution-3	2 years- <u>with <i>1 year of</i></u>
	<b>Distribution-2 Full certification</b>
Distribution-4	4 years- with 1 year of
	<b>Distribution-3 Full certification</b>
Treatment-1	6 months
Treatment-2	1 year
Treatment-3	2 years- <u>with 1 year of</u>
	Treatment-2 Full certification
Treatment-4	4 years- <u>with <i>1 year of</i></u>
	Treatment-3 Full certification

- 445A.633.2 Except as otherwise provided in this subsection, the Division may credit experience in operating gained in the field of wastewater treatment or in a related field towards the experience in operating required pursuant to subsection 1.
- No such experience in operating may be credited towards any year of full certification in distribution or treatment that is required pursuant to subsection 1.
- Not more that one-half of the experience in operating required pursuant to subsection 1 may come from credit pursuant to this subsection.

• THE CHANGE IN NAC 445.633.1 & 633.2 <u>APPLIES TO</u>

<u>STRENGTHENING THE EXPERIENCE REQUIREMENT TO OBTAIN</u>
<u>A CERTIFICATION AND IS A BENEFIT TO THE SKILL SET OF THE HIGHER CERTIFIED OPERATORS.</u>

- 445A.633.3 The division may credit all or a portion of the experience in operating gained at a lower classified facility toward the experience in operating required at a higher classified facility if:
  - (A) the higher classified facility is not more than [one] two classifications higher than the highest classified facility for which the applicant is currently certified; and
  - (B) the division determines that experience in operating gained at the lower classified facility is, based on system complexity, equivalent to operating at the higher classified facility or is a satisfactory substitute for experience in operating at the higher classified facility. No such experience in operating may be credited towards any year of full certification in distribution or treatment that is required pursuant to subsection 1.
  - 3(A) Promotes the opportunity for operators to achieve a higher certification, while ensuring that they have the experience and expertise to protect the public health, the committee proposed to recognize the experience earned at a lower classified PWS' with multiple processes to obtain a full certification 2 classifications higher than the highest classified facility for which the applicant is currently certified
  - #3(B) Tells you how the experience is evaluated based on system complexity equivalent to operating at a higher classified facility

ITEMS FOR TREATMENT		PWS Name:		PWS Name:		PWS Name:	
CLASSIFICATION			Notes		Notes		Notes
Description of Treatment Process		GW - Air stripper to adjust pH		SW Treatment of Lake Tahoe - Filtration		SW Treatment of Lake Tahoe- UV - Ozone	
Grade of System		D2-T1	7,12	D3-T2		D2-T2	
Amount of Experience		5 years	May 2011 - Current		Jan 2013- Jan 2015	4 years	Jan 2013- Current
Average daily population served	POINTS	·					
25 - 500	5	0	346				
	10			10	1365	0	1209
501 - 3,300 Groundwater	3	3		10	1303	0	1209
Surface water	5			5	Lake Tahoe	0	Lake Tahoe
Air stripping	4	4			Lune 1 c		Euno rango
Combination of ozone and UV light	10					10	Ozone + UV
Chlorine gas or hypochlorite	5			5	NaOCI	0	NaOCI
Chemical addition (1 point for each chemical added)	1			2	NaOCI (pts added above). Caustic & Surfactant for cleaning membranes.		Nitrogen (aids in keeping O3 generators clean), Calcium Thiosulfate (ozone quenching), NaOCI (added above)
Recycle filter backwash water to process	3			3	Recycled water passes through smaller filter skid unit.		, 1000
System control and data acquisition or other similar instrumentation to provide data or process control	3			3	Scada	0	Scada
Bag, ceramic, microfiltration, nanofiltration, reverse osmosis, membrane, electro dialysis	5			5	Microfiltration		0
Water System Treatment Points=		7		33		12	
Total	52					Treatment-1	5-19
Proposed Operator Treatment Classification	on=	T4				Treatment-2	20 - 35
				0			36 – 45 46 or more

- 445A.633.4 Not more than one-half of the required experience in operating may be satisfied by the successful completion of college level courses in engineering or in physical, chemical or biological sciences. Completion of such college level courses may not be credited towards any year of full certification in distribution or treatment that is required pursuant to subsection 1.
- This change emphasizes that education can not reduce the new experience requirements for Grades 3 & 4
- NAC 445A.633.5 Experience in operating or relevant training may be substituted for a high school diploma or general equivalency diploma that is required pursuant to NAC 445A.6293 upon approval of the Division. Education, training or experience in operating that is substituted for a high school diploma or general equivalency diploma may not be counted toward the experience in operating required in subsection 1.
  - These reg changes do not have any impact on the operators it is only clarification of language

## **SECTION 5: NAC 445A.639**

 NAC 445A.639.2 - every 2 years, the holder of a treatment-3, treatment-4, distribution-3 or distribution-4 certificate must earn at least [10] 14 contact hours of participation in a course of training approved by the division pursuant to NAC 445A.641 or 445A.643

NAC 445A.639.3 - every 2 years, the holder of a treatment-1, treatment-2, distribution-1 or distribution-2 certificate must earn at least [5] 7 contact hours of participation in a course of training approved by the division pursuant to NAC 445A.641 or 445A.643

 This is beneficial to the operators in that it raises level of competence and knowledge base to keep up with new technologies and regulation requirements

## **SECTION 5: NAC 445A.640**

- NAC 445A.640. 1 an operator who holds certificates for both distribution and treatment must comply with the requirements for continuing education for each type of certificate.
- NAC 445A.640.2 an operator who holds a full certificate and a certificate as an operator-intraining at a higher classification than the a full certificate in distribution or treatment must comply with the requirements of continuing education for [each] the certificate at the highest classification in that discipline in distribution or treatment as applicable to qualify for the renewal of both certificates.

This <u>is beneficial to the operators</u> in that <u>it revises the</u> requirements of continuing education for operators who hold multiple certificates

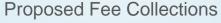
## **SECTION 6: NAC 445A.651**

- NAC 445A.651. 1 Fees of Division. (NRS 445A.860, 445A.880) The Division shall charge and collect the following fees <u>for each fiscal year:</u>
- The fees set forth in this sub section for Fiscal Year 2020-2021 are effective for that fiscal year and each fiscal year thereafter.
- 2. As used in this section, "fiscal year" means the 12-month period beginning on July 1, of one year and ending on June 30 of the following year.

## SECTION 7: FEE INCREASES NAC 445A.651

	FY 2017- 2018	FY 2018- 2019	FY 2019- 2020	Beginning July 1, 2020
For the issuance of a full certificate	\$84	\$100	\$110	\$120
For a certificate issued pursuant to paragraph (c) of subsection 2 of NAC 445A.6345	57	<b>\$125</b>	\$140	\$150
For the issuance of a certificate as an operator-in-training	57	<b>\$90</b>	\$100	\$110
For conversion of a certificate as an operator-in-training to a full certificate	30	\$30	\$35	<b>\$40</b>
[For the issuance of a provisional certificate]	<del>[30]</del>			
For the renewal of a full, <i>provisional</i> , <i>or operator-in-training</i> certificate	30	\$40	\$45	<b>\$50</b>
[For the renewal of a provisional certificate]	<del>[30]</del>			
[For the renewal of a certificate as an operator-in-training]	[30]			
For the reinstatement and renewal of a full certificate	100	\$140	\$145	\$150

## SECTION 7: FEE INCREASES NAC 445A.651





# SECTION 7: FEE INCREASES NAC 445A.651 Why are the increases necessary?

- to ensure that the Nevada Drinking Water Program has sufficient funds to compensate, for program growth, inflation increases since 2002 and the current decrease of federal funds
- the new fees would cover up to 69% of the total program's personnel cost, the rest is covered by federal grants
- our current fee structure that has not been changed since 2002 collects only 39% of the program cost

### PROPOSED REVISIONS

## • **EFFECTIVE Jul 1, 2018:**

- An operator will only need to obtain continuing education requirements for their highest grade (effective July 1st, 2018)
- An operator who holds certificates for both distribution and treatment must comply with the respective requirements for continuing education for each type of certificate (effective July 1st, 2018)

Upgrading to Full Certifications at Grades 3 and 4 (effective July 1st, 2018):

•Distribution-3/Treatment-3: 2 years, with 1 year of 2 full certification

•Distribution-4/Treatment-4: 4 years, with 1 year of 3 full certification

### PROPOSED REVISIONS

- **EFFECTIVE** 2019:
- TRANSITIONING TO THE NEW 2017 ABC STANDARDIZED EXAMS:

• THE <u>EARLIEST TRANSITION TO THE NEW EXAMS</u>, WOULD BE <u>JANUARY 1<sup>ST</sup>, 2019</u>

## **Education (Contact Hours):**

•<u>Increased contact hour requirements</u> will apply to <u>certifications that expire on 12/31/2019</u>

## **PROPOSED REVISIONS**

## **Estimated Fee Timeframes:**

	July 1st 2017- June 30 <sup>th</sup> 2018	July 1st 2018- June 30 <sup>th</sup> 2019	July 1st 2019- June 30 <sup>th</sup> 2020	July 1st 2020- June 30 <sup>th</sup> 2021
For the issuance of a full certificate	\$84	\$100	\$110	\$120
For a certificate issued pursuant to paragraph (c) of				
subsection 2 of NAC 445A.634 (Reciprocity)	57	125	140	150
For the issuance of a certificate as an operator-in-				
training (OIT)	57	90	100	110
For conversion of a certificate as an OIT to a full				
certificate	30	30	35	40
For the renewal of a full , provisional or OIT				
certificate	30	40	45	50
For the reinstatement and renewal of a full certificate	100	140	145	150

### **SUMMARY**

- Ensure that operators are well-trained and have the appropriate level(s) of experience
- Operators are up-to-date with the latest regulatory requirements, operation standards, and treatment technologies
- Providing the ability for operators, under certain circumstances, to further their personal professional development.
- Ensure the program has the necessary funds to serve the regulated community
- Offset the uncertainty of federal grants
- Help bridge the gap between expenses to ensure that the program is sustainable and effective
- Protection of public health, thereby strengthening the integrity of Nevada's Certified Operator program