COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

5 CCR 1002-32

REGULATION NO. 32 CLASSIFICATIONS AND NUMERIC STANDARDS FOR <u>ARKANSAS RIVER BASIN</u>

APPENDIX 32-1 Stream Classifications and Water Quality Standards Tables

Effective 06/30/2021

Abbreviations and Acronyms

Aq	=	Aquatic
°Ċ	=	degrees Celsius
CL	=	cold lake temperature tier
CLL	=	cold large lake temperature tier
CS-I	=	cold stream temperature tier one
CS-II	=	cold stream temperature tier two
D.O.	=	dissolved oxygen
DM	=	daily maximum temperature
DUWS	=	direct use water supply
E. coli	=	Escherichia coli
EQ	=	existing quality
mg/L	=	milligrams per liter
mg/m²	=	milligrams per square meter
mL	=	milliliter
MWAT	=	maximum weekly average temperature
OW	=	outstanding waters
SSE	=	site-specific equation
Т	=	total recoverable
t	=	total
tr	=	trout
TVS	=	table value standard
µg/L	=	micrograms per liter
UP	=	use-protected
WS	=	water supply
WS-I		warm stream temperature tier one
WS-II	=	warm stream temperature tier two
WS-III	=	warm stream temperature tier three
WL	=	warm lake temperature tier

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Middle Arkansas River Basin

				epainen i ea	ks Wilderness Areas.		
COARMA01	Classifications	Physical and	Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	
	Recreation E		acute	chronic	Arsenic(T)		0.02
	Water Supply	D.O. (mg/L)		6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)		7.0	Cadmium(T)	5.0	
Other:		рН	6.5 - 9.0		Chromium III		TVS
		chlorophyll a (mg/m ²)		150	Chromium III(T)	50	
*Uranium(acute) = See 32.5(3) for details. *Uranium(chronic) = See 32.5(3) for details.		E. Coli (per 100 mL)		126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron		WS
			acute	chronic	Iron(T)		1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron		0.75	Lead(T)	50	
		Chloride		250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)		0.01
		Cyanide	0.005		Molybdenum(T)		150
		Nitrate	10		Nickel	TVS	TVS
		Nitrite	0.05		Nickel(T)		100
		Phosphorus		0.11	Selenium	TVS	TVS
		Sulfate		WS	Silver	TVS	TVS(tr)
		Sulfide		0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS
	1	et of Pueblo Reservoir to a point imm	nediately above the	confluence v	with Wildhorse/Dry Cree	-	
COARMA02	Classifications	Physical and	_			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-II		Arsenic	240	
	Description F			CS-II		340	
	Recreation E		acute	chronic	Arsenic(T)		0.02
Qualifiara	Recreation E Water Supply	D.O. (mg/L)	acute	chronic 6.0	Arsenic(T) Cadmium	 TVS	
Qualifiers:		D.O. (spawning)	acute 	chronic 6.0 7.0	Arsenic(T) Cadmium Cadmium(T)	 TVS 5.0	0.02 TVS
Qualifiers: Other:		D.O. (spawning) pH	acute 6.5 - 9.0	chronic 6.0 7.0	Arsenic(T) Cadmium Cadmium(T) Chromium III	 TVS 5.0 	0.02
Other:		D.O. (spawning) pH chlorophyll a (mg/m²)	acute 	chronic 6.0 7.0 	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T)	 TVS 5.0 50	0.02 TVS TVS
Other: Temporary M Arsenic(chron	Water Supply lodification(s): iic) = hybrid	D.O. (spawning) pH	acute 6.5 - 9.0	chronic 6.0 7.0	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI	 TVS 5.0 50 TVS	0.02 TVS TVS TVS
Other: Temporary M Arsenic(chron	Water Supply	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL)	acute 6.5 - 9.0 	chronic 6.0 7.0 	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper	 TVS 5.0 50	0.02 TVS TVS TVS TVS
Other: Temporary M Arsenic(chron Expiration Dat	Water Supply lodification(s): iic) = hybrid	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL)	acute 6.5 - 9.0 	chronic 6.0 7.0 126	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron	 TVS 5.0 50 TVS TVS 	0.02 TVS TVS TVS TVS WS
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan	acute 6.5 - 9.0 ic (mg/L) acute	chronic 6.0 7.0 126 chronic	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T)	 TVS 5.0 50 TVS TVS 	0.02 TVS TVS TVS TVS WS 1000
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia	acute 6.5 - 9.0 ic (mg/L) acute TVS	chronic 6.0 7.0 126 chronic TVS	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead	 TVS 5.0 50 TVS TVS TVS	0.02 TVS TVS TVS TVS WS 1000 TVS
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia Boron	acute 6.5 - 9.0 ic (mg/L) acute	chronic 6.0 7.0 126 chronic TVS 0.75	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T)	 TVS 5.0 50 TVS TVS TVS 50	0.02 TVS TVS TVS TVS WS 1000 TVS
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride	acute 6.5 - 9.0 ic (mg/L) acute TVS 	chronic 6.0 7.0 126 chronic TVS 0.75 250	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese	 TVS 5.0 50 TVS TVS TVS 50 TVS	0.02 TVS TVS TVS TVS WS 1000 TVS TVS/WS
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine	acute 6.5 - 9.0 ic (mg/L) acute TVS C.S	chronic 6.0 7.0 126 chronic TVS 0.75	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T)	 TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS	0.02 TVS TVS TVS TVS WS 1000 TVS TVS/WS 0.01
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine Cyanide	acute 6.5 - 9.0 ic (mg/L) acute TVS TVS 0.019 0.005	chronic 6.0 7.0 126 chronic TVS 0.75 250 0.011	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T)	 TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS 	0.02 TVS TVS TVS TVS WS 1000 TVS TVSWS 0.01
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine Cyanide Nitrate	acute 6.5 - 9.0 ic (mg/L) ic (mg/L) acute TVS 0.019 0.005 10	chronic 6.0 7.0 126 chronic TVS 0.75 250 0.011	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel	 TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS	0.02 TVS TVS TVS WS 1000 TVS WS 1000 TVS TVS/WS 0.01 150 TVS
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite	acute 6.5 - 9.0 ic (mg/L) acute TVS TVS 0.019 0.005	chronic 6.0 7.0 126 chronic TVS 0.75 250 0.011	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel Nickel(T)	 TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS	0.02 TVS TVS TVS TVS WS 1000 TVS TVS/WS 0.01 150 TVS 100
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus	acute 6.5 - 9.0 ic (mg/L) ic (mg/L) acute TVS 0.019 0.005 10	chronic 6.0 7.0 126 Chronic TVS 0.75 250 0.011	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel Nickel(T) Selenium	 TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS	0.02 TVS TVS TVS TVS WS 1000 TVS TVS/WS 0.01 150 TVS 100 TVS
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate	acute 6.5 - 9.0 (mg/L) ic (mg/L) ic (mg/L) ic (mg/L) ic (mg/L) ic (mg/L) ic (mg/L) ic (mg/L)	<pre>chronic 6.0 7.0 126 chronic TVS 0.75 250 0.011 </pre>	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel Nickel(T) Selenium Silver	 TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS TVS	0.02 TVS TVS TVS TVS WS 1000 TVS 0.01 150 TVS/WS 0.01 150 TVS 100 TVS
Other: Temporary M Arsenic(chron Expiration Dat *Uranium(acu	Water Supply lodification(s): iic) = hybrid te of 12/31/2024 te) = See 32.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus	acute 6.5 - 9.0 ic (mg/L) acute TVS 0.019 0.005 10 0.005	chronic 6.0 7.0 126 Chronic TVS 0.75 250 0.011	Arsenic(T) Cadmium Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel Nickel(T) Selenium	 TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS	0.02 TVS TVS TVS TVS WS 1000 TVS TVS/WS 0.01 150 TVS 100 TVS

D.O. = dissolved oxygen DM = daily maximum MWAT = maximum weekly average temperature See 32.6 for further details on applied standards.

STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS – FOOTNOTES

- (A) Whenever a range of standards is listed and referenced to this footnote, the first number in the range is a strictly health-based value, based on the Commission's established methodology for human health-based standards. The second number in the range is a maximum contaminant level, established under the federal Safe Drinking Water Act that has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an "end-of-pipe" discharge level more restrictive than the second number in the range. Water bodies will be considered in attainment of this standard, and not included on the Section 303(d) List, so long as the existing ambient quality does not exceed the second number in the range.
- (B) Reserved.
- (C) Reserved.