

## **Arsenic Exemption *Extensions* Before the State Environmental Commission (SEC)**

December 5, 2012

**Background:** An exemption is an administrative tool allowed under the federal Safe Drinking Water Act and Nevada law. Exemptions can be used to grant water systems additional time to acquire financial and technical assistance to meet drinking water standards. The Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water (BSDW) has worked with the State Environmental Commission (SEC) to exercise the exemption regulations for the revised arsenic standard, also known as the Arsenic Rule.

The revised arsenic standard of 10 parts per billion (ppb) was enacted on January 22, 2001 and became enforceable on January 23, 2006. The old standard of 50 ppb had been in place for more than 60 years. In 2006 and 2007 the SEC granted exemptions to 64 water systems; which provided them three additional years, until January 23, 2009, to comply with the new arsenic standard.

Water systems that had not yet achieved compliance *may* have received further extensions of time to comply. Regulations allow up to three additional 2-year extensions based on certain criteria, discussed further below. In December, 2008 and again in December, 2010 the SEC evaluated system-specific extension recommendations from the BSDW. In 2010, extensions were granted to 26 systems. The list of systems under consideration in 2012 will no longer be eligible for additional extensions and must be compliant by January 23, 2015.

To assist in the exemption extension eligibility determination in November 2008, the NDEP carefully considered relevant regulations and guidance documents to establish four screening criteria and presented the criteria to the SEC as part of the extension process at that time. The NDEP is not proposing any changes to the criteria established in 2008, and current extension recommendations follow that work. Water systems that do not meet these criteria are not considered by the NDEP to be eligible for an extension recommendation. The Agency's current recommendations to the SEC reflect the following:

- ◆ A population threshold is found in Nevada Administrative Code (NAC) 445A.490.5. A water system may qualify for up to three additional two-year extensions if it serves a population of less than 3,300.
- ◆ NAC 445A.490.5 also allows that, "...an exemption ... may be renewed ... if the public water system establishes that it is taking all practicable steps to meet the requirements of [regulatory criteria used for the original exemption]". The NDEP has worked with each exempted public water system to gauge their progress in taking "all practicable steps" and has used this information in its recommendations for exemption extensions to the SEC.
- ◆ Systems recommended for extensions in December 2012 have an arsenic concentration less than, or equal to, 20 ppb. Additional discussion on the basis for this concentration criterion is included below.
- ◆ Nevada Revised Statute (NRS) 445A.935 requires that a supplier of water notify all users of the water system of the time and place for the hearing on their proposed exemption from the

drinking water regulations. This step was a clear requirement for all 64 systems who received original exemptions in 2006 and 2007. The NDEP believes that the intent of this Statute is to provide appropriate public notice to water system customers of the quality of their water supply and other circumstances surrounding their water system’s regulatory compliance status; as well as provide customers with an opportunity to participate in the public process. Likewise, in 2008, 2010, and again in 2012, the NDEP required public notice be sent to the customers of exempted water systems regarding the NDEP recommendation for their system and fact that the SEC will contemplate granting exemption extensions for an additional two years, or denying them based on concentration or lack of progress.

The concentration-based extension criterion is based in public health protection. While the intent of granting exemptions is to address the needs of economically challenged systems by providing additional time to achieve compliance, the granting of exemptions requires a determination that the exemption “will not result in an unreasonable risk to health” (NAC 445A.489). To aid in this determination relative to extensions, the NDEP utilized the *U.S. EPA Implementation Guidance for the Arsenic Rule, Appendix G, “Exemptions & the Arsenic Rule”* (August, 2002).

This Guidance documents an approach that helps to determine what does *not* constitute an unreasonable risk to health, rather than what does. The approach bases the total length of an exemption on the exposure concentration of arsenic delivered to the consumer. Table 1 depicts various concentrations of arsenic in drinking water and recommendations for the total time to comply with the revised standard. These recommendations are based on a formula derived by the US EPA and consider the total time of exposure to an arsenic concentration in excess of the revised standard.

**Table 1: Exemption & Extension Eligibility Recommendations** <sup>(1)</sup>

System Population Served	Total Time to Comply After Rule Revision- Jan 22, 2001	Exemption Periods Available	Recommended arsenic concentration criteria for granting an exemption or an extension			
			>30 ppb ≤50 ppb <sup>(2)</sup>	>25 ppb ≤30 ppb	>20 ppb ≤25 ppb	>10 ppb ≤20 ppb
>3,300 persons	8 years	3 year Exemption (to Jan 23, 2009)	Granted	Granted	Granted	Granted
<3,300 persons	8 years	3 year Exemption (to Jan 23, 2009)	Granted	Granted	Granted	Granted
	10 years	1 <sup>st</sup> Extension (to Jan 23, 2011)	Not Elig.	Granted	Granted	Granted
	12 years	2 <sup>nd</sup> Extension (to Jan 23, 2013)	Not Elig.	Not Elig.	Granted	Granted
	<b>14 years</b>	<b>3<sup>rd</sup> Extension (to Jan 23, 2015)</b>	<b>Not Elig.</b>	<b>Not Elig.</b>	<b>Not Elig.</b>	<b>Eligible</b>

(1) Adapted from U.S. EPA Implementation Guidance for the Arsenic Rule, Appendix G-15, August 2002

(2) U.S. EPA’s recommendation was 35 ppb, Nevada chose the old standard of 50 ppb.

The timeframes and recommendations in Table 1 reveal the intent to address the systems with the highest exposure concentrations, and highest increased risk to health, first. Likewise, the NDEP selected the concentration threshold of 20 ppb as the next qualifying tier and recommends the SEC continue to consider this stair-stepped approach as a factor in deciding to grant exemption extensions.

**NDEP Recommendations:** The NDEP recommends 10 water systems be granted extensions for the final 2-year period, expiring January 23, 2015. The list of water systems is attached and was published on the SEC webpage for the December 5, 2012 hearing at <http://sec.nv.gov/>.

Extensions granted by the SEC will include an updated list of milestones that the systems will have to achieve during the extension period to achieve compliance by January 23, 2015. A draft of the agreements was provided to each system that the NDEP is recommending for an extension. These draft documents are attached and were published on the SEC webpage for the December 5, 2012 hearing at <http://sec.nv.gov/>.

**NDEP Bureau of Safe Drinking Water - List of Water Systems with Arsenic Exemptions and their Status for Extension Recommendations to the State Environmental Commission - Dec 5, 2012**

	CO	PWS ID#	PUBLIC WATER SYSTEM NAME	ARSENIC (ppb)	POP	DATE OF ORIGINAL EXEMPTION
<b>Systems Achieving Compliance Since December 2010 SEC Hearing</b>						
1	CH	NV0000047	DELUXE MHP	24	37	December 4th, 2007
2	CH	NV0000052	OK MOBILE HOME PARK	15	90	September 6th, 2006
3	CH	NV0000061	TOLAS PARK MHP	20	54	May 24th, 2007
4	CH	NV0000903	CMC STEEL FABRICATORS DBA CMC JOIST	16	400	September 7th, 2007
5	CL	NV0002501	NPS COTTONWOOD COVE	15	1,354	September 6th, 2006
6	EU	NV0002573	DEVILS GATE WATER SYSTEM GID 2	12	70	May 24th, 2007
7	HU	NV0005069	HUMBOLDT CONSERVATION CAMP NDOP	15	140	September 6th, 2006
8	HU	NV0002528	TURQUOISE RIDGE JOINT VENTURE	20	250	September 6th, 2006
9	LA	NV0000008	LA CO SEWER AND WATER DIST 1 BM	24	3,026	May 24th, 2007
10	LI	NV0000185	PANACA FARMSTEAD WATER ASSOCIATION	20	800	May 24th, 2007
11	LY	NV0000223	SILVER SPRINGS MUTUAL WATER COMPANY	25	3,000	September 6th, 2006
12	LY	NV0000255	YERINGTON CITY OF	19	2,900	September 6th, 2006
13	LY	NV0000242	WEED HEIGHTS DEVELOPMENT	18	500	May 24th, 2007
14	NY	NV0000009	BEATTY WATER AND SANITATION DISTRICT	24	1,100	September 6th, 2006
15	ST	NV0000878	MASTERFOODS USA	15	140	December 4th, 2007
<b>Systems Eligible and Recommended for Extension - Arsenic Concentration &lt;= 20 ppb</b>						
16	CL	NV0000219	SEARCHLIGHT WATER COMPANY	11	760	September 6th, 2006
17	DO	NV0000887	SUNRISE ESTATES	17	91	September 6th, 2006
18	EU	NV0000043	CRESCENT VALLEY WATER SYSTEM	12	350	May 24th, 2007
19	HU	NV0000907	LONE TREE MINE	15	150	May 24th, 2007
20	HU	NV0000162	MC DERMITT WATER SYSTEM	19	200	December 4th, 2007
21	LA	NV0000006	LA CO SEWER AND WATER DIST 2 AUSTIN	14	350	May 24th, 2007
22	NY	NV0000237	TONOPAH PUBLIC UTILITIES	13	2,600	September 6th, 2006
23	WA	NV0000896	BRISTLECONE FAMILY RESOURCES	12	25	September 6th, 2006
24	WA	NV0004021	SILVER KNOLLS MUTUAL WATER COMPANY	13	120	May 24th, 2007
25	WA	NV0003000	VERDI SCHOOL	13	250	September 6th, 2006
<b>System Not Recommended for Extension, Closed</b>						
26	LY	NV0002595	Silver Springs Conservation Camp NDOP	19	144	September 6th, 2006