# PROPOSED REGULATION OF THE STATE ENVIRONMENTAL COMMISSION

# **LCB File No. R127-10**

P2010-07 – June 29, 2010

Explanation – Matter in Blue is *new*; matter in bold red and strikeout [omitted material] is material to be omitted.

AUTHORITY: §§1-318, NRS 445A.425 and 445A.520.

A REGULATION relating to water quality; making various changes in provisions that establish standards for water quality; and providing other matters properly relating thereto.

## **SMOKE CREEK**

#### **Material to be omitted:**

NAC 445A.180 (445A.1286). [Approximately 30 miles east of Susanville, California.]

STANDARDS OF WATER QUALITY

	STAND	ARDS OF WATER QUAL	/I I I										
Beneficia										se			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses													
Aquatic Life Species of Concern													
Temperature - °C		S.V. Summer ≤ 25.0											
<u>[∆Ta - °C]</u>		S.V. Winter $\leq 14.0$ $\frac{\Delta T \leq 3}{}$											
pH - SU		[Annual Median 7.0 8.0] S.V. 6.5 – [8.5]											
<del>[Phosphates (as</del> <del>PO4)]</del> - mg/l		<del>[A Avg. ≤ 0.5]</del> S.V. ≤ <del>[0.7]</del>											
[Nitrates] (as [NO3]) - mg/l		S.V. ≤ [5.0]											
Dissolved Oxygen - mg/l		[Avg. Jun Sep ≥ 8.0] S.V. ≥ [7.5]											
<del>[BOD mg/l]</del>		[S.V. ≥ 5.0]											
Turbidity – [JU]		<del>[b]</del>											
Total Dissolved Solids - mg/l		$[A \text{ Avg.} \le 225.0]$ S.V. $\le [275.0]$											
Chloride[s] - mg/l		S.V. ≤ <del>[10]</del>											
Fecal Coliform - No./100 ml		<del>[e]</del>											
<del>[Color PCU]</del>		<del>[d]</del>											

- [a Maximum allowable temperature increase above natural receiving water temperature.
- b Turbidity must not exceed that characteristic of natural conditions by more than 10 Jackson Units.
- e Feeal Coliform The more stringent of the following apply:
- The fecal coliform concentration must not exceed a geometric mean of 1000 per 100 milliliters nor may more than 20 percent of total samples exceed 2400 per 100 milliliters.
- The annual geometric mean of fecal coliform concentration must not exceed that characteristic of natural conditions by more than 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed that characteristic of natural conditions by more than 400 per 100 milliliters.
- d Color must not exceed that characteristic of natural conditions by more than 10 units on the Platinum-Cobalt Scale.]

# **Proposed changes:**

NAC 445A.180 (445A.1286). The limits of this table apply to the body of water known as Smoke Creek from the Nevada State line to the Smoke Creek Desert. Smoke Creek is located in Washoe County.

## STANDARDS OF WATER QUALITY

			Beneficial Usea												
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh		
Beneficial Uses			X	X	X	X	X			X					
Aquatic Life Species of Concern															
Temperature - °C		S.V. Summer $\leq 25.0$ S.V. Winter $\leq 14.0$			*	X									
pH - SU		S.V. 6.5 - 9	X	X	*	*				*					
Total Phosphorus (as P) - mg/l		b			*	*	X								
		<i>Nitrate</i> S.V. ≤ <i>90</i>	X		*					X					
Nitrogen Species (as N) - mg/l		<i>Nitrite S.V.</i> $\leq$ 5	X		*					X					
, ,		Total Nitrogen b			*	*									
Dissolved Oxygen - mg/l		S.V. ≥ <b>5.0</b>	X		*	X	X			X					
Turbidity - <i>NTU</i>		$S.V. \leq 50$			*										
Total Dissolved Solids - mg/l		S.V. ≤ <i>1000</i>	X	*											
Chloride - mg/l		S.V. ≤ <b>250</b>	X		*					X					
Fecal Coliform - No./100 ml		S.V. ≤ <i>1000</i>	*	*			X			*					
E Coli - No./100 ml		$AGM \le 126$ $S.V. \le 410$				*	X								
Total Ammonia (as N) - mg/l		c			*										

<sup>\* =</sup> The most restrictive beneficial use.

#### X = Beneficial use.

a Refer to NAC 445A.122 and section 11 of this regulation for beneficial use terminology. b Waters shall be free from nutrient concentrations from other than natural source that cause the growth of algae or aquatic plants in amounts that interfere with any beneficial uses of the water.

cThe ambient water quality criteria for ammonia are specified in NAC 445A.118.

## **BRONCO CREEK**

## Material to be omitted:

NAC 445A.181 (445A.1698). [At Hirschdale Road.]

STANDARDS OF WATER QUALITY

	STAND	AKDS OF WATER QUAL	/111													
			Beneficial							se	e					
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh			
Beneficial Uses																
Aquatic Life Species	of Concern															
Temperature - °C		Avg. Jun-Sep $\leq 20.0$ S.V. Summer $\leq 25.0$														
<del>[ΔTa - °C]</del>		S.V. Winter $\leq 13.0$ $\frac{\Delta T \leq 0}{2}$														
pH - SU		[Annual Median 7.0 8.5] S.V. 6.5 – [8.5]														
[Phosphates] (as [PO4]) - mg/l		<del>[A Avg. ≤ 0.3]</del> S.V. ≤ <del>[0.4]</del>														
[Nitrates] (as [NO3]) - mg/l		S.V. ≤ <del>[2.0]</del>														
Dissolved Oxygen - mg/l		[Avg. Jun Sep $\geq 7.0$ ] S.V. $\geq 6.0$														
Turbidity – [JU]		<del>[b]</del>														
Total Dissolved Solids - mg/l		$[A \text{ Avg.} \le 225.0]$ S.V. $\le [300.0]$														
Chloride[s] - mg/l		S.V. ≤ <del>[15]</del>														
Fecal Coliform - No./100 ml		<del>[e]</del>														
Color - PCU		<del>[d]</del>														

<sup>[</sup>a Maximum allowable temperature increase above natural receiving water temperature

b Turbidity must not exceed that characteristic of natural conditions by more than 10 Jackson Units.

e Fecal Coliform The more stringent of the following apply:

The feeal coliform concentration must not exceed a geometric mean of 1000 per 100 milliliters nor may more than 20 percent of total samples exceed 2400 per 100 milliliters.

The annual geometric mean of feeal coliform concentration must not exceed that characteristic of natural conditions by more than 200 per 100 milliliters nor may the number of feeal coliform in a single sample exceed that characteristic of natural conditions by more than 400 per 100 milliliters.

d Color must not exceed that characteristic of natural conditions by more than 10 units on the Platinum-Cobalt Scale.]

## **Proposed changes:**

NAC 445A.181 (445A.1698). The limits of this table apply to the body of water known as Bronco Creek from its origin to the Nevada State Line. Bronco Creek is located in Washoe County.

## STANDARDS OF WATER QUALITY

			Beneficial Usea										
PARAMETER	MAINTAIN EXISTING S	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	X Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of Concern													
Temperature - °C		Avg. Jun-Sep $\leq$ 20.0 S.V. Summer $\leq$ 25.0 S.V. Winter $\leq$ 13.0			*	X							
pH - SU		S.V. 6.5 - 9	X	X	*	*		$\boldsymbol{X}$	X	*			
<b>Total Phosphorus</b> (as <b>P</b> ) - mg/l		b			*	*	X	X					
		<i>Nitrate</i> S.V. ≤ <i>10</i>	X					*		X			
Nitrogen Species (as N) - mg/l		<i>Nitrite S.V.</i> ≤ 0.06	X		*			X		X			
(1) - mg/1		Total Nitrogen b			*	*							
Dissolved Oxygen - mg/l		S.V. ≥ 6.0	X		*	X	X	X		X			
Turbidity - <i>NTU</i>		<i>S.V.</i> ≤ 10			*								
Color - PCU		$S.V. \leq 75$						*					
Total Dissolved Solids - mg/l		S.V. ≤ <b>500</b>	X	X				*					
Chloride - mg/l		S.V. ≤ <b>250</b>	X					*		X			
Sulfate - mg/l		S.V. ≤ 250						*					
Fecal Coliform - No./100 ml		S.V. ≤ <b>1000</b>	*	*			X	X		*			
E Coli - No./100 ml		$AGM \le 126$ $S.V. \le 410$				*	X						
Total Ammonia (as N) - mg/l		С			*								

<sup>\* =</sup> The most restrictive beneficial use.

## X = Beneficial use.

a Refer to NAC 445A.122 and section 121 of this regulation for beneficial use terminology. bWaters shall be free from nutrient concentrations from other than natural source that cause the growth of algae or aquatic plants in amounts that interfere with any beneficial uses of the water

cThe ambient water quality criteria for ammonia are specified in NAC 445A.118.

## **GRAY CREEK**

#### **Material to be omitted:**

NAC 445A.182 (445A.1702). [At Hirschdale Road.]

## STANDARDS OF WATER OUALITY

	STANDA	RDS OF WATER QUA	LLI	Y									
						В	ene	ficia	l Us	se			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses													
Aquatic Life Species of Concern													
Temperature - °C		Avg. Jun-Sep $\leq 20.0$ S.V. Summer $\leq 25.0$											
<del>[∆Ta °C]</del>		S.V. Winter $\leq 13.0$ $\frac{\Delta T \leq 0}{1}$											
pH - SU		<del>[Annual Median 7.0 8.5]</del> S.V. 6.5 – <del>[8.5]</del>											
[Phosphates] (as [PO4]) - mg/l		$\frac{[A \text{ Avg.} \le 0.3]}{\text{S.V.} \le [0.4]}$											
[Nitrates] (as [NO3]) - mg/l		S.V. ≤ <del>[3.0]</del>											
Dissolved Oxygen - mg/l		[Avg. Jun Sep $\geq$ 8.0] S.V. $\geq$ [7.0]											
Turbidity – [JU]		<del>[b]</del>											
Total Dissolved Solids - mg/l		$[A - Avg. \le 125.0]$ S.V. $\le [165.0]$											
Chloride[s] - mg/l		$S.V. \leq \boxed{10.0}$											
Fecal Coliform - No./100 ml		<del>[e]</del>											
Color - PCU		<del>[d]</del>											

[a Maximum allowable temperature increase above natural receiving water temperature.

The fecal coliform concentration must not exceed a geometric mean of 1000 per 100 milliliters nor may more than 20 percent of total samples exceed 2400 per 100 milliliters.

The annual geometric mean of fecal coliform concentration must not exceed that characteristic of natural conditions by more than 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed that characteristic of natural conditions by more than 400 per 100 milliliters.

d Color must not exceed that characteristic of natural conditions by more than 10 units on the Platinum-Cobalt Scale.]

b Turbidity must not exceed that characteristic of natural conditions by more than 10 Jackson Units.

e Fecal Coliform The more stringent of the following apply:

## **Proposed changes:**

NAC 445A.182 (445A.1702). The limits of this table apply to the body of water known as Gray Creek from its origin to the Nevada State Line. Gray Creek is located in Washoe County.

## STANDARDS OF WATER QUALITY

									Beneficial Usea												
PARAMETER	MAINTAIN EXISTING STANDAI	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Livestock	X Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh								
Beneficial Uses			$\boldsymbol{X}$	$\boldsymbol{X}$	X	X	$\boldsymbol{X}$	$\boldsymbol{X}$	$\boldsymbol{X}$	X											
Aquatic Life Species of Concern																					
Temperature - °C		Avg. Jun-Sep $\leq 20.0$ S.V. Summer $\leq 25.0$ S.V. Winter $\leq 13.0$			*	X															
pH - SU		S.V. 6.5 - 9	X	X	*	*		X	X	*											
<b>Total Phosphorus</b> (as <b>P</b> ) - mg/l		b			*	*	X	X													
		<i>Nitrate</i> S.V. ≤ <i>10</i>	X					*		X											
Nitrogen Species (as N) - mg/l		<i>Nitrite S.V.</i> $\leq 0.06$	X		*			$\boldsymbol{X}$		X											
( ) - mg/1		Total Nitrogen b			*	*															
Dissolved Oxygen - mg/l		S.V. ≥ <b>6.0</b>	X		*	X	X	X		X											
Turbidity - <i>NTU</i>		<i>S.V.</i> ≤ <i>10</i>			*																
Color - PCU		<i>S.V.</i> ≤ 75						*													
Total Dissolved Solids - mg/l		S.V. ≤ <b>500</b>	X	X				*													
Chloride - mg/l		S.V. ≤ <b>250</b>	X					*		X											
Sulfate - mg/l		S.V. ≤ 250						*													
Fecal Coliform - No./100 ml		S.V. ≤ <b>1000</b>	*	*			X	X		*											
E Coli - No./100 ml		$AGM \le 126$ $S.V. \le 410$				*	X														
Total Ammonia (as N) - mg/l		c			*																

<sup>\* =</sup> The most restrictive beneficial use.

## X = Beneficial use.

a Refer to NAC 445A.122 and section 121 of this regulation for beneficial use terminology.

- b Waters shall be free from nutrient concentrations from other than natural source that cause the growth of algae or aquatic plants in amounts that interfere with any beneficial uses of the water
- c The ambient water quality criteria for ammonia are specified in NAC 445A.118.