

*Presented below are water quality standards that are in effect for Clean Water Act purposes.*

*EPA is posting these standards as a convenience to users and has made a reasonable effort to assure their accuracy. Additionally, EPA has made a reasonable effort to identify parts of the standards that are not approved, disapproved, or are otherwise not in effect for Clean Water Act purposes.*



# **SURFACE WATER QUALITY STANDARDS AND ANTIDEGRADATION POLICY**

*CONFEDERATED SALISH AND KOOTENAI TRIBES OF  
THE FLATHEAD RESERVATION*

*CSKT Natural Resources  
Department Environmental  
Protection Division  
Water Quality Program*

© July 2023 CSKT  
Natural Resources Department  
Environmental Protection Division  
Water Quality Program  
P.O. Box 278  
Pablo, MT 59855  
406.675.2700

# TABLE OF CONTENTS

<b>PART I. GENERAL PROVISIONS</b> .....	<b>3</b>
Section 1.1.1 Authority.....	3
Section 1.1.2 Severability.....	3
Section 1.1.3 Other Law.....	3
Section 1.1.4 Review and Revision of Standards.....	3
<b>PART II. PROCEDURES</b> .....	<b>4</b>
Section 1.2.1 Water Quality Standards and Antidegradation Policy.....	4
<b>PART III. SURFACE WATER QUALITY STANDARDS</b> .....	<b>5</b>
Section 1.3.1 Policy.....	5
Section 1.3.2 Application and Composition of Surface Water Quality Standards.....	5
Section 1.3.3 Definitions.....	5
Section 1.3.4 Classifications.....	9
Section 1.3.5 A-Closed Classification.....	9
Section 1.3.6 A-1 Classification.....	10
Section 1.3.7 B-1 Classification:.....	11
Section 1.3.8 B-2 Classification:.....	13
Section 1.3.9 B-3 Classification:.....	15
Section 1.3.10 C-1 Classification:.....	16
Section 1.3.11 C-2 Classification:.....	17
Section 1.3.12 C-3 Classification:.....	18
Section 1.3.13 General Requirements and Limitations.....	20
Section 1.3.14 Sampling Methods.....	21
Section 1.3.15 Biological Standards.....	21
Section 1.3.16 Radiological Standards.....	22
Section 1.3.17 Use Attainability Analysis (Reserved).....	22
<b>PART IV. ANTIDEGRADATION POLICY</b> .....	<b>23</b>
Section 1.4.1 Antidegradation Policy.....	23
Section 1.4.2 Tiered Classifications of Reservation Surface Waters.....	23
Section 1.4.3 Applicability and Limitations of Antidegradation.....	23
Section 1.4.4 Antidegradation Implementation Procedures.....	24
Section 1.4.5 Critical Condition Identification Procedures (Reserved).....	41
<b>PART V. MIXING ZONE POLICY</b> .....	<b>42</b>
Section 1.5.1 Mixing Zone Policy.....	42
Section 1.5.2 Narrative Toxic Standards (Reserved).....	42
<b>PART VI. COMPLIANCE WITH STANDARDS</b> .....	<b>43</b>
Section 1.6.1 Investigation of Reported or Suspected Non Compliance.....	43
Section 1.6.2 Preliminary Findings.....	43
Section 1.6.3 Investigation Report and Recommendations.....	43
Section 1.6.4 Compliance Order-Civil Action-Exemption.....	44

<b>PART VII. COMPLIANCE PROCEDURES, REQUIREMENTS, ORDERS.....</b>	<b>45</b>
Section 1.7.1 Purpose .....	45
Section 1.7.2 Definitions .....	45
Section 1.7.3 Compliance Schedule Authorization.....	45
Section 1.7.4 Notice of Unpermitted Discharge by Department. ....	45
Section 1.7.5 Required Notice to Department of Release or Unpermitted Discharge.....	46
Section 1.7.6 Immediate Notice of Unpermitted Discharge .....	46
Section 1.7.7 Contents of Immediate Notice of Unpermitted Discharge or Release.....	46
Section 1.7.8 Contents of Subsequent Written Notice of Unpermitted Discharge .....	47
Section 1.7.9 Failure to Notify May Be Basis of Civil Action. ....	48
Section 1.7.10 Cleanup Orders, Plans and Operations. ....	48
Section 1.7.11 Cleanup Order, Contents.....	49
Section 1.7.12 Noncompliance with Order .....	50
Section 1.7.13 Notices of Violation and Cease and Desist Order .....	50
<b>PART VIII NONPOINT-SOURCE POLLUTION MGMT (Reserved) .....</b>	<b>51</b>
<b>PART IX 401 CERTIFICATION.....</b>	<b>52</b>
Section 1.9.1 - Introduction .....	52
Section 1.9.2 - Purpose .....	52
Section 1.9.3 - Definitions.....	52
Section 1.9.4 - Authority to Act .....	52
Section 1.9.5 - Application.....	53
Section 1.9.6 Public Notice and Public Hearings .....	54
<b>CS&amp;KT TRIBAL NUMERIC CHART: Priority Pollutants .....</b>	<b>55</b>
Priority Footnotes .....	61
<b>CS&amp;KT TRIBAL NUMERIC CHART: Non-Priority Pollutants .....</b>	<b>63</b>
Non Priority Pollutant Footnotes .....	65
<b>Freshwater Aquatic Life Criteria for Ammonia.....</b>	<b>66</b>
<b>CSKT Numeric Surface Water Maximum Contaminant</b>	
<b>Level (MCL) Standards.....</b>	<b>70</b>
NOTES .....	72

# CHAPTER 1: WATER QUALITY

## PART I. GENERAL PROVISIONS

### **Section 1.1.1 Authority**

These rules are adopted by the Tribal Council upon recommendation of the Natural Resources Department, under authority of Ordinance 89-B of the Confederated Salish and Kootenai Tribes, the Water Quality Management Ordinance, Sections 1-2-102, 1-2-201, 1-2-204, 1-2-206. After consideration of Section 1-2-208 by the Department, these rules are promulgated pursuant to Ordinance 86-B, the Tribal Administrative Procedures Ordinance.

### **Section 1.1.2 Severability**

If any word, phrase, clause, sentence, paragraph, section, or other part of these rules is held invalid by any court of competent jurisdiction, such judgment shall affect only that portion held invalid.

### **Section 1.1.3 Other Law**

These rules in no manner supersede or negate the necessity of any person to obtain permits or conduct such environmental studies as may be required by Federal or Tribal authorities for any conduct or activity affecting or potentially affecting Reservation waters.

### **Section 1.1.4 Review and Revision of Standards**

Standards will be reviewed and revised in accordance with Ordinance 89-B, Chapter 2, Part 2, Sections 1-2-201 through 1-2-210. Standards will be reviewed and revised as necessary from time to time, but not less often than every three years from the time of final EPA approval.

## PART II. PROCEDURES

### **Section 1.2.1 Water Quality Standards and Antidegradation Policy**

The rule-making procedures found in the Tribal Administrative Procedures Ordinance No. 86-B will be followed with respect to the classification and adoption of standards for, and antidegradation policy decisions regarding, Reservation waters, including all surface water bodies and wetlands of the Flathead Reservation.

## **PART III. SURFACE WATER QUALITY STANDARDS**

### **Section 1.3.1 Policy**

The following standards are adopted to preserve, protect, restore, and maintain the chemical, physical, and biological integrity of the surface waters and wetlands of the Flathead Reservation. Standards are adopted pursuant to procedures outlined in the Tribal Administrative Procedure Ordinance 86-B. New or revised parts of the water quality standards will become effective after EPA approval.

### **Section 1.3.2 Application and Composition of Surface Water Quality Standards**

1. The standards in this Part are adopted to:
  - a) establish maximum or minimum allowable levels or concentrations of pollutants and pollution, and;
  - b) provide a basis for protecting water quality that is currently better than standards require for surface water quality and;
  - c) establish a basis for limiting the introduction of pollutants and/or pollution that could affect existing or designated uses of Reservation surface waters.
2. The provisions of Sections 1.3.13 and 1.3.14 apply to all surface waters. Where interpretation of the narrative water quality standard is more stringent than the applicable numeric standard located within the numeric criteria chart or the specific standards set forth in Sections 1.3.4 through 1.3.12, the narrative standard will always take precedence. (Note: the narrative requirements for “free-froms” and “no toxics in toxic amounts” are contained in Section 1.3.13 (1) (a-e) (2)).
3. The Department will utilize the updated human health carcinogen risk levels (1/1,000,000) for priority pollutants and other pollutants specified in the EPA 822-R-02-047, December, 2002. National Recommended Water Quality Criteria can be found at: <https://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table>. Current copies of this material may be obtained (for 25 cents per page plus postage) from the Environmental Protection Division of the Natural Resources Department, P.O. Box 278, Pablo, Montana 59855-0287, Telephone (406) 675-2700.

### **Section 1.3.3 Definitions**

The following terms have the meanings indicated below. Additional terms defined in Ordinance 89-B, Section 1-1-102 are incorporated by this reference.

1. “Best Management Practices” (BMP’s) means schedules of activities, operational practices, maintenance procedures, and other management practices adopted by rule or incorporated by an agency as a condition of a permit or contract to prevent



or reduce the pollution of Reservation waters. Best Management Practices may also include treatment requirements, operating procedures, and practices to control stormwater runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage that enter or have the potential to enter surface waters or groundwaters of the Tribes.

2. "Contaminated sediments" means sediments containing any of the specifically regulated toxic pollutants included in the Tribal Numeric Chart and any other pollutants in sediments determined to be deleterious to existing and designated uses.
3. "Conventional water treatment" means, in order of application, the processes of coagulation, sedimentation, filtration, and chlorination. It may also include taste and odor control as well as lime softening.
4. "Criteria" means EPA-recommended water quality criteria necessary to protect beneficial uses. Criteria that are adopted by the Tribes become Tribal standards.
5. "CSKT" means The Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation.
6. "Deleterious substances" means any physical, chemical, or biological materials in concentrations or amounts that impair or could impair the existing or designated uses of Reservation surface waters.
7. "Department" means the Tribal Natural Resources Department.
8. "Designated use" means those beneficial uses of Reservation waters that are specified under Sections 1.3.4 through 1.3.12, whether or not they are being attained. In addition, it is the intent of these regulations that all "existing uses" as defined under 1.3.3 (12) be designated as they become known.
9. "Discharge" means any addition of pollutants or combination of pollutants to Reservation waters from any point source. Discharge also means any waters entering surface waters of the Tribes as the result of a direct hydrologic connection from groundwaters that have been degraded by surface sources.
10. "EPA" means the U.S. Environmental Protection Agency.
11. "Ephemeral stream" means a stream or part of a stream that flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice and that has a channel bottom that is always above the local water table.
12. "Existing use" means a use that is actually attained in the water body (or a use that the existing water quality would have allowed the water body to attain) on or after November 28, 1975, whether or not it is a designated use and included in water quality standards.
13. "Geometric mean" is the mean of the logarithms, transformed back to their original units:  $GM = \exp(\bar{y})$  where  $y_i = \ln(x_i)$  and  $\bar{y}$  = sample mean of  $y$ .
14. "Intermittent stream" means a stream or reach of a stream that is below the local water table for at least some part of the year and that obtains its flow from both surface runoff and groundwater discharge.
15. "Naturally occurring water quality" means the quality of a waterbody over which there has been little or no human influence and is described by the range, mean, mode, and other appropriate descriptors of seasonal water quality in Reservation waters.
16. "Ordinance 86-B" means the CSKT Tribal Administrative Procedures Ordinance.

17. "Ordinance 89-B" means the CSKT Tribal Water Quality Management Ordinance.
18. "Outstanding National Resource Waters (ONRW)" means waters that constitute an outstanding National resource because of their exceptional quality and/or their ecological, recreational or cultural significance.
19. "Person" means an individual, association, partnership, corporation, commercial or professional establishment, firm, agency, or any agent or employee thereof.
20. "Pesticide" means any insecticide, herbicide, rodenticide, fungicide, or any substance or mixture of substances intended for preventing, destroying, repelling, altering life processes, or controlling insects, rodents, nematodes, fungi, weeds, and other undesirable forms of plant and animal life.
21. "Point Source" means any discernable, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, dam gate or spillway, well, discrete fissure, container, rolling stock, or vessel or other floating craft from which pollutants are or may be discharged. Point source may also include waters originating at discrete locations on the surface that subsequently enter groundwaters and reenter Tribal surface waters, as described under the definition of "Discharge".
22. "Pollutant" means any material that enters or has the potential to enter surface waters of the Tribes and impairs or has the potential to impair any designated or existing use of Tribal waters or that results in the exceedance of any numeric standard or narrative standard. Pollutants include, but are not limited to, dredged spoil, dirt, slurry, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, or any industrial, municipal, or agricultural wastes discharged into or that in any way enter waters of the Tribes.
23. "Pollution" means any man-made or man-induced alteration that results in, or has the potential to result in, the degradation of the chemical, physical, biological, and radiological integrity of any Tribal waters.
24. "Sediment" means solid material settled from suspension in a liquid; mineral or organic solid material that is being transported or has been moved from its site of origin by air, water, or ice and has come to rest on the earth's surface either above or below sea level; or inorganic or organic particles originating from weathering, chemical precipitation, or biological activity.
25. "Settleable solids" means inorganic or organic particles that are being transported or have been transported by water from the site or sites of origin and are settled or are capable of being settled from suspension.
26. "Standards" means all designated uses, all numeric standards, all narrative standards, and all policies and procedures related to antidegradation or other written implementation procedures.
27. "Surface waters" means any waters on the surface of the Reservation, including but not limited to streams (permanent, intermittent, and ephemeral), lakes, ponds, wetlands, seeps and springs, reservoirs, and irrigation and drainage systems discharging into a stream, lake, pond, wetland, reservoir, or other surface water. Treatment works used solely for treating, transporting, or impounding pollutants are not considered surface water.
28. "Toxic substances" means EPA's most recently published list of priority pollutants in EPA CWA 304 (a) Criteria Chart and any concentrations or combinations of materials that are toxic or harmful to human, animal, plant,

or aquatic life.

29. "Tribal Numeric Chart Levels" means the levels and concentrations for priority toxic and other pollutants. This chart adopts the latest EPA Updates to CWA 304 (a) Criteria Chart for priority toxic and other pollutants. Criteria are based on the 1999 updated carcinogen risk levels (1/1,000,000) to protect human health. Chronic or acute concentration levels may not be exceeded more than once in any consecutive 3-year period for any water quality parameter unless specifically stated otherwise. Levels are used throughout this Part to determine the maximum or minimum allowable concentrations of toxic or deleterious substances. Metals are based upon total recoverable analytical methods.
30. "True color" means the color of water from which turbidity has been removed.
31. "Turbidity" means a condition in water or wastewater caused by the presence of suspended matter that results in the scattering and absorption of light rays. Expressed as nephelometric turbidity units (NTU) and Formazin Nephelometric Units (FNU)
32. "Use Attainability Analysis" (UAA) means an assessment of the ability of a waterbody to attain a particular use. It is based on the physical, chemical, biological, and economic factors that affect the attainment of an existing or designated use. A use attainability analysis consists of a waterbody survey and assessment, a wasteload allocation, and, if appropriate, an economic analysis. UAAs may be used to determine whether a use could be attained were it not for natural or anthropogenic conditions that are not reparable within 20 years and must conform to EPA's latest guidance on use attainability analysis.
33. "Waste" means any material, gas, liquid or solid, that is a product or byproduct of any human activity and that is disposed of or that enters waters of the Tribes and impairs or has the potential to impair any Tribal standards.

**Table 1. CSKT classifications (and WQS reference), designated uses and applicable criteria**

<u>Classification</u> <u>WQS</u> <u>Reference</u>	<u>Designated</u> <u>Uses</u>	<u>Applicable Criteria in Numeric Criteria Chart</u>
<u>A-1 Closed</u> <u>Section 1.3.5</u>	<u>Drinking/culinary/food processing (after simple disinfection)</u>	<u>Human health – water +organism</u>
	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.5)</u>
	<u>Wildlife</u>	<u>==</u>
	<u>Fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>
<u>A-1</u> <u>Section 1.3.6</u>	<u>Drinking/culinary/food processing (after conventional treatment for naturally present impurities)</u>	<u>Human health – water +organism</u>
	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.6)</u>
	<u>Wildlife</u>	<u>==</u>
	<u>Salmonid fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>
<u>B-1</u> <u>Section 1.3.7</u>	<u>Drinking/culinary/food processing (after conventional treatment)</u>	<u>Human health – water +organism</u>
	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.7)</u>
	<u>Wildlife</u>	<u>==</u>
	<u>Salmonid fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>
<u>B-2</u> <u>Section 1.3.8</u>	<u>Drinking/culinary/food processing (after conventional treatment for naturally present impurities)</u>	<u>Human health – water +organism</u>
	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.8)</u>
	<u>Wildlife</u>	<u>==</u>
	<u>Marginal Salmonid fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>
<u>B-3</u> <u>Section 1.3.9</u>	<u>Drinking/culinary/food processing (after conventional treatment for naturally present impurities)</u>	<u>Human health – water +organism</u>
	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.9)</u>
	<u>Wildlife</u>	<u>==</u>
	<u>Salmonid fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>

	<u>Agricultural and industrial water supply</u>	--
C-1 <u>Section</u> <u>1.3.10</u>	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.10)</u>
	<u>Wildlife</u>	--
	<u>Salmonid fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>
	<u>Agricultural and industrial water supply</u>	--
C-2 <u>Section</u> <u>1.3.11</u>	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.11)</u>
	<u>Wildlife</u>	--
	<u>Non-salmonid fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>
	<u>Marginal agricultural and industrial water supply</u>	--
	<u>Marginal drinking /culinary/food processing</u>	<u>Human health – water + organism</u>
C-3 <u>Section</u> <u>1.3.12</u>	<u>Swimming/bathing/recreation</u>	<u>(E. coli criteria in Section 1.3.12)</u>
	<u>Wildlife</u>	--
	<u>Marginal non-salmonid fish and aquatic life</u>	<u>Aquatic Life and human health – organism only</u>
	<u>Agricultural and industrial water supply</u>	--

Note for Table 1: It is important to note that the criteria based on maximum contaminant levels (MCLs) apply to the designated use for drinking/culinary/food processing (after simple disinfection). As identified in table ‘CS&KT Numeric Surface Water Maximum Contaminant Level (MCL) Standards Adopted To Protect The Water Supply Designated Use,’ apply to the water supply designated use when the Numeric Criteria Chart does not have a water+organism human health value for a parameter or the MCL is more stringent than that value.

### **Section 1.3.4 Classifications**

1. Water quality segments specified in Sections 1.3.5 through 1.3.12 include all elements referred to in the definition of surface water. Standards must be met within each stream reach specified in each classification. Discharges occurring upstream or downstream of a stream reach specified within a classification may not lead to standards exceedances for the receiving reach and any downstream reach to the extent that such discharges are subject to regulation. Downstream toxicity tests may be required if the fate and transport of dissolved and/or particulate pollutants negatively impacts downstream water quality or impairs any designated or existing use.
2. The Department recognizes that the natural water quality of wetlands may differ from that of associated streams. The existing water quality of unimpaired wetlands and wetland functions and values will be protected. Wetlands will be restored and enhanced when considered degraded.

### **Section 1.3.5 A-Closed Classification**

1. The following Reservation waters are classified A-Closed:
  - a) Hellroaring Creek drainage upstream of the Polson water-supply intake.
  - b) Middle Crow Creek drainage to the Ronan water-supply intake.
2. Designated Uses:

Waters classified A-Closed must be maintained suitable for drinking, culinary, and food processing purposes after simple disinfection. Water quality is to be suitable for swimming, bathing, recreation, and wildlife (birds, mammals, amphibians and reptiles), and the growth and propagation of fish and associated aquatic life, although access restrictions to protect public health may limit actual use of A-Closed waters for these uses.
3. Standards:

Tribal standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified A-Closed:

  - a) The geometric mean number of *Escherichia coli* (E. Coli) bacteria may not exceed 32 colony-forming units per 100 milliliters if resulting from domestic sewage

- b) No change from naturally occurring dissolved oxygen concentrations is allowed.
- c) No change from naturally occurring pH is allowed.
- d) No increase above naturally occurring turbidity is allowed.
- e) No increase above naturally occurring water temperature is allowed.
- f) No increases are allowed above naturally occurring concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, fish, or wildlife.
- g) No increase in true color is allowed.
- h) For waters classified A-closed, no increases of toxic or other deleterious substances, pesticides, or organic and inorganic materials, including heavy metals, above natural concentrations are allowed.
- i) No increase in radioactivity above natural background levels is allowed.

### **Section 1.3.6 A-1 Classification**

1. The following Reservation waters are classified A-1:
  - a) All streams and lakes within the boundaries of the Mission Mountains Tribal Wilderness except Middle Crow Creek drainage to the Ronan water-supply intake, and streams north of Middle Crow Creek.
  - b) South Fork Jocko River and its tributaries within the South Fork of the Jocko Primitive Area.
  - c) That portion of Flathead Lake within the Flathead Indian Reservation and all streams within the Reservation that are tributary to Flathead Lake except tributaries in the Hellroaring Creek drainage.
  - d) Mission Creek drainage from the Mission Mountains Tribal Wilderness boundary to the St. Ignatius water-supply intake.
2. Designated Uses:  
Waters classified A-1 must be maintained suitable for drinking, culinary, and food processing purposes after conventional treatment for removal of naturally present impurities. Water quality is to be suitable for bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the growth and propagation of salmonid fishes and associated aquatic life; and agricultural and industrial water supply purposes.
3. Standards:  
Tribal Standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified A-1:

- a) The geometric mean number of *Escherichia coli* (E. Coli) bacteria may not exceed 32 colony-forming units per 100 milliliters if resulting from domestic sewage.
- b) Dissolved oxygen concentration must not be reduced below the applicable levels given in the Tribal Numeric Chart.
- c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.
- d) No increase above naturally occurring turbidity is allowed.
- e) Where naturally occurring water temperatures are in the range of 32°F (0°C) to 66°F (18.89°C), a 1°F (.56°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are in the range of 66°F (18.89°C) to 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are above 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed. Where naturally occurring water temperatures are within the range of 32°F (0°C) to 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed.
- f) No increases are allowed above naturally occurring concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, fish, or wildlife.
- g) True color must not be increased more than two units above naturally occurring color.
- h) For waters classified A-1, concentrations of toxic or deleterious substances which would remain in the water after conventional water treatment may not exceed the maximum contaminant levels set forth in the U.S. EPA National Primary Drinking Water Regulations (40 CFR Part 141) or the U.S. EPA National Secondary Drinking Water Regulations (40 CFR Part 143). Nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels.

### **Section 1.3.7 B-1 Classification**

1. The following Reservation waters are classified B-1:
  - a) Hellroaring Creek drainage downstream of the Polson water-supply intake.
  - b) Flathead River and its tributaries downstream of the highway bridge at Polson except the following tributaries:
    - (1) All streams and lakes within the boundaries of the Mission Mountains Tribal Wilderness located south of Middle Crow Creek.
    - (2) Middle Crow Creek drainage to the Ronan water-supply intake.



- (3) Crow Creek (mainstem) from the road crossing in Section 16, T20N, R20W, P.M.M. to the Flathead River, including Lower Crow Reservoir.
- (4) Little Bitterroot River (mainstem) from the Reservation boundary to the Flathead River.
- (5) Mission Creek drainage from the Mission Mountains Tribal Wilderness boundary to the St. Ignatius water-supply intake.
- (6) Mission Creek (mainstem) from the U.S. Highway 93 crossing to the Flathead River.
- (7) South Fork Jocko River and its tributaries within the South Fork of the Jocko Primitive Area upstream of section 36, T17N, R18W, P.M.M.
- (8) Hot Springs Creek (mainstem) from the former Hot Springs water-supply intake to the Little Bitterroot River.

c) Tributaries to Hot Springs Creek from the former Hot Springs water-supply intake to the Little Bitterroot River.

2. Designated Uses:

Waters classified B-1 must be maintained suitable for drinking and culinary and food processing purposes after conventional treatment; bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the growth and propagation of salmonid fishes and associated aquatic life; and agricultural and industrial water supply purposes.

3. Standards:

Tribal Standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified B-1:

- a) The geometric mean number of E-coli may not exceed 126 colony-forming units per 100 milliliters, and ten percent of the total samples may not exceed 252 colony-forming units per 100 milliliters during any 30-day period, ~~and the geometric mean number or organisms in the fecal coliform group must not exceed 200 per 100 milliliters, and 10 percent of the total samples during any 30-day period are not to exceed 400 fecal coliforms per 100 milliliters.~~
- b) Dissolved oxygen concentration must not be reduced below the applicable levels set forth in the Tribal Numeric Chart.
- c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.
- d) The maximum allowable increase above naturally occurring turbidity is 5 nephelometric turbidity units.

- e) Where naturally occurring water temperatures are in the range of 32°F (0°C) to 66°F (18.89°C), a 1°F (.56°C) maximum temperature increase is allowed. Where naturally water temperatures are in the range of 66°F (18.89°C) to 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are above 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are above 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed. Where natural water temperatures are within the range of 32°F (0°C) to 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed.
- f) No increases are allowed above natural concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, fish, or other wildlife.
- g) True color must not be increased more than five units above naturally occurring color.
- h) For waters classified B-1, concentrations of toxic or deleterious substances which would remain in the water after conventional water treatment may not exceed the maximum contaminant levels set forth in the U.S. EPA National Primary Drinking Water Regulations (40 CFR Part 141), the Tribal Numeric Chart, and the U.S. EPA National Secondary Drinking Water Regulations (40 CFR Part 143). Nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels.

### **Section 1.3.8 B-2 Classification**

1. The following Reservation waters are classified B-2:
  - a) Crow Creek (mainstem) from the road crossing in section 16, T20N, R20W.P.M.M. to the Flathead River, including Lower Crow Reservoir.
  - b) Little Bitterroot River (mainstem) from the Reservation boundary to the Flathead River.
  - c) Mission Creek (mainstem) from the U.S. Highway 93 crossing to the Flathead River.
2. Designated Uses:  
 Waters classified B-2 must be maintained suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the growth and marginal propagation of salmonid fishes and associated aquatic life; and agricultural and industrial water supply purposes.
3. Standards:

Tribal Standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified B-2:

- a) The geometric mean number of E-coli may not exceed 126 colony-forming units per 100 milliliters, and ten percent of the total samples may not exceed 252 colony-forming units per 100 milliliters during any 30-day period, ~~and the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, and 10 percent of the total samples during any 30-day period are not to exceed 400 fecal coliforms per 100 milliliters.~~
- b) Dissolved oxygen concentration must not be reduced below the applicable levels given in the Tribal Numeric Chart.
- c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.
- d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units.
- e) Where naturally occurring water temperatures are in the range of 32°F (0°C) to 66°F (18.89°C), a 1°F (.56°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are in the range of 66°F (18.89°C) to 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed. Where naturally occurring water temperatures are within the range of 32°F (0°C) to 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed.
- f) No increases are allowed above naturally occurring concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, fish, or wildlife.
- g) True color must not be increased more than five units above the natural color.
- h) For waters classified B-2, concentrations of toxic or deleterious substances which would remain in the water after conventional water treatment may not exceed the maximum contaminant levels set forth in the U.S. EPA National Primary Drinking Water Regulations (40 CFR Part 141), the Tribal Numeric Chart or the U.S. EPA National Secondary Drinking Water Regulations (40 CFR Part 143). Nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels.

### **Section 1.3.9 B-3 Classification**

1. There are no Reservation surface waters presently classified B-3.
2. Designated Uses:  
Waters classified B-3 must be maintained suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the growth and propagation of non-salmonid fishes and associated aquatic life; and agricultural and industrial water supply purposes.
3. Standards:  
Tribal Standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified B-3:
  - a) The geometric mean number of E-coli may not exceed 126 colony-forming units per 100 milliliters, and ten percent of the total samples may not exceed 252 colony-forming units per 100 milliliters during any 30-day period, ~~and the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, and 10 percent of the total samples during any 30-day period are not to exceed 400 fecal coliforms per 100 milliliters.~~
  - b) Dissolved oxygen concentration must not be reduced below the applicable levels given in the Tribal Numeric Chart.
  - c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.
  - d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units.
  - e) Where naturally occurring water temperatures are in the range of 32 °F (0°C) to 66 °F (18.89°C), a 1°F (.56°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are in the range of 66 °F (18.89°C) to 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are >66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are >55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed. Where naturally occurring water temperatures are within the range of 32°F (0°C) to 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed.
  - f)

- g) No increases are allowed above natural concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, fish, or wildlife.
- h) True color must not be increased more than five units above the natural color.
- i) For waters classified B-3, concentrations of toxic or deleterious substances which would remain in the water after conventional water treatment may not exceed the maximum contaminant levels set forth in the U.S. EPA National Primary Drinking Water Regulations (40 CFR Part 141), the Tribal Numeric Chart, and the U.S. EPA National Secondary Drinking Water Regulations (40 CFR Part 143). Nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels.

### **Section 1.3.10 C-1 Classification**

1. There are no Reservation surface waters presently classified C-1.
2. Designated Uses:  
Waters classified C-1 must be maintained suitable for bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the growth and propagation of salmonid fishes and associated aquatic life; and agricultural and industrial water supply purposes.
3. Standards:  
Tribal Standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified C-1:
  - a) The geometric mean number of E-coli may not exceed 126 colony-forming units per 100 milliliters, and ten percent of the total samples may not exceed 252 colony-forming units per 100 milliliters during any 30-day period, ~~and the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, and 10 percent of the total samples during any 30-day period are not to exceed 400 fecal coliforms per~~
  - b) Dissolved oxygen concentration must not be reduced below the applicable levels given in the Tribal Numeric Chart.
  - c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.
  - d) The maximum allowable increase above naturally occurring turbidity is 5 nephelometric turbidity units.
  - e) Where naturally occurring water temperatures are in the range of

32°F (0°C) to 66°F (18.89°C), a 1°F (.56°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are in the range of 66°F (18.89°C) to 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are above 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are above 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed. Where naturally occurring water temperatures are within the range of 32°F (0°C) to 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed.

- f) No increases are allowed above naturally occurring concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, fish, or wildlife.
- g) True color must not be increased more than five units above naturally occurring color.
- h) For waters classified C-1, concentrations of toxic or deleterious substances may not exceed levels that render the waters harmful, detrimental, or injurious to public health. Nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels.

### **Section 1.3.11 C-2 Classification**

1. There are no Reservation surface waters presently classified C-2.
2. Designated Uses:  
Waters classified C-2 must be maintained suitable for bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the growth and propagation of non-salmonid fishes and associated aquatic life, and agricultural and industrial water supply purposes. The quality of these waters is naturally marginal for drinking, culinary, and food processing purposes and agricultural and industrial water supply purposes. Degradation that will impact existing uses will not be allowed.
3. Standards:  
Tribal Standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified C-2:
  - a) The geometric mean number of E-coli may not exceed 126 colony-forming units per 100 milliliters, and ten percent of the total samples may not exceed 252 colony-forming units per 100 milliliters during any 30-day period, and the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, and 10 percent of the total samples during any 30-day period are not to exceed 400 fecal coliforms per 100 milliliters.

- b) Dissolved oxygen concentration may not be reduced below the applicable levels given in the Tribal Numeric Chart.
- c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.
- d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units.
- e) Where naturally occurring water temperatures are in the range of 32°F (0°C) to 66°F (18.89°C), a 1°F (.56°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are in the range of 66°F (18.89°C) to 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are above 66.5°F (19.17°C), a 0.5°F (.278°C) maximum temperature increase is allowed. Where naturally occurring water temperatures are above 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed. Where naturally occurring water temperatures are within the range of 32°F (0°C) to 55°F (12.78°C), a 2°F (1.11°C) maximum decrease is allowed.
- f) No increases are allowed above natural concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, or fish and wildlife.
- g) True color must not be increased more than five units above naturally occurring color.
- h) Concentrations of toxic or deleterious substances may not exceed levels that render the waters harmful, detrimental or injurious to public health. Nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels.

### **Section 1.3.12 C-3 Classification**

1. The following Reservation waters are classified C-3:
  - a) Hot Springs Creek (mainstem) from the Hot Springs water-supply intake to the Little Bitterroot River.
2. Designated Uses:  
Waters classified C-3 must be maintained suitable for bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the marginal growth and propagation of non-salmonid fishes and associated aquatic life; and agricultural and industrial water supply purposes.
3. Standards:

Tribal Standards are intended to protect and restore waters. No person may conduct activities that lead to exceedances of numeric or narrative water quality standards. The following are the specific water quality standards for waters classified C-3:

- a) The geometric mean number of E-coli may not exceed 126 colony-forming units per 100 milliliters, and ten percent of the total samples may not exceed 252 colony-forming units per 100 milliliters during any 30 day period, ~~and the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, and 10 percent of the total samples during any 30-day period are not to exceed 400 fecal coliforms per 100 milliliters.~~
- b) Dissolved oxygen concentration must not be reduced below the applicable levels given in the Tribal Numeric Chart.
- c) Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 9.0 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0.
- d) The maximum allowable increase above naturally occurring turbidity is 10 nephelometric turbidity units.
- e) Where naturally occurring water temperatures are within the range of 32°F (0°C) to 77°F (25°C), a 3°F (1.67°C) maximum water temperature increase is allowed. Where naturally occurring water temperatures are within the range of 77°F (25°C) to 79.5°F (26.39°C), a 0.5°F (.278°C) maximum water temperature increase is allowed. Where the naturally occurring water temperature is 79.5°F (26.39°C) or greater, the maximum allowable increase in water temperature is 0.5°F (.278°C). When the water temperature is above 55°F (12.78°C), a 2°F (1.11°C) ~~per hour~~ maximum decrease is allowed. Where naturally occurring water temperatures are within the range of 55°F (12.78°C) to 32°F (0°C) a 2 °F (1.11°C)-~~per hour~~ maximum decrease below naturally occurring water temperature is allowed.
- f) No increases are allowed above naturally occurring concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, or fish wildlife.
- g) True color must not be increased more than five units above naturally occurring color.
- h) For waters classified C-3, concentrations of toxic or deleterious substances may not exceed levels that render the waters harmful, detrimental, or injurious to public health and exceed Tribal Numeric Chart levels.

### **Section 1.3.13 General Requirements and Limitations**



1. Reservation surface waters must be free from substances that are or may become injurious to public health, safety, welfare, or any of the designated or existing beneficial uses. Such substances may or will:
  - a) Settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines;
  - b) Create floating debris, scum, a visible oil film (or be present in concentrations at or above 10 milligrams per liter) or globules of grease or other floating materials;
  - c) Produce odors, colors or other conditions that create a nuisance or render undesirable tastes to fish flesh or make fish inedible;
  - d) Create concentrations or combinations of materials that are toxic or harmful to human, animal, plant, or aquatic life except for pesticide application as described in Section 1.3.13 (4); and
  - e) Create conditions that produce undesirable aquatic life.
2. No pollutants and/or pollution may be discharged which, either alone or in combination with other pollutants and/or pollution, will cause exceedances of surface water quality standards (designated uses, numeric, narrative, and antidegradation).
3. Water, waste, or product holding facilities, leaching pads or tailing ponds utilized in the processing of ore must be located, constructed, operated, and maintained in such a manner and be constructed of materials that prevent the discharge, seepage, drainage, infiltration, or flow that cause, threaten, or allow pollution of surface waters. The Department may require that a monitoring system be installed and operated if the Department determines that pollutants may reach surface waters or present a substantial risk to public health.
  - a) Complete plans and specifications for proposed water, waste, or product holding facilities, leaching pads or tailing ponds must be submitted to the Department no less than 60 days prior to the proposed commencement of construction. Prior to commencement of construction, written Departmental approval must be obtained.
  - b) Water, waste, or product holding facilities, leaching pads or tailing ponds operating as of the effective date of this rule must be operated and maintained in such a manner so as to prevent the discharge, seepage, drainage, infiltration or flow that causes, threatens, or allows the pollution of surface waters.
4. Application of pesticides in or adjacent to Reservation surface waters must be in strict compliance with the labeled directions for use of the pesticide and other relevant requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and other Federal or Tribal laws that apply. Pesticide application should target noxious species and must not impact the structure or function of indigenous or intentionally introduced aquatic and wildlife communities.
5. No pollutants or pollution may be discharged that, either alone or in combination with other pollutants or pollution, will result in total dissolved gas pressure exceeding 110 percent of saturation relative to the water surface.

6. On all public water-supply watersheds, detailed plans and specifications for the construction and operation of roads will be submitted to the Department for its written approval no less than 60 days prior to the day on which it is desired to commence road construction. Approval must be obtained in writing from the Department prior to commencement of such construction.

### **Section 1.3.14 Sampling Methods**

1. Methods of sample collection, preservation, and analysis used to determine compliance with the applicable water quality standards will comply with the latest edition of Standard Methods for the Examination of Water and Wastewater published by the American Public Health Association or be in accordance with tests or procedures that have been found to be equivalent or more applicable by the EPA as set forth in 40 C.F.R. 141.23, 40 C.F.R. 136 or other official EPA guidance.
2. Standards for organisms of the coliform group are based on a minimum of five samples obtained during separate 24-hour periods during any consecutive 30-day period analyzed by the most probable number or equivalent membrane filter methods or in accordance with tests or analytical procedures that are found to be either equivalent or more applicable by the EPA. If however, there are fewer than 5 samples/30 days available, the available samples will be used to calculate the geometric mean for determination of compliance with standards.
3. Bioassay tolerance concentrations must be determined using the latest available research results for the materials using bioassay test procedures for simulating actual stream conditions as set forth in the latest edition of Standard Methods for the Examination of Water and Wastewater published by the American Public Health Association, ASTM Standards Part 31, or in accordance with tests or analytical procedures found to be either equivalent or more applicable by the EPA. Any bioassay studies must be made using a representative sensitive local species at life stages of economic or ecological importance. However, other species whose relative sensitivity is known may be used when there is difficulty in providing the more sensitive species in sufficient numbers or when such species are unsatisfactory for routine confined bioassays. All bioassay methods and species selections must be approved by the Department.

### **Section 1.3.15 Biological Standards**

It is the goal of the Tribal Council that all surface waters of the Reservation shall be free from substances in concentrations or combinations that will adversely impact the structure or function of indigenous or intentionally introduced aquatic and wildlife communities. Pesticides must be applied following label directions and other stipulations identified in Section 1.2.13.4. No person may cause the introduction of such substances to surface waters, whether via point source or nonpoint source. Specifically, the Tribes intend to fully protect federally listed or proposed threatened or endangered species or species of special Tribal interest.

The Tribes do not have specific, numeric biological standards or criteria, however, it is the intent of the Tribes to develop such criteria or standards as resources allow.

### **Section 1.3.16 Radiological Standards**

No person may cause radioactive materials to be present in surface waters in excess of natural quantities. In addition, specific numeric criteria for radiological substances are contained in the numeric chart for purposes of determining potential impairment.

### **Section 1.3.17 Use Attainability Analysis (Reserved)**

The department may recommend changes in designated uses in conformity with the requirements of Ordinance 89-B, Section 1-2-201 through 1-2-210 and the Tribal Administrative Procedures Ordinance 86-B. These changes in use may only be made in cases where one or more designated beneficial uses cannot be attained. Where such changes are sought by any person, a Use Attainability Analysis will be required to show that current designated uses are not achievable in accordance with EPA guidance.

## PART IV. ANTIDegradATION POLICY

### **Section 1.4.1 Antidegradation Policy**

The Tribal antidegradation policy is set out in Ordinance 89-B, Section 1-2-206, which is incorporated herein by reference. See also Section 1.2.1 of this document.

### **Section 1.4.2 Tiered Classifications of Reservation Surface Waters**

1. Antidegradation implementation methods include the following requirements for all Reservation surface waters:
  - a) Tier 1 waters. Existing instream uses and a level of water quality necessary to fully protect existing instream uses shall be maintained and protected for Tier 1 waters. All Reservation waters must meet Tier 1 water quality requirements.
  - b) Tier 2 waters. Where the quality of the waters exceeds levels necessary to support propagation of fish and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Department recommends and the Council finds, after compliance with the intergovernmental coordination and public participation provisions of the continuing planning process set out in Ordinance 89-B, Section 1-2-402, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which Tier 2 waters are located. In allowing any degradation or lower water quality, the Department and the Council shall assure that water quality is adequate to protect existing uses fully, assure the highest requirements for all new and existing point sources, and require all cost-effective and reasonable best management practices for point source and nonpoint source pollution control.
  - c) Tier 3 waters. Where Tribal waters constitute an outstanding national resource, such as waters of exceptional quality, or waters of ecological, recreational, or cultural significance, water quality shall be maintained and protected for Tier 3 waters. The following are Tier 3 waters:
    - (1) All waters located within Tribally designated primitive or wilderness areas.

### **Section 1.4.3 Applicability and Limitations of Antidegradation**

1. The requirements of this Part apply to any human activity degrading or potentially degrading a water body or segment thereof.
2. Tier 1. Existing instream uses and a level of water quality necessary to protect those uses will be protected and maintained.

3. Tier 2. If the Department or Council determine, based on important economic or social development, that degradation may be allowed, in no event may degradation of Reservation waters interfere with or become harmful, detrimental, or injurious to public health or welfare, recreation, safety, cultural, or spiritual values, fish and wildlife uses, livestock uses, or other existing uses. In allowing degradation to lower water quality, the Department shall assure water quality adequate to protect existing uses fully and shall assure that the most stringent enforceable requirements will be applied to all new and existing point sources and that all cost-effective and reasonable best management practices for nonpoint source control will be achieved.
4. Degradation of Outstanding National Resource Waters (ONRW) is prohibited. No new or expanded discharges are allowed in ONRW waters, whether or not they would degrade existing water quality. Short term exceptions to this policy may be made by the Department if the activity will result in the cleanup of an existing pollution source and all practicable methods are used to minimize any water quality or habitat effects on the affected waters and to minimize the length of time that the exception will apply.

## **Section 1.4.4 Antidegradation Implementation Procedures**

### **Introduction**

These antidegradation procedures provide detailed methods and guidance to be followed by the Confederated Salish and Kootenai Tribes (CSKT) Natural Resources Department (“the Department”) in implementing Section 1-2-206 of the Antidegradation Policy located in CSKT Water Quality Management Ordinance 89-B. In all cases, applicable technology and water quality-based requirements are to be implemented in combination with the antidegradation requirements described in this document.

Implementation of tribal and federal antidegradation requirements serves to promote the maintenance and protection of existing surface water quality. Under this program, all Reservation surface waters are provided one of three different levels of antidegradation protection. The level of protection that is provided to a specific segment depends upon a number of factors discussed in detail below. At a minimum, all waters are subject to a base level of protection (known as ***Tier 1*** or ***existing use protection***). Some Tribal waters may qualify only for this level of protection, while other Tribal waters may qualify for a higher level of protection based upon existing high water quality.

### **Part 1. The Antidegradation Review Process**

The Department will conduct some level of antidegradation review for all regulated activities that have the potential to affect existing water quality. The specifics of the review will depend upon the waterbody segment that would be affected, the Tier of antidegradation applicable to that waterbody segment, and the extent to which existing water quality would be degraded.

A sequence of steps representing the major antidegradation review requirements are presented in Figure 1. In conducting an antidegradation review, the first task that will be addressed by the Department is to determine which Tier of antidegradation applies. This is accomplished, by either assigning an antidegradation designation or by determining that the existing quality of the segment is better than necessary to support “fishable/swimmable” uses.

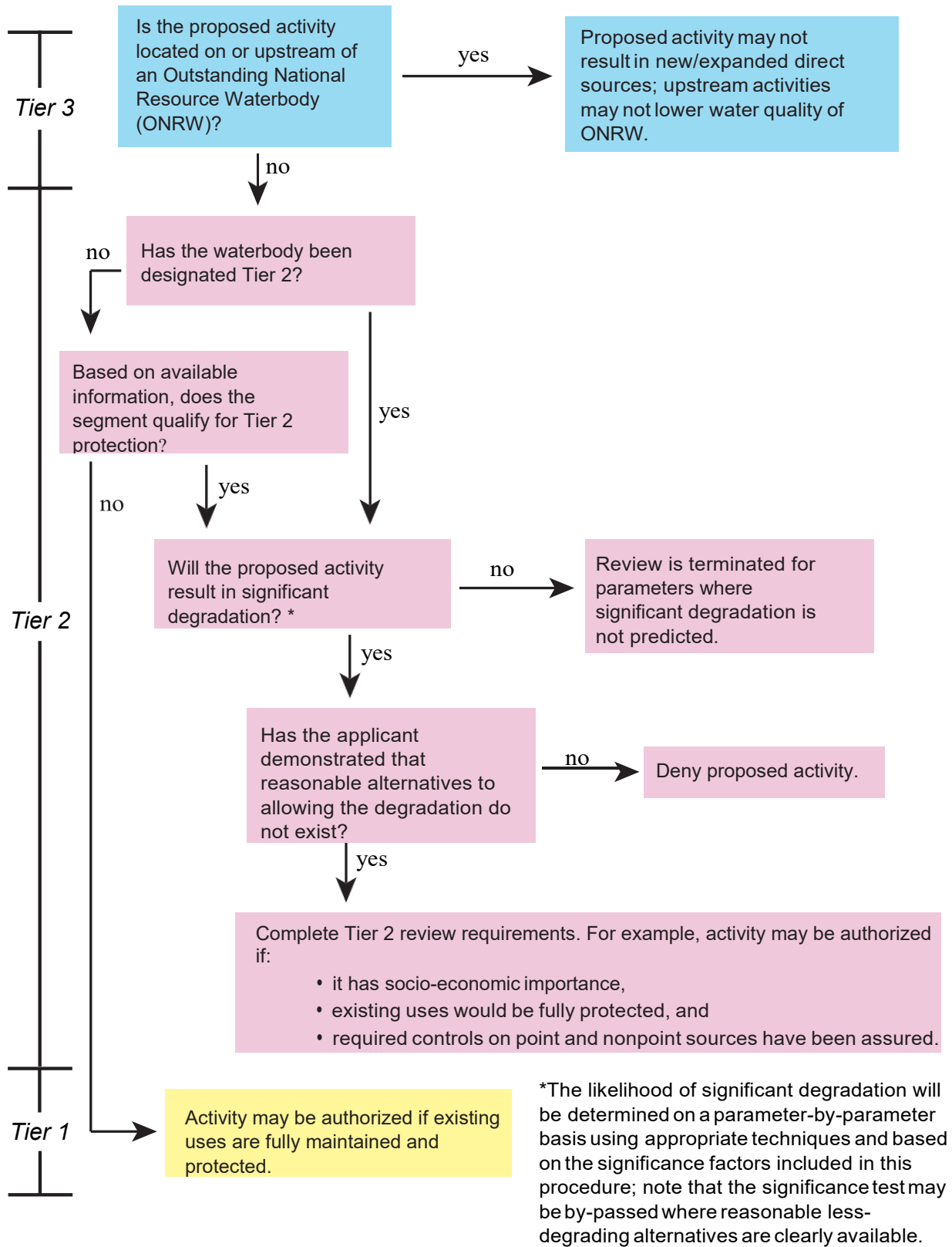


Figure 1. CSKT Antidegradation Implementation Flow Chart

Once the correct Tier of requirements is identified, the Department determines whether authorizing the proposed activity would be consistent with the Tribe's antidegradation requirements. The major conclusions of the Department's review are documented using an antidegradation review worksheet (Appendix). Based upon the review findings, a preliminary decision is made by the Department and subjected to intergovernmental coordination and public participation. Public participation occurs regardless of the outcome of the preliminary decision.

The Department then considers public comments and reaches a final decision regarding whether to authorize the proposed activity pursuant to the Tribe's antidegradation requirements. The substance and basis of the final decision by the Department are documented in the administrative record. The procedures to be followed by the Department in reaching a preliminary decision under each Tier of antidegradation are described below.

### **Tier 3 Procedures**

#### **A. Waters Qualifying for ONRW (Outstanding National Resource Waters Protection)**

##### **(1) Qualification Criteria**

Segments will be subject to **Tier 3** protection requirements only where an **ONRW** designation has been assigned by the Tribal Council through the Tribal rule making process specified under Tribal Administrative Procedures Ordinance 86-B. The factors to be considered in determining whether to assign an ONRW designation may include the following: location, previous special designations, existing water quality, ecological value, recreational or aesthetic value, or any other value or factors that indicate outstanding ecological or recreational resource value.

##### **(2) Water Quality Requirements**

Outstanding water quality is *not* a prerequisite for ONRW designation. The only requirement is that the segment has outstanding value as an aquatic resource, which may derive from the presence of exceptional scenic or recreational attributes, or from the presence of unique or sensitive ecosystems that may have naturally low water quality, or other factors.

##### **(3) Public Nomination**

The Public may nominate any Tribal water for ONRW protection at any time by sending a written request to the following address:

CSKT Division of Environmental Protection  
P.O. Box 278  
Pablo, MT 59855

The written request should explain why an ONRW designation is warranted based on one or more of the factors identified above. The Department will evaluate the information provided on the waterbody in question and determine whether an ONRW designation is warranted based on the factors identified above. If the waterbody does warrant designation as an ONRW, the Department will recommend to the Tribal Council that such designation be made. Typically, a determination will be made within 60 days of receipt of nomination. If circumstances dictate that more time is needed, the Department will notify the nominator and the public that additional time is needed to reach

a determination and will self-impose a deadline of up to an additional 60 days in which to decide on the ONRW nomination.

B. Direct Sources to ONRWs

(1) Prohibition on New or Expanded Sources

Any proposed activity that would result in a permanent new or expanded direct source of pollutants to any segment that has been designated as an ONRW is prohibited. This prohibition applies to new sources, expansion of existing sources in which treatment levels are maintained, and expansion of existing sources in which treatment levels are increased to maintain existing pollutant loading levels. Regardless of effluent quality, any new or expanded direct source is prohibited.

C. Sources Upstream from ONRWs

(1) No Change In Water Quality Allowed

Any proposed activity that would result in a permanent new or expanded indirect source of pollutants to an ONRW segment is prohibited except where such source would have no effect on the existing quality of the downstream ONRW segment. Effects on ONRW water quality resulting from upstream sources will be determined based on appropriate techniques and best professional judgment. Factors that may be considered in judging whether ONRW quality would be affected include:

- (a) percent change in ambient concentrations predicted at the appropriate critical conditions;
- (b) percent change in total existing loading;
- (c) percent reduction in available assimilative capacity;
- (d) nature, persistence and potential effects of the parameter;
- (e) potential for cumulative effects
- (e) degree of confidence in the components of any modeling technique utilized.

(2) Applicant - Information Requirements

The applicant may be required to provide information sufficient to evaluate the potential effects of the proposed activity on downstream ONRWs. The Department will identify the information that will be required to a given situation on a case-by-case basis.

D. Temporary and Limited Effects

(1) Guidelines

A direct or upstream source that would result in a temporary and limited effect on ONRW water quality may be authorized. The decision regarding whether effects will be temporary and limited will be handled on a case-by-case basis. Decisions on individual proposed activities may be based on the following factors:

- (a) length of time during which water quality will be lowered;
- (b) percent change in ambient concentrations;
- (c) parameters affected;
- (d) likelihood for long term water quality benefits to the segment;
- (e) degree to which achieving applicable water quality standards during the proposed activity may be at risk;
- (f) potential for any residual long-term influences on existing uses.



## Tier 2 Procedures

### A. Waters Qualifying for Tier 2 Protection

#### (1) Qualification Mechanisms

Segments may be afforded **Tier 2** protection by the Tribes in one of two ways. The first way is for the Tribal Council to assign Tier 2 protection through a rulemaking action pursuant to Tribal Administrative Procedures Ordinance 86-B. Where this occurs, a **high quality use** designation will be added to the Tribal Water Quality standards for the segment. The sole implication of a high-quality designation in the Tribal water quality control program is that it mandates application of the Tier 2 review requirements described below. The second way to afford Tier 2 protection is for the Department to decide that this level of protection is warranted during the antidegradation review of a proposed activity. Such decisions will be based on all relevant information including any ambient water quality (i.e., physical, chemical, biological) data submitted by the applicant. The criteria that will be used in identifying high quality Tier 2 waters are described below. The same criteria for making the high quality decision apply regardless of whether the decision is made by rulemaking or during the Department's antidegradation review. Regardless of how the high quality decision is made, the same level of protection and the same procedures are applied.

#### (2) Qualification Factors

Decisions regarding whether a waterbody is high quality and subject to Tier 2 protection requirements will be based on best professional judgments of the overall quality and value of the segment. In general, water with existing quality that is better than necessary to support fishable/swimmable uses will be considered high quality and subject to Tier 2 requirements. The factors that may be considered in determining whether a segment satisfies the high quality test include the following:

- (a) existing aquatic life uses;
- (b) existing recreational or aesthetic uses;
- (c) existing water quality for all parameters; and
- (d) the overall value of the segment from an ecological and public use perspective.

In general, it is presumed that most Tribal waters qualify for Tier 2 protection.

#### (3) Criteria Exceedances

In Tribal waters where exceedances have occurred and continue to occur for one or more parameters, a judgment will be made based on the factors identified above and in consideration of information submitted by the applicant and by the public. As a general operating rule, Tier 2 protection will be applied even where the criteria or some parameters are not always satisfied.

#### (4) Applicant - Information Requirements

The applicant may be required to provide monitoring data or other information about the affected waterbody to help determine the applicability of Tier 2 requirements based on the high quality test. The information that will be required in a given situation will be identified on a case-by-case basis. Because these procedures presume that Tier

Tier 2 protection requirements will be applied, such information will typically be required of the applicant only where this presumption is in dispute. Such information may include recent ambient chemical, physical, and biological monitoring data sufficient to characterize, during the appropriate critical conditions(s), the existing uses and the spatial and temporal variability of existing quality of the segment for the parameters that would be affected by the proposed activity.

## B. Significant Degradation

### (1) Overview

Once it is determined that Tier 2 protection applies to a waterbody, the next step in the review process is to determine whether the degradation that will result from the proposed activity is significant enough to warrant further review (such as evaluation of alternatives). The factors to be addressed in judging the significance of the proposed activity are identified in paragraph (2) below. Where the significance of the degradation associated with a proposed activity is in dispute, the factors identified in paragraph (2) should also be the focal point of opposing views by the applicant or the public.

### (2) Significance Factors

The Department, for all water quality parameters that would be affected by the proposed activity, will judge the likelihood that a proposed activity will pose significant degradation. Such significance judgments will be made on a parameter-by-parameter basis. The Department will identify and eliminate from further review only those proposed activities that present insignificant threats to water quality. Proposed activities will be considered significant and subject to Tier 2 requirements where significant degradation is projected for one or more water quality parameters. Because determinations of significant degradation are most appropriately made based on case-specific information, these procedures do not provide rigid decision criteria for judging significant changes in water quality. Rather, significant degradation may be demonstrated with respect to any one (or a combination) of the following factors:

- (a) percent change in ambient concentrations predicted at the appropriate critical condition(s);
- (b) the difference, if any, between existing ambient quality and ambient quality that would exist if all point sources were discharging at permitted loading rates;
- (c) percent change in loading;
- (d) percent reduction in available assimilative capacity;
- (e) nature, persistence, and potential effects of the parameter;
- (f) potential for cumulative effects;
- (g) predicted impacts to aquatic biota;
- (h) degree of confidence in any modeling techniques utilized;
- (i) the difference, if any, between permitted and existing effluent quality.

**Required Analysis.** Based on one or more of the significance factors identified above, the Department may make determinations of significant degradation based on appropriate modeling techniques coupled with detailed characterization of the existing background water quality. However, determinations of significance need not be complicated, data-intensive, or resource intensive. It is not the intent of these procedures to require detailed analyses to address each of the factors identified above. Where appropriate,

determinations of significance may be based on simple analyses. For example, proposed activities may be judged as insignificant where:

- (a) available dilution exceeds 100:1;
- (b) the proposed activity would not result in a significant increase of loading for any parameter;
- (c) there is substantial potential for the proposed activity to result in a net long-term water quality benefit to the segment.

Likewise, a significant increase in loadings for any given parameter may be the basis for concluding that significant degradation will occur.

**Persistent Toxics.** The significance of proposed new or expanded sources of bioaccumulative or other persistent toxic substances will be judged depending upon, for example, existing loadings of the substances to the segment from all sources. The Department's interpretation of monitoring data or other information indicating fish tissue or sediment accumulation in the watershed will be considered with respect to judging the significance of new or expanded sources of persistent toxic substances.

### (3) General Guidelines

As a *non-binding* rule-of-thumb, proposed activities that would lower the ambient quality of any parameter by more than 5%, reduce the available assimilative capacity by more than 5%, or increase pollutant loading to a segment by more than 5% will be presumed to pose significant degradation. If the cumulative degradation in ambient water quality or assimilative capacity from all sources (including the proposed activity) for any parameter exceeds ten percent (10%) or if the cumulative pollutant loading of all sources (including the proposed activity) for any parameter increases more than ten percent (10%), the Tribe shall find that the proposed activity causes significant degradation. The intent of this guideline is to establish a *de minimis* test of significance and to eliminate from further review only those proposed activities that will result in truly minor changes in water quality.

### (4) By-passing the Significance Test

Where available information clearly indicates that reasonable non-degrading or less-degrading alternatives to lowering existing water quality exist, the Department may by-pass the significant degradation requirements and direct the applicant to demonstrate the necessity of the degradation pursuant to (C) below.

### (5) Applicant - Information Requirements

The applicant may be required to provide monitoring data or other information about the affected water body and/or proposed activity to help determine the significance of the proposed degradation for specific parameters. The information that will be required in a given situation will be identified on a case-by-case basis. Because these procedures establish a fairly low threshold of significance, in many cases a large database will not be necessary to determine that a proposed activity will result in significant degradation. The information required might include recent ambient chemical, physical, or biological monitoring data sufficient to characterize, the spatial and temporal variability of existing background quality of the segment for the parameters that would be affected by the proposed activity, as well as the water quality that would result if the proposed activity were authorized.

(6) Determine Significance of Proposed Activity

Activities determined to be significant by the Department shall be subject to the Tier 2 review requirements described below. If the Department determines that an activity will not pose significant degradation for any parameter, no further antidegradation Tier 2 requirements shall apply; however, such activities must still meet all technology and/or water quality-based control requirements or conditions of the permit or the water quality certification.

C. Evaluation of Alternative to Lowering Water Quality

(1) Role of Department

The primary emphasis of the Department's Tier 2 antidegradation reviews will be to determine whether reasonable non-degrading or less-degrading alternatives to allowing the proposed degradation are available. The Department will first evaluate any alternative analysis submitted by the applicant for consistency with the minimum requirements described below. If an acceptable analysis of alternatives was completed and submitted to the Department as part of the initial project proposal, no further evaluation of alternatives will be required of the applicant. If an acceptable alternative analysis has not been completed, the Department will work with the project applicant to ensure that an acceptable alternative analysis is developed.

(2) Role of the Applicant

The applicant of any proposed activity that would significantly lower water quality in a high quality segment is required to prepare an evaluation of alternatives. The evaluation is required, at a minimum, to provide substantive information pertaining to the costs and environmental impacts associated with the following alternatives:

- (a) pollution prevention measures;
- (b) reduction in scale of the project;
- (c) water recycle or reuse;
- (d) process changes;
- (e) innovative treatment technology;
- (f) advanced treatment technology;
- (g) seasonal or controlled discharge option to avoid critical water quality periods;
- (h) improved operation and maintenance of existing treatment systems;
- (i) alternative discharge locations.

(3) Preliminary Determination

Once the Department has determined that feasible alternatives to allowing the degradation have been adequately evaluated, the Department shall make a preliminary determination regarding whether reasonable non-degrading or less-degrading alternatives are available. This determination will be based primarily on the alternative analysis developed by the project applicant, but may be supplemented with other information or data. If the Department determines that reasonable alternatives to allowing the degradation do not exist, the Department shall continue with the Tier 2 review and document the substance and basis of that preliminary determination using the antidegradation review worksheet.

(4) If Importance is Found Lacking

If the Department makes a preliminary determination that the proposed activity does not have social or economic importance in the area in which the affected waters are located, the Department will document that antidegradation review

finding and public notice on a preliminary decision, based upon antidegradation Tier 2 requirements, to deny the proposed activity.

(5) Role of the Public

Because the socioeconomic importance of a proposed activity is a question best addressed by local interests, the Department will consider the comments submitted by local governments, land use planning authorities, and other local interests in determining whether the balancing of benefits and costs that was the basis for the Department's preliminary decision was appropriate. Based upon comments and information received during the public comment period, the Department may reverse its preliminary determination regarding the social or economic importance of a proposed activity.

D. Ensure Full Protection of Existing Uses

(1) See Tier 1 Procedures

Prior to authorizing any proposed activity that would significantly degrade a Tier 2 water, the Department shall ensure that existing uses will be fully protected consistent with the Tier 1 implementation procedures provided below.

E. Ensure Implementation of Required Point and Nonpoint Source Controls

(1) Role of Department

Prior to authorizing any proposed activity that would significantly degrade a Tier 2 water, the Department shall determine that compliance with applicable controls on all point sources has been assured. The Department may conclude that such compliance has not been assured where facilities are in noncompliance with their NPDES permit limits. However, the existence of schedules of compliance of NPDES permit requirements will be taken into consideration in such cases. Where there are nonpoint sources involved, the Department shall determine that any tribally-required controls or reasonable best management practices have been achieved or that a plan that assures such compliance has been developed.

(2) Preliminary Determination

Based upon available data or other information, the Department will make a preliminary determination regarding whether compliance with required control of point and nonpoint sources in the zone of influence has been assured. If the preliminary determination is that such compliance has been assured, the Departments shall continue with the Tier 2 review and document the substance and basis for the preliminary determination using the antidegradation review worksheet.

(3) If Controls Have Not Been Achieved

If the Department makes a preliminary determination that compliance with required point and nonpoint source controls has not been assured, the Department shall document that antidegradation review finding and public notice a preliminary decision, based upon Tier 2 requirements, to deny the proposed activity.

#### (4) Role of the Public

Based upon comments and information received during the public comment period, the Department may reverse its preliminary finding regarding the degree to which compliance with required point and nonpoint source controls has been assured.

### Tier 1 Procedures

#### A. Waters Qualifying for Tier 1 Protection

##### (1) Waters subject to Tier 1 Requirements

All reservation surface waters are subject to **Tier 1** protection, which can also be referred to as **existing use protection**. Those which are only subject to Tier 1 protection are those waters that have not been assigned Tier 3 or Tier 2 designation by the Council and that do not currently possess the overall water quality or value necessary to meet the high quality test. In general, Tier 1-only waters are those segments where fishable/swimmable goal uses are not attained, or where assimilative capacity does not exist for any of the parameters that would be affected by the proposed activity.

#### B. Two-Part Requirement

##### (1) Protect Water Quality and Uses

The Tribal antidegradation policy requires that existing uses, and the water quality necessary to protect existing uses, shall be maintained and protected. This requirement contains two parts: (1) protection of existing uses, and (2) protection of the water quality necessary to maintain and protect existing uses.

#### C. Ensure Water Quality Necessary to Maintain and Protect Existing Uses

##### (1) Confirm that Designated Uses Address Existing Uses

Prior to authorizing any proposed activity, the Department shall ensure that water quality sufficient to protect existing uses fully will be achieved. The Department must decide whether the waterbody currently supports, or has supported since November 28, 1975, an existing use that has more stringent water quality requirements than the currently designated uses. To make this decision, the Department will focus on whether a higher designated use should be assigned to the waterbody to reflect an existing use. Where the Department determines that currently designated uses reflect existing uses, the Department will document that preliminary determination using the antidegradation review worksheet. In such cases, the water quality control requirements necessary to protect designated uses will be presumed to also fully protect existing uses.

##### (2) Where Designated Uses do not Address Existing Uses

The procedure outlined in paragraph (1) above presumes that designated uses appropriately address existing uses pursuant to tribal and federal requirements. Where this is not the case, a revision to Tribal standards may be needed because designated uses are required to reflect (at a minimum) all attainable uses. Where existing uses with more stringent protection requirements than currently designated uses are identified, the Department will protect existing uses fully and, at the earliest opportunity, propose that appropriate revisions to the designated uses be adopted into the Tribal water quality standards. However, the Department will not delay Tier 1 protection pending the reclassification action.

(3) Require Water Quality Necessary to Protect Existing Uses

Where the Department determines that the waterbody currently supports, or has supported since November 28, 1975, an existing use that has more stringent water quality requirements than the currently designated uses, the Department shall identify the level of water quality necessary to protect existing uses fully for the parameters in question. The Department's estimate of the level of water quality required will be based on water quality standards (narrative, numeric and biological) and/or federal criteria guidance. In general, water quality sufficient to maintain and protect existing uses for the parameters in question will be assured, whether or not those existing uses were designated uses for the waterbody in the Tribal standards. The preliminary finding regarding existing uses and the level of water quality necessary to protect existing uses will be documented using the antidegradation review worksheet.

(4) Additional Applicant Information Requirements

The applicant may be required to provide monitoring data or other information about the affected waterbody to help determine whether designated uses also reflect existing waterbody uses or the level of water quality necessary to protect existing uses fully. The information that will be required in a given situation will be identified on a case-by-case basis. Because these procedures presume that designated uses reflect existing uses, such information will typically be required only where this presumption is in doubt, based on the information available to the Department. Where this presumption is in doubt, the applicant may be required to provide physical, chemical or biological monitoring data or other information needed by the Department to identify and protect existing uses.

D. Ensure Full Protection of Existing Uses

(1) Presume that Applicable Criteria Will Protect Existing Uses

It is presumed that the implementation of the water quality criteria established to protect designated uses will also incidentally protect existing uses. However, situations may arise where a proposed regulated activity will impair or eliminate an existing use for reasons that cannot be tied to any applicable water quality criterion.

(2) Where Applicable Criteria Will Not Protect Existing Uses

Where the Department concludes that existing uses will be impaired by a regulated activity for reasons which cannot be tied to the applicable criterion, the Department will work with project applicant to revise the project design such that existing uses will be maintained and protected. If a mutually acceptable resolution cannot be achieved regarding the loss or impairment of existing uses that will occur using the antidegradation review worksheet, the Department will identify appropriate control requirements, up to and including denial of the proposed activity, and public notice its preliminary decision. Where possible such effects will be predicted based upon quantitative methods. In predicting effects, the Department will use all information submitted by the applicant, available modeling techniques, and best professional judgment based upon experience with similar types of projects, as appropriate.

(3) Where Loss of Or Impairment of Existing Uses Is Not Predicted

Where the Department determines that implementation of the applicable water quality criteria will fully protect the existing uses, that finding will be documented using the antidegradation review worksheet.

---

## Documentation, Public Review, and Intergovernmental Coordination Procedures

### A. Documentation of Antidegradation Review Findings

#### (1) Antidegradation Worksheet

The Department will complete an antidegradation review for all proposed regulated activities that may have some effect on surface water quality. The findings of all antidegradation reviews will be documented using an antidegradation worksheet.

### B. Public Review Procedures

#### (1) Tribal Requirements

The antidegradation review findings will be subjected to the Tribal public participation requirements in Tribal Administrative Procedures Ordinance 86-B. A separate public notice for purposes of antidegradation need not be issued. For example, the antidegradation preliminary findings may be included in the public notice issued for purposes of an NPDES permit 401 certification.

#### (2) Content of Public Notice

In preparing a public notice, the Department will, at a minimum, outline the substance and basis of the Tribes' antidegradation review, conclusions, including the preliminary finding regarding whether to authorize the proposed activity;

- a. request public input on particular aspects of the antidegradation review that might be improved based on public input;
- b. provide notice of the availability of the antidegradation review worksheet;
- c. provide notice of the availability of any introductory public information regarding the state antidegradation program, and;
- d. include a reference to the Tribes' antidegradation policy.

### C. Intergovernmental Coordination Procedures

#### (1) Follow Tribal CPP

The Department shall conduct all antidegradation reviews consistent with the intergovernmental coordination procedures included in the Tribes' continuing planning process identified in Tribal Water Quality Management Ordinance 89-B at 1-2-402.

#### (2) Minimum Process

At a minimum, the Department will provide copies of the completed antidegradation review worksheet and/or the public notice to appropriate Tribal and federal government agencies along with a written request to provide comments by the public comment deadline.



---

## ANTIDEGRADATION REVIEW WORKSHEET

1. Name of Reviewer \_\_\_\_\_

Name of Receiving Water \_\_\_\_\_

Watershed \_\_\_\_\_

Stream Classification \_\_\_\_\_

2. Brief Description of Proposed Activity \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Which Tier(s) of antidegradation apply?

\_\_\_\_\_ Tier 3 - go to question 4

\_\_\_\_\_ Tier 2 - go to question 7

\_\_\_\_\_ Tier 1 - go to question 13

### Tier 3 Questions

4. Will the proposed activity result in a permanent new or expanded source of pollutants directly to an ONRW segment?

\_\_\_\_\_ Yes – recommend denial of proposed activity

\_\_\_\_\_ No

5. If the proposed activity will result in a permanent new or expanded source of pollutants to a segment upstream from an ONRW segment, will the proposed activity affect ONRW water quality?

\_\_\_\_\_ Yes – recommend denial of proposed activity

\_\_\_\_\_ No

**(Question 5 cont.)**

Basis for conclusion: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6. If the proposed activity will result in a non-permanent new or expanded source of pollutants to an ONRW segment or a segment upstream from an ONRW segment, will the proposed activity result in “temporary and limited” effects on ONRW water quality?**

- \_\_\_\_\_ Yes
- \_\_\_\_\_ No – recommend denial or proposed activity

Basis for conclusion: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Tier 2 Questions**

**7. Does the waterbody qualify for Tier 2 protection as a result of a High Quality use designation?**

- \_\_\_\_\_ Yes
- \_\_\_\_\_ No

If no, what is the basis for the conclusion that Tier 2 applies: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**8. Will the proposed activity result in significant degradation?**

\_\_\_\_\_ Yes

\_\_\_\_\_ No – recommend approval of the proposed activity

\_\_\_\_\_ Significance test bypassed due to availability of a reasonable less degrading alternative.

If significance test bypassed, what is basis for conclusion: \_\_\_\_\_

---

---

---

**9. Has the applicant completed an adequate evaluation of alternatives and demonstrated that there are not reasonable alternatives to allowing the degradation?**

\_\_\_\_\_ Yes

\_\_\_\_\_ No – recommend denial of the proposed activity

If no, basis for conclusion: \_\_\_\_\_

---

---

---

**10. Has the applicant demonstrated that the proposed activity will provide important socioeconomic development in the area in which the affected waters are located?**

\_\_\_\_\_ Yes

\_\_\_\_\_ No – recommend denial of the proposed activity

If no, basis for conclusion: \_\_\_\_\_

---

---

**11. Will the existing uses be fully protected consistent with the Tier 1 procedures outlined by questions (14-16) below (questions 14-16 must be completed)?**

\_\_\_\_\_ Yes

\_\_\_\_\_ No – recommend denial of the proposed activity

**12. Have all required controls on point and nonpoint sources to the segment been achieved?**

\_\_\_\_\_ Yes

\_\_\_\_\_ No – recommend denial of the proposed activity

Basis for conclusion: \_\_\_\_\_

---

---

---

---

**Tier 1 Questions**

**13. Basis for concluding that Tier 2 requirements do not apply is as follows:**

---

---

---

**14. Are there uses that exist or have existed since November 28, 1975 that have more stringent water quality protection requirements than the currently designated uses?**

\_\_\_\_\_ Yes

\_\_\_\_\_ No

**(Question 14 cont.)**

If yes, basis for conclusion:

---

---

---

**15. If the answer to question 14 was yes, what water quality criteria requirements will ensure protection of such existing uses?**

---

---

---

**16. Will existing uses be fully maintained and protected?**

\_\_\_\_\_ Yes

\_\_\_\_\_ No – recommend denial of the proposed activity

If no, basis for conclusion: \_\_\_\_\_

---

---

---

## Preliminary Decision

17. Based on the above, can the proposed activity be authorized pursuant to the Tribal antidegradation policy?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

Basis for conclusion: \_\_\_\_\_

---

---

---

---

---

---

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### **Section 1.4.5 Critical Condition Identification Procedures (Reserved).**

(Note: This section is currently in preparation. Procedures are expected to follow the Waste Load Allocation Procedures presently being reviewed by EPA for use in Region VIII.)

## PART V. MIXING ZONE POLICY

### **Section 1.5.1 Mixing Zone Policy**

1. The Department shall develop and recommend to the Council as a part of the Water Quality Standards a mixing zone policy and implementing procedures applicable to permitted discharges for all Reservation waters.
2. At a minimum, the mixing zone policy and implementing procedures shall include the following:
  - a) No mixing zone shall be granted, if approval of the mixing zone or dilution allowance will threaten or impair existing beneficial uses.
  - b) All mixing zones shall be free from substances that:
    - i. Settle to form objectionable objects;
    - ii. Float as debris, scum, oil, or other matter;
    - iii. Produce objectionable color, odor, taste, or turbidity;
    - iv. Are acutely toxic; or
    - v. Produce undesirable or nuisance aquatic life.
  - c) No effluent discharges shall be permitted which discharge above the critical flow water-surface elevation of the receiving water.
  - d) No effluent discharges shall be permitted for chemical parameters which have the potential to persist or bioaccumulate in the aquatic environment.
  - e) New or increased sources of discharge into the following Reservation waters shall not be allowed a mixing zone or dilution allowance:
    - i. Designated Outstanding National Resource Waters and designated Outstanding Tribal Resource Waters,
    - ii. Lakes or open waterbodies which have a mean detention time of less than 20 days,
  - f) Assumptions or procedures applied to determine mixing zone configurations are subject to review and revision as information related to the permitted discharge become available. At a minimum, mixing zones are subject to review and revision along with other elements of a discharge permit upon expiration of the permit.

### **Section 1.5.2 Narrative Toxic Standards (Reserved)**

(Note: Narrative toxic standards are currently in preparation. Procedures will address various mechanisms used to implement water quality-based controls (chemical-specific and biological standards components), as well as how these mechanisms will be integrated to protect designated uses. Implementation is expected to follow EPA guidance documents and 40 CFR 131.11 (a)(2)).

## PART VI. COMPLIANCE WITH STANDARDS

### **Section 1.6.1 Investigation of Reported or Suspected Non Compliance**

The Department will forthwith investigate compliance with the standards for surface water quality and other provisions contained in these rules whenever it:

1. Receives notice of a suspected exceedance or whenever it receives a written request from any person to investigate and act upon any suspected violation of any requirement hereunder;
2. Possesses reliable information, as a result of Department sampling or otherwise, that gives the Department reason to believe that an exceedance of standards has occurred or that a water body or segment thereof has been, or may be, degraded.

### **Section 1.6.2 Preliminary Findings**

1. If the preliminary findings of an investigation of water quality conditions or threats thereto show that a condition exists that indicates a clear and present danger to human health or to the livelihood of Reservation residents, the procedures set out in Section 1-2-104 of Ordinance (89-B) will be followed. In all other instances, applicable procedures set out herein and in Ordinance 89-B shall be followed by the Department to address the particular situation.
2. Whenever preliminary findings indicate that an existing use of a water body or segment thereof is impaired or endangered, the Department will, to the extent practicable, notify each affected user of the impairment or endangerment and of any recommended means to address the situation. The Department will promptly cause a notice of the scope and severity of the impairment, together with any recommended mitigation, to be published or broadcast, or both, by local media with wide access to the Reservation public.

### **Section 1.6.3 Investigation Report and Recommendations**

In addition to any preliminary findings made and action taken pursuant to these rules, a report of an investigation of an alleged or suspected exceedance of a standard or violation of a requirement of these rules will be submitted promptly by the Environmental Protection Division of the Department to the Head of the Department. The report shall include, without limitation:

1. Any physical, chemical, biological, radiological, or thermal evidence of alleged or suspected pollution or exceedance;
2. If the pollution or exceedance appears to have occurred, a description of its nature, scope, and estimated duration;



3. The apparent or possible cause or causes of the pollution or exceedance, including, if the cause is a short-term activity eligible for exemption hereunder, whether such an exemption has been requested and what the disposition of the request has been;
4. The effect, if any, that the alleged or suspected pollution or exceedance has had or may have on existing uses and designated uses of the water body or segment thereof; and
5. Recommendations for compliance measures, if any, to be undertaken by the Department and for any further investigation.

#### **Section 1.6.4 Compliance Order-Civil Action-Exemption**

1. The Department may cause a compliance order to be served, either personally or by certified mail, upon the responsible party for each point source of such unpermitted discharge, as provided in Ordinance 89-B Section 13-21 if it has reason to believe, based upon reliable information:
  - a) That a violation or exceedance of a numeric standard (numeric, narrative, and designated uses) or other limitation or a violation of a requirement of these rules has occurred; and
  - b) That the violation or exceedance is caused by an unpermitted discharge of pollutants from one or more point sources.
2. A compliance order will specify the condition, limitation, standard or numeric standard exceeded, or other requirement violated, and set a reasonable time for compliance, considering the seriousness of the violation and any good faith efforts that have been made to comply with the condition, limitation, standard, numeric standard, or requirement believed to be violated.
3. A compliance order is a final Departmental decision that may be appealed as a contested case under the Tribal Administrative Procedures Ordinance 86-B. Nothing in this section is intended to limit the Department's ability to commence judicial enforcement proceedings as provided in Water Quality Management Ordinance 89-B.
4. If the responsible party refuses or fails to comply with the schedule of compliance set out in the compliance order, the Department may commence a civil action against such operator for appropriate relief. Such relief may include injunctive relief not to exceed \$10,000 a day for each parameter violated and for each day of noncompliance as provided in Section 1-3-212 of Ordinance 89-B. The Department may also seek costs of any pollution reduction or other measures undertaken by the Department to address environmental damages including loss of cultural values associated with natural resources injured by the violation and the Department's investigative and enforcement costs.
5. Subsection (1) of this Rule may not be applied by the Department, after due consideration, if the activity producing the discharge is a one-time, non-repetitious event or an operation of short duration.

## PART VII. COMPLIANCE PROCEDURES, REQUIREMENTS, AND ORDERS

### **Section 1.7.1 Purpose**

The purpose of this regulation is to establish procedures for compliance with the regulatory and other enforcement provisions of Ordinance 89-B. To the extent that such provisions require recognition by the U.S. Environmental Protection Agency (EPA) of conformity with Section 402 of the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES), the regulatory provisions for implementation are presently reserved. It is recognized that until such time as Tribal authority to implement the NPDES program within the exterior boundaries of the Reservation is acknowledged, the EPA retains sole authority for program implementation within the exterior boundaries of the Reservation.

### **Section 1.7.2 Definitions**

The definitions of terms found in Ordinance 89-B and in the Clean Water Act and its implementing regulations shall be applied to this Part. To the extent that any ambiguity exists, the ordinary and plain meaning of any such term shall be applied.

### **Section 1.7.3 Compliance Schedule Authorization**

The Tribes authorize the use of compliance schedules, on a case-by-case basis, for water quality-based effluent limits in National Pollutant Discharge Elimination System (NPDES) permits, when appropriate, and consistent with 40 CFR 122.47, for new, recommencing, or existing dischargers to require compliance as soon as possible with water quality-based effluent limitations calculated to meet water quality standards. Any request for a compliance schedule to meet tribal water quality standards should be directed to the: Department of Natural Resources - Department Head. Applications should include the following information: statement of need that details economic constraints, infrastructure demands, and/or other factors that impinge upon NPDES permit compliance.

### **Section 1.7.4 Notice of Unpermitted Discharge by Department**

1. Upon receiving notice of an unpermitted discharge of any substance into Reservation waters or other reliable information indicating a release that threatens waters of the Reservation or residents, the Department shall follow the procedures and conditions for notification contained in these regulations and, where applicable, the Tribal Emergency Response Plan.
2. When public health or safety appear to be threatened, the Department shall cause affected water users to be notified and advised of measures to minimize or avoid the threat. The Department may assess the costs of such notification to the responsible party.

### **Section 1.7.5 Required Notice to Department of Release or Unpermitted Discharge**

1. Any person whose activities result in a discharge or release of pollutants or other substances that cause, threaten, or allow pollution of Reservation surface waters is required to promptly notify the Department of such release or discharge in sufficient detail to allow the Department to take timely and appropriate action.
2. Two notices to the Department are required:
  - a) An immediate notice as soon as the person or his/her agent or employee whose activities threaten Reservation surface waters or have resulted in a release or unpermitted discharge has knowledge thereof, and
  - b) Within three (3) calendar days of the immediate notice, a subsequent written notice setting forth the best estimate of quantity, nature, duration, and extent of the release or threatened discharge of pollutants.

### **Section 1.7.6 Immediate Notice Of Unpermitted Discharge - How Given by Responsible Party**

1. Immediate notice may be given as follows:
  - a) Between the hours of 8 a.m. and 4:30 p.m. on a weekday that is not a Tribal holiday, notice may be given to a responsible employee of the Environmental Division of the Department by the timeliest of the following methods:
    - (1) verbally, by telephone: (406) 675-2700.
    - (2) verbally, in person at the Tribal Complex at Pablo, Montana; or
    - (3) in writing, by telefax. FAX: (406) 675-2806.
    - (4) By email, [naturalresources@cskt.org](mailto:naturalresources@cskt.org)
  - b) At all other times, notice may be telephoned to the dispatcher of the Tribal Law Enforcement Department telephone: (406) 675-4700.

### **Section 1.7.7 Contents of Immediate Notice of Unpermitted Discharge or Release**

1. The Department will provide a form for the recording of verbal immediate notice by the Environmental Division employees and the Tribal police dispatcher.
2. Information to be provided by immediate notice will include:
  - a) the name, business address, and telephone number of the individual reporting the threatened release or discharge;
  - b) the address and telephone number of the place from which the notice is given;
  - c) whether the notifying individual is the person whose activities resulted in the threatened release or discharge or an agent or employee of such person;

- d) if the notifying individual is an agent or employee, the name, address, and telephone number of either:
  - (1) the nearest office of the person whose activities resulted in the threatened release or unpermitted discharge, or
  - (2) the notifying individual's supervisor;
- e) the date, time, and place of the threatened release or discharge and any immediately apparent personal injury, property damage, or threat to human health arising from the event that produced the threatened release or discharge;
- f) an initial estimate of the nature and quantity of substances released or discharged and any known toxic, hazardous, or deleterious potential of the substances;
- g) whether and which other agencies or emergency services have been or will be notified by the notifying individual; and
- h) whether the person whose activities resulted in the threatened release or discharge is known to be mobilizing for cleanup operations.
  - (1) other pertinent information that will help the Department respond to the spill.

**Section 1.7.8 Contents of Subsequent Written Notice of Unpermitted Discharge or Release**

Subsequent written notice to the Department signed by the person, or authorized representative thereof, whose activities resulted in the threatened release or discharge shall include:

1. any necessary correction of or addition to the information provided in the immediate notice;
2. the name, address, and telephone number of any agent or employee of the person whose activities resulted in the threatened release or discharge who is authorized by said person to communicate with the Department in matters associated with the event, and, if different, the same identifying information with respect to any officer or agent authorized by law to accept service of process on behalf of the person whose activities resulted in the threatened release or discharge;
3. an initial assessment of the probable water quality and other social or environmental consequences of the threatened release or discharge, including any predictable effect on existing water uses;
4. a description of measures undertaken, planned, or proposed to be undertaken by the person whose activities resulted in the threatened release or discharge to cleanup, prevent, and fully address adverse effects on water quality, including an identification of equipment and manpower to be utilized;
5. an identification of any cooperative agreement or activities to be conducted jointly with other appropriate governmental agencies or with a disaster response

team, and whether the person whose activities resulted in the threatened release or discharge is responsible for all or part of the expense incurred by such agency or team.

6. the proposed estimated duration of cleanup, mitigation, or pollution prevention activities to be undertaken to the satisfaction of the Department,
7. to the extent known or reasonably ascertainable, the names, addresses, and telephone numbers of any owners of real or personal property injured or potentially adversely affected by the event producing the threatened release or discharge,
8. other pertinent information.

### **Section 1.7.9 Failure to Notify May Be Basis of Civil Action**

If a person whose activities result in a threatened release or unpermitted discharge fails to notify the Department of the event, the Department may bring a civil action against the person for failure to notify. If the failure to notify is proved, the Tribal Court may assess a penalty not to exceed \$25,000 per day for each day during which such failure continues, plus any cleanup, investigative, administrative, and other costs incurred by the Department or the Tribes, as applicable.

### **Section 1.7.10 Cleanup Orders, Plans and Operations**

1. Any person reasonably believed to have violated any effective requirement established under Ordinance 89-B or regulations and standards adopted pursuant thereto, or whose activity results in a release or unpermitted discharge that causes or threatens to cause harm to human health or to the environment, including the actual or threatened impairment of existing uses, may be subject to a Departmental order pursuant to Ordinance 89-B, Chapter 3, Part 2.
2. The Department may consider any measures proposed by a responsible party to abate the violation or cease the discharge and to minimize, prevent or reduce the harmful effects of any unlawful discharge, exceedance, or other threat to Reservation waters.
3. The Department may issue an order requiring the responsible party to immediately comply with the Ordinance 89-B, comply with applicable conditions of a Clean Water Act Section 401 certification, abate the discharge and, as appropriate, propose comprehensive measures by which the responsible party, upon Departmental approval, may achieve compliance. Compliance activities may include restoration of an affected area to its pre-discharge or pre-violation state, full satisfaction of all environmental and natural resource injuries and damages, including but not limited to satisfaction for cultural losses experienced as a result of the violation, and compensation to the Tribes for losses and expenses incurred as a result of responding to the discharge or violation and the time by which compliance and satisfaction must be achieved. Such order constitutes a final agency action subject to the appellate provisions of the Tribal Administrative Procedures Ordinance 86-B.

4. If a Departmental order is not timely complied with or is inadequately complied with in the considered view of the Department, the Department may undertake the cleanup and restoration of the site or abatement of the violation and may assess the full costs of the same against the responsible party pursuant to applicable provisions of Ordinance 89-B and these rules.
5. If the measures undertaken or proposed to be undertaken by the person whose activities resulted in the release or actual or threatened discharge are deemed adequate, the Department will monitor affected waters to determine the effectiveness of the cleanup or mitigation.
6. If the measures undertaken or proposed to be undertaken are deemed inadequate by the Department, it will so inform the person whose activities resulted in the threatened release or discharge and require additional or different measures to be undertaken. Departmental requirements will be based on reasonably available and cost-effective remedial measures, considering the seriousness of the threatened release or discharge, and may include monitoring for and mitigation or prevention of cumulative effects of the discharge and other measures deemed necessary by the Department.
7. Within five days of receipt of Departmental requirements in writing, the person whose activities resulted in the threatened release or discharge must promptly submit a plan of operations incorporating Departmental requirements. The responsible party may, in the same period, propose adequate alternative measures acceptable to the Department. However, the responsible party bears the burden of demonstrating the unreasonableness of Departmental requirements as specified herein and, in the event that the responsible party elects to deviate from Departmental requirements, shall be considered to have violated the provisions of this rule and applicable provisions of the Ordinance 89-B and shall thus be subject to enforcement action brought pursuant thereto.

#### **Section 1.7.11 Cleanup Order, Contents**

1. If the person whose activities resulted in the threatened release or discharge does not timely propose and undertake a cleanup of affected or potentially affected lands and waters which will accomplish all feasible mitigation or remediation of adverse effects of the event, the Department may issue a cleanup order to said person.
2. Such order will include, at a minimum:
  - a) a listing of essential equipment, supplies, and personnel required to undertake cleanup at the site and to satisfy or mitigate or prevent natural resource and environmental damages;
  - b) a requirement that cleanup begin as soon as equipment and supplies can be brought to the site;
  - c) the name and telephone number of the Departmental employee who will monitor the cleanup;
  - d) Departmental requirements, if any, for chemical and biological sampling and

analysis of the deleterious effects of the spill or discharge on water quality and for reporting of the same; and

- e) a notice that if cleanup is not timely commenced and satisfactorily concluded, the Department may undertake the cleanup and restoration of the site and assess the full costs of same against the noncomplying responsible party.
3. The Department may assess the foregoing costs and associated losses against such person in its Order. Such Order constitutes a final agency action and shall be appealable pursuant to the terms of the Tribal Administrative Procedures Ordinance 86-B.

### **Section 1.7.12 Noncompliance with Order**

If a cleanup order is not complied with, the Department may bring a civil action against the responsible party or parties as set out in Ordinance 89-B.

### **Section 1.7.13 Notices of Violation and Cease and Desist Order**

1. In instances where the Department reasonably believes that a violation of any provision of Ordinance 89-B or any permit, certification or control regulation issued pursuant thereto has occurred, it may issue a written notice of violation to the responsible party. Such notice is not subject to appeal except as set out in applicable sections of Ordinance 89-B Chapter 3, Part 2. However, informal consultation with the Department to discuss its terms may be sought by the recipient and is encouraged.
2. Such notice shall include a short and plain statement of the provision(s) alleged to have been violated and the facts supporting such a violation. It may also contain a recommendation for necessary corrective action or such other measures as may be necessary for the responsible party to resolve the violation and a time by which such resolution must occur.
3. The Department is further authorized to issue cease and desist orders as set out in Water Quality Management Ordinance 89-B, Section 1-3-209. Such an order shall be appealable pursuant to the provisions of Ordinance 89-B Chapter 3, Part 2.
4. Suspension or Revocation of Permit (Reserved).

## PART VIII NONPOINT SOURCE POLLUTION MANAGEMENT

1. Whenever pollution or exceedance of any standard, numeric standard, limitation, or other requirement of these rules is found by the Department to be caused by a person or persons resulting in or contributing to nonpoint source pollution, the Department may enter into an agreement with such person for the purpose of preventing, mitigating, or reducing such pollution.
2. Such agreement shall provide, without limitation, for such activities to be conducted in accordance with:
  - a) Reasonable cost-effective best management practices appropriately designed to prevent, reduce, or mitigate the introduction of pollutants into affected or potentially affected surface waters, and
  - (b) a schedule of compliance, not to exceed three years in duration, for attainment of the relevant standard.
3. An agreement entered pursuant to the rules will be incorporated by reference into initial Comprehensive Water Quality Management Plan and will, thereby, become a part of the same.
4. In negotiating reasonable cost-effective best management practices or schedules of compliance pursuant to this Rule, the Department may consult with or request technical assistance from agencies of other governments with responsibilities for, or expertise in, the protection of water quality and, if funds are available, may employ qualified consultants to provide research, advice, or other services as deemed necessary or desirable by the Department.
5. If a person whose activities or operations contribute to nonpoint source pollution is (a) a Tribal agency or (b) a lessor or contractor conducting activities upon lands beneficially owned by the Tribes, the Department shall recommend to the Tribal Council imposition of reasonable cost-effective best management practices, a schedule of compliance, and such other measures as it deems appropriate for adoption by Resolution of the Council. Upon adoption of such a Resolution affecting the operating practices of a Tribal agency or enterprise, the requirements of the Resolution will take effect pursuant to the terms of the Resolution. The conditions of said Resolution affecting the operating practices of a lessor or contractor conducting activities on Tribal lands will be incorporated as early as possible into the relevant instrument and enforced as a material condition thereof.



## PART IX 401 CERTIFICATION

### **Section 1.9.1 - Introduction**

Section 401 of the Federal Water Pollution Control Act (Clean Water Act or CWA) requires that applicants for a Federal license or permit relating to any activity which may result in any discharge into navigable waters (i.e., waters of the United States) shall obtain a certification from the responsible governmental authority that such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act.

The Tribes, acting through the Tribal Natural Resources Department, Environmental Protection Division, applied for and on February 27, 1995 obtained recognition of their authority by the U.S. Environmental Protection Agency to implement the CWA 401 program and to take all action necessary to meet the requirements thereof.

### **Section 1.9.2 - Purpose**

The purpose of this regulation is to establish procedures for application, public notice, and hearing in relation to the processing of applications for certification required by section 401 of the CWA.

### **Section 1.9.3 - Definitions**

1. "Applicant" for purposes of CWA 401 certification means any person who applies for a license or permit issued by an agency of the federal government to conduct an activity that may result in a discharge of a pollutant to Reservation surface waters or wetlands.
2. "Certification" means a letter of approval, denial, or approval with conditions of an application for certification issued by the Environmental Protection Division of the Tribal Natural Resources Department.
3. The definitions of other terms used in these regulations shall be consistent with those used in Ordinance 89-B and the federal Clean Water Act and its implementing regulations. In the case of ambiguity, words will be given their ordinary meaning.

### **Section 1.9.4 - Authority to Act**

A certification, certification with conditions, or denial of certification with conditions or alternatives shall be issued in letter form, but must be assigned a docket number and retained as a part of the Division's official records. Such letters may be signed by a duly authorized agency official which, for purposes of this rule, includes the head of the Department of Natural Resources or persons duly authorized to act for him/her in his/her absence.

### **Section 1.9.5 - Application**

1. No discharge of pollutants or construction of any facility that may precipitate a discharge of pollutants to Reservation surface waters, including wetlands, may commence without first obtaining a written certification of such discharge as described herein.
2. Application for certification may be made upon a form supplied by the Division or in any manner that adequately and accurately describes the applicant's name and address; a description of the proposed point source or activity; its volume, biological, chemical, physical and radiological characteristics; a description of the existing environmental conditions at the site of the proposed discharge; its location and duration and extent of the proposed discharge. The applicant shall also supply the Division with the size of the area potentially affected; the location or locations at which the discharge may enter Reservation waters; any environmental impact assessment, information, maps, and/ or photographs provided to any licensing or permitting agency; the date or dates of the proposed activity's inception and termination; a description of the methods proposed to monitor the quality and characteristics of the discharge and operation of the facility from which the discharge will originate; and a description of the functions and operation of the activity and any practices proposed to minimize or treat pollutants or other effluent that may be discharged to Reservation waters.
3. In cases where a CWA 402 permit application has been made to the U.S. Environmental Protection Agency or a CWA 404 permit application has been made to the U.S. Army Corps of Engineers, or in cases where an applicant has applied for approval for a project pursuant to Tribal Ordinance 87-A, the applicant may submit a complete copy of that permit application to the Division in lieu of subsection (2) above, but may be requested by the Division to supply such additional information as may be reasonably required to afford it sufficient information to make a certification decision in conformity with the Clean Water Act.
4. Upon receipt of an application for certification, the Division shall make a record of the date of its receipt. If upon examination the application is found to be defective or incomplete, it will be returned promptly to the applicant for correction or completion, and the date and reasons for the return shall be marked on a copy of the application and made of record in Division files. The applicant shall be notified of the deficiencies by certified mail within 30 days of receipt by the Division of the application. The applicant shall have another 30 days from notification of the incomplete application to supply complete information to the Division or face rejection of the application. If no response or a grossly inadequate response is received by the Division, the application shall be deemed to have been withdrawn by the applicant. In addition, an untimely response may not be considered by the Division, although any applicant may reapply for certification at any time.
5. Within thirty (30) days of submission of a complete application and supporting scientific and technical information to the Department for review by the Water Quality Program, the Department may either grant, deny, or grant with conditions the application for 401 certification. Response from the Water Quality Program to the submitted application may be extended an additional forty-five (45) days upon determination that the time provided is insufficient to carry out consultation and technical review of an application.
6. If the Division accepts the application and later determines that additional information is required before a certification decision can be made, such information may be required at a later date without rejecting the application. Once a complete application for certification is received by the Division, it shall be granted, denied, or granted with conditions or alternatives.

7. The Division shall issue a statement of its reasons for denial of certification in writing to the applicant and such statement shall be made a part of the Division's official record with regard to the application.
8. The Division's decision as to any complete application for certification shall constitute an "agency action" within the meaning of the Ordinance No. 86-B, and may be appealed according to the terms of that Ordinance. Any person aggrieved by the Division's final determination with respect to grant or deny grant of certification with conditions or alternatives may be appealed as set forth in Ordinance 86-B.

### **Section 1.9.6 Public Notice and Public Hearings**

Public notice of an application shall be performed in relation to all applications, as follows:

1. By mailing notice of the application for certification to persons and organizations who have requested the same and to all others deemed appropriate.
2. When determined by the Department as necessary to protect the public interest, by publication of notice as set out in Ordinance 86-B, Part IV, Section 8. However, certification action shall not be construed to constitute rulemaking proceedings for any other purpose. The publication shall be made on a form approved by the Division or Department, as appropriate, and the applicant shall arrange for publication and bear the cost of such publication and provide an affidavit of publication to the Department.
3. Any person desiring to present views on an application in relation to water pollution control considerations shall do so by providing the same in writing to the Division or Department, whichever is identified in the last published notice, or such longer period of time as the Department or division may determine. In cases where the Department or Division has elected to seek public comment on an application, no application may be deemed complete until the public comment period and hearing, if any, has been completed.
4. If the Department or Division determines there is sufficient public interest in any application, a public hearing for the informal submission of informal oral or written testimony may be held. When this determination is made before notice of application as set out at (1), the notice shall include the time and place of the hearing. Otherwise, a separate notice of public hearing shall be made and such notice shall be distributed and published in the manner provided above, at the sole expense of the applicant. In addition, it shall be the applicant's responsibility to obtain Departmental or Divisional approval of all notices referenced herein and to arrange for publication of same.

## CS&KT TRIBAL NUMERIC CHART: Priority Pollutants (Footnotes A-O)

Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
1. Antimony	7440360			5.6	640
2. Arsenic	7440382	340 A	150 A	0.018 B,L	0.14 B,L
3. Beryllium	7440417			F	F
4. Cadmium	7440439	1.90 C	0.79 C	F	F
5a. Chromium III	16065831	1803 C	86 C	F	F
5b. Chromium VI	18540299	16	11	F	F
6. Copper	7440508	P	P	1,300	
7. Lead	7439921	82 C	3.2 C	F	F
8a. Mercury	7439976	1.4M $\ominus$	0.77 M $\ominus$	0.05	0.051
8b. Mercury Methylmercury	22967926				0.3 mg/kg N P
9. Nickel	7440020	469 C	52 C	610	4,600
10. Selenium	7782492	O $\oplus$	1.5 Lentic 3.1 Lotic 11.3 fish tissue (muscle mg/kg dw)	170	4200
11. Silver	7440224	3.8 C			
12. Thallium	7440280			0.24	0.47
13. Zinc	7440666	120 C	120 C	7400	26000
14. Cyanide	57125	22 K, I	5.2 K I	4	400
15. Asbestos	1332214			7 million fibers/L	
16. 2,3,7,8-TCDD Dioxin	1746016			5.0E-9 B	5.1E-9 B
17. Acrolein	107028	3	3	3	400
18. Acrylonitrile	107131			0.061 B	7.0 B

Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
19. Benzene	71432			0.58 B	16 B
20. Bromoform	75252			7.0 B	120 B
21. Carbon Tetrachloride	56235			0.4 B	5 B
22. Chlorobenzene	108907			100	800
23. Chlorodibromomethane	124481			0.80 B	21 B
24. Chloroethane	75003				
25. 2-Chloroethylvinyl Ether	110758				
26. Chloroform	67663			60 B	2000 B
27. Dichlorobromomethane	75274			0.95 B	27 B
28. 1,1-Dichloroethane	75343				
29. 1,2-Dichloroethane	107062			9.9 B	650 B
30. 1,1-Dichloroethylene	75354			300 B	20,000 B
31. 1,2-Dichloropropane	78875			0.90 B	31 B
32. 1,3-Dichloropropene	542756			0.27	12
33. Ethylbenzene	100414			68	130
34. Methyl Bromide	74839			100	10,000
35. Methyl Chloride	74873			F	F
36. Methylene Chloride	75092			20 B	1,000 B
37. 1,1,1,2-Tetrachloroethane	79345			0.2 B	3 B
38. Tetrachloroethylene	127184			10 B	29 B
39. Toluene	108883			57	520
40. 1,2 –Trans-Dichloroethylene	156605			100	4,000

Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
41. 1,1,1-Trichloroethane	71556			10,000	200,000
42. 1,1,2-Trichloroethane	79005			0.55 B	8.9 B
43. Trichloroethylene	79016			0.6 B	7 B
44. Vinyl Chloride	75014			0.022 B	1.6 B
45. 2-Chlorophenol	95578			30	800
46. 2,4-Dichlorophenol	120832			10	60
47. 2,4-Dimethylphenol	105679			100	3,000
48. 2-Methyl-4,6-Dinitrophenol	534521			2	30
49. 2,4-Dinitrophenol	51285			10	300
50. 2-Nitrophenol	88755				
51. 4-Nitrophenol	100027				
52. 3-Methyl-4-Chlorophenol	59507			500	2,000
53. Pentachlorophenol	87865	19 D	15 D	0.03 B	0.04 B
54. Phenol	108952			4,000	300,000
55. 2,4,6-Trichlorophenol	88062			1.5 B	2.8 B
56. Acenaphthene	83329			70	90
57. Acenaphthylene	208968				
58. Anthracene	120127			300	400
59. Benzidine	92875			0.00014 B	0.011 B
60. Benzo(a)Anthracene	56553			0.0012 B	0.0013 B

Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
61. Benzo(a)Pyrene	50328			0.00012 B	0.00013 B
62. Benzo(b)Fluoranthene	205992			0.0012 B	0.0013 B
63. Benzo(ghi)Perylene	191242				
64. Benzo(k)Fluoranthene	207089			0.012 B	0.013 B
65. Bis(2-Chloroethoxy)Methane	111911				
66. Bis(2-Chloroethyl)Ether	111444			0.030 B	2.2 B
67. Bis(2-Chloro-1-methylethyl) Ether	108601			200	4000
68. Bis(2-Ethylhexyl)Phthalate	117817			0.32 B	0.37 B
69. 4-Bromophenyl Phenyl Ether	101553				
70. Butylbenzyl Phthalate	85687			0.10	0.10
71. 2-Chloronaphthalene	91587			800	1,000
72. 4-Chlorophenyl Phenyl Ether	7005723				
73. Chrysene	218019			0.12 B	0.13 B
74. Dibenzo(a,h)Anthracene	53703			0.00012 B	0.00013
75. 1,2-Dichlorobenzene	95501			1,000	3,000
76. 1,3-Dichlorobenzene	541731			7	10
77. 1,4-Dichlorobenzene	106467			300	900
78. 3,3-Dichlorobenzidine	91941			0.049 B	0.15 B
79. Diethyl Phthalate	84662			600	600
80. Dimethyl Phthalate	131113			2,000	2,000

Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
81. Di-n-Butyl Phthalate	84742			20	30
82. 2,4-Dinitrotoluene	121142			0.049 B	1.7 B
83. 2,6-Dinitrotoluene	606202				
84. Di-n-Octyl Phthalate	117840				
85. 1,2-Diphenylhydrazine	122667			0.03 B	0.2 B
86. Fluoranthene	206440			20	20
87. Fluorene	86737			50	70
88. Hexachlorobenzene	118741			0.000079 B	0.000079 B
89. Hexachlorobutadiene	87683			0.01 B	0.01 B
90. Hexachlorocyclopentadiene	77474			4	4
91. Hexachloroethane	67721			0.1 B	0.1 B
92. Ideno(1,2,3-cd)Pyrene	193395			0.0012 B	0.0013 B
93. Isophorone	78591			34 B	1,800 B
94. Naphthalene	91203				
95. Nitrobenzene	98953			10	600
96. N-Nitrosodimethylamine	62759			0.00069 B	3.0 B
97. N-Nitrosodi-n-Propylamine	621647			0.0050 B	0.51 B
98. N-Nitrosodiphenylamine	86306			3.3 B	6.0 B
99. Phenanthrene	85018				
100. Pyrene	129000			20	30



Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
101. 1,2,4-Trichlorobenzene	120821			0.071	0.076
102. Aldrin	309002	3.0 E	---	0.00000077 B	0.00000077 B
103. alpha-BHC	319846			0.00036 B	0.00039 B
104. beta-BHC	319857			0.0080 B	0.014 B
105. gamma-BHC (Lindane)	58899	0.95	---	4.2 B	4.4 B
106. delta-BHC	319868				
107. Chlordane	57749	2.4 E	0.0043 E	0.00031	0.00032
108. 4,4-DDT	50293	1.1 E	0.001 E	0.000030 B	0.000030 B
109.p.p.Dichlorodipenyldichloroethylene 4,4-DDE	72559			0.000018 B	0.000018 B
110. p,p'-Dichlorodipenyldichloroethane 4,4-DDD	72548			0.00012 B	0.00012 B
111. Dieldrin	60571	0.24	0.056 I	0.0000012 B	0.0000012 B
112. alpha-Endosulfan	959988	0.22 E,M, K	0.056 EM,K	20	30
113. beta-Endosulfan	33213659	0.22 E,M, K	0.056 EM,K	20	40
114. Endosulfan Sulfate	1031078			20	40
115. Endrin	72208	0.086	0.036 I	0.03	0.03
116. Endrin Aldehyde	7421934			1	1
117. Heptachlor	76448	0.52 E	0.0038 E	0.0000059 B	0.0000059 B
118. Heptachlor Epoxide	1024573	0.52 E	0.0038 E	0.000032 B	0.000032 B
119. Polychlorinated Biphenyls PCB's			0.014 H	0.000064 B, J	0.000064 B, J
120. Toxaphene	8001352	0.73	0.0002	0.00070	0.00071

## Priority Footnotes:

- A. Applies to total arsenic.
- B. Based on carcinogenicity of  $10^{-6}$  risk.
- C. Freshwater Aquatic Life Criteria for these metals are expressed as a function of total hardness (mg/L,  $\text{CaCO}_3$ ). The values displayed in the chart correspond to a total hardness of 100 mg/L. The hardness relationship is as follows:

	Parameters for Calculating Freshwater Dissolved Metals Criteria That Are Hardness Dependent		Chronic = $\exp \{mc [\ln (\text{hardness})] + bc\}$	
	Acute = $\exp \{ma [\ln (\text{hardness})] + ba\}$			
	ma	ba	mc	bc
Cadmium	0.9789	-3.866	0.7977	-3.909
Chromium (III)	0.8190	3.7256	0.8190	0.6848
Lead	1.273	-1.460	1.273	-4.705
Nickel	0.8460	2.255	0.8460	0.0584
Silver	1.72	-6.59	-----	-----
Zinc	0.8473	0.884	0.8473	0.884

*Note: If the hardness is <25 mg/L as  $\text{CaCO}_3$ , the number 25 will be used in the calculation. If the hardness is greater than or equal to 400 mg/L of  $\text{CaCO}_3$ , 400 mg/L will be used in the calculation.*

- D. Freshwater Aquatic Life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Acute CMC= $\exp [1.005 (\text{pH}) - 4.869]$  WQS; Chronic CCC= $\exp [1.005 (\text{pH}) - 5.134]$ . Values displayed in table correspond to a pH of 7.8.
- E. If assessment is to be done using an averaging period, the values given should be divided by 2.
- F. EPA has not calculated a human health criterion for this contaminant. However, permit authorities should address this contaminant in NPDES permit actions using the Tribes' existing narrative criteria for toxics. PCB's are a class of chemicals which include all aroclors.
- G. The derivation of the chronic (CCC) standard for this pollutant did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels.
- H. This standard applies to total PCBs.
- I. This water quality standard is expressed as mg free cyanide (as CN)/L.
- J. This water quality standard refers to the inorganic form only.
- K. This standard was derived from data for endosulfan and is most appropriately applied to the sum of alpha-endosulfan and beta-endosulfan.
- L. Under conditions of high dissolved organic carbon, copper is substantially less toxic and the Tribe will consider use of the Water Effect-Ratio.

- M. This standard is applied to **total mercury**. If a substantial portion of the mercury in the water column is methylmercury, this standard will probably be under protective. Even though inorganic mercury is converted to methylmercury and methylmercury bioaccumulates to a great extent, this standard does not account for uptake via the food chain.
- N. The methylmercury human health criterion is a fish-tissue-based value derived using the CSKT Fisheries protocols for collecting and analyzing fish tissues (e.g. dorsal fillets of fish are collected based on fish species, age, and size class. The tissues are homogenized based on size class and analyzed for methylmercury in a laboratory environment.]
- O. The Selenium criteria for aquatic life and human health is a fish-tissue based value derived using the CSKT protocols for collecting and analyzing fish tissues which involves collection of muscle tissue. Alternatively, water column samples for lotic or lentic systems may be used. For intermittent selenium concentration spikes the Tribes may use the following equation for acute:  

$$WQC(int) = (WQC(30\text{-day}) - (C(bkgrnd) * (1 - f(int)))) / f(int)$$
Where WQC(30-day) is the water column monthly element, for either a lentic or lotic waters; C(bkgrnd) is the average background selenium concentration, and f(int) is the fraction of any 30-day period during which elevated selenium concentrations occur, with f(int) assigned a value  $\geq 0.033$  (corresponding to 1 day).
- P. The criteria for copper are established using the biotic ligand model (BLM). When available and sufficient, site-specific data will be used to calculate the copper BLM criteria. If not available, other representative data will be considered and used.

### CS&KT TRIBAL NUMERIC CHART: Non-Priority Pollutants (Footnotes A-B)

Non-Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
1. Alkalinity			20,000		
2. Aluminum pH 6.5-9.0	7429905	750 A	87 A,B		
3. Ammonia	7664417	See Ammonia Table			
4. Aesthetic Qualities**					
5. Bacteria	See Classification-Recreation use				
6. Barium	7440393			1,000	
7. Boron					
8. Chloride	16887006	860,000	230,000		
9. Chlorine	7782505	19	11		
10. Chlorophenoxy Herbicide 2,4,5-TP[Silvex]	93721			100	400
11. Chlorophenoxy Herbicide 2,4-D	94757			1,300	12,000
12. Chloropyrifos	2921882	0.083	0.041		
13. Color**					
14. Demeton	8065483		0.1		
15. Ether, Bis Chloromethyl	542881			0.00015	0.017
16. Gases, Total Dissolved**					
17. Guthion	86500		0.01		
18. Hardness					
19. Hexachlorocyclohexane-Technical	608731			0.0066	0.010
20. Iron	7439896		1,000	300	
21. Malathion	121755		0.1		
22. Manganese	7439965			50	100
23. Methoxychlor	72435		0.03	0.02	0.02

Non-Priority Pollutant	CAS No.	Freshwater-Aquatic Life		Human Health for Consumption of:	
		ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)
24. Mirex	2385855		0.001		
25. Nitrates	14797558			10,000	
26. Nitrosamines				0.0008	1.24
27. Dinitrophenols	25550587			10	1,000
28. Nonylphenol	8452153	28	6.6		
29. Nitrosodibutylamine	924163			0.0063	0.22
30. Nitrosodiethylamine	55185			0.0008	1.24
31. Nitrosopyrrolidine	930552			0.016	34
32. Oil and Grease**					
33. Oxygen, Dissolved	7782447	See Oxygen Table			
34. Diazionon	333415	0.17	0.17		
35. Parathion	56382	0.065	0.013		
36. Pentachlorobenzene	608935			0.1	0.1
37. pH		6.5-9.0	6.5-9.0	5.0-9.0	
38. Phosphorus Total**	7723140				
39. Phosphate Phosphorus**					
40. Solids Dissolved (TDS) and Salinity**				250,000	
41. Solid Suspended (TSS) &/or Turbidity**					
42. Sulfide-Hydrogen Sulfide	7783064		2		
43. Tainting Substances**					
44. Temperature	See Classification-Aquatic Life				
45. Tetrachlorobenzene, 1,2,4,5-	95943			0.03	0.03
46. Tributyltin TBT		0.46	0.063		
47. Trichlorophenol, 2,4,5-	95954			300	600
48. Clean Sediment**					
49. Contaminated Sediment**					
50. Pathogen and Pathogen Indicators					

## Non Priority Pollutant Footnotes:

\*\* See Narrative Standards.

- A. This value is expressed in terms of total recoverable metal in the water column.
- B. The use of Water-Effect Ratios might be appropriate at pH values greater than 7.0 and moderate to high hardness. Supporting data indicated that aluminum is substantially less toxic at higher pH and hardness, but the effects of pH and hardness are not well quantified at this time.

Freshwater Aquatic Life Standards for dissolved oxygen are as follows:

	Standards for Waters Classified A-1, B-1, B-2, C-1 and C-2		Standards for Waters Classified B-3 and C-3	
	Early Life Stages <sup>1,2</sup>	Other Life Stages	Early Life Stages <sup>2</sup>	Other Life Stages
30 Day Mean	N/A <sup>3</sup>	6.5	N/A	5.5
7 Day Mean	9.5 (6.5)	N/A	6.0	N/A
7 Day Mean Minimum	N/A	5.0	N/A	4.0
1 Day Minimum <sup>4</sup>	8.0 (5.0)	4.0	5.0	3.0

1. These are water column concentrations to achieve the required inter-gravel dissolved oxygen concentrations shown in parentheses. For species that have early life stages exposed directly to the water column, the figures in parentheses apply.

2. Includes all embryonic and larval stages and all juvenile forms to 30-days following hatching.

3. N/A (Not Applicable).

4. All minima should be considered as instantaneous concentrations to be achieved at all times.

# Aquatic Life Criteria for Ammonia\*

## pH-Dependent Values of the CMC (Acute Criterion)

CMC (acute), mg N/L, Total		
pH	Salmonids Present	Salmonids Absent
6.5	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	0.885	1.32

\*All criteria are expressed as total ammonia as N.

# Aquatic Life Criteria for Ammonia\*

## Temperature and pH-Dependent Values of the CCC (Chronic Criterion) for Fish Early Life Stages Present

CCC (chronic) for Fish Early Life Stages Present, mg N/L, Total										
pH	Temperature °C (°F)									
	0- (32)	14- (57.2)	16 (60.8)	18 (64.4)	20- (68)	22 (71.6)	24 (75.2)	26 (78.8)	28 (82.4)	30 (86)
6.5	6.67	6.67	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.57	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	6.44	6.44	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.29	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	6.12	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.91	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18
7.1	5.67	5.67	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.39	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	5.08	5.08	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.73	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.36	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	3.98	3.98	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.58	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.18	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	2.80	2.80	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.43	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897
8.1	2.10	2.10	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773
8.2	1.79	1.79	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	1.52	1.52	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	1.29	1.29	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	1.09	1.09	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	0.920	0.920	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
8.7	0.778	0.778	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	0.661	0.661	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244
8.9	0.565	0.565	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208
9.0	0.486	0.486	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

\*All criteria are expressed as total ammonia as N.



# Aquatic Life Criteria for Ammonia<sup>‡</sup>

## Temperature and pH-Dependent Values of the CCC (Chronic Criterion) for Fish Early Life Stages Absent

CCC (chronic) for Fish Early Life Stages Absent, mg N/L, Total										
pH	Temperature °C (°F)									
	0-7 (32-44.6)	8 (46.4)	9 (48.2)	10 (50)	11 (51.8)	12 (53.6)	13 (55.4)	14 (57.2)	15* (59)	16* (60.8)
6.5	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46	6.06
6.6	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36	5.97
6.7	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25	5.86
6.8	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10	5.72
6.9	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93	5.56
7.0	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73	5.37
7.1	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49	5.15
7.2	8.75	8.29	7.69	7.21	6.76	6.34	5.94	5.57	5.22	4.90
7.3	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92	4.61
7.4	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59	4.30
7.5	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23	3.97
7.6	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85	3.61
7.7	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47	3.25
7.8	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89
7.9	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71	2.54
8.0	3.95	3.70	3.47	3.26	3.05	2.88	2.68	2.52	2.36	2.21
8.1	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03	1.91
8.2	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74	1.63
8.3	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48	1.39
8.4	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25	1.17
8.5	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06	0.990
8.6	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892	0.836
8.7	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754	0.707
8.8	1.07	1.01	0.944	0.885	0.829	0.778	0.729	0.684	0.641	0.601
8.9	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548	0.513
9.0	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471	0.442

<sup>‡</sup>All criteria are expressed as total ammonia as N.

\* At 15°C (59°C) and above, the criterion for fish ELS absent is the same as the criterion for fish ELS present.

## Fresh Water Aquatic Life Criteria for Ammonia\*

mg Total Ammonia Nitrogen (TAN)/L	
<u>Acute (CMC) equation (1 hour average)</u>  <i>Oncorhynchus present</i>	$CMC = MIN \left( \left( \frac{0.275}{1 + 10^{7.204 - pH}} + \frac{39.0}{1 + 10^{pH - 7.204}} \right), \right.$ $\left. \left( 0.7249 \times \left( \frac{0.0114}{1 + 10^{7.204 - pH}} + \frac{1.6181}{1 + 10^{pH - 7.204}} \right) \times (23.12 \times 10^{0.036 \times (20 - T)}) \right) \right)$
<u>Acute (CMC) equation (1 hour average)</u>  <i>Oncorhynchus absent</i>	$CMC = 0.7249 \times \left( \frac{0.0114}{1 + 10^{7.204 - pH}} + \frac{1.6181}{1 + 10^{pH - 7.204}} \right) \times MIN(51.93, 23.12 \times 10^{0.036 \times (20 - T)})$
<u>Chronic (CCC) equation (30-day rolling average)*</u>	$CCC = 0.8876 \times \left( \frac{0.0278}{1 + 10^{7.688 - pH}} + \frac{1.1994}{1 + 10^{pH - 7.688}} \right) \times (2.126 \times 10^{0.028 \times (20 - MAX(T, 7))})$
<p><u>Note: Ammonia criteria are a function of pH and temperature. At the standard normalized pH of 7.0 and temperature of 20oC, the acute criterion would be 17 mg TAN/L and the chronic criterion would be 1.9 mg TAN/L. Criteria duration: the acute criterion is a one-hour average and the chronic criterion is a thirty-day rolling average. Criteria frequency: Not to be exceeded more than once in 3 years.</u></p> <p><u>* Not to exceed 2.5 times the CCC as a 4-day average within the 30-days, i.e. 4.8 mg TAN/L at pH 7 and 20 oC. more than once in 3 years on average.</u></p>	

**Note:** Acute (CMC) and chronic (CCC) freshwater ammonia criteria were developed using EPA's 2013 *Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater* (EPA-822-R-13-001), which is hereby incorporated by reference. Illustrations, tables, and formulae used in the development of these equations can be found on pages 40-52 of the criteria document. Alternative equations for the presence or absence of *Oncorhynchus sp.* (rainbow trout) can be found on pages 41-42 of the document.

**Temperature and pH Dependent Values of the CMC (Acute Criterion Magnitude)-**

**Oncorhynchus spp. Present.**

pH	Temperature (°C)																
	0-14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	33	33	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	31	31	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	30	30	29	27	24	22	20	19	18	16	15	14	13	12	11	9.8	9
6.8	28	28	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	26	26	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7	24	24	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	8	7.3
7.1	22	22	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	20	20	19	18	16	15	14	13	12	11	9.8	8.1	8.3	7.7	7.1	6.5	6
7.3	18	18	17	16	14	13	12	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3
7.4	15	15	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7
7.5	13	13	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6	5.6	5.2	4.8	4.4	4
7.6	11	11	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	9.6	9.6	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	3
7.8	8.1	8.1	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5
7.9	6.8	6.8	6.6	6.2	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8	5.6	5.6	5.4	5	4.6	4.2	3.9	3.6	3.3	3	2.9	2.6	2.4	2.2	2	1.9	1.7
8.1	4.6	4.6	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4
8.2	3.8	3.8	3.7	3.5	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	3.1	3.1	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	0.96
8.4	2.6	2.6	2.5	2.3	2.1	2	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79
8.5	2.1	2.1	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.9	0.83	0.77	0.71	0.65
8.6	1.8	1.8	1.7	1.6	1.5	1.3	1.2	1.1	1	0.96	0.88	0.81	0.75	0.69	0.63	0.59	0.54
8.7	1.5	1.5	1.4	1.3	1.2	1.1	1	0.94	0.87	0.8	0.74	0.68	0.62	0.57	0.53	0.49	0.45
8.8	1.2	1.2	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37
8.9	1	0	4	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.4	0.37	0.34	0.32
9	0.88	0.88	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27

**Temperature and pH Dependent Values of the CMC (Acute Criterion Magnitude)- Oncorhynchus spp. Absent.**

pH	Temperature (°C)																				
	0-10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	51	48	44	41	37	34	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	49	46	42	39	36	33	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	46	44	40	37	34	31	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9
6.8	44	41	39	35	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	41	38	35	32	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7	38	35	33	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9	7.3
7.1	34	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	31	29	27	25	23	21	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6
7.3	27	26	24	22	20	18	17	16	14	13	15	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3
7.4	24	22	21	19	18	16	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7
7.5	21	19	18	17	15	14	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4
7.6	18	17	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5	4.8	4.4	4.1	3.8	3.5
7.7	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	2.9
7.8	13	12	11	10	9.3	8.5	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5
7.9	11	9.9	9.1	8.4	7.7	7.1	6.6	3	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8	8.8	8.2	7.6	7	6.4	5.9	5.4	5	4.6	4	3.9	3.6	3.3	3	2.8	2.6	2.4	2.2	2	1.9	1.7
8.1	7.2	6.8	6.3	5.8	5.3	4.9	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4
8.2	6	5.6	5.2	4.8	4.4	4	3.7	3.4	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	4.9	4.6	4.3	3.9	3.6	3.3	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	0.96
8.4	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79
8.5	3.3	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.9	0.83	0.77	0.71	0.65
8.6	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1	0.96	0.88	0.81	0.75	0.69	0.63	0.58	0.54
8.7	2.3	2.2	2	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1	0.94	0.87	0.8	0.74	0.68	0.62	0.57	0.53	0.49	0.45
8.8	1.9	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37
8.9	1.6	1.5	1.4	1.3	1.2	1.1	1	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.4	0.37	0.34	0.32
9	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27

**Temperature and pH-Dependent Values of the  
CCC (Chronic Criterion Magnitude)**

pH	Temperature (°C)																							
	0-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	4.9	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.5	1.4	1.3	1.2	1.1
6.6	4.9	4.5	4.3	4	3.8	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1
6.7	4.9	4.5	4.2	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1
6.8	4.9	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1
6.9	4.9	4.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1
7	4.9	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	0.99
7.1	4.9	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95
7.2	4.9	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	0.96	0.9
7.3	4.9	3.5	3.3	3.1	2.9	2.7	2.6	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	0.97	0.91	0.85
7.4	4.9	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.3	1.5	1.4	1.3	1.3	1.2	1.1	1	0.96	0.9	0.85	0.79
7.5	4.9	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95	0.89	0.83	0.78	0.73
7.6	4.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.1	1.1	0.98	0.92	0.86	0.81	0.76	0.71	0.67
7.7	4.9	2.4	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.94	0.88	0.83	0.78	0.73	0.68	0.64	0.6
7.8	4.9	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53
7.9	4.9	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53	0.5	0.47
8	4.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.94	0.88	0.83	0.78	0.73	0.68	0.64	0.6	0.56	0.53	0.5	0.44	0.44	0.41
8.1	4.9	1.5	1.4	1.3	1.2	1.1	1.1	0.99	0.92	0.87	0.81	0.76	0.71	0.67	0.63	0.59	0.55	0.52	0.49	0.46	0.43	0.4	0.38	0.35
8.2	4.9	1.2	1.2	1.1	1	0.96	0.9	0.84	0.79	0.74	0.7	0.65	0.61	0.57	0.54	0.5	0.37	0.44	0.42	0.39	0.37	0.34	0.32	0.3
8.3	4.9	1.1	0.99	0.93	0.87	0.82	0.76	0.72	0.67	0.63	0.59	0.55	0.52	0.49	0.46	0.43	0.4	0.38	0.35	0.33	0.31	0.29	0.27	0.26
8.4	4.9	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53	0.5	0.47	0.44	0.41	0.39	0.36	0.34	0.32	0.3	0.28	0.26	0.25	0.23	0.22
8.5	4.9	0.75	0.71	0.67	0.62	0.58	0.55	0.51	0.48	0.45	0.42	0.4	0.37	0.35	0.33	0.31	0.29	0.27	0.25	0.24	0.22	0.21	0.2	0.18
8.6	4.9	0.64	0.6	0.56	0.53	0.49	0.46	0.43	0.41	0.38	0.36	0.33	0.31	0.29	0.28	0.26	0.24	0.23	0.21	0.2	0.19	0.18	0.16	0.15
8.7	4.9	0.54	0.51	0.47	0.44	0.42	0.39	0.37	0.34	0.32	0.3	0.28	0.27	0.25	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.14	0.13
8.8	4.9	0.46	0.43	0.4	0.38	0.35	0.33	0.31	0.29	0.27	0.26	0.24	0.23	0.21	0.2	0.19	0.17	0.16	0.15	0.14	0.13	0.13	0.12	0.11
8.9	4.9	0.39	0.37	0.34	0.32	0.3	0.28	0.27	0.25	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.1	0.09
9	4.9	0.34	0.32	0.3	0.28	0.26	0.24	0.23	0.21	0.2	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.11	0.1	0.09	0.09	0.08



## General Notes:

- (1) Priority and Non-Priority Pollutants are based on EPA's categories and include parameters determined to be toxic (toxin), carcinogenic (carcinogen), or harmful. Harmful parameters include nutrients, biological agents, and those parameters that cause taste and /or odor effects or physical effects.
- (2) Carcinogens: chemicals classified by EPA as carcinogens for an oral route of exposure; Standards are based upon the incremental risk of causing one additional instance of cancer in one million persons. Includes those parameters in classifications A (Human Carcinogen), B1 or B2 (Probable Human Carcinogens), and C (Possible Human Carcinogen).
- (3) Chronic criteria for the protection of aquatic life, based on 30 day average concentration, shall not exceed these values more frequently than once in any 3-year period. Chronic standards will be evaluated on the basis of all samples taken within any consecutive 30-day period. It is recommended that a minimum of 3 representative samples be provided.
- (4) Radionuclide photon-emitters consisting of either beta or gamma emitters and are classified as carcinogenic. Their associated Standard is based upon a 4 mrem ede/yr exposure. This exposure is based upon daily ingestion of 2.4 liters of water. The emitters covered under this Standard are:
  - Cesium, radioactive
  - Iodine, radioactive
  - Strontium -89 and -90, radioactive
  - Tritium
  - Gamma photon emitters
- (5) For surface waters the applicable Water Quality Criterion is the more restrictive of either the Aquatic Life Standard or the Human Health Standards.
- (6) Levels of individual petrochemicals in the water column should not exceed 0.010 of the lowest continuous flow 96-hour  $LC_{50}$  to several important fresh water species, each having a demonstrated high susceptibility to oils and petrochemicals.
- (7) The ingestion of aquatic organisms is based on the assumption of 22 grams of aquatic organisms per day. Where it is shown that consumption is more than 22 grams per day, these values must be proportionately lowered. For example, if average consumption equals 44 grams per day then the appropriate standard should be divided by 2.

**CS&KT Numeric Surface Water Maximum Contaminant Level (MCL) Standards Adopted To Protect The Water Supply Designated Use (All concentrations expressed as ug/L, except where noted.)**

<b>Chemical Name Priority Pollutants</b>	<b>CASRN MCL (1)</b>	<b>SDW A</b>	<b>Potential Health Effects from Ingestion of Water (2)</b>
Chlorobenzene	108-90-7	100	Liver, kidneys
1,2,4-Trichlorobenzene	120-82-1	70	Adrenal glands
1,1,1-Trichloroethane	71-55-6	200	Liver, nervous system, circulatory system
1,2-Dichlorobenzene	95-50-1	600	Liver, kidneys, circulatory system
1,4-Dichlorobenzene	106-46-7	75	Anemia, liver, kidneys, spleen, blood
1,2-trans-Dichloroethylene	156-60-5	100	Liver
Ethylbenzene	100-41-4	700	Liver, kidneys
Hexachlorocyclopentadiene	77-47-4	50	Kidneys, stomach
Toluene	108-88-3	1000	Nervous system, kidneys, liver
Antimony	7440-36-0	6	Blood cholesterol, blood sugar
Beryllium	7440-41-7	4	Intestinal lesions
Cadmium	7440-43-9	5	Kidneys
Chromium (total)	7440-47-3	100	
Cyanide	57-12-5	200	Thyroid
Lead	7439-92-1	TT(3)	Physical/mental development (children), kidney, high blood pressure (adults)
Nickel	7440-02-0	100	Heart, liver (4)
Selenium	7782-49-2	50	Hair, fingernail, numbness, circulatory system
<b>Non-Priority Pollutants</b>			
Alachlor	15972-60-8	2	Eye, liver, kidneys, spleen, anemia, cancer
Atrazine	1912-24-9	3	Cardiovascular system, reproductive system
Carbofuran	1563-66-2	40	Blood, nervous system, reproductive system
2,4-D	94-75-7	70	Kidneys, liver, adrenal glands
Dalapon	75-99-0	200	Kidneys



**CS&KT Numeric Surface Water Maximum Contaminant Level (MCL) Standards Adopted To Protect The Water Supply Designated Use (All concentrations expressed as ug/L, except where noted.)**

<b>Chemical Name Non-Priority Pollutants</b>	<b>CASRN MCL (1)</b>	<b>SDWA</b>	<b>Potential Health Effects from Ingestion of Water (2)</b>
Di(2-ethylhexyl)adipate	103-23-1	400	Reproductive system
Dibromochloropropane	96-12-8	0.2	Reproductive system, cancer
Dichloroethylene (cis-1,2-) Dinoseb	156-59-2 88-85-7	70 7	Liver Reproductive system
Diquat	85-00-7	20	Cataracts
Endothall	145-73-3	100	Stomach, intestines
Ethylene dibromide (EDB)	106-93-4	0.05	Liver, stomach, reproductive system, kidneys, cancer
Glyphosate	1071-83-6	700	Kidneys, reproductive system
Methoxychlor	72-43-5	40	Reproductive system
Oxamyl (Vydate)	23135-22-0	200	Nervous system
Picloram	1918-02-1	500	Liver
Simazine	122-34-9	4	Blood
Styrene	100-42-5	100	Liver, kidneys, circulatory system
Xylenes	1330-20-7	10,000	Nervous system
Fluoride	7782-41-4	4,000	Bone, teeth
Nitrite	14797-65-0	1,000	Methemoglobinemia
<b>Radiological (in pCi/l, except where noted)</b>			
Alpha emitters	Multiple	15	Cancer
Beta/photon emitters	12587-47-2	4 mrem/y	Cancer
Combined Radium 226 & 228	13982-63-6 15262-20-1	5	Cancer

---

## NOTES:

- (1) This column shows current published CWA § 304(a) human health criteria based on MCL, in most cases assuming consumption of 2.4 liters of water. Values for carcinogens are calculated at a  $10^{-6}$  incremental risk level.
- (2) The potential health effects are based on consumption of water containing pollutant concentrations that exceed the MCL, in most cases, over many years. The listed effects are consistent with those that drinking water systems must disclose to the public, on an annual basis, where MCL's have been exceeded during the year covered by the report. See 63 Federal Register 44512-44536, 40 CFR Parts 141 and 142, National Primary Drinking Water Regulation: Consumer Confidence Reports, Final Rule, August 19, 1998.
- (3) For lead, the MCL requires a Treatment Technology (TT); however, the action level is 0.015 mg/L.
- (4) Potential health effects for nickel are taken from *Is Your Drinking Water Safe?*, EPA 810-F- 94-002, May, 1994.

## ACRONYMS:

CASRN: Chemical Abstracts Service Registry Number

CSKT: Confederated Salish and Kootenai Indian Tribes of the Flathead Indian Reservation

MCL: Maximum Contaminant Levels

SDWA: Safe Drinking Water Act