

**ADOPTED REGULATION OF THE  
STATE ENVIRONMENTAL COMMISSION**

**LCB File No. R061-10**

Effective July 22, 2010

EXPLANATION – Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

AUTHORITY: §§1 and 3, NRS 445A.855 and 445A.860; §2, NRS 445A.855, 445A.860 and 445A.863; §§4-9, NRS 445A.860.

A REGULATION relating to public water systems; revising the date upon which certain federal regulations are adopted by reference; amending the frequency of sanitary surveys for public water systems using solely groundwater; requiring a preliminary engineering report to include certain information if it includes certain treatment processes; requiring public water systems to keep records of documentation required to comply with certain federal regulations; requiring public water systems using surface water to comply with certain standards for disinfection; and providing other matters properly relating thereto.

**Section 1.** NAC 445A.4525 is hereby amended to read as follows:

445A.4525 1. The provisions of 40 C.F.R. §§ 141.1, 141.2, 141.4 to 141.42, inclusive, subsections (a) and (d) of § 141.43 and §§ 141.60 to 141.722, inclusive, of the “National Primary Drinking Water Regulations,” and related federal regulations applicable to public water systems, including all tables and appendices therein, as those provisions and regulations existed on July 1, ~~[2006.]~~ *2009*, are hereby adopted by reference.

2. The provisions of 40 C.F.R. §§ 142.61 to 142.65, inclusive, including all tables therein, as those provisions existed on July 1, 2006, are hereby adopted by reference.

3. A copy of a publication containing those provisions is available by mail from the Superintendent of Documents, United States Government Printing Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll-free telephone at (866) 512-1800, for the price of ~~[\$61.]~~

**§67.** Copies of those regulations are also available, free of charge, at the Internet address <http://www.gpoaccess.gov/cfr/index.html>.

**Sec. 2.** NAC 445A.454 is hereby amended to read as follows:

445A.454 1. The monitoring requirements for the primary standards set forth in NAC 445A.453 must be performed as required by 40 C.F.R. §§ 141.21 to 141.29, inclusive, 141.40, 141.41, 141.42, 141.74, 141.86 to 141.89, inclusive, 141.131, 141.132, 141.133, 141.172, 141.173, 141.174, **141.402**, 141.530 to 141.564, inclusive, 141.605, 141.621 to 141.628, inclusive, and 141.701 to 141.709, inclusive, as adopted by reference in NAC 445A.4525.

2. Any analysis conducted to determine compliance with the primary standards referenced in NAC 445A.453 must be performed by a laboratory that is certified pursuant to the provisions of NAC 445A.542 to 445A.54296, inclusive, in accordance with:

(a) The method or methods listed in, or approved pursuant to, the provisions of NAC 445A.542 to 445A.54296, inclusive, for the selected contaminant or contaminants in the drinking water; or

(b) Any method for the selected contaminant or contaminants in the drinking water approved by the United States Environmental Protection Agency as an acceptable alternative test procedure for drinking water.

3. For water systems which are conducting water quality monitoring at a frequency greater than annually, compliance with the maximum contaminant levels for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium or thallium must be determined during normal operating conditions by a running annual average at any sampling point. A monitoring program identifying the sampling points must be submitted to the Division or the appropriate district board of health for review and approval. The monitoring

program must demonstrate that the average quality of the water served to each customer in the distribution system is below the maximum contaminant level. The Division or the appropriate district board of health shall establish the number of samples the public water system must take for calculating the running annual average. The public water systems may not monitor more frequently than specified in the monitoring program by the Division or the appropriate district board of health to determine compliance unless approved in writing by the Division or the appropriate district board of health.

4. As used in this section:

(a) “Normal operating conditions” means the conditions that are achieved when the water system operates wells or treatment plants to supply water for seasonal demands.

(b) “Running Annual Average” means the sum of the consecutive 12-month contaminant sample values divided by the total number of samples taken at one sample point. (Example:  $(\sum x_1 + x_2 + \dots + x_n)/n = \text{Running Annual Average}$ )

**Sec. 3.** NAC 445A.4655 is hereby amended to read as follows:

445A.4655 1. The Division or the appropriate district board of health shall conduct a sanitary survey on all public water systems.

2. All public water systems using surface water or groundwater under the direct influence of surface water will be subject to a sanitary survey at a minimum of once every 3 years or on a more frequent basis as determined by the Division.

3. All public water systems using solely groundwater will be subject to a sanitary survey at a ~~minimum of once every 5 years or on a more frequent basis as~~ *frequency* determined by the Division ~~[.]~~ *but at a minimum of once every:*

*(a) Three years for all community water systems; or*

*(b) Five years for all noncommunity water systems.*

**Sec. 4.** NAC 445A.54026 is hereby amended to read as follows:

445A.54026 1. Except as otherwise provided in NRS 445A.920, a public water system proposing to:

(a) Construct a new facility for treatment or blending of groundwater; or

(b) Make additions to or modify an existing facility to treat or blend groundwater,

↪ must submit a preliminary engineering report to the Division or to the appropriate district board of health. The report must be reviewed by the Division or the appropriate district board of health before the supplier begins design of a facility to treat or blend groundwater.

2. A preliminary engineering report must:

(a) Describe the needs of the public water system, identify the purpose of the water project, analyze alternatives and propose a preferred course of action, from an engineering and economic perspective;

(b) *If the project includes treatment to comply with the requirements of 40 C.F.R. § 141.403, as adopted by reference in NAC 445A.4525, include documentation indicating the manner in which the public water system will achieve a minimum of 99.99 percent or 4-log treatment of viruses pursuant to those requirements;*

(c) Identify design alternatives that were considered and associated design parameters; and

~~(e)~~ (d) Identify a recommendation by an engineer for the final design.

**Sec. 5.** NAC 445A.54042 is hereby amended to read as follows:

445A.54042 Each public water system to which the disinfection requirements of *40 C.F.R. § 141.403, as adopted by reference in NAC 445A.4525, and* NAC 445A.66825 ~~[applies]~~ *apply* shall provide disinfection treatment in accordance with the provisions of NAC 445A.66825 to

445A.6685, inclusive . ~~[, and 40 C.F.R. §§ 141.131, 141.132, 141.133 and 141.135, as adopted by reference in NAC 445A.4525.]~~

**Sec. 6.** NAC 445A.54048 is hereby amended to read as follows:

445A.54048 1. Each public water system shall maintain accurate and complete records of the operation of each facility to treat groundwater. The records must include:

(a) The results of all monitoring conducted in accordance with NAC 445A.454 and 445A.456;

(b) *If applicable, the documentation required to comply with 40 C.F.R. § 141.405, as adopted by reference in NAC 445A.4525;*

(c) The date of any maintenance or inspection of a filter and the results of the inspection;

~~[(e)]~~ (d) The quantity of water produced;

~~[(d)]~~ (e) The quality of water produced;

~~[(e)]~~ (f) The hours of operation;

~~[(f)]~~ (g) The rates of flow at the plant;

~~[(g)]~~ (h) The rates of filtration;

~~[(h)]~~ (i) The rates of backwash; and

~~[(i)]~~ (j) The dates and description of failures of major equipment or unit processes and the action taken to correct these failures.

2. The records of a facility to treat groundwater must be retained for a period of not less than 2 years, unless the Division or the appropriate district board of health has determined otherwise.

**Sec. 7.** NAC 445A.6569 is hereby amended to read as follows:

445A.6569 “Certified backflow prevention assembly tester” means a person who is certified *to test assemblies for the prevention of backflow* by the California/Nevada section of the American Water Works Association ~~[to test assemblies for the prevention of backflow.]~~, *the American Backflow Prevention Association or an equivalent organization approved by the Division.*

**Sec. 8.** NAC 445A.6676 is hereby amended to read as follows:

445A.6676 1. The development or treatment of a source of water for a public water system must comply with the applicable provisions of:

- (a) NAC 445A.66765 to 445A.6696, inclusive; and
- (b) NAC 445A.495 to ~~[445A.540.]~~ **445A.5405**, inclusive.

2. An engineer who designs such a project shall demonstrate to the Division or the appropriate district board of health that:

(a) Any source of water selected for development contains a sufficient quantity of available water to ensure that the total capacity of the public water system is adequate; and

(b) Any water intended to be supplied to users of the public water system will meet the standards set forth in NAC 445A.450 to 445A.492, inclusive, for microbiological, physical, chemical and radiological quality.

3. A supplier of water shall, within any applicable economic, technical and legal limitations, obtain water from the best source available.

**Sec. 9.** NAC 445A.66825 is hereby amended to read as follows:

445A.66825 1. In addition to any disinfection required pursuant to NAC 445A.526, a supplier of water shall provide for the continuous disinfection, in accordance with NAC

445A.66825 to 445A.6685, inclusive, of any groundwater used by the public water system which:

- (a) Does not comply with primary standards;
- (b) Is obtained from a well that is located or constructed in a manner that varies from the requirements of NAC 445A.65505 to 445A.6731, inclusive; or
- (c) Is distributed through a distribution system that is constructed in a manner that varies from the requirements of NAC 445A.65505 to 445A.6731, inclusive.

2. A supplier of water shall:

(a) Locate any facilities for disinfection in such a manner that the facilities are accessible throughout the entire year.

(b) Provide adequate housing for equipment used for disinfection and for the storage of disinfectants.

3. If a supplier of water proposes to use any disinfectants other than chlorine, including iodine, ozone, chlorine dioxide, chloramines or ultraviolet light, the supplier of water shall, before preparing the final plans and specifications for the facility, submit the proposal to and obtain the approval of the Division or the appropriate district board of health. If *the supplier of water uses* chlorine dioxide, ultraviolet light or ozone ~~[is used for inactivation of]~~ *to inactivate Giardia lamblia* cysts, viruses or *Cryptosporidium* ~~[ ]~~ *for a public water system using surface water or groundwater under the direct influence of surface water*, the disinfection practice must comply with the standards for disinfection set forth in NAC 445A.526.

4. Chloramines may be used as a secondary disinfectant to maintain an effective residual of disinfectant in a distribution system only if the Division or the appropriate district board of

health, after conducting an evaluation of each proposal for such a use on a case-by-case basis, determines that chloramines are suitable for that use.



**Permanent Regulation - Filing Statement**

Nevada Division of Environmental Protection  
**Bureau of Safe Drinking Water**

Legislative Review of Adopted Regulations as Required  
by Administrative Procedures Act, NRS 233B.066

**State Environmental Commission (SEC)**  
**LCB File No. R061-10**  
P2010-03

**R061-10: Safe Drinking Water Adoption By Federal Reference:** The Nevada Division of Environmental Protection (NDEP) is proposing to update its adoption by reference date in NAC 445A for regulations that have been promulgated by the U.S. Environmental Protection Agency (U.S. EPA) from July 1, 2006 to July 1, 2009. Nevada's Safe Drinking Water Program regulates public water systems using a combination of State regulations and the National Primary Drinking Water Regulations (NPDWR) adopted by reference. The U.S. EPA has granted the NDEP primary enforcement responsibility for the NPDWR. In order to maintain primary enforcement responsibility, the NDEP must adopt regulations that are at least as stringent as new or amended federal regulations.

In part, the proposed amendments adopt the new federal Ground Water Rule and the Lead and Copper Rule Short-Term Revisions and Clarifications. The Lead and Copper Rule is a current regulation implemented by the NDEP. These amendments are considered necessary to maintain Primary Enforcement Responsibility for NDEP's Bureau of Safe Drinking Water's (BSDW) federal program elements. Additionally, changes are proposed to enhance a BSDW safe drinking water program element in response to needs of the regulated community, and provide "cleanup" and clarification of existing regulations.

**1. A description of how public comment was solicited, a summary of public response and an explanation of how other interested persons may obtain a copy of the summary.**

The NDEP held three public workshops on the above referenced regulation as depicted below.

Elko	Carson City	Las Vegas
<b>May 11, 2010 9:00 am to 10:30 am</b>	<b>May 12, 2010 9:00 am to 10:30 am</b>	<b>May 13, 2010 9:00 am to 10:30 am</b>
<b>Elko Convention &amp; Visitors Authority 700 Moren Way Cedar Room</b>	<b>Department of Conservation &amp; Natural Resources Bryan Building 901 South Stewart St</b>	<b>College of Southern Nevada Charleston Campus 6375 W. Charleston Blvd</b>

Following the workshop, the State Environmental Commission (SEC) held a regulatory hearing on June 17, 2010 in Reno at the Nevada Department of Wildlife. A public notice and agenda for

the SEC hearing was posted at the meeting location, at the State Library in Carson City, and at the Offices of the Division of Environmental Protection in Carson City and Las Vegas. Copies of the agenda, the public notice, and the proposed permanent regulation were also made available at all public libraries throughout the state as well as to individuals on the SEC electronic and ground-based mailing lists.

The public notice was published in the Las Vegas Review Journal and Reno Gazette Journal newspapers once a week for three consecutive weeks prior to the above referenced SEC regulatory hearing. Other information about the proposed regulation was also made available on the SEC website at: [http://www.sec.nv.gov/main/hearing\\_0610.htm](http://www.sec.nv.gov/main/hearing_0610.htm)

**2. The number persons who attended the SEC Regulatory Hearings:**

- (a) Approximately 20
- (b) Testified on the regulations: 2 (1 NDEP Staff) (1 TMWA Staff)
- (c) Submitted written comments: (none)

**3. A description of how comment was solicited from affected businesses, a summary of their response, and an explanation of how other interested persons may obtain a copy of the summary.**

Comments were solicited from affected businesses through e-mail and telephone exchanges, and public workshops indicated in number 1 above. Workshops were posted in all requisite library locations. In addition, the Workshop notice was mailed to 1920 individuals, including all public water systems, all certified water system operators, and a large number of engineering companies on file with the Bureau. Workshops fully described the proposal and attendees were provided the opportunity to ask questions or comment on the proposed amendments. Two individuals were present at the above referenced SEC hearing and provided support for Section 7 of this petition. No adverse comments were received prior to the SEC regulatory hearing.

**4. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.**

The regulation was adopted with some minor non-substantive language changes; an errata sheet containing the changes to the original draft regulation was submitted with this filing statement to the Legislative Counsel Bureau.

**5. The estimated economic effect of the adopted regulation on the business which it is to regulate and on the public.**

Adoption of this regulation is not expected to result in a significant additional financial burden to the business community or the general public. In general, the economic impact of this regulation for a given drinking water system might involve marginal costs for repeated water samples to identify microbial contamination. The cost of sampling analysis ranges from approximately \$12.00 to \$25.00 per sample. Water systems have from 1 to approximately 63 active sources.

However systems with multiple sources can reduce the number of sources to be sampled by submitting a Triggered Representative Source Water Monitoring Plan. In general the regulation provides for better protection of the health and safety of the public and may result in decreased medical costs that might be incurred as a direct result of waterborne disease or lead exposure. A complete analysis of the estimated economic effect of the regulation is available online at: [http://sec.nv.gov/docs/form1\\_p2010-03.pdf](http://sec.nv.gov/docs/form1_p2010-03.pdf) (see #5).

**6. The estimated cost to the agency for enforcement of the adopted regulation.**

While the regulation will increase the responsibilities of existing staff at the Division of Environmental Protection, the new regulatory requirements will be implemented with existing resources. The outcome of ongoing resource evaluation will determine if appropriate additional resources will be sought to ensure adequate oversight of public water systems in Nevada to ensure the protection of public health.

**7. A description of any regulations of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.**

This regulation amendment will not duplicate any State regulation. In order to avoid overlap of Title 40 of the US Environmental Protection Agency's CFR, these regulations adopt portions by reference.

**8. If the regulation includes provisions which are more stringent than a federal regulation, which regulates the same activity, a summary of such provisions.**

This regulation amendment will not be more stringent than federal regulations.

**9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.**

This regulation amendment does not propose new or increased fees.