

**STATE OF NEW MEXICO  
BEFORE THE WATER QUALITY CONTROL COMMISSION**



**In the Matter of:**

**PROPOSED AMENDMENTS TO  
*STANDARDS FOR INTERSTATE  
AND INTRASTATE WATERS,*  
20.6.4 NMAC**

**No. WQCC 14-05 (R)**

**NOTICE OF CHANGES TO NEW MEXICO  
ENVIRONMENT DEPARTMENT'S PETITION**

The New Mexico Environment Department (NMED or "Department") Surface Water Quality Bureau (SWQB) filed a petition with the Water Quality Control Commission (WQCC or "Commission") on proposed amendments to 20.6.4 NMAC, along with a request for a rulemaking hearing, on June 25, 2014. On July 10, 2014, the Department presented the petition and hearing request to the WQCC and a hearing was set and hearing officer appointed. On October 20, 2014, the Department filed an amended petition. The amended petition revised the proposed language in principally two topical areas, the applicability of the aluminum criteria (20.6.4.900.I(1) and (2) NMAC), and the latest version of the Colorado River Basin Salinity Control Forum report (20.6.4.901.H NMAC).

Additional changes to the petition in the Departments' Notice of Intent to Present Technical Testimony (NOI), filed on December 12, 2014, were forecast based on erroneous or updated information and due to ongoing discussions with other parties. Throughout the last six months the SWQB has met with Amigos Bravos, the U.S. Environmental Protection Agency (EPA), Los Alamos National Laboratory, the New Mexico Department of Game and Fish, the

San Juan Water Commission, Freeport McMoRan, Chevron Mining, the New Mexico Municipal Environmental Quality Association and Peabody Energy to resolve issues related to the Department's proposals and proposed amendments. These discussions resulted in significant changes to Sections 10 (Temporary Standards) and 16 (Piscicide Provision). The changes are made to address party comments and concerns, and all changes are made in legislative format for ready identification of change. The attached petition reflects the most current and comprehensive petition of the Department and replaces the originally filed version and amended petition in all ways except the statements of basis have been excluded. *See Attachment A.* Descriptions of and reasons for the changes needed since the petition, amended petition and NOI were filed are explained below.

#### **Changes to the Petition in 20.6.4.10.F NMAC ("Subsection F")**

The SWQB proposes a new Subsection F under which a temporary criterion may be adopted for a limited time as justified by the petitioner and approved by the WQCC and the EPA. The SWQB determined further changes to the petition were necessary; most significantly the addition of language consistent with the language just adopted by the EPA in its Water Quality Standards Regulatory Clarifications rule. 40 CFR Part 131. The EPA rule is cited in Subparagraph F(1) so petitions reflect the applicable federal requirements. Likewise, EPA's rule allows that, in addition to the factors under 40 CFR § 131.10(g)(1)-(6), a temporary standard may be justified due to:

...a time limited exceedance of a criterion when removing a dam or during significant wetlands, lake or stream reconfiguration/restoration efforts....States and authorized tribes may only use this factor to justify the time necessary to remove the dam or the length of time in which wetland, lake, or stream restoration activities are actively on-going...

80 Fed. Reg. 51037 (August 21, 2015); 40 CFR § 131.14(b)(2)(i)(A)(2). Therefore, this factor is proposed to be added in Subparagraph 10.F(1)(a): "...or implementation of actions necessary to facilitate restoration such as through dam removal or other significant wetland or water body-reconfiguration activities..."

Paragraph (4) is added to clarify factors specific to the implementation of the temporary standard in aspects of Clean Water Act programs as authorized by the Department or the EPA.

Additional changes are made to clarify that only one work plan is necessary, and redundant language is removed. The work plan requirements from Paragraphs (5) and (6) are combined into Paragraph (5) and paragraphs are renumbered and cited accordingly. A written progress report is required for subsequent reviews by the Commission and added to the renumbered Paragraph (8). The word "department" is corrected to "commission" in renumbered Paragraph (10) to reflect that only the Commission, not the Department, has the authority to extend a temporary standard. Minor corrections are necessary to follow the format for publication in the New Mexico Administrative Code.

#### **Changes to the Petition in 20.6.4.12 NMAC**

The term "shall be" is changed to "is" to reflect the active voice in proposed Subsection 20.6.4.12.H NMAC.

#### **Changes to the Petition in 20.6.4.16 NMAC ("Section 16")**

Changes are proposed in Section 16 to streamline and update the WQCC's review of piscicide use.

First, the notification language previously in Subsection C of 20.6.4.16 NMAC is recommended to be moved to Subsection A, and a new Paragraph (9) added, requiring the petitioner provide notice to local entities and the public before the piscicide application is

reviewed by the Commission. This paragraph also adds a 30-day public comment period which would occur before the petition is submitted for SWQB and WQCC review, and specifies what information is required in the public notice. A new Paragraph (10) is added to Subsection A so that public comments and petitioner responses are filed with the petition.

A new Subsection C is inserted to detail what information the WQCC considers in its decision whether to hold a public hearing, and specifies that the WQCC shall notify the petitioner and commenters of its decision on whether to hold a hearing, and the reasons for that decision. With the addition of the new Subsection C, the Subsections are reordered accordingly. Subsection D is changed to reflect that if a hearing is held due to substantial public interest, the petitioner must give notice to those listed in Subsection A, and to those who commented, at least 30 days prior to the hearing.

In summary, the changes to the petition in Section 16, Subsections A and D, and the addition of Subsection C are: 1) local entities are informed about proposed petitions and piscicide use; 2) public input is solicited from affected areas before a petition is submitted; and, 3) the Commission is provided with information needed as a basis on whether or not to hold a public hearing or meeting for a piscicide petition review. The proposed changes add a 30-day public comment period at the beginning of the process but do not affect the timeline for review by the Department or the Commission. In cases where a public hearing is held, the petitioner would be required to give notice two times.

#### **Changes to the Petition in 20.6.4.97 NMAC**

A typographical error is corrected in the segment description for Chino Mines property Subwatershed Drainage A.

**Changes to the Petition in 20.6.4.804 and 807 NMAC (“Section 804” and “Section 807”)**

The words “below” and “above” are replaced with the hydrologic terms “downstream of” and “upstream of”, respectively, in the segment descriptions for Section 804 and proposed Section 807, to use language uniform with changes proposed in other segment descriptions.

For the foregoing reasons, the Department notifies the WQCC and the other parties of the filing of the Department’s petition, which reflects the most current and comprehensive petition of the Department and replaces the originally filed version and amended petition in all ways except the statements of basis have been excluded.

Respectfully submitted, this the 4th day of September, 2015.

**NEW MEXICO ENVIRONMENT DEPARTMENT**



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## CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing *Notice of Changes to New Mexico Environment Department's Petition* was served on the following parties on this the 4<sup>th</sup> day of September, 2015, via the stated delivery methods below:

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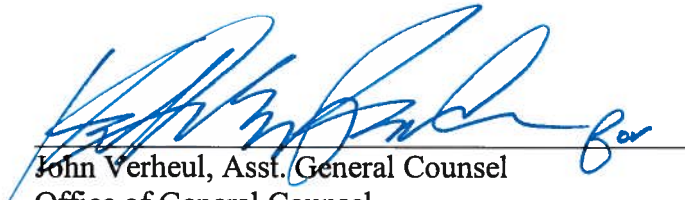
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11 AND INTRASTATE WATERS, )  
12 20.6.4 NMAC )  
13 )  
14 \_\_\_\_\_ )

No. WQCC 14-05 (R)

15  
16 New Mexico Environment Department's Second Revised Petition

17 Proposed amendments are indicated in legislative format as shown below. New language  
18 is underlined and deleted language is struck-through. Changes to the proposals in Sections 10,  
19 12, 16, 97, 804 and 807 of 20.6.4 NMAC since the Department's previous petition amendments  
20 and pre-filed testimony are shown shaded in gray.  
21

22 20.6.4.7 DEFINITIONS: Terms defined in the New Mexico Water Quality Act, but not  
23 defined in this part will have the meaning given in the Water Quality Act.

24 A. Terms beginning with numerals or the letter "A," and abbreviations for  
25 units.

26 (1) "4T3 temperature" means the temperature not to be exceeded for four or  
27 more consecutive hours in a 24-hour period on more than three consecutive days.

28 (2) "6T3 temperature" means the temperature not to be exceeded for six or more  
29 consecutive hours in a 24-hour period on more than three consecutive days.

30 (3) Abbreviations used to indicate units are defined as follows:

31 (a) "cfu/100 mL" means colony-forming units per 100 milliliters. The  
32 results for *E. coli* may be reported as either cfu (colony forming units) or the most probable  
33 number (MPN), depending on the analytical method used.  
34

35 20.6.4.7.A(3)(b) NMAC through 20.6.4.7.A(3)(f) NMAC – No changes proposed.  
36

37 (g) "MPN" means most probable number per 100 milliliters.

38 (gh) "NTU" means nephelometric turbidity unit;

39 (hi) "pCi/L" means picocuries per liter.

40 (j) "pH" means the measure of the acidity or alkalinity and is expressed in  
41 standard units (su).  
42

43 20.6.4.7.A(4) NMAC through 20.6.4.7.B(4) NMAC – No changes proposed.  
44

45 C. Terms beginning with the letter "C".

(1) “CAS number” means an assigned number by chemical abstract service (CAS) to identify a substance. CAS numbers index information published in chemical abstracts by the American chemical society.

(2) “Chronic toxicity” means toxicity involving a stimulus that lingers or continues for a relatively long period relative to the life span of an organism. Chronic effects include, but are not limited to, lethality, growth impairment, behavioral modifications, disease and reduced reproduction.

(3) “Classified water of the state” means a surface water of the state, or reach of a surface water of the state, for which the commission has adopted a segment description and has designated a use or uses and applicable water quality criteria in 20.6.4.101 through 20.6.4.899 NMAC.

(4) “Closed basin” is a basin where topography prevents the surface outflow of water and water escapes by evapotranspiration or percolation.

(45) “Coldwater” in reference to an aquatic life use means a surface water of the state where the water temperature and other characteristics are suitable for the support or propagation or both of coldwater aquatic life.

(56) “Coolwater” in reference to an aquatic life use means the water temperature and other characteristics are suitable for the support or propagation of aquatic life whose physiological tolerances are intermediate between and may overlap those of warm and coldwater aquatic life.

(67) “Commission” means the New Mexico water quality control commission.

(78) “Criteria” are elements of state water quality standards, expressed as constituent concentrations, levels or narrative statements, representing a quality of water that supports a use. When criteria are met, water quality will protect the designated use.

#### 20.6.4.7.D NMAC – 20.6.4.7.H (2) NMAC No changes proposed.

#### I. Terms beginning with the letter “I”.

(1) “Industrial water supply” means the use or storage of water by a facility for process operations unless the water is supplied by a public water system. Industrial water supply does not include irrigation or other agricultural uses.

(2) “Intermittent” when used to describe a surface water of the state means the water body contains water for extended periods only at certain times of the year, such as when it receives seasonal flow from springs or melting snow.

(3) “Interstate waters” means all surface waters of the state that cross or form a part of the border between states.

(4) “Intrastate waters” means all surface waters of the state that are not interstate waters.

(5) “Irrigation” or “~~irrigation storage~~” means application of water to land areas to supply the water needs of beneficial plants.

(6) “Irrigation storage” means storage of water to supply the needs of beneficial plants.

**J. Terms beginning with the letter “J”. [RESERVED]**

**K. Terms beginning with the letter “K”. [RESERVED]**

**20.6.4.7.L NMAC through 20.6.4.W(5) NMAC- No changes proposed.**

**X. Terms beginning with the letters “X” through “Z”. [RESERVED]**

[20.6.4.7 NMAC - Rp 20 NMAC 6.1.1007, 10-12-00; A, 7-19-01; A, 05-23-05; A, 07-17-05; A, 08-01-07; A, 12-01-10; A, 01-14-11, A, XX-XX-XX]

**20.6.4.8 NMAC – 20.6.4.9 NMAC – No changes proposed**

**20.6.4.10 REVIEW OF STANDARDS; NEED FOR ADDITIONAL STUDIES:**

**A.** Section 303(c)(1) of the federal Clean Water Act requires that the state hold public hearings at least once every three years for the purpose of reviewing water quality standards and proposing, as appropriate, necessary revisions to water quality standards.

**20.6.4.10.B NMAC – 20.6.4.10.E NMAC – No changes proposed**

**F. Temporary Standards.**

**(1)** Any person may petition the commission to adopt a temporary standard applicable to all or part of a surface water of the state as provided for in this section and applicable Subsections in 40 CFR Part 131.14. The commission may adopt a proposed temporary standard if the petitioner demonstrates that:

**(a)** attainment of the associated designated use may not be feasible in the short term due to one or more of the factors listed in 40 CFR 131.10(g), or due to the implementation of actions necessary to facilitate restoration such as through dam removal or other significant wetland or water body reconfiguration activities as demonstrated by the petition and supporting work plan requirements in paragraphs (4), (5) and (6) below;

**(b)** the proposed temporary standard represents the highest degree of protection feasible in the short term, limits the further degradation of water quality to the minimum necessary to achieve the original standard by the expiration date of the temporary standard, and adoption will not cause the further impairment or loss of an existing use;

**(c)** for point sources, existing or proposed discharge control technologies will comply with applicable technology-based limitations and feasible technological controls and other management alternatives, such as a pollution prevention program; and

**(d)** for restoration activities, nonpoint source or other control technologies shall limit downstream impacts, and if applicable, existing or proposed discharge control technologies shall be in place consistent with Subparagraph (c).

**(2)** A temporary standard shall apply to specific pollutant(s), and to specific water body segment(s). The adoption of a temporary standard does not exempt dischargers from complying with all other applicable water quality standards or control technologies.

1 (3) Designated uses shall not be modified on a temporary basis. Designated use  
2 attainment as reported in the CWA Section 305(b)/303(d) Integrated Report shall be based on the  
3 original standard and not on a temporary standard.

4 (4) A petition for a temporary standard shall:

5 (a) identify the currently applicable standard(s), the proposed temporary  
6 standard for the specific pollutant(s) and the specific surface water body segment(s) of the state to  
7 which the temporary standard would apply;

8 (b) include the basis for any factor(s) specific to the applicability of the  
9 temporary standard (for example critical flow under Subsection B of 20.6.4.11 NMAC);

10 (bc) demonstrate that the proposed temporary standard meets the  
11 requirements in this Subsection;

12 (ed) present a work plan and with timetable of proposed actions for  
13 achieving compliance with the original standard in accordance with Paragraph (5);

14 (de) include any other information necessary to support the petition.

15 (5) As a condition of a petition for a temporary standard, in addition to meeting  
16 the requirements in this Subsection, the petitioner shall prepare a supporting work plan in  
17 accordance with subParagraph (6 4) to conduct the analysis required in this Subsection, and  
18 submit the work plan to the department for review and comment. Upon revision of the work plan  
19 based on input from the department, the petitioner shall conduct the analyses in accordance with  
20 the work plan. The department or the petitioner may petition the commission to adopt a temporary  
21 standard if the conclusions of the work plan analysis support such action.

22 (6) The work plan to support a temporary standard shall identify the factor(s)  
23 listed in 40 CFR 131.10(g) or Subparagraph 20.6.4.10.F(1)(a) NMAC affecting attainment of the  
24 standard that will be analyzed and the timeline for proposed actions to be taken to achieve the uses  
25 attainable over the term of the temporary standard, including baseline water quality, and any  
26 investigations, projects, facility modifications, monitoring, or other measures necessary to achieve  
27 compliance with the original standard. The work plan shall include provisions for review of  
28 progress in accordance with subParagraph (98), public notice and consultation with appropriate  
29 state, tribal, local and federal agencies.

30 (76) The commission may condition the approval of a temporary standard by  
31 requiring additional monitoring, relevant analyses, the completion of specified projects, submittal  
32 of information, or any other actions.

33 (87) Temporary standards may be implemented only after appropriate public  
34 participation, commission approval and adoption pursuant to this Subsection for all state purposes,  
35 and EPA Clean Water Act Section 303 (c) approval for any federal action.

36 (98) All temporary standards are subject to a required review during each  
37 succeeding review of water quality standards conducted in accordance with Subsection A of  
38 20.6.4.10 NMAC. The petitioner shall provide a written report to the commission documenting the  
39 progress of proposed actions, pursuant to a reporting schedule stipulated in the approved temporary  
40 standard. The purpose of the review is to determine progress consistent with the original conditions  
41 of the petition for the duration of the temporary standard. If the petitioner cannot demonstrate that

1 sufficient progress has ~~not~~ been made the commission may revoke approval of the temporary  
2 standard or provide additional conditions to the approval of the temporary standard.

3 (109) The commission may consider a petition to extend a temporary standard.  
4 The effective period of a temporary standard shall be extended only if demonstrated to the  
5 department commission that the factors precluding attainment of the underlying standard still  
6 apply, that the petitioner is meeting the conditions required for approval of the temporary standard,  
7 and that reasonable progress towards meeting the underlying standard is being achieved.

8 (110) A temporary standard shall expire no later than the date specified in the  
9 approval of the temporary standard. Upon expiration of a temporary standard, the original  
10 standard becomes applicable.

11 (121) Temporary standards shall be identified in 20.6.4.97 – 899 NMAC as  
12 appropriate for the surface water affected.

13 [20.6.4.10 NMAC - Rp 20 NMAC 6.1.1102, 10-12-00; Rn, 20.6.4.9 NMAC, 05-23-  
14 05; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

15  
16 **20.6.4.11 NMAC - No changes proposed.**  
17

18 **20.6.4.12 COMPLIANCE WITH WATER QUALITY STANDARDS:** The following  
19 provisions apply to determining compliance for enforcement purposes; they do not apply for  
20 purposes of determining attainment of uses. The department has developed assessment protocols  
21 for the purpose of determining attainment of uses that are available for review from the  
22 department's surface water quality bureau.

23 **A.** Compliance with acute water quality criteria shall be determined from the analytical results  
24 of a single grab sample. Acute criteria shall not be exceeded.  
25

26 **20.6.4.12.B NMAC through 20.6.4.12.G NMAC - No changes proposed.**  
27

28 **H.** It is ~~shall be~~ a policy of the commission to allow a temporary standard approved  
29 and adopted pursuant to Subsection F of 20.6.4.10 NMAC to be included in the applicable NPDES  
30 permit as enforceable limits and conditions. The temporary standard and schedule of actions may  
31 be included at the earliest practicable time, and shall specify milestone dates so as to measure  
32 progress towards meeting the original standard.

33 [20.6.4.12 NMAC - Rp 20 NMAC 6.1.1104, 10-12-00; A, 10-11-02; Rn, 20.6.4.11 NMAC, 05-23-  
34 05; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]  
35

36 **20.6.4.13 NMAC through 20.6.4.15 NMAC - No changes proposed.**  
37

38 **20.6.4.16 PLANNED USE OF A PISCICIDE:** The use of a piscicide registered under the  
39 Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), 7 U.S.C. Section 136 *et seq.*,  
40 and under the New Mexico Pesticide Control Act ("NMPCA"), Section 76-4-1 *et seq.* NMSA  
41 1978 (1973) in a surface water of the state, shall not be a violation of Subsection F of 20.6.4.13  
42 NMAC when such use is covered by a federal National Pollutant Discharge Elimination System

(NPDES) permit or has been approved by the commission under procedures provided in this section. The use of a piscicide which is covered by a NPDES permit shall require no further review by the commission and the person whose application is covered by the NPDES permit shall meet the additional notification and monitoring requirements outlined in Subsection FG of 20.6.4.16 NMAC. The commission may approve the reasonable use of a piscicide under this section if the proposed use is not covered by a NPDES permit to further a Clean Water Act objective to restore and maintain the physical or biological integrity of surface waters of the state, including restoration of native species.

A. Any person seeking commission approval of the use of a piscicide not covered by a NPDES permit shall file a written petition concurrently with the commission and the surface water bureau of the department. The petition shall contain, at a minimum, the following information:

- (1) petitioner's name and address;
- (2) identity of the piscicide and the period of time (not to exceed five years) or number of applications for which approval is requested;
- (3) documentation of registration under FIFRA and NMPCA and certification that the petitioner intends to use the piscicide according to the label directions, for its intended function;
- (4) target and potential non-target species in the treated waters and adjacent riparian area, including threatened or endangered species;
- (5) potential environmental consequences to the treated waters and the adjacent riparian area, and protocols for limiting such impacts;
- (6) surface water of the state proposed for treatment;
- (7) results of pre-treatment survey;
- (8) evaluation of available alternatives and justification for selecting piscicide use;
- (9) documentation of notice requesting public comment on the proposed use within a 30-day period, including information as described in Paragraphs (1), (2) and (6) of this Subsection, provided to:
  - (a) local political subdivisions;
  - (b) local water planning entities;
  - (c) local conservancy and irrigation districts; and
  - (d) 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.
- (10) copies of public comments received in response to the publication of notice and the petitioner's responses to public comments received;
- (11) post-treatment assessment monitoring protocol; and
- (12) any other information required by the commission.

B. Within thirty days of receipt of the petition, the department shall review the petition and file a recommendation with the commission to grant, grant with conditions or deny the petition. The recommendation shall include reasons, and a copy shall be sent to the petitioner by certified mail.

1        **C.**     The commission shall review the petition, the public comments received under  
2     Paragraphs (9) and (10) of Subsection A of 20.6.4.16 NMAC, the petitioner's responses to public  
3     comments and the department's technical recommendations for the petition. A public hearing  
4     shall be held if the commission determines there is substantial public interest. The commission  
5     shall notify the petitioner and those commenting on the petition of the decision whether to hold a  
6     hearing and the reasons therefore in writing.

7     **C.D.**    If ~~T~~the commission shall review the petition and the department's determines there is  
8     substantial public interest ~~recommendation and shall within 90 days of receipt of the~~  
9     ~~department's recommendation may hold~~ a public hearing shall be held within 90 days of receipt  
10    of the department's recommendation in the locality affected by the proposed use in accordance  
11    with Adjudicatory Procedures, 20.1.3 NMAC. Notice of the hearing shall be given in writing by  
12    the petitioner to individuals listed under Subsection A of 20.6.4.16 NMAC as well as to  
13    individuals who provided public comment under that Subsection at least 30 days prior to the  
14    hearing. ~~In addition to the public notice requirements in Adjudicatory Procedures, 20.1.3~~  
15    ~~NMAC, the petitioner shall provide written notice to:~~

16        ~~(1) local political subdivisions;~~  
17        ~~(2) local water planning entities;~~  
18        ~~(3) local conservancy and irrigation districts; and~~  
19        ~~(4) local media outlets, except that the petitioner shall only be required to publish~~  
20    ~~notice in a newspaper of circulation in the locality affected by the proposed use.~~

21        **D. E.**   In a hearing provided for in this Section or, if no hearing is held, in a commission  
22    meeting, the registration of a piscicide under FIFRA and NMPCA shall provide a rebuttable  
23    presumption that the determinations of the EPA Administrator in registering the piscicide, as  
24    outlined in 7 U.S.C. Section 136a(c)(5), are valid. For purposes of this Section the rebuttable  
25    presumptions regarding the piscicide include:

26        (1) Its composition is such as to warrant the proposed claims for it;  
27        (2) Its labeling and other material submitted for registration comply with the  
28    requirements of FIFRA and NMPCA;  
29        (3) It will perform its intended function without unreasonable adverse effects on  
30    the environment; and  
31        (4) When used in accordance with all FIFRA label requirements it will not  
32    generally cause unreasonable adverse effects on the environment.

33        (5) "Unreasonable adverse effects on the environment" has the meaning provided  
34    in FIFRA, 7 U.S.C. Section 136(bb): "any unreasonable risk to man or the environment, taking  
35    into account the economic, social, and environmental costs and benefits of the use of any  
36    pesticide."

37        **E. F.**   After a public hearing, or commission meeting if no hearing is held, the  
38    commission may grant the petition in whole or in part, may grant the petition subject to  
39    conditions, or may deny the petition. In granting any petition in whole or part or subject to  
40    conditions, the commission shall require the petitioner to implement post-treatment assessment  
41    monitoring and provide notice to the public in the immediate and near downstream vicinity of  
42    the application prior to and during the application.

**F. G.** Any person whose application is covered by a NPDES permit shall provide written notice to local entities as described in ~~20.6.4.16 Subsections C (1) to (4) A~~ of 20.6.4.16 NMAC and ~~subsection E~~ and implement post-treatment assessment monitoring within the application area as described in Subsection (F).

[20.6.4.16 NMAC - Rn, Paragraph (6) of Subsection F of 20.6.4.12 NMAC, 05-23-05; A, 05-23-05; A, XX-XX-XX]

**20.6.4.17 – 20.6.4.49: [RESERVED]**

**20.6.4.50 – 20.6.4.96 NMAC – No changes proposed.**

**20.6.4.97 EPHEMERAL WATERS** - Ephemeral ~~unclassified-surface~~ waters of the state as identified below and additional ephemeral waters as identified on the department's water quality standards website pursuant to Subsection C of 20.6.4.15 NMAC.

**A. Designated Uses:** livestock watering, wildlife habitat, limited aquatic life and secondary contact.

**B. Criteria:** the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses.

**C. Waters:**

**(1) the following waters are designated in the Rio Grande basin:**

(a) Cunningham gulch from Santa Fe county road 55 upstream 1.4 miles to a point upstream of the LAC Minerals mine, identified as Ortiz Mine on USGS topographic maps;

(b) an unnamed tributary from Arroyo Hondo upstream 0.4 miles to the Village of Oshara water reclamation facility outfall;

(c) an unnamed tributary from San Pedro creek upstream 0.8 miles to the PAA-KO community sewer outfall;

(d) Inditos draw from the crossing of an unnamed road along a power line one-quarter mile west of McKinley county road 19 upstream to New Mexico highway 509;

(e) an unnamed tributary from the diversion channel connecting Blue canyon and Socorro canyon upstream 0.6 miles to the New Mexico Firefighters Academy treatment facility outfall;

(f) an unnamed tributary from the AMAFCA Rio Grande south channel upstream of the crossing of New Mexico highway 47 upstream to I-25;

(g) the south fork of Cañon del Piojo from Canon del Piojo upstream 1.2 miles to an unnamed tributary;

(h) an unnamed tributary from the south fork of Cañon del Piojo upstream 1 mile to the Resurrection mine outfall;

(i) Arroyo del Puerto from San Mateo creek upstream 6.8 miles to the Ambrosia Lake mine entrance road;

(j) an unnamed tributary from San Mateo creek upstream 1.5 miles to the Roca Honda mine facility outfall in NPDES permit number;

1 (k) San Isidro arroyo from the Lee Ranch mine facility outfall upstream to  
2 Tinaja arroyo;

3 (l) Tinaja arroyo from San Isidro arroyo upstream to Mulatto canyon; and

4 (m) Mulatto canyon from Tinaja arroyo upstream to 1 mile northeast of the  
5 Cibola national forest boundary.

6 (2) the following waters are designated in the **Pecos river basin**:

7 (a) an unnamed tributary from Hart canyon upstream 1 mile to South Union  
8 road;

9 (b) Aqua Chiquita from Rio Peñasco upstream to McEwan canyon; and

10 (c) Grindstone canyon upstream of Grindstone Reservoir.

11 (3) the following waters are designated in the **Canadian river basin**:

12 (a) Bracket canyon upstream of the Vermejo river;

13 (b) an unnamed tributary from Bracket canyon upstream 2 miles to the Ancho  
14 mine; and

15 (c) Gachupin canyon from the Vermejo river upstream 2.9 miles to an  
16 unnamed west tributary near the Ancho mine outfall.

17 (4) in the **San Juan river basin** an unnamed tributary of Kim-me-ni-oli wash  
18 upstream of the mine outfall.

19 (5) the following waters are designated in the **Little Colorado river basin**:

20 (a) Defiance draw from County Road 1 to upstream of West Defiance Road;  
21 and

22 (b) an unnamed tributary of Defiance draw from McKinley County Road 1  
23 upstream to New Mexico Highway 264.

24 (6) the following waters are designated in the **closed basins**:

25 (a) in the Tularosa river closed basin San Andres canyon downstream of  
26 South San Andres canyon; and

27 (b) in the Mimbres river closed basin:

28 (i) San Vicente arroyo from the Mimbres river upstream to Maudes  
29 canyon;

30 (ii) Chino Mines property Subwatershed Drainage A and tributaries  
31 thereof;

32 (iii) Chino Mines property Subwatershed Drainage B and tributaries  
33 thereof (excluding the northwest tributary containing Ash Spring);

34 (iv) Chino Mines property Subwatershed Drainage C and tributaries  
35 thereof (excluding reaches containing Bolton spring, the Chiracahua Leopard Frog critical  
36 habitat transect, and all reaches in Subwatershed C that are upstream of the Chiracahua Leopard  
37 Frog critical habitat);

38 (v) Chino Mines property Subwatershed Drainage D and tributaries  
39 thereof (Drainages D-1, D-2 and D-3, excluding the southeast tributary in drainage D1 that  
40 contains Brown Spring); and,

41 (vi) Chino Mines property Subwatershed Drainage E and tributaries thereof  
42 (Drainages E-1, E-2 and E-3).

[20.6.4.97 NMAC - N, 05-23-05; A, 12-01-10; A, XX-XX-XX]

~~[NOTE: Effective 12-01-10, no waters are yet approved for listing in Subsection C of this section.]~~

**20.6.4.98 INTERMITTENT WATERS - All non-perennial unclassified surface waters of the state, except those ephemeral waters included under 20.6.4.97 NMAC or classified in 20.6.4.100 thru 899.**

**A. Designated Uses:** livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

**B. Criteria:** the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.98 NMAC - N, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.99 PERENNIAL WATERS - All perennial unclassified surface waters of the state except those classified in 20.6.4.100 thru 899.**

**A. Designated Uses:** warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

**B. Criteria:** the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

[20.6.4.99 NMAC - N, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.100: [RESERVED]**

**20.6.4.101 RIO GRANDE BASIN - The main stem of the Rio Grande from the international boundary with Mexico upstream to one mile below downstream of Percha dam.**

**A. Designated Uses:** irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

**B. Criteria:**

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criterion applies: temperature 34°C (93.2°F) or less.

(2) At mean monthly flows above 350 cfs, the monthly average concentration for: TDS 2,000 mg/L or less, sulfate 500 mg/L or less and chloride 400 mg/L or less.

**C. Remarks:** sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.

[20.6.4.101 NMAC - Rp 20 NMAC 6.1.2101, 10-12-00; A, 12-15-01; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.102 RIO GRANDE BASIN - The main stem of the Rio Grande from one mile below downstream of Percha dam upstream to Caballo dam.**

**A. Designated Uses:** irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

**C. Remarks:** sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.

[20.6.4.102 NMAC - Rp 20 NMAC 6.1.2102, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.103 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam and perennial reaches of tributaries to the Rio Grande in Sierra and Socorro counties, excluding waters on tribal lands.**

**A. Designated Uses:** irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, ~~secondary~~ primary contact and warmwater aquatic life.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

**C. Remarks:** flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.

[20.6.4.103 NMAC - Rp 20 NMAC 6.1.2103, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.104 NMAC – 20.6.4.109 NMAC – No changes proposed.**

**20.6.4.110 RIO GRANDE BASIN - The main stem of the Rio Grande from Angostura diversion works upstream to Cochiti dam, excluding the reaches on San Felipe, Santo Domingo Kewa and Cochiti pueblos.**

**A. Designated Uses:** irrigation, livestock watering, wildlife habitat, primary contact, coldwater aquatic life and warmwater aquatic life.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: pH within the range of 6.6 to 9.0 and temperature 25°C (77°F) or less.

[20.6.4.110 NMAC - Rp 20 NMAC 6.1.2108, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.111 NMAC – 20.6.4.115 NMAC – No changes proposed.**

**20.6.4.116 RIO GRANDE BASIN** - The Rio Chama from its mouth on the Rio Grande upstream to Abiquiu reservoir, perennial reaches of the Rio Tusas, perennial reaches of the Rio Ojo Caliente, perennial reaches of Abiquiu creek and perennial reaches of El Rito creek ~~below~~ downstream of the town of El Rito.

**A. Designated Uses:** irrigation, livestock watering, wildlife habitat, coldwater aquatic life, warmwater aquatic life and ~~secondary~~ primary contact.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 31°C (87.8°F) or less.

[20.6.4.116 NMAC - Rp 20 NMAC 6.1.2113, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.117 NMAC – 20.6.4.123 NMAC – No changes proposed.**

**20.6.4.124 RIO GRANDE BASIN - Perennial reaches of Sulphur creek from its headwaters to its confluence with Redondo creek** upstream to its headwaters.

**A. Designated Uses:** limited aquatic life, wildlife habitat, livestock watering and ~~secondary~~ primary contact.

**B. Criteria:** the use-specific criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: pH within the range of 2.0 to 9.0, maximum temperature 30°C (86°F), and the chronic aquatic life criteria of Subsections I and J of 20.6.4.900 NMAC.

[20.6.4.124 NMAC - N, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.125 NMAC – 20.6.4.203 NMAC – No changes proposed.**

**20.6.4.204 PECOS RIVER BASIN** - The main stem of the Pecos river from the headwaters of Avalon reservoir upstream to Brantley dam.

**A. Designated Uses:** irrigation, livestock watering, wildlife habitat, ~~secondary~~ primary contact and warmwater aquatic life.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.204 NMAC - Rp 20 NMAC 6.1.2204, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for Avalon Reservoir are under 20.6.4.219 NMAC.]

**20.6.4.205 PECOS RIVER BASIN - Brantley reservoir.**

**A. Designated Uses:** irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.205 NMAC - Rp 20 NMAC 6.1.2205, 10-12-00; A, 05-23-05; A, 12-01-10]

**20.6.4.206 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, perennial reaches of the Rio Hondo and its tributaries below downstream of Bonney canyon and perennial reaches of the Rio Felix.**

**A. Designated Uses:** irrigation, livestock watering, wildlife habitat, ~~secondary~~ primary contact and warmwater aquatic life.

**B. Criteria:**

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 14,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 6,000 mg/L or less.

[20.6.4.206 NMAC - Rp 20 NMAC 6.1.2206, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.207 PECOS RIVER BASIN - The main stem of the Pecos river from Salt creek (near Acme) upstream to Sumner dam.**

**A. Designated Uses:** irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and ~~secondary~~ primary contact.

**B. Criteria:**

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 8,000 mg/L or less, sulfate 2,500 mg/L or less and chloride 4,000 mg/L or less.

[20.6.4.207 NMAC - Rp 20 NMAC 6.1.2207, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.208 NMAC – 20.6.4.212 NMAC – No changes proposed.**

**20.6.4.213 PECOS RIVER BASIN - McAllister lake.**

**A. Designated Uses:** coldwater aquatic life, ~~secondary~~ primary contact, livestock watering and wildlife habitat.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.213 NMAC - Rp 20 NMAC 6.1.2211.3, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.214 NMAC– 20.6.4.218 NMAC – No changes proposed.**

**20.6.4.219 PECOS RIVER BASIN - Avalon reservoir.**

1           **A. Designated Uses:** irrigation storage, livestock watering, wildlife habitat,  
2 ~~secondary~~ primary contact and warmwater aquatic life.

3           **B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are  
4 applicable to the designated uses.  
5 [20.6.4.219 NMAC - N, 05-23-05; A, 12-01-10; A, XX-XX-XX]

6  
7                   **20.6.4.220 NMAC – 20.6.4.304 NMAC – No changes proposed.**  
8

9           **20.6.4.305 CANADIAN RIVER BASIN - The main stem of the Canadian river from the**  
10 **headwaters of Conchas reservoir upstream to the New Mexico-Colorado line, perennial**  
11 **reaches of the Conchas river, the Mora river downstream from the USGS gaging station**  
12 **near Shoemaker, the Vermejo river downstream from Rail canyon and perennial reaches**  
13 **of Raton, Chicorica (except Lake Maloya and Lake Alice) and Uña de Gato creeks.**

14           **A. Designated Uses:** irrigation, marginal warmwater aquatic life, livestock  
15 watering, wildlife habitat and primary contact.

16           **B. Criteria:**  
17           (1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable  
18 to the designated uses.

19           (2) TDS 3,500 mg/L or less at flows above 10 cfs.  
20 [20.6.4.305 NMAC - Rp 20 NMAC 6.1.2305, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-  
21 XX]

22 [NOTE: This segment was divided effective 12-01-10. The standards for ~~Lake Maloya and Lake~~  
23 ~~Alice and Lake Maloya~~ are under 20.6.4.311 and 20.6.4.312 NMAC, respectively.]  
24

25                   **20.6.4.306 NMAC – 20.6.4.307 NMAC – No changes proposed.**  
26

27           **20.6.4.308 CANADIAN RIVER BASIN - Charette lakes.**

28           **A. Designated Uses:** coldwater aquatic life, warmwater aquatic life, ~~secondary~~  
29 ~~primary~~ contact, livestock watering and wildlife habitat.

30           **B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are  
31 applicable to the designated uses.  
32 [20.6.4.308 NMAC - Rp 20 NMAC 6.1.2305.5, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-  
33 XX-XX]  
34

35                   **20.6.4.309 – 20.6.4.316 – No changes proposed.**  
36

37           **20.6.4.317 CANADIAN RIVER BASIN - Springer lake.**

38           **A. Designated Uses:** coolwater aquatic life, irrigation, primary contact, livestock  
39 watering, ~~and~~ wildlife habitat, and public water supply.

40           **B. Criteria:** The use-specific numeric criteria set forth in 20.6.4.900 NMAC are  
41 applicable to the designated uses.  
42 [20.6.4.317 NMAC - N, 07-10-12; A, XX-XX-XX]

**20.6.4.318 NMAC - 20.6.4.400: [RESERVED]**

**20.6.4.401 – 20.6.4.402 – No changes proposed.**

**20.6.4.403 SAN JUAN RIVER BASIN - The Animas river from its confluence with the San Juan river upstream to Estes Arroyo.**

**A. Designated Uses:** public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, ~~marginal coldwater~~ coolwater aquatic life, and primary contact ~~and warmwater aquatic life.~~

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 29°C (84.2°F) or less.  
[20.6.4.403 NMAC - Rp 20 NMAC 6.1.2403, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.404 SAN JUAN RIVER BASIN - The Animas river from Estes Arroyo upstream to the ~~New Mexico-Colorado line~~ Southern Ute Indian tribal boundary.**

**A. Designated Uses:** ~~coldwater~~ coolwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply, industrial water supply and primary contact.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: phosphorus (unfiltered sample) 0.1 mg/L or less.  
[20.6.4.404 NMAC - Rp 20 NMAC 6.1.2404, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.405 – 20.6.4.501 – No changes proposed.**

**20.6.4.502 GILA RIVER BASIN - The main stem of the Gila river from Redrock canyon upstream to the confluence of the West Fork Gila river and East Fork Gila river and perennial reaches of tributaries to the Gila river ~~below~~ downstream of Mogollon creek.**

**A. Designated Uses:** industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: 28°C (82.4°F) or less.  
[20.6.4.502 NMAC - Rp 20 NMAC 6.1.2502, 10-12-00; A, 05-23-05; A, 12-01-10]

**20.6.4.503 GILA RIVER BASIN - All perennial tributaries to the Gila river ~~above~~ upstream of and including Mogollon creek.**

**A. Designated Uses:** domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance of 400  $\mu$ S/cm or less for all perennial tributaries except West Fork Gila and tributaries thereto, specific conductance of 300  $\mu$ S/cm or less; main stem of the Gila river above Gila hot springs and 400  $\mu$ S/cm or less for other reaches; 32.2°C (90°F) or less in the east fork of the Gila river and Sapillo creek below downstream of Lake Roberts; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less. [20.6.4.503 NMAC - Rp 20 NMAC 6.1.2503, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.504 – 20.6.4.802 – No changes proposed.**

**20.6.4.803 CLOSED BASINS - Perennial reaches of the Mimbres River downstream of the confluence with Willow Springs Allie canyon and all perennial reaches of tributaries thereto.**

**A. Designated Uses:** ~~coldwater~~ coolwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less and temperature of 30°C (86°F) or less.

[20.6.4.803 NMAC - Rp 20 NMAC 6.1.2803, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

**20.6.4.804 CLOSED BASINS - Perennial reaches of the Mimbres River upstream of the confluence with Willow Springs Allie canyon to Cooney canyon, and all perennial reaches of East Fork Mimbres (McKnight Canyon) belowdownstream of the fish barrier, and all perennial reaches thereto.**

**A. Designated Uses:** irrigation, domestic water supply, coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

**B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: ~~specific conductance 300  $\mu$ S/cm or less;~~ the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.804 NMAC - Rp 20 NMAC 6.1.2804, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-XX-XX]

[NOTE: The segment covered by this section was divided effective XX-XX-XX. The standards for the additional segment are covered under 20.6.4.807 NMAC.]

**20.6.4.807 CLOSED BASINS - Perennial reaches of the Mimbres river upstream of Cooney Canyon and all perennial reaches thereto, including perennial reaches of East Fork Mimbres river (McKnight Canyon) aboveupstream of the fish barrier.**

1        **A. Designated Uses:** irrigation, domestic water supply, high quality coldwater  
2 aquatic life, livestock watering, wildlife habitat and primary contact.

3        **B. Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are  
4 applicable to the designated uses, except that the following segment-specific criteria apply:  
5 specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126  
6 cfu/100 mL or less, single sample 235 cfu/100 mL or less.  
7 [20.6.4.807 NMAC – A, XX-XX-XX]

8  
9 **20.6.4.8078 – 20.6.4.899: [RESERVED]**

10  
11 **20.6.4.900                    CRITERIA APPLICABLE TO EXISTING, DESIGNATED OR**  
12 **ATTAINABLE USES UNLESS OTHERWISE SPECIFIED IN 20.6.4.97 THROUGH**  
13 **20.6.4.899 NMAC.**

14        **A. Fish Culture and Water Supply:** Fish culture, public water supply and  
15 industrial water supply are designated uses in particular classified waters of the state where these  
16 uses are actually being realized. However, no numeric criteria apply uniquely to these uses.  
17 Water quality adequate for these uses is ensured by the general criteria and numeric criteria for  
18 bacterial quality, pH and temperature.

19  
20                    **Subsections B and C of 20.6.4.900 – No changes proposed.**

21  
22        **D. Primary Contact:** the monthly geometric mean of *E. coli* bacteria of 126  
23 cfu/100 mL or MPN/100 mL and single sample of 410 cfu/100 mL or MPN/100 mL and pH  
24 within the range of 6.6 to 9.0 apply to this use. The results for *E. coli* may be reported as either  
25 cfu (colony forming units) or the most probable number (MPN) depending on the analytical  
26 method used.

27        **E. Secondary Contact:** the monthly geometric mean of *E. coli* bacteria of 548  
28 cfu/100 mL or MPN/100 mL and single sample of 2507 cfu/100 mL or MPN/100 mL apply to  
29 this use. The results for *E. coli* may be reported as either cfu (colony forming units) or the most  
30 probable number (MPN), depending on the analytical method used.

31  
32 **Subsection F through Subsection H, Subparagraph (1) of 20.6.4.900 NMAC - No changes**  
33 **proposed.**

34  
35        **(2) Coldwater:** dissolved oxygen 6.0 mg/L or more, 6T3 temperature 20°C  
36 (68°F), maximum temperature 24°C (75°F) and pH within the range of 6.6 to 8.8. Where a  
37 single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the  
38 maximum temperature and no 6T3 temperature applies.

39        **(3) Marginal Coldwater:** dissolved oxygen 6.0 mg/L or more, 6T3 temperature  
40 25°C (77°F), maximum temperature 29°C (84°F) and pH within the range from 6.6 to 9.0.  
41 Where a single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it  
42 is the maximum temperature and no 6T3 temperature applies.

(4) **Coolwater:** dissolved oxygen 5.0 mg/L or more, maximum temperature 29°C (84°F) and pH within the range of 6.6 to 9.0.

(5) **Warmwater:** dissolved oxygen 5.0 mg/L or more, maximum temperature 32.2°C (90°F) and pH within the range of 6.6 to 9.0. Where a segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature.

(6) **Marginal Warmwater:** dissolved oxygen 5.0 mg/L or more, pH within the range of 6.6 to 9.0 and maximum temperature 32.2°C (90°F). Where a segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature.

(7) **Limited Aquatic Life:** The acute aquatic life criteria of Subsections I and J of this section apply to this subcategory. Chronic aquatic life criteria do not apply unless adopted on a segment-specific basis. Human health-organism only criteria apply only for persistent pollutants unless adopted on a segment-specific basis.

**I.** Hardness-dependent acute and chronic aquatic life criteria for metals are calculated using the following equations. The criteria are expressed as a function of dissolved hardness (as mg CaCO<sub>3</sub>/L). With the exception of aluminum, the equations are valid only for dissolved hardness concentrations of 0-400 mg/L. For dissolved hardness concentrations above 400 mg/L, the criteria for 400 mg/L apply. For aluminum the equations are valid only for dissolved hardness concentrations of 0-220 mg/L. For dissolved hardness concentrations above 220 mg/L, the aluminum criteria for 220 mg/L apply.

(1) **Acute aquatic life criteria for metals.** The equation to calculate acute criteria in µg/L is  $\exp(m_A[\ln(\text{hardness})] + b_A)(CF)$ . Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department. The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act. The equation parameters are as follows:

Metal	$m_A$	$b_A$	Conversion factor (CF)
Aluminum (Al)	1.3695	1.8308	
Cadmium (Cd)	0.8968	-3.5699	$1.136672 - [(\ln \text{hardness})(0.041838)]$
Chromium (Cr) III	0.8190	3.7256	0.316
Copper (Cu)	0.9422	-1.700	0.960
Lead (Pb)	1.273	-1.460	$1.46203 - [(\ln \text{hardness})(0.145712)]$
Manganese (Mn)	0.3331	6.4676	
Nickel (Ni)	0.8460	2.255	0.998
Silver (Ag)	1.72	-6.59	0.85
Zinc (Zn)	0.9094	0.9095	0.978

(2) **Chronic aquatic life criteria for metals.** The equation to calculate chronic criteria in µg/L is  $\exp(m_C[\ln(\text{hardness})] + b_C)(CF)$ . Except for aluminum, the criteria are based

on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department. The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act. The equation parameters are as follows:

Metal	m <sub>C</sub>	b <sub>C</sub>	Conversion factor (CF)
Aluminum (Al)	1.3695	0.9161	
Cadmium (Cd)	0.7647	-4.2180	1.101672-[(ln hardness)(0.041838)]
Chromium (Cr) III	0.8190	0.6848	0.860
Copper (Cu)	0.8545	-1.702	0.960
Lead (Pb)	1.273	-4.705	1.46203-[(ln hardness)(0.145712)]
Manganese (Mn)	0.3331	5.8743	
Nickel (Ni)	0.8460	0.0584	0.997
Zinc (Zn)	0.9094	0.6235	0.986

(3) Selected values of calculated acute and chronic criteria (µg/L).

Hardness as CaCO <sub>3</sub> , dissolved (mg/L)		Al	Cd	Cr III	Cu	Pb	Mn	Ni	Ag	Zn
25	Acute	512	0.51	180	4	14	1,881	140	0.3	45
	Chronic	205	0.17	24	3	1	1,040	16		34
30	Acute	658	0.59	210	4	17	1,999	170	0.4	54
	Chronic	263	0.19	28	3	1	1,105	19		41
40	Acute	975	0.76	270	6	24	2,200	220	0.7	70
	Chronic	391	0.23	35	4	1	1,216	24		53
50	Acute	1,324	0.91	320	7	30	2,370	260	1.0	85
	Chronic	530	0.28	42	5	1	1,309	29		65
60	Acute	1,699	1.07	370	8	37	2,519	300	1.3	101
	Chronic	681	0.31	49	6	1	1,391	34		76
70	Acute	2,099	1.22	430	10	44	2,651	350	1.7	116
	Chronic	841	0.35	55	7	2	1,465	38		88
80	Acute	2,520	1.37	470	11	51	2,772	390	2.2	131
	Chronic	1,010	0.39	62	7	2	1,531	43		99
90	Acute	2,961	1.51	520	12	58	2,883	430	2.7	145
	Chronic	1,186	0.42	68	8	2	1,593	48		110
100	Acute	3,421	1.65	570	13	65	2,986	470	3.2	160

Hardness as CaCO <sub>3</sub> , dissolved (mg/L)		Al	Cd	Cr III	Cu	Pb	Mn	Ni	Ag	Zn
	Chronic	1,370	0.45	74	9	3	1,650	52		121
200	Acute	8,838	2.98	1,010	26	140	3,761	840	11	301
	Chronic	3,541	0.75	130	16	5	2,078	90		228
220	Acute	10,071	<u>3.23</u>	<u>1,087</u>	<u>28</u>	<u>151</u>	<u>3,882</u>	<u>912</u>	<u>13</u>	<u>328</u>
	Chronic	4,035	<u>0.80</u>	<u>141</u>	<u>18</u>	<u>6</u>	<u>2,145</u>	<u>101</u>		<u>248</u>
300	Acute	<del>10,071</del>	4.21	1,400	38	210	4,305	1190	21	435
	Chronic	<del>4,035</del>	1.00	180	23	8	2,379	130		329
400 and above	Acute	<del>10,071</del>	5.38	1,770	50	280	4,738	1510	35	564
	Chronic	<del>4,035</del>	1.22	230	29	11	2,618	170		428

**J. Use-Specific Numeric criteria.**

~~(1) Notes applicable to the table of numeric criteria in Paragraph (2) of this subsection.~~

~~(a) Where the letter "a" is indicated in a cell, the criterion is hardness-based and can be referenced in Subsection I of 20.6.4.900 NMAC.~~

~~(b) Where the letter "b" is indicated in a cell, the criterion can be referenced in Subsection C of 20.6.4.900 NMAC.~~

~~(c) Criteria are in µg/L unless otherwise indicated.~~

~~(d) Abbreviations are as follows: CAS—chemical abstracts service (see definition for "CAS number" in 20.6.4.7 NMAC); DWS—domestic water supply; Irr—irrigation; LW—livestock watering; WH—wildlife habitat; HH OO—human health-organism only; C—cancer-causing; P—persistent.~~

~~(e) The criteria are based on analysis of an unfiltered sample unless otherwise indicated. The acute and chronic aquatic life criteria for aluminum are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department. For aluminum, where the pH is 6.5 or less in the receiving water after mixing, the acute and chronic dissolved criteria in the table will apply.~~

~~(f) The criteria listed under human health-organism only (HH OO) are intended to protect human health when aquatic organisms are consumed from waters containing pollutants. These criteria do not protect the aquatic life itself; rather, they protect the health of humans who ingest fish or other aquatic organisms.~~

~~(g) The dioxin criteria apply to the sum of the dioxin toxicity equivalents expressed as 2,3,7,8 TCDD dioxin.~~

~~(h) The criteria for polychlorinated biphenyls (PCBs) applies to the sum of all congeners, to the sum of all homologs or to the sum of all areclors.~~

**(21) Table of Numeric Criteria:** The following table sets forth the numeric criteria applicable to existing, designated and attainable uses. For metals, criteria represent the total sample fraction unless otherwise specified in the table. Additional criteria that are not compatible with this table are found in Subsections A through I, K and L of this section.

Pollutant	CAS Number	DWS	Irr/Irr Storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Aluminum, dissolved	7429-90-5		5,000						
Aluminum, total recoverable	7429-90-5					a	a		
Antimony, dissolved	7440-36-0	6						640	P
Arsenic, dissolved	7440-38-2	10	100	200		340	150	9.0	C,P
Asbestos	1332-21-4	7,000,000 fibers/L							
Barium, dissolved	7440-39-3	2,000							
Beryllium, dissolved	7440-41-7	4							
Boron, dissolved	7440-42-8		750	5,000					
Cadmium, dissolved	7440-43-9	5	10	50		a	a		
Chlorine residual	7782-50-5				11	19	11		
Chromium III, dissolved	16065-83-1					a	a		
Chromium VI, dissolved	18540-29-9					16	11		
Chromium, dissolved	7440-47-3	100	100	1,000					
Cobalt, dissolved	7440-48-4		50	1,000					
Copper, dissolved	7440-50-8	1300	200	500		a	a		
Cyanide, total recoverable	57-12-5	200			5.2	22.0	5.2	140	
Lead, dissolved	7439-92-1	15	5,000	100		a	a		
Manganese, dissolved	7439-96-5					a	a		
Mercury	7439-97-6	2		10	0.77				
Mercury, dissolved	7439-97-6					1.4	0.77		
Methylmercury	22967-92-6							0.3 mg/kg in fish tissue	P
Molybdenum, dissolved	7439-98-7		1,000						
Molybdenum, total recoverable	7439-98-7					7,920	1,895		

Pollutant	CAS Number	DWS	Irr/Irr Storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Nickel, dissolved	7440-02-0	700				a	a	4,600	P
Nitrate as N		10 mg/L							
Nitrite + Nitrate				132 mg/L					
Selenium, dissolved	7782-49-2	50	b	50				4,200	P
Selenium, total recoverable	7782-49-2				5.0	20.0	5.0		
Silver, dissolved	7440-22-4					a			
Thallium, dissolved	7440-28-0	2						0.47	P
Uranium, dissolved	7440-61-1	30							
Vanadium, dissolved	7440-62-2		100	100					
Zinc, dissolved	7440-66-6	10,500	2,000	25,000		a	a	26,000	P
Adjusted gross alpha		15 pCi/L		15 pCi/L					
Radium 226 + Radium 228		5 pCi/L		30.0 pCi/L					
Strontium 90		8 pCi/L							
Tritium		20,000 pCi/L		20,000 pCi/L					
Acenaphthene	83-32-9	2,100						990	
Acrolein	107-02-8	18						9	
Acrylonitrile	107-13-1	0.65						2.5	C
Aldrin	309-00-2	0.021				3.0		0.00050	C,P
Anthracene	120-12-7	10,500						40,000	
Benzene	71-43-2	5						510	C
Benzydine	92-87-5	0.0015						0.0020	C
Benzoanthracene	56-55-3	0.048						0.18	C
Benzoapyrene	50-32-8	0.2						0.18	C,P
Benzo(b)fluoranthene	205-99-2	0.048						0.18	C
Benzo(k)fluoranthene	207-08-9	0.048						0.18	C
alpha-BHC	319-84-6	0.056						0.049	C
beta-BHC	319-85-7	0.091						0.17	C
Gamma-BHC (Lindane)	58-89-9	0.20				0.95		1.8	
Bis(2-chloroethyl) ether	111-44-4	0.30						5.3	C

Pollutant	CAS Number	DWS	Irr/Irr Storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Bis(2-chloroisopropyl) ether	108-60-1	1,400						65,000	
Bis(2-ethylhexyl) phthalate	117-81-7	6						22	C
Bromoform	75-25-2	44						1,400	C
Butylbenzyl phthalate	85-68-7	7,000						1,900	
Carbon tetrachloride	56-23-5	5						16	C
Chlordane	57-74-9	2				2.4	0.0043	0.0081	C,P
Chlorobenzene	108-90-7	100						1,600	
Chlorodibromomethane	124-48-1	4.2						130	C
Chloroform	67-66-3	57						4,700	C
2-Chloronaphthalene	91-58-7	2,800						1,600	
2-Chlorophenol	95-57-8	175						150	
Chrysene	218-01-9	0.048						0.18	C
Diazinon	333-41-5					0.17	0.17		
4,4'-DDT and derivatives		1.0			0.001	1.1	0.001	0.0022	C,P
Dibenzo(a,h)anthracene	53-70-3	0.048						0.18	C
Dibutyl phthalate	84-74-2	3,500						4,500	
1,2-Dichlorobenzene	95-50-1	600						1,300	
1,3-Dichlorobenzene	541-73-1	469						960	
1,4-Dichlorobenzene	106-46-7	75						190	
3,3'-Dichlorobenzidine	91-94-1	0.78						0.28	C
Dichlorobromomethane	75-27-4	5.6						170	C
1,2-Dichloroethane	107-06-2	5						370	C
1,1-Dichloroethylene	75-35-4	7						7,100	C
2,4-Dichlorophenol	120-83-2	105						290	
1,2-Dichloropropane	78-87-5	5.0						150	C
1,3-Dichloropropene	542-75-6	3.5						210	C
Dieldrin	60-57-1	0.022				0.24	0.056	0.00054	C,P
Diethyl phthalate	84-66-2	28,000						44,000	
Dimethyl phthalate	131-11-3	350,000						1,100,000	
2,4-Dimethylphenol	105-67-9	700						850	
2,4-Dinitrophenol	51-28-5	70						5,300	
2,4-Dinitrotoluene	121-14-2	1.1						34	C
Dioxin		3.0E-05						5.1E-08	C,P
1,2-Diphenylhydrazine	122-66-7	0.44						2.0	C

Pollutant	CAS Number	DWS	Irr/Irr Storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
alpha-Endosulfan	959-98-8	62				0.22	0.056	89	
beta-Endosulfan	33213-65-9	62				0.22	0.056	89	
Endosulfan sulfate	1031-07-8	62						89	
Endrin	72-20-8	2				0.086	0.036	0.060	
Endrin aldehyde	7421-93-4	10.5						0.30	
Ethylbenzene	100-41-4	700						2,100	
Fluoranthene	206-44-0	1,400						140	
Fluorene	86-73-7	1,400						5,300	
Heptachlor	76-44-8	0.40				0.52	0.0038	0.00079	C
Heptachlor epoxide	1024-57-3	0.20				0.52	0.0038	0.00039	C
Hexachlorobenzene	118-74-1	1						0.0029	C,P
Hexachlorobutadiene	87-68-3	4.5						180	C
Hexachlorocyclopentadiene	77-47-4	50						1,100	
Hexachloroethane	67-72-1	25						33	C
Ideno(1,2,3-cd)pyrene	193-39-5	0.048						0.18	C
Isophorone	78-59-1	368						9,600	C
Methyl bromide	74-83-9	49						1,500	
2-Methyl-4,6-dinitrophenol	534-52-1	14						280	
Methylene chloride	75-09-2	5						5,900	C
Nitrobenzene	98-95-3	18						690	
N-Nitrosodimethylamine	62-75-9	0.0069						30	C
N-Nitrosodi-n-propylamine	621-64-7	0.050						5.1	C
N-Nitrosodiphenylamine	86-30-6	71						60	C
Nonylphenol	84852-15-3					28	6.6		
Polychlorinated Byphenyls (PCBs)	1336-36-3	0.50			0.014	2	0.014	0.00064	C,P
Pentachlorophenol	87-86-5	1.0				19	15	30	C
Phenol	108-95-2	10,500						860,000	
Pyrene	129-00-0	1,050						4,000	
1,1,2,2-Tetrachloroethane	79-34-5	1.8						40	C

Pollutant	CAS Number	DWS	Irr/Irr Storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Tetrachloroethylene	127-18-4	5						33	C,P
Toluene	108-88-3	1,000						15,000	
Toxaphene	8001-35-2	3				0.73	0.0002	0.0028	C
1,2-Trans-dichloroethylene	156-60-5	100						10,000	
1,2,4-Trichlorobenzene	120-82-1	70						70	
1,1,1-Trichloroethane	71-55-6	200							
1,1,2-Trichloroethane	79-00-5	5						160	C
Trichloroethylene	79-01-6	5						300	C
2,4,6-Trichlorophenol	88-06-2	32						24	C
Vinyl chloride	75-01-4	2						24	C

**(42)** Notes applicable to the table of numeric criteria in Paragraph (21) of this subsection.

**(a)** Where the letter “a” is indicated in a cell, the criterion is hardness-based and can be referenced in Subsection I of 20.6.4.900 NMAC.

**(b)** Where the letter “b” is indicated in a cell, the criterion can be referenced in Subsection C of 20.6.4.900 NMAC.

**(c)** Criteria are in µg/L unless otherwise indicated.

**(d)** Abbreviations are as follows: CAS - chemical abstracts service (see definition for “CAS number” in 20.6.4.7 NMAC); DWS - domestic water supply; Irr/Irr Storage-irrigation or irrigation storage; LW - livestock watering; WH - wildlife habitat; HH-OO - human health-organism only; C - cancer-causing; P - persistent.

**(e)** The criteria are based on analysis of an unfiltered sample unless otherwise indicated. The acute and chronic aquatic life criteria for aluminum are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department.

**(f)** The criteria listed under human health-organism only (HH-OO) are intended to protect human health when aquatic organisms are consumed from waters containing pollutants. These criteria do not protect the aquatic life itself; rather, they protect the health of humans who ingest fish or other aquatic organisms.

**(g)** The dioxin criteria apply to the sum of the dioxin toxicity equivalents expressed as 2,3,7,8-TCDD dioxin.

**(h)** The criteria for polychlorinated biphenyls (PCBs) applies to the sum of all congeners, to the sum of all homologs or to the sum of all aroclors.

**K.** Acute aquatic life criteria for total ammonia are dependent on pH and the presence or absence of salmonids. The criteria in mg/L as N based on analysis of unfiltered samples are as follows:

1

pH	Where Salmonids Present	Where Salmonids Absent
6.5 and below	32.6	48.8
6.6	31.3	46.8
6.7	29.8	44.6
6.8	28.1	42.0
6.9	26.2	39.1
7.0	24.1	36.1
7.1	22.0	32.8
7.2	19.7	29.5
7.3	17.5	26.2
7.4	15.4	23.0
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.65	14.4
7.8	8.11	12.1
7.9	6.77	10.1
8.0	5.62	8.40
8.1	4.64	6.95
8.2	3.83	5.72
8.3	3.15	4.71
8.4	2.59	3.88
8.5	2.14	3.20
8.6	1.77	2.65
8.7	1.47	2.20
8.8	1.23	1.84
8.9	1.04	1.56
9.0 and above	0.885	1.32

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L. Chronic aquatic life criteria for total ammonia are dependent on pH, temperature and whether fish in early life stages are present or absent. The criteria are based on analysis of unfiltered samples and are calculated according to the equations in Paragraphs (1) and (2) of this subsection. For temperatures from below 0 to 14°C, the criteria for 14°C apply; for temperatures above 30°C, the criteria for 30°C apply. For pH values below 6.5, the criteria for 6.5 apply; for pH values above 9.0, the criteria for 9.0 apply.

(1) Chronic aquatic life criteria for total ammonia when fish early life stages are present.

- (a) The equation to calculate chronic criteria in mg/L as N is:  

$$((0.0577/(1 + 10^{7.688-pH})) + (2.487/(1 + 10^{pH-7.688}))) \times \text{MIN}(2.85, 1.45 \times 10^{0.028 \times (25-T)})$$
- (b) Selected values of calculated chronic criteria in mg/L as N:

1

pH	Temperature (°C)										
	0 and below	14 and below	15	16	18	20	22	24	26	28	30 and above
6.5 and below	<del>6.67</del>	6.67	6.46	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	<del>6.57</del>	6.57	6.36	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	<del>6.44</del>	6.44	6.25	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	<del>6.29</del>	6.29	6.10	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	<del>6.12</del>	6.12	5.93	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	<del>5.91</del>	5.91	5.73	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18
7.1	<del>5.67</del>	5.67	5.49	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	<del>5.39</del>	5.39	5.22	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	<del>5.08</del>	5.08	4.92	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	<del>4.73</del>	4.73	4.59	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	<del>4.36</del>	4.36	4.23	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	<del>3.98</del>	3.98	3.85	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	<del>3.58</del>	3.58	3.47	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	<del>3.18</del>	3.18	3.09	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	<del>2.80</del>	2.80	2.71	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	<del>2.43</del>	2.43	2.36	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897
8.1	<del>2.10</del>	2.10	2.03	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773
8.2	<del>1.79</del>	1.79	1.74	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	<del>1.52</del>	1.52	1.48	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	<del>1.29</del>	1.29	1.25	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	<del>1.09</del>	1.09	1.06	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	<del>0.920</del>	0.920	0.89 2	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
8.7	<del>0.778</del>	0.778	0.75 4	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	<del>0.661</del>	0.661	0.64 1	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244
8.9	<del>0.565</del>	0.565	0.54 8	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208
9.0 and above	<del>0.486</del>	0.486	0.47 1	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

2

3

**(2) Chronic aquatic life criteria for total ammonia when fish early life stages are absent.**

**(a)** The equation to calculate chronic criteria in mg/L as N is:  

$$((0.0577/(1 + 10^{7.688-pH})) + (2.487/(1 + 10^{pH-7.688}))) \times 1.45 \times 10^{0.028 \times (25-MAX(T,7))}$$

**(b)** Selected values of calculated chronic criteria in mg/L as N:

pH	Temperature (°C)									
	7 and below	7 and below	8	9	10	11	12	13	14	15 and above
6.5 and below	10.8	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46
6.6	10.7	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36
6.7	10.5	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25
6.8	10.2	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10
6.9	9.93	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93
7.0	9.60	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73
7.1	9.20	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49
7.2	8.75	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22
7.3	8.24	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92
7.4	7.69	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59
7.5	7.09	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23
7.6	6.46	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85
7.7	5.81	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47
7.8	5.17	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09
7.9	4.54	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71
8.0	3.95	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36
8.1	3.41	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03
8.2	2.91	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74
8.3	2.47	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48
8.4	2.09	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25
8.5	1.77	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06
8.6	1.49	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892
8.7	1.26	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754
8.8	1.07	1.07	1.01	0.944	0.855	0.829	0.778	0.729	0.684	0.641
8.9	0.917	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548
9.0 and above	0.790	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471

At 15° C and above, the criterion for fish early life stages absent is the same as the criterion for fish early life stages present (refer to table in Paragraph (1) of this subsection).

1 [20.6.4.900 NMAC - Rp 20 NMAC 6.1.3100, 10-12-00; A, 10-11-02; A, 05-23-05; A, 07-17-05;  
2 A, 12-01-10; A, XX-XX-XX]

3  
4 **20.6.4.901 PUBLICATION REFERENCES:** These documents are intended as guidance  
5 and are available for public review during regular business hours at the offices of the surface  
6 water quality bureau. Copies of these documents have also been filed with the New Mexico state  
7 records center in order to provide greater access to this information.

8 **A.** American public health association. 1992. *Standard methods for the examination*  
9 *of water and wastewater, 18th Edition*. Washington, D.C. 1048 p.

10  
11 **Subsections B – G of 20.6.4.901 NMAC – No changes proposed.**

12  
13 **H.** Colorado river basin salinity control forum. ~~2002~~14. ~~2002~~14 *Review, water*  
14 *quality standards for salinity, Colorado river system*. Phoenix, Arizona. 99 p.

15  
16 **Subsections I – L of 20.6.4.901 NMAC – No changes proposed.**

17  
18 **M.** United States environmental protection agency. 1984. *Technical support*  
19 *manual: waterbody surveys and assessments for conducting use attainability analyses,*  
20 *volume III: lake systems*. Office of water, regulations and standards, Washington, D.C. 208  
21 p. <http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf>  
22 [20.6.4.901 NMAC - Rp 20 NMAC 6.1.4000, 10-12-00; A, 05-23-05; A, 12-01-10; A, XX-  
23 XX-XX]