

## **LCB File No. R118-99**

# **PROPOSED REGULATION OF THE HEALTH DIVISION OF THE DEPARTMENT OF HUMAN RESOURCES**

## **NOTICE OF INTENT TO ACT UPON A REGULATION**

Notice of Hearing for the Amendment of Regulations  
of the Nevada State Health Division

The State Board of Health will hold a public hearing at 9:00 a.m. on October 7, 1999 at the Grant Sawyer Building, Room 4410, 555 East Washington Avenue, Las Vegas, Nevada. The purpose of the hearing is to receive comments from all interested persons regarding amendments to regulations in Nevada Administrative Code (NAC) 445A. The State Health Division proposes that these changes be adopted by the State Board of Health as permanent regulations.

The following information is provided pursuant to the requirements of NRS 233B.0603:

1. The proposed regulations are required by passage of Assembly Bills (AB) 284 and 689 of the 1999 Nevada Legislature. These proposed amendments are needed to ensure compliance with AB 284 and 689 and define the necessary requirements for fluoridation of Nevada's public water systems and adopt reference material for the design, construction and operation of fluoridated public water systems.
2. The proposed regulation addresses and defines the following issues:
  - Statutory requirements pursuant to AB 284 & 689; maintenance of all existing Safe Drinking Water Act (SDWA) requirements; maximum and minimum fluoride levels
  - Requirements and procedures for maintaining proper concentrations of fluoride
  - Necessary equipment; testing requirements; recordkeeping and reporting requirements; adjustments for natural concentrations of fluoride in the water supply
  - Criteria for exemption from requirement to fluoridate
3. Adoption of the proposed regulations will result in the following economic impacts:
  - No adverse effects on the businesses which NAC445A.6682 regulates
  - No adverse effects on the public
  - Estimated cost to the Nevada State Health Division for enforcement of the proposed regulation is minimal
  - Estimated immediate cost to public water systems or water authorities or the general public is none
  - Estimated long-term cost to public water systems or water authorities for operation and maintenance for fluoridation process is minimal
  - Estimated long-term economic effect to the public is lower dental care costs due to a lower incidence of dental caries
4. The proposed amendments do not overlap or duplicate any other local, state or federal processes or procedures.
5. The proposed amendment implements the provisions of state law.
6. The proposed amendment does not establish or increase any existing fee.

Persons wishing to comment upon the proposed action of the State Board of Health may appear at the scheduled public hearing or address their comments, data, views or arguments in written form to:

Secretary, State Board of Health  
505 East King Street, Room 201  
Carson City, NV 89701-4797

The Nevada State Health Division, State Board of Health must receive written submissions on or before September 27, 1999. If no person who is directly affected by the proposed action appears to make an oral presentation, the State Board of Health may proceed immediately to act upon any written submissions.

A copy of this notice and the regulation to be adopted will be on file at the Nevada State Library and Archives, 100 Stewart Street, Carson City, Nevada, for inspection by members of the public during business hours. Additional copies of the notice and the regulation will be available at:

Nevada State Health Division  
505 East King Street, Room 201  
Carson City, Nevada  
Nevada State Health Division, Bureau of Health Protection Services  
1179 Fairview Drive, Suite 100  
Carson City, Nevada

Nevada State Health Division, Bureau of Health Protection Services  
620 Belrose Street, Suite 101  
Las Vegas, Nevada

and in all counties in which an office of the agency is not maintained at the main public library for inspection and copying by members of the public during business hours. This notice, including the text of the proposed amendment, is available in the State of Nevada Register of Administrative Regulations, which is prepared and published monthly by the Legislative Counsel Bureau pursuant to NRS 233B.0653, and on the Internet at <http://www.leg.state.nv.us>. Copies of this notice and the proposed amendment will also be mailed to members of the public upon request. A reasonable fee may be charged for copies if it is deemed necessary.

Per NRS 233B.064(2), upon adoption of any regulation, the Nevada State Health Division, State Board of Health, if requested to do so by an interested person, either before adoption or within 30 days thereafter, will issue a concise statement of the principal reasons for and against its adoption and incorporate therein its reason for overruling the consideration urged against its adoption.

This notice of hearing has been posted at the following locations:

STATE LIBRARY AND ARCHIVES, 100 Stewart Street, Carson City

BUREAU OF HEALTH PROTECTION SERVICES, 1179 Fairview Drive, Carson City  
NEVADA STATE HEALTH DIVISION, 505 East King Street, Carson City  
LEGISLATIVE COUNSEL BUREAU, 401 South Carson Street, Carson City  
BUREAU OF HEALTH PROTECTION SERVICES, 620 Belrose Street, Suite 101, Las Vegas  
CLARK COUNTY HEALTH DEPARTMENT, 625 Shadow Lane, Las Vegas  
CARSON CITY LIBRARY, 900 North Roop Street, Carson City  
CHURCHILL COUNTY LIBRARY, 553 S. Maine Street, Fallon  
CLARK COUNTY LIBRARY, 1401 E. Flamingo Road, Las Vegas  
DOUGLAS COUNTY LIBRARY, 1625 Library Lane, Minden  
ELKO COUNTY LIBRARY, 720 Court Street, Elko  
GOLDFIELD PUBLIC LIBRARY (ESMERALDA CO.), Corner of Crook and Ramsey,  
Goldfield  
EUREKA BRANCH LIBRARY, 10190 Monroe Street, Eureka  
HUMBOLDT COUNTY LIBRARY, 85 East 5<sup>th</sup> Street, Winnemucca  
BATTLE MOUNTAIN BRANCH LIBRARY (LANDER CO.), 625 Broad Street, Battle  
Mountain  
LINCOLN COUNTY LIBRARY, 63 Main Street, Pioche  
LYON COUNTY LIBRARY, 20 Nevin Way, Yerington  
MINERAL COUNTY LIBRARY, 125 "A" Street, Hawthorne  
PERSHING COUNTY LIBRARY, 125 Central, Lovelock  
STOREY COUNTY LIBRARY, 95 South "R" Street, Virginia City  
TONOPAH PUBLIC LIBRARY (NYE CO.), 171 Central, Tonopah  
WASHOE COUNTY LIBRARY, 301 South Center Street, Reno  
WHITE PINE COUNTY LIBRARY, 950 Campton Street, Ely

## PROPOSED REGULATION OF THE HEALTH DIVISION OF THE DEPARTMENT OF HUMAN RESOURCES

**Section 1.** Chapter 445A.6682 of NAC is hereby amended as follows:

1. *In a county where the population is 400,000 or more, a water authority or a public water system that serves a population of 100,000 or more shall fluoridate all water delivered for human consumption pursuant to AB 689 no later than January 1, 2000. The health authority for public water systems required to fluoridate water pursuant to AB 689 is the health division.*

~~[All requests that fluoride be added to the water supply for the reduction of the incidence of dental caries must be referred to the health authority, who shall send the request to the board of health for consideration. The public water system must supply water meeting the standards of the board for fluoridation at a maximum of 1.5 ppm.]~~

2. *All requests that fluoride be added to the water supply for the reduction of the incidence of dental caries must be referred to the health authority as defined in NAC 445A.66055, who shall send the request to the state board of health for consideration.* In addition to any

approval required pursuant to NRS 445A.025 to 445A.050, inclusive, the following must agree to ~~[add fluoride to the water supply:]~~ *the request:*

(a) The public water system;

(b) The county board of health;

(c) The state board of health;

(d) The local dental and medical society, or if there is none, the state dental and medical society;

and

(e) The local governing authority.

*This subsection does not apply to a water authority or public water system which fluoridates pursuant to subsection 1 of this regulation.*

~~[3.—The application of fluoride must be made through accurate feeding equipment. Either gravimetric or volumetric dry feed equipment or positive displacement liquid feed equipment with an accuracy within 5 percent is required. Special precaution must be taken to protect the operators from inhaling fluoride dust when charging the hoppers of the feeders. Each operator who handles fluoride must have his own toxic dust respirator to be used only when handling this chemical. When liquid feed equipment is used, at least two solution tanks must be available for the preparation and storage of the fluoride solution.~~

~~4.—The feeding equipment must be controlled in such a manner that fluoride is added to the public water system only when its facilities and equipment for supplying water are functioning properly. Electrical power to the feeding equipment must be wired in conjunction with the pumping equipment of the public water system in such a manner that fluoride cannot be introduced into the supply of water when the water is not flowing. Pumps for feeding chemicals must be equipped with flow detectors which ensure that the injection of chemicals stops when the well or booster pumps stop.~~

~~5.—The supplier of water shall:~~

~~(a) Maintain a kit which is approved by the health authority for testing the level of fluoride in water, test the level of fluoride entering the public water system daily and maintain accurate records of the daily tests.~~

~~(b) Follow any written instructions of the health authority for the sampling of water to which fluoride has been added. Samples must be taken from one or more points in the distribution system as determined by the health authority. The frequency of sampling must be stated in the~~

~~written instructions. Samples must be tested by the health authority for control purposes. Tests for the purity of the fluoride used in fluoridation must be determined as necessary, and these tests must be by the methods approved in Standard Methods for the Examination of Water and Wastewater.]~~

*3. The State Board of Health will exempt a public water system or water authority from the fluoridation requirement of its ground water supply proportion if:*

*(a) A written request to the State Board of Health with supporting documentation that demonstrates that the system for the production of ground water for the public water system or water authority is less than 15 percent of the total average annual water production of the system or authority for the years in which drought conditions are not prevalent; and*

*(b) The system for the production of ground water is part of a combined regional and local system for the distribution of water that is served by a fluoridated source.*

*4. The State Board of Health will exempt a public water system or water authority from the fluoridation requirement if a majority of the voters voting on the question placed on a ballot pursuant to section 4.5 of AB 689, vote affirmatively to cease fluoridation prior to January 1, 2001:*

*5. The public water system or water authority may cease the fluoridation of water during an emergency condition if:*

*(a) A written notice is submitted to the health division within 30 days of an emergency condition that describes the condition and length of time for the ceasing of fluoridation; and*

*(b) That the public water system or water authority continues the fluoridation of water when the emergency condition no longer exists.*

*6. The public water system or water authority may cease the fluoridation of water during a period of routine maintenance if:*

*(a) A written notice is submitted to the health division prior to a period of routine maintenance that describes the condition and length of time for the ceasing of fluoridation; and*

*(b) That the public water system or water authority continues the fluoridation of water when the period of routine maintenance is no longer in effect.*

*7. The public water system or water authority must maintain compliance with NAC 445A.050 to 445A.492, inclusive, and supply water which meets the following fluoridation standards:*

*(a) The minimum permissible concentration level of fluoride must not be less than 0.7 ppm; and*

*(b) The maximum permissible concentration level of fluoride must not exceed 1.2 ppm.*

*6. The introduction of fluoride or its equivalent into the facilities of the public water system or water authority must be made through accurate feeding equipment.*

*7. All introduction of chemicals for fluoridation into the facilities of the public water system or water authority must be in accordance with the chemical suppliers recommendations.*

*8. All feeding equipment must be maintained in accordance with manufacturers recommendations.*

*9. Either gravimetric or volumetric dry-feed equipment or positive displacement liquid feed equipment with an accuracy within 5 percent is required.*

*10. The water system operators shall comply with the protective equipment requirements of section 5.3.4 of the Recommend Standards for Water Works as referenced in NAC 445A.6663.*

*11. When liquid-feed equipment is used, at least two solution tanks must be available for the preparation and storage of the fluoride solution.*

*12. The feeding equipment must be controlled in such a manner that fluoride is added to the public water system only when the facilities and equipment of the public water system or water authority for supplying water are functioning properly. Electrical power to the feeding equipment must be wired in conjunction with the pumping or flow control equipment of the public water system in such a manner that fluoride cannot be introduced into the supply of water when the water is not flowing. Pumps for feeding chemicals must be equipped with flow detectors which ensure that the injection of chemicals stops when the well or booster pumps stop.*

*13. The public water system or water authority shall:*

*(a) Maintain a kit or monitoring equipment which is approved by the appropriate health authority for testing the level of fluoride in water.*

*(b) Adjust the level of treatment if the natural concentration of fluoride present in the public water system is not within the permissible concentration levels of fluoride as described in subsection 4 of this regulation.*

*(c) Samples must be taken from one or more points in the distribution system as approved by the health authority.*

*(d) Test or monitor the level of fluoride daily after its introduction into the facilities of the public water system or water authority and maintain accurate records of the daily tests.*

*(e) Results of the daily testing must be reported to the health authority at least monthly in accordance with written instructions approved by the health authority.*

*(f) At least one test per week a daily test must be verified by a certified laboratory in accordance with NAC 445A.458 and by the methods approved in Standard Methods for the Examination of Water and Wastewater as referenced in NAC 445A.6663. Samples may be taken at the approved distribution points as described in section 1 subsection 13 (c) and tested by the health authority for control purposes.*

*(g) A record or copy of all daily test results shall be maintained at each public water system or water authority for the period specified in 40 CFR §141.33 and shall be available for review by the health authority upon reasonable request.*

*(h) Follow any written instructions of the health authority for the sampling of water to which fluoride has been added.*

*(i) The fluoride used in fluoridation must conform with the provisions of Section 4.7 of the Recommended Standards for Water Works as referenced in NAC 445A.6663.*

*(j) Notify the Health Division beginning as soon as possible, but no later than the end of the next business day, whenever:*

*(1) The concentration level of fluoride discharged does not meet the permissible concentration levels for fluoride as defined in section 1 subsection 4.*

*(2) Any event occurs which may affect the ability of the public water system to produce safe, potable water.*

*(k) Except as otherwise provided in this paragraph, comply with the provisions of:*

*(1) Recommended Standards for Water Works as referenced in NAC 445A.6663; and*

*(2) Standard Methods for the Examination of Water and Wastewater as referenced in NAC 445A.6663.*

*If there is any conflict between any of the provisions described in this paragraph, the most*

*stringent of those provisions prevails.*

**Sec. 2.** Chapter 445A.455 of NAC is hereby amended as follows:

445A.455 Secondary standards: General requirements; public notice.

1. Whenever any of the following chemical substances, as measured at representative points in the distribution system, is present in a public water supply in excess of the listed levels, and the health authority determines that there is another more suitable supply of water which is economically feasible, available in a sufficient quantity, and of a significantly higher quality, the supplier of water shall give notice to the public:

Substance	Level, Milligrams Per Liter
Chloride .....	250.0
Color .....	15.0 color units
Copper.....	1.0
Foaming Agents.....	0.5
Iron .....	0.3
Magnesium.....	125.0
Manganese .....	0.05
Odor .....	3.0 threshold odor number
pH.....	6.5 - 8.5
Sulfate.....	250.0
TDS (total dissolved solids dried at 180°C) .....	500.0
Zinc .....	5.0

2. The following chemical substances, as measured at representative points in the distribution system, must not be present in a public water supply in excess of the listed levels:

Substance	Level, Milligrams Per Liter
Chloride .....	400.0
Iron.....	0.6

Magnesium.....	150.0
Manganese .....	0.1
Sulfate .....	500.0
TDS (total dissolved solids dried at 180°C) .....	1000.0

3. *For public water systems that do not provide fluoridation as described in NAC 445A.6682*

*the* ~~The~~ standard for fluoride in community and nontransient, noncommunity water systems is 2.0 milligrams per liter.

4. If a public water system exceeds one of the standards set by subsection 2 or 3 or the state board of health grants a variance from the requirement concerning that contaminant level, the supplier of water shall give notice to the public.

5. The notices required by subsections 1 and 4 must be:

(a) Published in a newspaper of general circulation in the area served by the system not 30 days after the standard is exceeded;

(b) Delivered personally or by mail to each person served by the system not more than 45 days after the standard is exceeded; and

(c) Published and delivered annually thereafter as provided in this section if the standard continues to be exceeded.