

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

December 7, 2010

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. In late 2008 and early 2009, the SEC evaluated extension eligibility criteria and subsequent recommendations from the BSDW and granted 34 water systems an additional 2-year extension to their original exemption. Of the 34 water systems with extended exemptions, 3 more water systems have since become compliant.

Water systems that have not yet achieved compliance *may* receive another extension of time to an exemption extension. According to state and federal regulations, systems meeting certain criteria may be eligible for up to three, 2-year extensions to an original exemption. The systems the SEC will be considering are on their second round of extensions.

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 2010 have an arsenic concentration less than, or equal to, 25 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 and again in 2010, the NDEP required public notice be sent to the customers of all 34 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 ⁽¹⁾

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 ⁽²⁾	>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 st Extension (to Jan 23, 2011)	Not Elig.	Granted	Granted	Granted
	12 years	2 nd Extension (to Jan 23, 2013)	Not Elig.	Not Elig.	Eligible	Eligible
	14 years	3 rd Extension (to Jan 23, 2015)	Not Elig.	Not Elig.	Not Elig.	Eligible

(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 25 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 26 water systems be granted extensions for the next 2-year period, expiring January 23, 2013. The list of water systems in each category (in compliance, recommended, and not recommended) is attached and was published on the SEC webpage for the December 7, 2010 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. For 2010, the NDEP has drafted two versions of this document based on whether a system delivers water with an arsenic concentration of less than, or more than, 20 ppb. The NDEP's recommended approach of having two different extension agreements resulted from the difference in activities that the two types of water systems should be required to complete in the next two years. Systems with arsenic concentrations greater than 20 ppb, which will not be recommended for a third extension, are expected to be compliant by January 23, 2013; and the milestones in the SEC extension agreement reflect this. Systems with arsenic concentrations less than or equal to 20 ppb, which may be eligible for one final extension, will be expected to have their compliance plan determined with an appropriate schedule in place to ensure compliance by January 23, 2015. This approach will permit the NDEP to have clear expectations and be better able to gauge a water system's progress in taking "all practicable steps" to achieve compliance.

The proper draft of the respective 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 7, 2010 hearing at <http://sec.nv.gov/>.

According to State and Federal laws and regulations, systems that are currently operating under an Arsenic Rule compliance exemption until January 23, 2011, that do not receive an extension and are not in compliance on that date will be in violation of such regulations on January 24, 2011. The NDEP will pursue a Finding of Alleged Violation (FOAV) and Administrative Order (AO) or Administrative Order on Consent (AOC) for each facility in violation of the arsenic standard. The attached summary status list includes 5 systems that are not considered by the NDEP to be eligible for extensions based on a concentration greater than 25 ppb or lack of adequate progress toward compliance. The NDEP believes that the first 2 systems on the list are nearing compliance and therefore, it is expected that the remaining 3 systems will require an FOAV and AO/AOC to ensure compliance.

NDEP Bureau of Safe Drinking Water - List of Water Systems with Arsenic Exemptions and their Status for Extension Recommendations to the State Environmental Commission - December 7, 2010

	COUNTY	PWS ID#	PUBLIC WATER SYSTEM NAME	ARSENIC (ppb)	POP	DATE OF ORIGINAL EXEMPTION
Systems Achieving Compliance Since December 2008 SEC Hearing						
1	LI	NV0000013	CALIENTE PUBLIC UTILITIES	17	1,500	September 6th, 2006
2	MI	NV0000897	SCHURZ ELEMENTARY SCHOOL	14	320	December 4th, 2007
3	WA	NV0001086	SKY RANCH WATER SERVICE CORPORATION	14	2,030	September 6th, 2006
Systems Eligible and Recommended for Extension - Arsenic Concentration > 20 ppb						
4	CH	NV0000047	DELUXE MHP	24	37	December 4th, 2007
5	LA	NV0000008	LA CO SEWER AND WATER DIST 1 BM	24	3,026	May 24th, 2007
6	LY	NV0000223	SILVER SPRINGS MUTUAL WATER COMPANY	25	3,000	September 6th, 2006
7	NY	NV0000009	BEATTY WATER AND SANITATION DISTRICT	24	1,100	September 6th, 2006
Systems Eligible and Recommended for Extension - Arsenic Concentration <= 20 ppb						
8	CH	NV0000061	TOLAS PARK MHP	20	54	May 24th, 2007
9	CH	NV0000903	CMC STEEL FABRICATORS DBA CMC JOIST	16	400	September 7th, 2007
10	CH	NV0000052	OK MOBILE HOME PARK	15	90	September 6th, 2006
11	CL	NV0002501	NPS COTTONWOOD COVE	15	1,354	September 6th, 2006
12	CL	NV0000219	SEARCHLIGHT WATER COMPANY	11	760	September 6th, 2006
13	DO	NV0000887	SUNRISE ESTATES	17	91	September 6th, 2006
14	EU	NV0000043	CRESCENT VALLEY WATER SYSTEM	12	350	May 24th, 2007
15	EU	NV0002573	DEVILS GATE WATER SYSTEM GID 2	12	70	May 24th, 2007
16	HU	NV0005069	HUMBOLDT CONSERVATION CAMP NDOP	15	140	September 6th, 2006
17	HU	NV0000907	LONE TREE MINE	15	150	May 24th, 2007
18	HU	NV0000162	MC DERMITT WATER SYSTEM	19	200	December 4th, 2007
19	HU	NV0002528	TURQUOISE RIDGE JOINT VENTURE	20	250	September 6th, 2006
20	LA	NV0000006	LA CO SEWER AND WATER DIST 2 AUSTIN	14	350	May 24th, 2007
21	LI	NV0000185	PANACA FARMSTEAD WATER ASSOCIATION	20	800	May 24th, 2007
22	LY	NV0000242	WEED HEIGHTS DEVELOPMENT	18	500	May 24th, 2007
23	LY	NV0000255	YERINGTON CITY OF	19	2,900	September 6th, 2006
24	NY	NV0000237	TONOPAH PUBLIC UTILITIES	13	2,600	September 6th, 2006
25	ST	NV0000878	MASTERFOODS USA	15	140	December 4th, 2007
26	WA	NV0000896	BRISTLECONE FAMILY RESOURCES	12	25	September 6th, 2006
27	WA	NV0004021	SILVER KNOLLS MUTUAL WATER COMPANY	13	120	May 24th, 2007
28	WA	NV0003000	VERDI SCHOOL	13	250	September 6th, 2006
System Recommended for Extension, But No Proof of Public Notice						
29	LY	NV0002595	Silver Springs Conservation Camp NDOP	19	144	September 6th, 2006
Systems Not Recommended - Concentration > 25 ppb						
30	CH	NV0003068	CARSON RIVER ESTATES	28	90	December 4th, 2007
31	MI	NV0000357	HAWTHORNE ARMY AMMO DEPOT	30	300	May 24th, 2007
32	NY	NV0005028	SHOSHONE ESTATES WATER COMPANY	30	240	December 4th, 2007
			(System is also not taking "all practicable steps")			
33	WA	NV0000193	CRYSTAL TP	27	80	September 6th, 2006
Systems Not Recommended - Not Taking "All Practicable Steps" to Achieve Compliance						
34	CH	NV0000058	WILDES MANOR	20	70	December 4th, 2007

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