This is an amendment to 20.6.4 NMAC, Sections 10, 11, 12, 113 and 900.

20.6.4.10 APPLICABILITY OF WATER QUALITY STANDARDS: A. Livestock Watering and Wildlife Habitat Uses:

(1) When a discharge creates a water which could be used by livestock and/or wildlife in a nonclassified, otherwise ephemeral surface water of the state, such water shall be protected for the uses of livestock watering and/or wildlife habitat by the standards applicable to these uses as set forth in 20.6.4.900 NMAC.

(2) Designated uses of such water will be limited to livestock watering and/or wildlife habitat only when such a water does not enter a classified surface water of the state with criteria which are more restrictive than those necessary to protect livestock watering and/or wildlife habitat, except in direct response to precipitation or runoff. The commission shall adopt any additional designated uses for such surface waters of the state by rulemaking proceedings.

(3) When such a water, except in direct response to precipitation or runoff, enters a classified surface water of the state with criteria which are more restrictive than those necessary to protect livestock watering and/or wildlife habitat, the numeric standards established for the classified surface water of the state shall apply at the point such a water enters the classified surface water of the state. If discharge to such waters of the state ceases or is diverted elsewhere, all uses adopted under this section or subsequently under additional rulemaking proceedings for such waters of the state shall be deemed no longer designated, existing, or attainable.

B. Critical Low Flow: The numeric standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC may not be attainable when streamflow is less than the critical low flow of the stream in question. The critical low flow of a stream at a particular site shall be:

(1) for human health criteria, the harmonic mean flow. "Harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows. That is, it is the reciprocal of the mean of reciprocals. For ephemeral waters the calculation shall be based upon the nonzero flow intervals and modified by including a factor to adjust for the proportion of intervals with zero flow.

Harmonic Mean =
$$\frac{n}{\sum 1/x}$$

Modified Harmonic Mean = $\left[\frac{\sum_{i=1}^{N_i - N_i} \frac{1}{Qi}}{Nt - No}\right]^{-1} x \left[\frac{Nt - No}{Nt}\right]$
where, Qi = nonzero flow

Nt = total number of flow values No = number of zero flow values

(2) for all other narrative and numeric criteria, the minimum average four consecutive day flow which occurs with a frequency of once in three years (4Q3). Critical low-flow numeric values may be determined on an annual, a seasonal or a monthly basis, as appropriate, after due consideration of site-specific conditions.

C. Guaranteed Minimum Flow: On a case-by-case basis and upon consultation with the interstate stream commission, the commission may allow the use of a contractually guaranteed minimum streamflow in lieu of a critical low flow determined under Subsection B of this section. Should drought, litigation or any other reason interrupt or interfere with minimum flows under a guaranteed minimum flow contract for a period of at least thirty consecutive days, such permission, at the sole discretion of the commission, may then be revoked. Any minimum flow specified under such revoked permission shall be superseded by a critical low flow determined under Subsection B of this section. A public notice of the request for a guaranteed minimum flow shall be published in a newspaper of general circulation by the department at least 30 days prior to scheduled action by the commission. These water quality standards do not grant to the commission or any other entity the power to create, take away or modify property rights in water.

D. Mixing Zones: A limited mixing zone, contiguous to a point source wastewater discharge, may be allowed in any stream receiving such a discharge. Mixing zones serve as regions of initial dilution which allow the application of a dilution factor in calculations of effluent limitations. Effluent limitations shall be developed which will protect the most sensitive existing, designated or attainable use of the receiving water.

E. Mixing Zone Limitations: Wastewater mixing zones, in which the numeric standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC or 20.6.4.900 NMAC may be exceeded, shall be subject to the following limitations:

(1) Mixing zones are not allowed for discharges to publicly owned lakes, reservoirs, or playas; these effluents shall meet all applicable standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.

(2) The acute numeric standards, as set out in Paragraph (1) of Subsection J, <u>Subsection M</u>, Paragraph (1) of [<u>Subsection M</u>] <u>Subsection N</u>, and Paragraph (1) of [<u>Subsection N</u>] <u>Subsection O</u> of 20.6.4.900 NMAC, shall be attained at the point of discharge for any discharge to a surface water of the state with a designated fishery use.

(3) The general standards set out in Subsections A, B, C, D, E, G, H, J of 20.6.4.12 NMAC, and the provision set out in Subsection D of 20.6.4.13 NMAC are applicable within mixing zones.

(4) The areal extent and concentration isopleths of a particular mixing zone will depend on sitespecific conditions including, but not limited to, wastewater flow, receiving water critical low flow, outfall design, channel characteristics and climatic conditions and, if needed, shall be determined on a case-by-case basis. When the physical boundaries or other characteristics of a particular mixing zone must be known, the methods presented in Section 4.4.5, "Ambient-induced mixing," in "Technical support document for water quality-based toxics control" (March 1991, EPA/505/2-90-001) shall be used.

(5) All applicable water quality standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC, except Paragraph (1) of Subsection J, <u>acute aquatic life criteria</u> of Subsection M, Paragraph (1) of [Subsection M] Subsection N, and Paragraph (1) of [Subsection N] Subsection O of 20.6.4.900 NMAC, shall be attained at the boundaries of mixing zones. A continuous zone of passage through or around the mixing zone shall be maintained in which the water quality meets all applicable standards and allows the migration of aquatic life presently common in surface waters of the state with no effect on their populations.

F. **Multiple Uses**: When a classified water of the state has more than a single designated use, the applicable numeric standards shall be the most stringent of those established for such classified water.

G. Human health standards shall apply to those waters with a designated, existing or attainable fishery use. The human health standards for persistent toxic pollutants, as identified in Subsection M of Section 20.6.4.900 NMAC, shall also apply to all tributaries of waters with a designated, existing or attainable fishery use. [20.6.4.10 NMAC – Rp 20 NMAC 6.1.1103, 10-12-00; A, 10-11-02]

20.6.4.11 COMPLIANCE WITH WATER QUALITY STANDARDS:

A. Compliance with acute water quality standards shall be determined from the analytical results of a single grab sample. Acute standards shall not be exceeded.

B. Compliance with chronic water quality standards shall be determined from the arithmetic mean of the analytical results of samples collected using applicable protocols. Chronic standards shall not be exceeded more than once every three years.

C. Compliance with water quality standards for total ammonia shall be determined by performing the biomonitoring procedures set out in Subsections D and E of 20.6.4.13 NMAC, or by attainment of applicable ammonia standards set out in[Subsections M and N] Subsections N and O of 20.6.4.900 NMAC.

D. <u>Compliance with water quality standards for the protection of human health shall be determined</u> from the analytical results of representative grab samples, as defined in the Water Quality Management Plan. <u>Human health standards shall not be exceeded.</u>

 $[\mathbf{D}]$ **E**. The commission may establish a numeric water quality standard at a concentration that is below the minimum quantification level. In such cases, the water quality standard is enforceable at the minimum quantification level.

 $[\mathbf{E}]$ **F**. In determining compliance with standards for chromium an analysis which measures both the trivalent and hexavalent ions shall be used.

[F] <u>**G**</u>. For compliance with numeric standards dependent on hardness, hardness (as mg CaCO₃/L) shall be determined from a sample taken at the same time that the sample for the water contaminant is taken, or from available verifiable data sources including, but not limited to, the U.S. environmental protection agency's STORET water quality database.

[G] <u>H</u>. The hardness-dependent formulae for metals shall be valid only for hardness values of 0-400 mg/L. For values above 400 mg/L, the value for 400 mg/L shall apply.

[H] <u>I</u>. The total ammonia tables shall be valid only for temperatures of 0 to 30°C and for pH values of 6.5 to 9.0. For temperatures below 0°C, the total ammonia standards for 0°C shall apply; for temperatures above 30°C, the total ammonia standards for 30°C shall apply. For pH values below 6.5, the total ammonia standards for 6.5 shall apply; for pH values above 9.0, the total ammonia standards for 9.0 shall apply.

J. Compliance Schedules: It shall be the policy of the commission to allow on a case-by-case basis the inclusion of a schedule of compliance in a national pollutant discharge elimination system (NPDES) permit

New Mexico Register / Volume XIII, Number 18 / September 30, 2002

issued to an existing facility. Such schedule of compliance will be for the purpose of providing a permittee with adequate time to make treatment facility modifications necessary to comply with water quality based permit limitations determined to be necessary to implement new or revised water quality standards. Compliance schedules may be included in NPDES permits at the time of permit renewal or modification and shall be written to require compliance at the earliest practicable time. Compliance schedules shall also specify milestone dates so as to measure progress towards final project completion (e.g., design completion, construction start, construction completion, date of compliance).

[20.6.4.11 NMAC - Rp 20 NMAC 6.1.1104, 10-12-00; A, 10-11-02]

20.6.4.12 GENERAL STANDARDS: General standards are established to sustain and protect existing or attainable uses of surface waters of the state. These general standards apply to all surface waters of the state at all times, unless a specified standard is provided elsewhere in this part. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property. When changes in dissolved oxygen, temperature, dissolved solids, sediment or turbidity in a water of the state is attributable to natural causes or the reasonable operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting, numerical standards for temperature, dissolved solids content, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply. The foregoing provision does not include major reconstruction of storage dams or diversion dams except for emergency actions necessary to protect health and safety of the public, or discharges from municipal separate storm sewers.

A. Bottom Deposits: Surface waters of the state shall be free of water contaminants from other than natural causes that will settle and damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

B. Floating Solids, Oil and Grease: Surface waters of the state shall be free of oils, scum, grease and other floating materials resulting from other than natural causes that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

C. Color: Color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition nor shall color impair the use of the water by desirable aquatic life presently common in surface waters of the state.

D. Odor and Taste of Fish: Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish, or result in offensive odor arising in a surface water of the state or otherwise interfere with the reasonable use of the water.

E. Plant Nutrients: Plant nutrients from other than natural causes shall not be present in concentrations which will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state.

F. Toxic Pollutants:

(1) Surface waters of the state shall be free of toxic pollutants [attributable to discharges] from other than natural causes in amounts, concentrations or combinations which affect the propagation of fish or which are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, [or to livestock or other animals;] or which will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels which will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

(2) Pursuant to this section, the human health criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for human health not listed in 20.6.4.900 NMAC, the following provisions shall be applied in accordance with 20.6.4.10, 20.6.4.11 and 20.6.4.13 NMAC.

(a) The human health criterion shall be the recommended human health criterion for "consumption of organisms only" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act. In determining such criterion for a cancer-causing toxic pollutant, a cancer risk of 10⁻⁵ (one cancer per 100,000 exposed persons) shall be used.

(b) When a numeric criterion for the protection of human health has not been published by the U.S. environmental protection agency, a quantifiable criterion may be derived from data available in the U.S. environmental protection agency's Integrated Risk Information System (IRIS).

(3) Pursuant to this section, the chronic aquatic life standard shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no chronic standard listed in 20.6.4.900 NMAC, the following provisions shall be applied in sequential order in accordance with 20.6.4.10, 20.6.4.11 and 20.6.4.13 NMAC.

(a) <u>The chronic aquatic life criterion shall be the "freshwater criterion continuous</u> concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal <u>Clean Water Act</u>;

(b) If the U.S. environmental protection agency has not published a chronic aquatic life criterion, a geometric mean LC-50 value shall be calculated for the particular species, genus or group, which is representative of the form of life to be preserved, using the results of toxicological studies published in scientific journals.

(i) The chronic aquatic life criterion for a toxic pollutant which does not bioaccumulate shall be 10 percent of the calculated geometric mean LC-50 value; and

(ii) The chronic aquatic life criterion for a toxic pollutant which does bioaccumulate shall be: the calculated geometric mean LC-50 adjusted by a bioaccumulation factor for the particular species, genus or group representative of the form of life to be preserved, but when such bioaccumulation factor has not been published, the criterion shall be one percent of the calculated geometric mean LC-50 value.

(4) Pursuant to this section, the acute aquatic life criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no acute criterion listed in 20.6.4.900 NMAC, the acute aquatic life criterion shall be the "freshwater criterion maximum concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act.

(5) Within 90 days of the issuance of a final NPDES permit containing a numeric criterion selected or calculated pursuant to Paragraph 2, Paragraph 3 or Paragraph 4 of Subsection F of this section, the Department shall petition the Commission to adopt such criterion into these standards.

[except that the] The use of a piscicide registered under the Federal Insecticide, Fungicide, and (6) Rodenticide Act (FIFRA), 7 U.S.C. Section 136 et seq., and under the New Mexico Pesticide Control Act (NMPCA), Section 76-4-1 et seq. NMSA 1978 (1973), shall not be a violation of Subsection F of this section when such use has been approved by the commission. Any person seeking commission approval of the use of a piscicide shall file a written petition with the commission. The petition shall contain, at a minimum, the following information: (1) petitioner's name and address; (2) identity of the piscicide; (3) documentation of registration under FIFRA and NMPCA; (4) target and potential non-target species, including threatened or endangered species; (5) potential environmental consequences and protocols for limiting such impacts; (6) affected surface water of the state; (7) results of pre-treatment survey; (8) evaluation of available alternatives and justification for selecting piscicide use; (9) post-treatment assessment monitoring protocol; and (10) any other information required by the commission. The commission shall review the petition and require a public hearing in the locality affected by the proposed use in accordance with Adjudicatory Procedures, 20.1.3 NMAC. In addition to the public notice requirements in Adjudicatory Procedures, 20.1.3 NMAC, the petitioner shall provide written notice to (1) local political subdivisions; (2) local water planning entities; (3) local conservancy and irrigation districts; and (4) local media outlets, except that the petitioner shall only be required to publish notice in a newspaper of circulation in the locality affected by the proposed use. After a public hearing, the commission may grant the petition in whole or in part, may grant the petition subject to conditions, or may deny the petition. In granting any petition in whole or part or subject to conditions, the commission shall require the petitioner to implement post-treatment assessment monitoring. [Pursuant to this section, the chronic standard for the use to be protected shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant not listed in 20.6.4.900 NMAC, the following provisions shall be applied in numeric order in accordance with 20.6.4.10, 20.6.4.11 and 20.6.4.13 NMAC.

(1) The chronic standard shall be the "criterion continuous concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act; or

(2) Using results of toxicological studies published in scientific journals, a geometric mean LC 50 value shall be calculated for the particular species, genus or group which is representative of the form of life to be preserved. The chronic standard for a toxic pollutant which does not bioaccumulate shall be 10 percent of the calculated geometric mean LC 50 value; or

(3) The chronic standard for a toxic pollutant which does bioaccumulate shall be the standard calculated under Paragraph (2) of this subsection adjusted by a bioaccumulation factor for the particular species, genus or group representative of the particular form of life to be preserved. When such definitive information has not been published, the chronic standard for a bioaccumulating toxic pollutant shall be one percent of the calculated geometric mean LC 50 value.]

G. Radioactivity: The radioactivity of surface waters of the state shall be maintained at the lowest practical level and shall in no case exceed the standards set forth in the New Mexico Radiation Protection Regulations, 20.3.1.400 through 20.3.1.499 NMAC (5-3-95).

H. Pathogens: Surface waters of the state shall be virtually free of pathogens. In particular, surface waters of the state used for irrigation of table crops such as lettuce shall be virtually free of *Salmonella* and *Shigella* species.

I. **Temperature**: Maximum temperatures for each classified water of the state have been specified in 20.6.4.101 through 20.6.4.899 NMAC. However, the introduction of heat by other than natural causes shall not increase the temperature, as measured from above the point of introduction, by more than $2.7^{\circ}C$ (5°F) in a stream, or more than $1.7^{\circ}C$ (3°F) in a lake or reservoir. In no case will the introduction of heat be permitted when the maximum temperature specified for the reach (generally 20°C (68°F) for coldwater fisheries and 32.2°C (90°F) for warmwater fisheries) would thereby be exceeded. These temperature standards shall not apply to impoundments constructed offstream for the purpose of heat disposal. High water temperatures caused by unusually high ambient air temperatures are not violations of these standards.

J. **Turbidity**: Turbidity attributable to other than natural causes shall not reduce light transmission to the point that the normal growth, function, or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water.

K. Salinity: Where existing information is sufficient, numerical standards for TDS (or conductivity), chlorides and sulfates, have been adopted in 20.6.4.101 through 20.6.4.899 NMAC. The following standards apply at the downstream point of the reach in which they are set:

(1) For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin states and the federal government to support and implement the salinity policy and program outlined in the report "1999 Review, water quality standards for salinity, Colorado river system."

(2) Numeric criteria for salinity are established at three points in the Colorado river basin as follows: below Hoover dam, 723 mg/L; below Parker dam, 747 mg/L; and at Imperial dam, 879 mg/L.

(3) As a part of the program, objectives for New Mexico shall include the elimination of discharges of water containing solids in solution as a result of the use of water to control or convey fly ash from coal-fired electric generators, wherever practicable.

(4) In determining compliance with the numeric criteria hereby adopted, salinity (TDS) shall be determined by either the "calculation method" (sum of constituents) or the filterable residue method. Approved test procedures for these determinations are as set forth in 20.6.4.13 NMAC.

L. **Dissolved Gases**: Surface waters of the state shall be free of nitrogen and other dissolved gases at levels above 110 percent saturation when this supersaturation is attributable to municipal, industrial or other discharges.

[20.6.4.12 NMAC - Rp 20 NMAC 6.1.1105, 10-12-00; A, 10-11-02]

20.6.4.113 RIO GRANDE BASIN - The Santa Fe river and its tributaries from Cochiti reservoir upstream to the outfall of the Santa Fe wastewater treatment facility.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater fishery, secondary contact, and warmwater fishery.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 30°C (86°F), turbidity shall not exceed 50 NTU, and dissolved oxygen shall not be less than 4.0 mg/L. Dissolved oxygen shall not be less than 5.0 mg/L as a 24-hour average. Values used in the calculation of the 24-hour average for dissolved oxygen shall not exceed the dissolved oxygen saturation value. For a measured value above the dissolved oxygen saturation value, the dissolved oxygen saturation value will be used in calculating the 24-hour average. The dissolved oxygen saturation value shall be determined from the table set out in [Subsection O] Subsection P of 20.6.4.900 NMAC. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).
[20.6.4.113 NMAC – Rp 20 NMAC 6.1.2110, 10-12-00; A, 10-11-02]

20.6.4.900 STANDARDS APPLICABLE TO ATTAINABLE OR DESIGNATED USES UNLESS OTHERWISE SPECIFIED IN 20.6.4.101 THROUGH 20.6.4.899 NMAC.

A. Coldwater Fishery: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20°C (68°F), and pH shall be within the range of 6.6 to 8.8. The acute and chronic <u>aquatic life</u> standards set out in [Subsection J] subsections J and M of this section are applicable to this use. The total ammonia standards set out in [Subsection N] Subsection O of this section and the human health standards listed in Subsection M of this section are applicable to this use.

B. Domestic Water Supply: Surface waters of the state designated for use as domestic water supplies shall not contain substances in concentrations that create a lifetime cancer risk of more than one cancer per 100,000 exposed persons. The following numeric standards <u>and those standards listed under domestic water supply</u> in Subsection M of this section shall not be exceeded:

[(1)	dissolved antimony	0.006	mg/L
(2)	dissolved arsenic	0.05	-mg/L
(3)	dissolved barium	2.	-mg/L
(4)	dissolved beryllium	0.004	-mg/L
(5)	dissolved cadmium	0.005	-mg/L
(6)	dissolved chromium	0.1	mg/L
(7)	dissolved cyanide	0.2	mg/L
(8)	dissolved lead	0.05	— mg/L
(9)	total mercury	0.002	<u>-mg/L</u>]
[(10)	dissolved nickel	0.1	-mg/L]
[(11)	(1) dissolved nitrate (as N)	10.	mg/L
[(12)	dissolved selenium	0.05	— mg/L
(13)	dissolved thallium	0.002	-mg/L
(14)	dissolved uranium	-5.0	<u>mg/L</u>]
[(15)]	(<u>2</u>) radium-226 + radium-228	5.	pCi/L
[(16)]	(<u>3)</u> strontium-90	8	pCi/L
[(17)]	(<u>4)</u> tritium	20,000	pCi/L
			· · · ·

[(18)] (5) gross alpha (including radium-226, but excluding radon and uranium) 15 pCi/L

C. High Quality Coldwater Fishery: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20° C (68° F), pH shall be within the range of 6.6 to 8.8, [total organic carbon shall not exceed 7 mg/L,] turbidity shall not exceed 10 NTU (25 NTU in certain reaches where natural background prevents attainment of lower turbidity), and conductivity (at 25° C) shall not exceed a limit varying between 300 µmhos/cm and 1,500 µmhos/cm depending on the natural background in particular surface waters of the state (the intent of this standard is to prevent excessive increases in dissolved solids which would result in changes in community structure). The acute and chronic <u>aquatic life</u> standards set out in [Subsection J] subsection J and M of this section are applicable to this use. The total ammonia standards set out in [Subsection N] Subsection O of this section and the human health standards for pollutants listed in Subsection M of this section are applicable to this use.

D. Irrigation <u>and Irrigation Storage</u>: The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL. The following numeric standards <u>and those standards listed under irrigation in Subsection M of this section</u> shall not be exceeded:

		b beetion bi			
[(1)	dissolved aluminum	-5.0	mg/L		
(2)	dissolved arsenic	0.10	-mg/L		
(3)	dissolved boron	0.75	-mg/L		
(4)	dissolved cadmium	0.01	-mg/L		
(5)	dissolved chromium	0.10	-mg/L		
(6)	dissolved cobalt	0.05	-mg/L		
(7)	dissolved copper	-0.20	-mg/L		
(8)	dissolved lead	-5.0	-mg/L		
(9)	dissolved molybdenum	1.0	-mg/L]		
[(10)]	(1) dissolved selenium	0.13	mg/L		
[(11)	$\overline{(2)}$ dissolved selenium in presenc	e of >500 n	ng/L SO ₄	0.25	mg/L
[(12)	dissolved vanadium	0.1	<u> </u>		•
(13)	dissolved zinc	2.0	-mg/L]		

E. Limited Warmwater Fishery: Dissolved oxygen shall not be less than 5 mg/L, pH shall be within the range of 6.6 to 9.0, and on a case by case basis maximum temperatures may exceed 32.2°C. The acute and chronic aquatic life standards set out in [Subsection J] subsections J and M of this section are applicable to this

use. The total ammonia standards set out in [Subsection M] Subsection N of this section and the human health standards listed in Subsection M of this section are applicable to this use.

F. **Marginal Coldwater Fishery**: Dissolved oxygen shall not be less than 6 mg/L, on a case by case basis maximum temperatures may exceed 25°C and the pH may range from 6.6 to 9.0. The acute and chronic aquatic life standards set out in [Subsection J] subsections J and M of this section are applicable to this use. The total ammonia standards set out in [Subsection N] Subsection O of this section and the human health standards listed in Subsection M of this section are applicable to this use.

Primary Contact: The monthly geometric mean of fecal coliform bacteria shall not exceed G. 200/100 mL, no single sample shall exceed 400/100 mL and pH shall be within the range of 6.6 to 9.0.

Warmwater Fishery: Dissolved oxygen shall not be less than 5 mg/L, temperature shall not H. exceed 32.2°C (90°F), and pH shall be within the range of 6.6 to 9.0. The acute and chronic aquatic life standards set out in [Subsection J] subsections J and M of this section are applicable to this use. The total ammonia standards set out in [Subsection M] Subsection N of this section and the human health standards listed in Subsection M of this section are applicable to this use.

I. Fish culture, secondary contact, and municipal and industrial water supply and storage are also designated in particular classified waters of the state where these uses are actually being realized. However, no numeric standards apply uniquely to these uses. Water quality adequate for these uses is ensured by the general standards and numeric standards for bacterial quality, pH, and temperature which are established for all classified waters of the state listed in 20.6.4.101 through 20.6.4.899 NMAC.

J. The following schedule of [numeric standards and] equations for the determination of numeric standards for the substances listed and those standards listed in Subsection M for aquatic life shall apply to the subcategories of fisheries identified in this section

(1) Acute standards

[(a)	dissolved aluminum	750	<u>μg/L</u>
(b)	dissolved arsenic	340	μg/L
(c)	dissolved beryllium	130	μg/L
(d)	total mercury	2.4	μg/L
(e)	total recoverable selenium	20.0	$\frac{\mu g}{L}$
[(f)] ((a) dissolved silver e	(1.72[ln(hardness)]-6.6825)	μg/L
[(g)	cyanide, weak acid dissociable	22.0	µg/L
(h)	total chlordane	2.4	$-\mu g/L$]
		(1 128[ln(hardness)] 2 686	7 - 'B''

 $(e^{(1.128[\ln(hardness)]-3.6867)})$ of $\mu g/L$ The hardness-dependent [(i)] (b) dissolved cadmium formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute factor for cadmium is cf = 1.136672 - [(ln hardness)(0.041838)].

[(i)] (c)	dissolved chromium	e ^{(0.819[ln(hardness)]+2.5736)}	μg/L
[[]]] []]	dissolved copper	e ^{(0.9422[ln(hardness)]-1.7408)}	ισ/L

	uissoiveu coppei	0	- F
[(])] <u>(e)</u>	dissolved lead	$(e^{(1.273[\ln(hardness)]-1.46)})cf$	μ
4.1	1/1 11 11		1

⁴⁰⁾) cf $\mu g/L$ The hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute and chronic factor for lead is cf = 1.46203 - [(ln hardness)(0.145712)].

	$[(m)]$ (f) dissolved nickel $e^{(0.8460[\ln(hardness)]+2.253)}$ µg/L
	$[(n)]$ (g) dissolved zinc $e^{(0.8473[\ln(hardness)]+0.8618)} \mu g/L$
	[(0) total chlorine residual 19 µg/L]
(2)	Chronic standards
	[(a) dissolved aluminum 87.0 µg/L
	(b) dissolved arsenic 150 µg/L
	(c) dissolved beryllium 5.3 µg/L
	(d) total mercury $0.012 \ \mu g/L$
	(e) total recoverable selenium 5.0 µg/L
	(f) cvanide, weak acid dissociable 5.2 ug/L
	(g) total chlordane 0.0043 µg/L]
	$[(h)]$ (a) dissolved cadmium $(e^{(0.7852[\ln(hardness)]-[2.715])})cf \mu g/L$
ss-der	pendent formulae for cadmium must be multiplied by a conversion factor (cf) to be expresse

The hardness-dependent formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed dissolved values. The chronic factor for cadmium is cf = 1.101672 - [(ln hardness)(0.041838)]. The hardness-depe ed as

[(i)] <u>(b)</u>	dissolved chromium	$e^{(0.819[\ln(hardness)]+0.534)}$	μg/L
[(i)] (c)	dissolved copper	$e^{(0.8545[\ln(hardness)]-1.7428)}$	μg/L
[(k)] <u>(d)</u>	dissolved lead	$(e^{(1.273[\ln(hardness)]-4.705)})cf$	μg/L

The hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute and chronic factor for lead is cf = 1.46203 - [(ln hardness)(0.145712)].

[(])] <u>(e)</u>	dissolved nickel	$e^{(0.846[\ln(hardness)]+0.0554)}$	µg/L
[(m)] (f)	dissolved zinc	$e^{(0.8473[\ln(hardness)]+0.8699)}$	µg/L

)] <u>(1)</u>	dissolve	d zino	2	e(0.01/2	, [m(nure	11035)].0.0	()))
total	chlorine	recidu	ادر			1	1		[_]
total	emornie	restat	iui						-μ <u>6</u> /Ξ]
			~						4 . 4

[(n)

K. Livestock Watering: The following numeric standards <u>and those standards listed in Subsection</u> M for livestock watering shall not be exceeded:

[(1)	dissolved aluminum		— mg/L
(2)	dissolved arsenic	0.2	<u> mg/L</u>
(3)	dissolved boron	5.0	-mg/L
(4)	dissolved cadmium	0.05	-mg/L
(5)	dissolved chromium	1.0	-mg/L
(6)	dissolved cobalt	-1.0	-mg/L
(7)	dissolved copper	0.5	-mg/L
(8)	dissolved lead	0.1	-mg/L
(9)	total mercury	0.01	-mg/L
(10)	dissolved selenium	0.05	-mg/L
(11)	dissolved vanadium	0.1	-mg/L
(12)	dissolved zinc	25.0	-mg/L]
[(13)]	(<u>1</u>) radium-226 + radium-228	30.	0 pCi/L
[(14)]	(<u>2)</u> tritium	20,000	pCi/L
[(1/////	(2) total subscription (1 - 1) = (1 -	1 4 1	1

(15) (3) total gross alpha (including radium-226, but excluding radon and uranium) 15 pCi/L

L. Wildlife Habitat: Wildlife habitat should be free from any substances at concentrations that are toxic to or will adversely affect plants and animals that use these environments for feeding, drinking, habitat or propagation, or can bioaccumulate and impair the community of animals in a watershed or the ecological integrity of surface waters of the state. In the absence of site-specific information, and subject to the following paragraph, the [following] chronic numeric standards listed in Subsection M for wildlife habitat shall not be exceeded[÷].

[(1)	total mercury	0.77	ug/L
$\hat{\boldsymbol{\omega}}$	total recoverable selenium	5.0	Hg/L
	cvanide weak acid dissociable	5.0	μ <u>σ/L</u>
(\mathbf{a})	total chlorine residual	11	μg/L μg/L
(5)	total DDT and metabolites	0.001	μ <u>σ</u> /Ι
(0)	total DCDa	0.001	$-\mu_{5/1}$
(0)	- total FCD5	0.014	<u>-µg/j</u>
(7)			

The discharge of substances which bioaccumulate, in excess of levels [specified above] listed in Subsection M for wildlife habitat is allowed if, and only to the extent that, the substances are present in the intake waters which are diverted and utilized prior to discharge, and then only if the discharger utilizes best available treatment technology to reduce the amount of bioaccumulating substances which are discharged.

M. Numeric criteria

The following table sets forth the numeric criteria adopted by the commission to protect existing, designated and attainable uses. Additional criteria that are not compatible with this table and are found in Subsections A through L of this section.

Pollutant			Domestic		Livestock Wildlife		<u>Aquat</u>	ic Life	Human	Cancer
	total, unless indicated	<u>CAS</u> <u>Number</u>	<u>Water</u> <u>Supply</u> <u>µg/L</u>	<u>Irrigation</u> <u>µg/L</u>	<u>Watering</u> <u>µg/L</u>	<u>Habitat</u> <u>µg/L</u>	<u>Acute</u> μg/L	<u>Chronic</u> μg/L	<u>Health</u> μg/L	<u>Causing</u> <u>and/or</u> <u>Persistent</u>
1	Aluminum, dissolved	<u>7429-90-5</u>	_	<u>5,000</u>	<u>5,000</u>	_	<u>750</u>	<u>87</u>	_	_
2	Antimony, dissolved	<u>7440-36-0</u>	<u>6</u>	_	_	_	-	_	4,300	<u>P</u>
<u>3</u>	Arsenic, dissolved	<u>7440-38-2</u>	<u>50</u>	<u>100</u>	<u>200</u>	_	<u>340</u>	<u>150</u>	<u>24.2</u>	<u>C,P</u>
4	Barium, dissolved	<u>7440-39-3</u>	<u>2,000</u>	_	_	_	_	_		
<u>5</u>	Beryllium, dissolved	<u>7440-41-7</u>	<u>4</u>	_	_		<u>130</u>	<u>5.3</u>	_	
<u>6</u>	Boron, dissolved	<u>7440-42-8</u>	_	<u>750</u>	<u>5,000</u>	_				_
<u>7</u>	Cadmium, dissolved	7440-43-9	<u>5</u>	<u>10</u>	<u>50</u>	_	<u>see</u> 20.6.4.900.J	<u>see</u> 20.6.4.900.J	_	_
8	Chlorine residual	<u>7782-50-5</u>	_	-	_	<u>11</u>	<u>19</u>	<u>11</u>	_	_
<u>9</u>	Chromium, dissolved	<u>18540-29-9</u>	<u>100</u>	<u>100</u>	<u>1,000</u>	_	<u>see</u> 20.6.4.900.J	<u>see</u> 20.6.4.900.J	<u> </u>	<u> </u>
<u>10</u>	Cobalt, dissolved	<u>7440-48-4</u>	_	<u>50</u>	<u>1,000</u>	_	-	_	_	_
<u>11</u>	Copper, dissolved	<u>7440-50-8</u>	_	<u>200</u>	<u>500</u>	_	<u>see</u> 20.6.4.900.J	<u>see</u> 20.6.4.900.J	_	_
<u>12</u>	Cyanide, dissolved	<u>57-12-5</u>	<u>200</u>		_	_				_
<u>13</u>	Cyanide, weak acid dissociable	<u>57-12-5</u>	_		_	<u>5.2</u>	<u>22.0</u>	<u>5.2</u>	<u>220,000</u>	_
<u>14</u>	Lead, dissolved	<u>7439-92-1</u>	<u>50</u>	<u>5,000</u>	<u>100</u>		<u>see</u> 20.6.4.900.J	<u>see</u> 20.6.4.900.J		<u> </u>
<u>15</u>	<u>Mercury</u>	<u>7439-97-6</u>	2		<u>10</u>	0.77	<u>2.4</u>	<u>0.012</u>		_
<u>16</u>	Molybdenum, dissolved	<u>7439-98-7</u>	_	<u>1,000</u>	_	_				_
<u>17</u>	Nickel, dissolved	7440-02-0	<u>100</u>	<u> </u>	_	_	<u>see</u> 20.6.4.900.J	<u>see</u> 20.6.4.900.J	<u>4,600</u>	<u>P</u>
<u>18</u>	<u>Selenium, dissolved</u>	7782-49-2	<u>50</u>	<u>see</u> 20.6.4.900.D	<u>50</u>	<u> </u>	<u> </u>	<u> </u>	<u>11,000</u>	<u>P</u>
<u>19</u>	Selenium, total recoverable	7782-49-2			_	<u>5.0</u>	20.0	<u>5.0</u>		_
<u>20</u>	Silver, dissolved	7440-22-4	_				<u>see</u> 20.6.4.900.J			
21	Thallium, dissolved	7440-28-0	2			_			<u>6.3</u>	<u>P</u>
22	Uranium, dissolved	7440-61-1	5,000							

	Dollutont		Domestic		Livostook	Wildlife	<u>Aquat</u>	ic Life	Humon	Cancer
	total, unless indicated	<u>CAS</u> <u>Number</u>	<u>Water</u> <u>Supply</u> μg/L	<u>Irrigation</u> <u>µg/L</u>	<u>Watering</u> <u>µg/L</u>	Habitat <u>µg/L</u>	<u>Acute</u> μg/L	<u>Chronic</u> μg/L	<u>Health</u> <u>µg/L</u>	<u>Causing</u> <u>and/or</u> <u>Persistent</u>
23	Vanadium, dissolved	7440-62-2	_	<u>100</u>	<u>100</u>	_	_	_	-	_
<u>24</u>	Zinc, dissolved	<u>7440-66-6</u>		<u>2,000</u>	<u>25,000</u>		<u>see</u> 20.6.4.900.J	<u>see</u> 20.6.4.900.J	<u>69,000</u>	<u>P</u>
<u>25</u>	<u>Acenaphthene</u>	<u>83-32-9</u>	_	_	_		_	_	<u>2,700</u>	_
<u>26</u>	<u>Acrolein</u>	<u>107-02-8</u>	_	_	_	_	_	_	<u>780</u>	_
<u>27</u>	<u>Acrylonitrile</u>	<u>107-13-1</u>	_	_	_	_	_	_	<u>6.6</u>	<u>C</u>
<u>28</u>	Aldrin	<u>309-00-2</u>	_	_	-	_	<u>3.0</u>	_	<u>0.0014</u>	<u>C,P</u>
<u>29</u>	Anthracene	120-12-7	_	_	_	_	_	_	<u>110,000</u>	_
<u>30</u>	Benzene	<u>71-43-2</u>	_	_	_	_	_	_	<u>710</u>	<u>C</u>
<u>31</u>	Benzidine	<u>92-87-5</u>	_	_	-	_	-	_	<u>0.0054</u>	<u>C</u>
<u>32</u>	Benzo(a)anthracene	<u>56-55-3</u>	_	_		_	_	_	<u>0.49</u>	<u>C</u>
<u>33</u>	Benzo(a)pyrene	<u>50-32-8</u>	_	_	_	_	-	_	<u>0.49</u>	<u>C,P</u>
<u>34</u>	Benzo(b)fluoranthene	205-99-2	_	_	_	_	_	_	<u>0.49</u>	<u>C</u>
35	Benzo(k)fluoranthene	207-08-9	_	_	_	_	_	_	0.49	<u>C</u>
<u>36</u>	<u>alpha-BHC</u>	<u>319-84-6</u>	_	_	_	_	_	_	0.13	<u>C</u>
<u>37</u>	beta-BHC	319-85-7	_	_	_	_	_	_	0.46	<u>C</u>
38	Gamma-BHC (Lindane)	58-89-9	_	_	_	_	0.95	_	0.63	<u>C</u>
<u>39</u>	Bis(2-chloroethyl) ether	111-44-4	_	_	_	_	_	_	<u>14</u>	<u>C</u>
40	Bis(2-chloroisopropyl) ether	108-60-1	_	_	_	_	_	_	170,000	_
41	Bis(2-ethylhexyl) phthalate	117817	_	_	_	_	_	_	<u>59</u>	<u>C</u>
42	Bromoform	75-25-2	_	_	_	_	_	_	3600	<u>C</u>
43	Butylbenzyl phthalate	85-68-7	_	_	_	_	_	_	5,200	_
44	Carbon tetrachloride	56-23-5	_	_	_	_	_	_	44	C
45	Chlordane	57-74-9	_		_		2.4	0.0043	0.022	C,P
46	<u>Chlorobenzene</u>	108-90-7	_	_	_	_	_	_	21,000	_
47	Chlorodibromomethane	124-48-1			_			_	340	C
48	Chloroform	67-66-3	_		_	_		_	4,700	<u>C</u>
49	2-Chloronaphthalene	91-58-7			_			_	4,300	
50	2-Chlorophenol	95-57-8			_				400	
51	Chrysene	218-01-9	_		_	_		_	0.49	<u>C</u>

	Dollutont		Domestic		Livesteek	Wildlife	<u>Aquat</u>	ic Life	Uuman	Cancer
	total, unless indicated	<u>CAS</u> <u>Number</u>	<u>Water</u> <u>Supply</u> μg/L	<u>Irrigation</u> μg/L	<u>Watering</u> <u>µg/L</u>	<u>Habitat</u> <u>µg/L</u>	<u>Acute</u> μg/L	<u>Chronic</u> μg/L	<u>Human</u> <u>Health</u> <u>µg/L</u>	<u>Causing</u> <u>and/or</u> <u>Persistent</u>
<u>52</u>	4,4'-DDT and derivatives	<u>50-29-3</u>	_	_	_	<u>0.001</u>	<u>1.1</u>	0.001	0.0059	<u>C,P</u>
<u>53</u>	Dibenzo(a,h)anthracene	<u>53-70-3</u>	_	_	_	_	_	_	<u>0.49</u>	<u>C</u>
<u>54</u>	Dibutyl phthalate	<u>84-74-2</u>	_	_	_	-	-	_	12,000	_
<u>55</u>	<u>1,2-Dichlorobenzene</u>	<u>95-50-1</u>	_	_	_	_	_	_	17,000	_
<u>56</u>	1,3-Dichlorobenzene	<u>541-73-1</u>	_	_	_	_	_	_	2,600	_
<u>57</u>	<u>1,4-Dichlorobenzene</u>	<u>106-46-7</u>	_	_	_	_	_	_	<u>2,600</u>	_
<u>58</u>	3,3'-Dichlorobenzidine	<u>91-94-1</u>	_	_	_	_	_	_	<u>0.77</u>	<u>C</u>
<u>59</u>	Dichlorobromomethane	<u>75-27-4</u>	_	_	_	_	_	_	460	<u>C</u>
<u>60</u>	1,2-Dichloroethane	<u>107-06-2</u>	_	_	_	_	_	_	<u>990</u>	<u>C</u>
61	<u>1,1-Dichloroethylene</u>	<u>75-35-4</u>	_	_	_	_	_	_	<u>32</u>	<u>C</u>
<u>62</u>	2,4-Dichlorophenol	<u>120-83-2</u>	_	_	_	_	_	_	<u>790</u>	_
63	<u>1,2-Dichloropropane</u>	<u>78-87-5</u>	_	_	_	-	-	_	<u>390</u>	<u>C</u>
<u>64</u>	<u>1,3-Dichloropropene</u>	<u>542-75-6</u>	_	_	_	_	_	_	<u>1,700</u>	_
<u>65</u>	Dieldrin	60-57-1	_	_	_	_	0.24	0.056	0.0014	<u>C,P</u>
66	Diethyl phthalate	<u>84-66-2</u>	-	_	_	-	_	_	120,000	-
<u>67</u>	Dimethyl phthalate	<u>131-11-3</u>	_	_	_	_	_	_	2,900,000	_
<u>68</u>	2,4-Dimethylphenol	<u>105-67-9</u>	_	_	_	_	_	_	2,300	_
<u>69</u>	2,4-Dinitrophenol	<u>51-28-5</u>	_	_	_	_	_	_	14,000	_
70	2,4-Dinitrotoluene	<u>121-14-2</u>	_	_	_	_	_	_	<u>91</u>	<u>C</u>
71	2,3,7,8-TCDD Dioxin	<u>1746-01-6</u>	_	_	_	_	_	_	<u>1.4E-07</u>	<u>C,P</u>
72	1,2-Diphenylhydrazine	<u>122-66-7</u>	_	_	_	_	_	_	<u>5.4</u>	<u>C</u>
<u>73</u>	<u>alpha-Endosulfan</u>	<u>959-98-8</u>	_	_		_	<u>0.22</u>	<u>0.056</u>	<u>240</u>	
<u>74</u>	<u>beta-Endosulfan</u>	33213-65-9	_	_		_	<u>0.22</u>	<u>0.056</u>	<u>240</u>	
75	Endosulfan sulfate	<u>1031-07-8</u>	_	_	_	_	_	_	<u>240</u>	_
<u>76</u>	Endrin	<u>72-20-8</u>	_	_	_	_	<u>0.086</u>	0.036	<u>0.81</u>	_
78	Endrin aldehyde	7421-93-4	_	_	_	_		_	0.81	_
<u>79</u>	Ethylbenzene	100-41-4							29,000	
80	Fluoranthene	206-44-0	_	_	_	_		_	370	_
<u>81</u>	Fluorene	<u>86-73-7</u>		<u> </u>		_			14,000	
82	Heptachlor	76-44-8			_	_	0.52	0.0038	0.0021	<u>C</u>

	Pollutant		Domestic		Livestock	Wildlife	<u>Aquat</u>	ic Life	Human	Cancer
	total, unless indicated	<u>CAS</u> <u>Number</u>	<u>Water</u> <u>Supply</u> <u>µg/L</u>	<u>Irrigation</u> <u>µg/L</u>	<u>Watering</u> <u>µg/L</u>	<u>Habitat</u> <u>µg/L</u>	<u>Acute</u> μg/L	<u>Chronic</u> μg/L	<u>Health</u> <u>µg/L</u>	<u>Causing</u> <u>and/or</u> <u>Persistent</u>
<u>83</u>	Heptachlor epoxide	1024-57-3	_	_	_	_	0.52	0.0038	0.0011	<u>C</u>
<u>84</u>	<u>Hexachlorobenzene</u>	<u>118-74-1</u>	_	_	_	_	_	_	0.0077	<u>C,P</u>
<u>85</u>	Hexachlorobutadiene	<u>87-68-3</u>	_	_	_	-	_	_	<u>500</u>	<u>C</u>
<u>86</u>	Hexachlorocyclopentadiene	<u>77-47-4</u>	_	_	_	_	_	_	<u>17,000</u>	_
<u>87</u>	Hexachloroethane	<u>67-72-1</u>	_	_	_	_	_	_	<u>89</u>	<u>C</u>
<u>88</u>	Ideno(1,2,3-cd)pyrene	<u>193-39-5</u>	_	_	_	-	_	_	<u>0.49</u>	<u>C</u>
<u>89</u>	Isophorone	<u>78-59-1</u>	_	_	_	_	_	_	26,000	<u>C</u>
<u>90</u>	Methyl bromide	<u>74-83-9</u>	_	_	_	_	_	_	4000	_
<u>91</u>	2-Methyl-4,6-dinitrophenol	<u>534-52-1</u>	_	_	_	-	_	_	<u>765</u>	_
<u>92</u>	Methylene chloride	<u>75-09-2</u>	_	_	_	_	_	_	<u>16,000</u>	<u>C</u>
<u>93</u>	Nitrobenzene	<u>98-95-3</u>	_	_	_	_	_	_	<u>1,900</u>	_
<u>94</u>	N-Nitrosodimethylamine	<u>62-75-9</u>	_	_	_	_	_	_	<u>81</u>	<u>C</u>
<u>95</u>	N-Nitrosodi-n-propylamine	<u>621-64-7</u>	_	_	_	_	_	_	<u>14</u>	<u>C</u>
<u>96</u>	N-Nitrosodiphenylamine	<u>86-30-6</u>	_	_	_	_	_	_	<u>160</u>	<u>C</u>
<u>97</u>	<u>PCBs</u>	<u>1336-36-3</u>	_	_	_	<u>0.014</u>	_	<u>0.014</u>	<u>0.0017</u>	<u>C,P</u>
<u>98</u>	Pentachlorophenol	<u>87-86-5</u>	_	_	_	_	<u>19</u>	<u>15</u>	<u>82</u>	<u>C</u>
<u>99</u>	Phenol	<u>108-95-2</u>	_	_	_	_	_	_	4,600,000	_
100	<u>Pyrene</u>	<u>129-00-0</u>	-	_	_	-	_	_	<u>11,000</u>	-
101	1,1,2,2-Tetrachloroethane	<u>79-34-5</u>	_	_	_	_	_	_	<u>110</u>	<u>C</u>
102	Tetrachloroethylene	<u>127-18-4</u>	_	_	_	_	_	_	88.5	<u>C,P</u>
103	Toluene	<u>108-88-3</u>	_	_	_	-	_	_	200,000	_
104	<u>Toxaphene</u>	8001-35-2	_	_	_	_	<u>0.73</u>	0.0002	<u>0.0075</u>	<u>C</u>
105	1,2-Trans-dichloroethylene	<u>156-60-5</u>	_	_	_	_	_	_	140,000	_
106	1,2,4-Trichlorobenzene	<u>120-82-1</u>	_	_	_	-	_	_	<u>940</u>	_
107	1,1,2-Trichloroethane	<u>79-00-5</u>			_				420	<u>C</u>
108	Trichloroethylene	<u>79-01-6</u>	_		_	_			<u>810</u>	<u>C</u>
109	2,4,6-Trichlorophenol	88-06-2	_		_			_	<u>65</u>	<u>C</u>
110	Vinyl chloride	75-01-4		_	_		_		5,250	C

[H] N. Total Ammonia (mg/L as N), Warmwater Fisheries:

 $(\overline{1})$ acute standards

	(-)	acare sta									
						pН					
	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	29	26	23	19	14	10	6.6	3.7	2.1	1.2	0.70
1	28	26	23	19	14	9.9	6.5	3.7	2.1	1.2	0.70
2	28	26	22	18	14	9.7	6.4	3.6	2.1	1.2	0.69
3	28	25	22	18	14	9.6	6.3	3.6	2.0	1.2	0.69
4	27	25	22	18	14	9.5	6.2	3.5	2.0	1.2	0.69
5	27	25	22	18	13	9.4	6.1	3.5	2.0	1.2	0.68
6	27	24	21	18	13	9.3	6.1	3.5	2.0	1.1	0.68
7	26	24	21	17	13	9.2	6.0	3.4	2.0	1.1	0.68
8	26	24	21	17	13	9.1	6.0	3.4	1.9	1.1	0.68
9	26	24	21	17	13	9.0	5.9	3.4	1.9	1.1	0.68
10	25	23	21	17	13	8.9	5.9	3.3	1.9	1.1	0.68
11	25	23	20	17	13	8.9	5.8	3.3	1.9	1.1	0.68
12	25	23	20	17	13	8.8	5.8	3.3	1.9	1.1	0.69
13	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.69
14	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.70
15	24	23	20	16	12	8.6	5.7	3.3	1.9	1.1	0.70
16	24	22	20	16	12	8.6	5.7	3.3	1.9	1.1	0.71
17	24	22	20	16	12	8.5	5.6	3.2	1.9	1.1	0.72
18	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.73
19	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.74
20	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.75
21	24	22	19	16	12	8.4	5.6	3.2	1.9	1.2	0.77
22	24	22	19	16	12	8.4	5.6	3.3	1.9	1.2	0.78
23	24	22	19	16	12	8.4	5.6	3.3	1.9	1.2	0.80
24	24	22	19	16	12	8.4	5.6	3.3	2.0	1.2	0.81
25	24	22	19	16	12	8.4	5.6	3.3	2.0	1.2	0.83
26	22	20	18	15	11	7.9	5.2	3.1	1.9	1.2	0.80
27	20	19	17	14	10	1.5	4.9	2.9	1.8	1.1	0.76
28	19	18	15	15	9./	6.9	4.0	2.1	1./	1.1	0.73
29	18	10	14	12	9.1	0.4	4.5	2.6	1.0	1.0	0.70
30	1/	15	13	11	8.5	0.0	4.1	2.4	1.5	0.97	0.68

(2) chronic standards

pН

_	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	2.5	2.5	2.5	25	25	23	15	0.84	0.48	0.28	0.16
ľ	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.83	0.47	0.20	0.16
2	2.4	2.4	2.4	2.4	2.4	2.2	1.5	0.82	0.47	0.27	0.16
3	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.81	0.46	0.27	0.16
4	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.80	0.46	0.27	0.16
5	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.80	0.45	0.26	0.16
6	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.79	0.45	0.26	0.16
7	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.78	0.45	0.26	0.16
8	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.77	0.44	0.26	0.15
9	2.2	2.2	2.2	2.2	2.2	2.1	1.3	0.77	0.44	0.26	0.16
10	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
11	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
12	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.44	0.26	0.16
13	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.43	0.26	0.16
14	2.1	2.1	2.1	2.1	2.2	2.0	1.3	0.75	0.43	0.26	0.16
15	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
16	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
17	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.43	0.26	0.16
18	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.43	0.26	0.17
19	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.44	0.26	0.17
20	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.44	0.27	0.17
21	1.9	1.9	1.9	1.9	1.9	1.8	1.2	0.69	0.41	0.25	0.16
22	1.8	1.8	1.8	1.8	1.8	1.7	1.1	0.65	0.38	0.24	0.15
23	1.7	1.7	1.7	1.7	1.7	1.6	1.0	0.60	0.36	0.22	0.15
24	1.6	1.6	1.6	1.6	1.6	1.5	0.97	0.57	0.34	0.21	0.14
25	1.4	1.4	1.5	1.5	1.5	1.4	0.91	0.53	0.32	0.20	0.13
26	1.3	1.3	1.4	1.4	1.4	1.3	0.85	0.50	0.30	0.19	0.13
27	1.3	1.3	1.3	1.3	1.3	1.2	0.79	0.47	0.28	0.18	0.12
28	1.2	1.2	1.2	1.2	1.2	1.1	0.74	0.44	0.27	0.17	0.12
29	1.1	1.1	1.1	1.1	1.1	1.0	0.70	0.41	0.25	0.16	0.11
30	1.0	1.0	1.0	1.0	1.0	0.97	0.65	0.39	0.24	0.16	0.11

Temperature °C

Temperature °C

	(1)	acute sta	iiuui u5			pН					
	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	29	26	23	19	14	10	6.6	3.7	2.1	1.2	0.70
1	28	26	23	19	14	9.9	6.5	3.7	2.1	1.2	0.70
2	28	26	22	18	14	9.7	6.4	3.6	2.1	1.2	0.69
3	28	25	22	18	14	9.6	6.3	3.6	2.0	1.2	0.69
4	27	25	22	18	14	9.5	6.2	3.5	2.0	1.2	0.69
5	27	25	22	18	13	9.4	6.1	3.5	2.0	1.2	0.68
6	27	24	21	18	13	9.3	6.1	3.5	2.0	1.1	0.68
7	26	24	21	17	13	9.2	6.0	3.4	2.0	1.1	0.68
8	26	24	21	17	13	9.1	6.0	3.4	1.9	1.1	0.68
9	26	24	21	17	13	9.0	5.9	3.4	1.9	1.1	0.68
10	25	23	21	17	13	8.9	5.9	3.3	1.9	1.1	0.68
11	25	23	20	17	13	8.9	5.8	3.3	1.9	1.1	0.68
12	25	23	20	17	13	8.8	5.8	3.3	1.9	1.1	0.69
13	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.69
14	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.70
15	24	23	20	16	12	8.6	5.7	3.3	1.9	1.1	0.70
16	24	22	20	16	12	8.6	5.7	3.3	1.9	1.1	0.71
17	24	22	20	16	12	8.5	5.6	3.2	1.9	1.1	0.72
18	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.73
19	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.74
20	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.75
21	22	20	18	15	11	7.9	5.2	3.0	1.8	1.1	0.71
22	21	19	17	14	10	7.3	4.9	2.8	1.7	1.0	0.68
23	19	18	15	13	9.7	6.8	4.5	2.7	1.6	0.98	0.65
24	18	16	14	12	9.0	6.4	4.2	2.5	1.5	0.93	0.62
25	17	15	13	11	8.4	6.0	4.0	2.3	1.4	0.88	0.59
26	16	14	13	10	7.9	5.6	3.7	2.2	1.3	0.84	0.56
27	14	13	12	9.6	7.3	5.2	3.5	2.1	1.2	0.79	0.54
28	13	12	11	9.0	6.9	4.9	3.3	1.9	1.2	0.76	0.52
29	13	12	10	8.4	6.4	4.6	3.1	1.8	1.1	0.72	0.50
30	12	11	10	7.8	6.0	4.3	2.9	1.7	1.1	0.69	0.48

[N] O. Total Ammonia (mg/L as N), Coldwater Fisheries: (1) acute standards

(2) chronic standards

						pН					
	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.84	0.48	0.28	0.16
1	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.83	0.47	0.27	0.16
2	2.4	2.4	2.4	2.4	2.4	2.2	1.5	0.82	0.47	0.27	0.16
3	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.81	0.46	0.27	0.16
4	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.80	0.46	0.27	0.16
5	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.80	0.45	0.26	0.16
6	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.79	0.45	0.26	0.16
7	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.78	0.45	0.26	0.16
8	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.77	0.44	0.26	0.15
9	2.2	2.2	2.2	2.2	2.2	2.1	1.3	0.77	0.44	0.26	0.16
10	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
11	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
12	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.44	0.26	0.16
13	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.43	0.26	0.16
14	2.1	2.1	2.1	2.1	2.2	2.0	1.3	0.75	0.43	0.26	0.16
15	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
16	2.0	2.0	2.0	2.0	2.0	1.8	1.2	0.69	0.40	0.24	0.15
17	1.8	1.8	1.8	1.8	1.8	1.7	1.1	0.64	0.38	0.23	0.14
18	1.7	1.7	1.7	1.7	1.7	1.6	1.0	0.60	0.35	0.21	0.14
19	1.6	1.6	1.6	1.6	1.6	1.5	0.97	0.56	0.33	0.20	0.13
20	1.5	1.5	1.5	1.5	1.5	1.4	0.90	0.52	0.31	0.19	0.12
21	1.4	1.4	1.4	1.4	1.4	1.3	0.84	0.49	0.29	0.18	0.12
22	1.3	1.3	1.3	1.3	1.3	1.2	0.79	0.46	0.27	0.17	0.11
23	1.2	1.2	1.2	1.2	1.2	1.1	0.73	0.43	0.26	0.16	0.10
24	1.1	1.1	1.1	1.1	1.1	1.0	0.69	0.40	0.24	0.15	0.10
25	1.0	1.0	1.0	1.0	1.0	0.96	0.64	0.38	0.23	0.14	0.095
26	0.95	0.95	0.96	0.96	0.97	0.9	0.60	0.35	0.21	0.13	0.091
27	0.89	0.89	0.89	0.90	0.91	0.84	0.50	0.33	0.20	0.13	0.08/
28	0.85	0.85	0.85	0.84	0.85	0.79	0.55	0.51	0.19	0.12	0.084
29	0.77	0.78	0.78	0.78	0.79	0.73	0.49	0.29	0.18	0.12	0.080
30	0.72	0.72	0.75	0.75	0.74	0.09	0.40	0.28	0.17	0.11	0.077

Temperature °C

Temperature °C

[**O**] **<u>P</u>. Dissolved oxygen saturation based on temperature and elevation.**

Elevation (feet)

	0	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500	10,000
0	14.6	14.3	14.1	13.8	13.6	13.3	13.1	12.8	12.6	12.3	12.1	11.9	11.6	11.4	11.2	11.0	10.8	10.6	10.3	10.1	9.9
1	14.2	13.9	13.7	13.4	13.2	12.9	12.7	12.5	12.2	12.0	11.8	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7
2	13.8	13.6	13.3	13.1	12.8	12.6	12.4	12.1	11.9	11.7	11.5	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4
3	13.4	13.2	13.0	12.7	12.5	12.3	12.0	11.8	11.6	11.4	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3	9.1
4	13.1	12.8	12.6	12.4	12.2	11.9	11.7	11.5	11.3	11.1	10.9	10.7	10.4	10.2	10.0	9.8	9.7	9.5	9.3	9.1	8.9
5	12.7	12.5	12.3	12.1	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4	9.2	9.0	8.9	8.7
6	12.4	12.2	12.0	11.8	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.4	9.2	9.0	8.8	8.6	8.5
7	12.1	11.9	11.7	11.5	11.3	11.1	10.8	10.6	10.4	10.2	10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.4	8.2
8	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4	9.3	9.1	8.9	8.7	8.6	8.4	8.2	8.0
9	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.0	8.9	8.7	8.5	8.3	8.2	8.0	7.8
10	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.4	9.2	9.0	8.8	8.7	8.5	8.3	8.1	8.0	7.8	7.7
11	11.0	10.8	10.6	10.4	10.2	10.0	9.9	9.7	9.5	9.3	9.1	9.0	8.8	8.6	8.5	8.3	8.1	8.0	7.8	7.6	7.5
12	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.5	9.3	9.1	8.9	8.8	8.6	8.4	8.3	8.1	7.9	7.8	7.6	7.5	7.3
13	10.5	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.1	8.9	8.7	8.6	8.4	8.2	8.1	7.9	7.8	7.6	7.5	7.3	7.2
14	10.3	10.1	9.9	9.7	9.6	9.4	9.2	9.0	8.9	8.7	8.5	8.4	8.2	8.1	7.9	7.7	7.6	7.4	7.3	7.1	7.0
15	10.1	9.9	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.4	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8
16	9.8	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.3	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7
17	9.6	9.5	9.3	9.1	9.0	8.8	8.6	8.5	8.3	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7	6.6
18	9.4	9.3	9.1	8.9	8.8	8.6	8.5	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.3	7.1	7.0	6.8	6.7	6.6	6.4
19	9.3	9.1	8.9	8.8	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3
20	9.1	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2
21	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.0
22	8.7	8.6	8.4	8.2	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9
23	8.6	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8
24	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8	5.7
25	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6
26	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6	5.5
27	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.9	5.7	5.6	5.5	5.4
28	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.2	6.1	6.0	5.9	5.8	5.6	5.5	5.4	5.3
29	7.7	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.2	6.1	6.0	5.9	5.8	5.7	5.5	5.4	5.3	5.2
30	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.3	6.1	6.0	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1

[20.6.4.900 NMAC - Rp 20 NMAC 6.1.3100, 10-12-00; A, 10-11-02]