LCB File No. R185-99

PROPOSED REGULATION OF THE STATE BOARD OF HEALTH

The attached amendments were brought before the public during workshops in Elko on September 28, Carson City on September 29, and Las Vegas on October 7. It is planned that they will come before the State Board of Health at its December 10, 1999. meeting.

Certification of Operators of [Privately Owned] Public Water Systems

- **Section 1.** Chapter 445 A of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 13, inclusive, of this regulation.
- Sec. 2. "Community water system" has the meaning ascribed to it in section 3 of chapter 392, Statutes of Nevada 1999, at page 1865.
- Sec. 3. "Nontransient water system" has the meaning ascribed to it in section 7 of chapter 392, Statutes of Nevada 1999, at page 1865.
- **Sec. 4.** Chapter 445A.624 of NAC is hereby amended as follows:
- 445A.624 "Responsible charge" defined. "Responsible charge" means:
- 1. Actively engaged in on-site supervision and performance of operation activities including the treatment and distribution of water; and
- 2. Independently making [decisions during the normal operation of a public water system which can affect the quality, safety and adequacy of water delivered to customers.] process control/system integrity decisions about water quality or quantity that affect public health. A person in responsible charge is generally classified as an operator or supervisor, including a shift operator or supervisor, of a public water system.
- **Sec. 5.** Chapter 445A.627 of NAC is hereby amended as follows: 445A.627 Persons in responsible charge: General requirements.
- 1. A public water system which:

- (a) [Serves 100 or more persons at places which are intended for occupancy throughout the year;] is classified as a community or nontransient water system; or
- (b) Is designated by the health division as being supplied by:
- (1) Surface water; or
- (2) Ground water under the direct influence of surface water,

shall have a person in responsible charge at the site of the facility or on call at all times. A public water system supplied by surface water or ground water under the direct influence of surface water must have an operator(s) in responsible charge who holds a valid certification equal to or greater than the classification of the facility. Except as otherwise provided in NAC 445A.628, the person in responsible charge of the public water system must be the holder of a full certificate in the same classification or a higher classification than the classification of the public water system. If the person in responsible charge is on call, he must be able to be contacted immediately and be able to respond at the site within a short reasonable period.

- 2. A supplier of water shall notify the health division within 72 hours or 2 working days, whichever is earlier, of any time that the public water system is not in compliance with the provisions of this section.
- 3. If a public water system serves more than [8,000] 10,000 persons, the health division may require the public water system to have, in addition to the person in responsible charge of the public water system, additional persons in responsible charge at the same time, including a person in responsible charge for the treatment of water and a person in responsible charge for the distribution of water. If the health division requires additional persons in responsible charge, the additional persons in responsible charge may be certified at a classification lower than the classification of the public water facility. In addition, all operating personnel making process

control / system integrity decisions about water quality or quantity that affect public must be certified. Any shift operator on shift alone or any foreman / supervisor must be certified at least one grade lower than the operator in responsible charge.

Sec. 6. Chapter 445A.629 of NAC is hereby amended as follows:

445A.629 Classification of public water systems.

- 1. The health division shall classify all public water systems in this state pursuant to subsection 2 or 3.
- 2. A public water system which:
- (a) Uses only ground water or water provided by another public water system; and
- (b) Does not provide treatment of the water or ground water or the only treatment it provides is **[disinfection]** *chlorination*, must be classified based only on the population it serves as follows:

CLASSIFICATION

AVERAGE DAILY POPULATION SERVED

Class Distribution - 1	25 - 500
Class Distribution - 2	501 - 3,300
Class Distribution - 3	3,301 - 10,000
Class Distribution - A	10.001 or more

- 3. A public water system which:
- (a) Uses surface water or ground water under the direct influence of surface water; or
- (b) Uses ground water and provides treatment of the ground water, other than [disinfection] chlorination, must be classified on a point system as follows:

Average daily population served	
25 - 500	5
501 - 3,300	10
3,301 - 10,000	15
10,001 - 100,000	20
100,001 or more	25
Source for public water system	
Ground water	3
Ground water under the direct influence of surface water	4
Surface water	5
Air stripping	4
Ozone	7
pH adjustment or corrosion control	4
Iron and manganese removal/sequestering	2
Softening (ion exchange)	5
Granular activated carbon for organic contamination	7
Coagulation	5
Taste and odor control	4
Chlorination or equal	5
Fluoridation	5

Chlorine-ammonia treatment	. 8
Chlorine Dioxide	. 8
Bacteriological or chemical laboratory	. 2
Blending, aesthetic	. 5
Blending, health effects	. 8
Arsenic removal	. 5
Nitrate removal.	. 8
Filtration	
Conventional	. 10
Rapid	. 7
Diatomaceous earth	. 7
Slow sand	. 5
Bag, ceramic, microfiltration	. 5
CLASSIFICATION TOTAL PO	INTS
Class Treatment 1	9
Class Treatment 2	35
Class Treatment 3	15
Class Treatment 4	ore

4. As used in this section, "filtration" means a process for removing particulate matter from water by passing the water through porous media.

Sec. 7. Chapter 445A.630 of NAC is hereby amended as follows;

NAC 445A.630 Examination for certification: Application; submission and applicability of fee; reexamination; scheduling.

- 1. An application to take an examination for certification as an operator must be made on a form provided by the health division and must be submitted to the health division not less than 30 days before the date of the examination. The application must be complete and must be accompanied by the fee for the certification for which the examination is being administered as set forth in NAC 445A.651.
- 2. The fee accompanying the application for examination entitles an applicant who passes the examination and meets any other qualifications for certification to be certified until December 31 of the first calendar year after the calendar year in which the certification is issued.
- 3. An applicant who fails an examination is not eligible for reexamination until 6 months after the date on which the examination was taken.
- 4. Examinations for certification must be given at least twice annually at locations and times designated by the health division.
- 5. Applicants must test in sequence starting at grade 1. If an applicant holds or has held within one year a certification in another state that is equivalent to Nevada, he may test for the next grade higher if he qualifies for a higher grade, as determined by information supplied with application.
- **Sec. 8.** Chapter 445A.632 of NAC is hereby amended as follows:
- 445A.632 Grading of examinations and review of qualifications for certificate.

- 1. The health division shall review and grade or enter into a contract [with the American Water Works Association] to review and grade the examinations for certification. A score of not less than 70 percent is required to pass the examination.
- 2. The health division shall review or enter into a contract [with the American Water Works Association] to review the qualifications of each applicant for a full certificate to determine whether the minimum requirements for experience set forth in NAC 445A.633 have been satisfied.

Sec. 9. Chapter 445A.633 of NAC is hereby amended as follows:

NAC 445A.633 Full certificate: Issuance; qualifications.

Classification

1. The health 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 specific classification, *meet the requirements set forth in subsection 6 and* have the following experience in operating a public water system of that classification:

Years Experience

Class Treatment -	3	2 years
		•
Class Treatment -	4	3 years

- 2. Credit may be given for experience in wastewater treatment or a related field for that experience required in subsection 1. No more than half of the experience in wastewater treatment or a related field may be substituted for experience in a public water system.
- 3. The health division may credit all or a portion of the experience gained at a lower classified facility toward the experience required at a higher classified facility if:
- (a) The higher classified facility is not more than one classification higher than the highest classified facility for which the applicant is currently certified; and
- (b) The health division [, or the American Water Works Association on behalf of the health division] determines that experience gained at the lower classified facility is equivalent to or is a satisfactory substitute for experience at the higher classified facility.
- 4. Except as otherwise provided in this subsection, 2 days of education in engineering at the college level, or the equivalent thereof as determined by the health division, may be substituted for each day of experience in operating required in subsection 1. Not more than one-half of the required experience in operating may be satisfied by such substitution.
- 5. As used in this section, "experience in operating" means having been actively engaged in the operation and maintenance activities of a water treatment or water distribution system.
- 6. Applicants must have a high school education or a general equivalency diploma (GED). Experience and/or relevant training may be substituted for a high school diploma or GED upon approval of the health division. Education, training, or experience applied toward

educational requirements may not be counted towards experience requirements of this regulation set forth in subsection 1.

Sec. 10. Chapter 445A.634 of NAC is hereby amended as follows:

445A.634 Certification of operator certified in another state or by California/Nevada section of American Water Works Association.

- 1. The health division shall issue a full certificate in the same classification to an operator who has obtained certification in another state if the health division determines, upon review of his application for certification and supporting material, that **[he]** the applicant has:
- (a) Passed an examination that is equivalent to the examination administered by the health division pursuant to NAC 445A.631; and
- (b) The experience required by NAC 445A.633.
- 2. The health division shall issue a full certificate in the same classification to an operator who holds a current certification by the California/Nevada section of the American Water Works Association.

Sec. 11. Chapter 445A.636 of NAC is hereby amended as follows:

445A.636 Provisional certification.

- 1. Upon payment of the fee set forth in NAC 445A.651, the health division shall issue to an applicant a provisional certificate if:
- (a) The applicant is employed by a public water system that is not designated by the health division as being supplied by surface water or ground water under the direct influence of surface water, and the person in responsible charge, for a public water system in operation prior to January 1, 2000, was not required to obtain a full certificate; [and]

- (b) A statement is submitted to the health division from the governing board or owner of the public water system that the applicant was in a position of responsible charge of the public water system on [July 1, 1992.] January 1, 2000; [and]
- (c) The applicant has attended a minimum two day training class which is designed to teach the basics of water system operations; and,
- (d) The water system must submit an application for provisional certification for the operator in responsible charge no later than December 31, 2000.
- 2. Except as otherwise provided in subsection 3, a provisional certificate issued pursuant to subsection 1:
- (a) Expires on [March 1, 1995.] December 31 of the first calendar year after the calendar year in which the certification is issued.
- (b) The renewal of a provisional certificate every [May be renewed for] 2 years must be in accordance with the criteria [as] set forth in NAC 445A.638 or the certificate is no longer valid.
- 3. A provisional certificate is only valid:
- (a) During the period that the operator remains employed in that position of responsible charge of the public water system; and
- (b) At the public water system where the operator is employed on [July 1, 1992] January 1, 2000.
- 4. If the classification of the plant or distribution system changes to a higher level, then the provisional certification will no longer be valid. [If an addition to an existing public water system is installed after July 1, 1992, resulting in the public water system being given a higher classification, a person who is in responsible charge of the public water system on the date of the

installation of the addition and who holds a provisional certificate may be granted a provisional certificate at the higher classification, if:

- (a) He participated in the installation; and
- (b) Evidence is presented to the health division that he has been trained and is qualified to operate the higher-classified public water system.]
- 5. The training required by subsection 1 (c) will be sponsored and paid for by the health division and will include but are not limited to well design, safety, water quality, monitoring, reporting, Safe Drinking Water Act, drinking water standards, health effects of chemical and bacterial contamination, Total Coliform Rule.
- **Sec. 12.** Chapter 445A.641 of NAC is hereby amended as follows:
- 445A.641 Continuing education: Conditions for obtaining credit. The health division shall not grant any credit of continuing education to the holder of a certificate for participation in training unless:
- 1. The course of training is approved by the health division [before his participation therein].
- 2. The course of training is relevant to the subject matter of the particular certificate held by him.
- 3. The subject matter of the training is relevant to the operation or maintenance of a water treatment plant or a water distribution system. The subject matter may include, but is not limited to, state and federal regulations concerning drinking water, the mechanics for the operation and maintenance of a water plant or water system and the machinery of a water plant or water system, including the electrical systems of a water plant or water system, the hydraulics of a water plant or water system, the chemical treatment of water, the biological testing of water, the

disinfection of water and any relevant applications of mathematics and chemistry to the operation or maintenance of a public water system.

Sec. 13. Chapter 445A.636 of NAC is hereby repealed.

[445A.636 Provisional certification.

445A.645 Recertification of operator following termination of employment. Except as otherwise provided in subsection 4 of NAC 445A.638, an operator who:

- 1. Has a current full certificate or operator in training certificate; and
- 2. Moves out of the state or otherwise terminates employment as an operator within this state, may renew his certificate for 2 years after the date of expiration of the current certificate if he pays the fee for renewal of the certificate set forth in NAC 445A.651 before July 1 of the first calendar year following the date of expiration. After the 2 years, a new certificate may be issued to the operator if he furnishes proof to the health division that he is currently employed as an operator of a public water system in any state and he pays the applicable fee for the issuance of the certificate set forth in NAC 445A.651.1