

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.

Morongo Band of Mission Indiana: Ordinance 39 - Surface Water Quality Protection Ordinance

Effective January 20, 2026

The following water quality standards (WQS) provisions are not currently in effect for Clean Water Act purposes:

- cadmium chronic aquatic life criterion.
- bacteria criteria for secondary contact recreation.

The tribe rescinded the following WQS provisions:

- aluminum aquatic life criteria.
- copper aquatic life criteria.
- nickel human health criteria.
- selenium human health criteria.
- zinc human health criteria.
- dieldrin aquatic life criteria.
- mercury aquatic life criteria.
- section *X. Variances*.

MORONGO BAND OF MISSION INDIANS

ORDINANCE 39

**SURFACE WATER QUALITY PROTECTION
ORDINANCE**

Approved March 15, 2018

Amended March 15, 2022

Motion Number #012522-03

MORONGO BAND OF MISSION INDIANS
ORDINANCE NO. 39
SURFACE WATER QUALITY PROTECTION ORDINANCE

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I. FINDINGS

The Morongo Band of Mission Indians is a federally recognized Indian Tribe exercising inherent sovereignty and jurisdiction over the Morongo Indian Reservation. Acting pursuant to Tribal law, custom and tradition, and in the exercise of its inherent sovereign powers to enact ordinances, rules and regulations, and otherwise govern the Reservation, the Tribe finds that the protection of water quality is essential to the health, welfare, safety, and environment of Tribal Members, other Residents and the public. The Tribe further finds that the federal government, acting primarily through the Environmental Protection Agency (EPA), historically has exercised jurisdiction over water quality issues on the Reservation. However, for a variety of reasons including the lack of adequate resources, the Environmental Protection Agency has not always assigned to surface water quality protection on the Reservation the level of priority that the Tribe has desired or deemed appropriate. Therefore, exercising its own inherent sovereignty over the Reservation, the Tribe finds that Tribal efforts and initiatives, in addition to those of state and federal agencies, are essential to protect and improve the quality of surface water on the Reservation and to assure that surface water quality issues on the Reservation, including protection regulations and enforcement, are given the level of priority that the Tribe deems appropriate.

II. PURPOSE

The purpose of this Ordinance is to carry out the provisions of the Morongo Environmental Protection Ordinance, Section IV(C)(1), to protect surface water quality on the Reservation. Carrying out this purpose includes, among other things, protecting the health, safety and welfare of Tribal members and all other persons within the exterior boundaries of the Reservation; preventing the deterioration of water quality and other natural resources resulting from surface water pollution; and protecting the cultural, social, and economic stability of the Reservation. The Tribe intends to carry out the purpose of this Ordinance by reducing and/or controlling present and future sources of surface water pollution within the exterior boundaries of the Reservation in a manner that achieves a quality of water that maintains the chemical, physical, and biological integrity of the waters within the jurisdiction of the Tribe in order to preserve and enhance the environment within the Reservation and on the lands immediately surrounding the Reservation.

The Tribal Water Quality Standards (Standards) contained herein are intended and shall be construed to be consistent with the Clean Water Act, which declares its objective to “restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” The Tribe shares that objective for its waters, and further adds the objective of restoring and maintaining the cultural and spiritual integrity of its waters. The Clean Water Act also states that “it is the national goal that, wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water.” Other designated uses of Tribal waters intended to be protected by these Standards include: groundwater recharge, municipal domestic supply, agricultural supply, primary contact recreation, secondary contact recreation, culturally significant, wildlife and livestock habitat, and warm freshwater habitat. Any contamination that may result from such uses shall not lower the quality of the water below what is needed for life, including human recreation and protection and propagation of fish and wildlife that depend on Tribal waters.

III. APPLICABILITY

To the fullest extent allowed by the law, this Ordinance is applicable to activities that occur anywhere on the Reservation regardless of whether those activities are undertaken by a Tribal Member, a Resident who is not a Tribal Member, a guest, a visitor, an invitee, a trespasser, holder of a Right of Way, or a person or entity that has leased land or space on the Reservation for the purpose of conducting business activities of any kind.

Except as specifically provided herein, the Tribal Water Quality Standards Program applies to all waters within the exterior boundaries of the Reservation, including water situated wholly or partly within, or bordering upon the Reservation. All waters not explicitly named have the same uses as named waters to which they are a tributary, and all tributaries to named waters are also protected under these Standards. The criteria in these Standards shall not apply to natural phenomena not brought about by human activity. On occasion, there will be natural events, such as floods or other extreme weather events, that may cause a temporary exceedance(s) of the criteria values. When caused by natural events, such exceedances shall not be viewed as adverse to the designated use. The exception for natural phenomena should be reserved for instances where there is little doubt that natural phenomena is responsible for exceedances. A thorough explanation of methodology and data should be provided for any natural phenomena exceptions. Site-specific criteria may be appropriate for areas where natural conditions are the sole cause of criteria exceedances.

IV. **DEFINITIONS**

A. The terms used in this Ordinance shall be defined as follows:

1. The term “acute toxicity” refers to a relatively short-term lethal or other adverse effect to an organism caused by pollutants, and usually defined as occurring within one hour for fish and large invertebrates and shorter times for smaller organisms. Some exceptions apply to reflect unique characteristics of individual pollutants.
2. The term “antidegradation” refers to the policy set forth in Section VII of this Ordinance whereby existing or designated uses, the level of water quality necessary to protect those uses, and general aquatic and riparian ecosystem health is maintained and protected.
3. The term “chronic toxicity” refers to a fairly long-term adverse effect to an organism (when compared to the life span of the organism) caused by or related to changes in feeding, growth, metabolism, reproduction, etc.
4. The term “Clean Water Act” means the Federal Water Pollution Control Act, as amended from time to time, currently codified at United States Code Title 33, Chapter 26, Sections 1251-1388.
5. The term “degradation” means the lowering of, or threat of lowering, water quality or the quality of the natural environment by an increase in contaminants or pollution or by a decrease in the ecological quality of the environment.
6. The term “designated use” means the use of water for purposes that may include, but are not limited to, the following: aesthetics; agricultural use; aquaculture and fish propagation; commercial use; cultural, religious and spiritual uses; domestic use; fire protection; groundwater recharge; hydropower generation; industrial use; ecological flow uses; mineral resource development; municipal use; navigation; pollution

control; recreational use; resource development; stock water use; storage; water quality; conjunctive use; and wildlife habitat.

7. The term “discharge” means any addition, regardless of method and regardless of intent, of a pollutant, pollution, or combination of pollutants to Reservation waters from any point source.
8. The term “dissolved oxygen” means the amount of oxygen dissolved in water or the amount of oxygen available for biochemical activity in water, commonly expressed as a concentration in milligrams per liter.
9. The term “Environmental Protection Department” means the Morongo Band of Mission Indians Environmental Protection Department.
10. The term “Environmental Protection Ordinance” means Morongo Ordinance # 12, as approved in 2000 and as it may be amended from time to time.
11. The term “Environmental Protection Agency (EPA)” means the United States Environmental Protection Agency.
12. The term “existing uses” means the uses actually attained in a surface water body on or after November 28, 1975, whether or not they are referred to in this Ordinance.
13. The term “geometric mean” is a mean calculated by converting all values to logarithms, averaging the logarithms, and determining the antilogarithm of that average.
14. The term “groundwater” means all water that exists beneath the earth surface or beneath any surface water body, regardless of the geological formation or structure in which such water stands, flows, percolates, or otherwise moves.
15. The term “hazardous substance” or “hazardous material” means any chemical, material, or substance defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “extremely hazardous waste,” “restricted hazardous waste,” “toxic substance” or words of similar import under any environmental laws and any substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness, and any other substance or material with respect to which any federal, state, local or Tribal Environmental Law or any Governmental Authority requires environmental investigation, monitoring, regulation or remediation. Typical hazardous substances are toxic, corrosive, ignitable, explosive or chemically reactive.
16. The term “human health criteria” means criteria guidance published under section 304(a) of the Clean Water Act and periodically updated based on the latest scientific information on the effect a pollutant concentration has on human health from consumption of fish and/or ingestion of water.
17. The term “Manager” means the Manager of the Morongo Environmental Protection Department.

18. The term “milligrams per liter” means a unit of concentration expressed in terms of the number of milligrams contained in a volume of one liter; one milligram per liter is equivalent to one part per million at unit density.
19. The term “millirem” means a unit of absorbed radiation dose modified by the ability of the radiation to cause biological damage; one thousand millirem are equivalent to 1 rem.
20. The term “Most Probable Number” means an estimate of microbial density per unit volume of water sample, based on probability theory.
21. The term “narrative standards” means a standard or criterion expressed in words rather than numerically.
22. The term “Nephelometric Turbidity Units” means a measure of turbidity in water; see Turbidity.
23. The term “non-member” means a person who is not an enrolled member of the Morongo Band of Mission Indians.
24. The term “nonpoint source” means pollution that is not from a discernible, single source (e.g., sediment runoff from land).
25. The term “nutrient” means a chemical element or inorganic compound taken in by green plants and used in organic synthesis (e.g., phosphorous and nitrogen).
26. The term “Ordinance” means this Surface Water Quality Ordinance, as it may be amended or revised from time to time.
27. The term “Outstanding Tribal Resource Water” means a tribal water body designated for protection under Tier 3 of the Tribe’s antidegradation policy (see Section VII).
28. The term “person” means any individual, corporation, partnership, firm, association, agency, municipality, political subdivision, industry, or any other entity whatsoever.
29. The term “pH” means the negative logarithm of the effective hydrogen-ion concentration in gram equivalents per liter.
30. The term “picocurie” means a unit of measure of the intensity of radioactivity (the number of decays per unit time).
31. The term “point source” means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, culvert, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft.
32. The term “pollutant” means any substance that, when introduced to water, will alter the quality of that water.
33. The term “pollution” means the presence of matter, energy, contamination, or other alteration of the physical, chemical, or biological properties of water or land whose

- nature, location, or quantity produces undesired environmental effects, including, but not limited to, changes in aesthetics, temperature, taste, color, turbidity, or odor of the waters, or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters that may render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, to cultural, spiritual, domestic, commercial, industrial, agricultural, recreational, or other beneficial uses, or to livestock, wildlife, birds, fish, or other aquatic life.
34. The term "Reservation" means the Morongo Indian Reservation and all lands within the exterior boundaries of the Morongo Indian Reservation.
35. The term "Resident" means a person who owns, has a beneficial interest in, or has a leasehold or rental interest in a place of residence on the Reservation, and who actually resides in that place of residence either on a regular basis or from time to time.
36. The term "stream" means an area where surface water flows sufficiently to produce a defined channel or bed, indicated by hydraulically sorted sediments or the removal of vegetative litter or loosely rooted vegetation by the action of moving water, regardless of whether that channel or bed contains water on a year-round basis; provided, however, that the term "stream" does not include an entirely artificial watercourse unless that artificial watercourse is used to convey water from a stream that existed naturally before construction of the artificial watercourse.
37. The term "stream bank" means that portion of the land surface extending from the stream water surface to the point at which water begins to overflow into the floodplain.
38. The term "surface water" means any or all water originating from precipitation or groundwater flow that is found on the surface of the earth, primarily in rivers, streams, springs, seeps, ponds, wetlands, and lakes.
39. The term "toxic substances" means those pollutants or combinations of pollutants, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including, but not limited to, malfunctions in reproduction), or physical deformations in such organisms or their offspring.
40. The term "Tribal" when used in connection with any custom, tradition, law, regulation, standard or action shall mean a law, regulation, standard or action of the Tribe.
41. The term "Tribal Council" means the duly elected Morongo Tribal Council.
42. The term "Tribal Member" means a person who is an enrolled member of the Morongo Band of Mission Indians.
43. The term "Tribe" means the Morongo Band of Mission Indians, a federally recognized Indian Tribe.
44. The term "turbidity" means the measure of surface water clarity and indicates to what

extent solids, such as soil particles, algae, plankton, and other substances, suspended in the water decreases the passage of light through the water.

45. The term "Use Attainability Analysis" means a structured scientific assessment of the factors affecting attainment of a use for a body of water, which may include physical, chemical, biological, and economic factors as referred to in 40 CFR Section 131.10(g).
46. The term "waste" includes any and all substances, liquid (including wastewater), solid, gaseous, radioactive or heat laden, associated with human habitation, or of human or animal origin, or from any of man's activities including producing, manufacturing or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to, and for purposes of, disposal.
47. The term "wastewater" means water that contains wastes from residential, commercial, and industrial processes. Wastewater may consist of domestic effluent of sewage and/or graywater, water from commercial establishments and institutions, and/or industrial effluent resulting from direct contact with or the production of any raw material, intermediate product, finished product, byproduct, or waste product.
48. The term "water quality" means the chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use.
49. The term "water quality criteria" means specific levels of water quality which, if reached, are expected to render a body of water suitable for its beneficial use.
50. The term "water quality standards" means provisions of state, territorial, authorized tribal or federal law approved by EPA that describe the desired condition of a water body and the means by which that condition will be protected or achieved
51. The term "waters of the Reservation" means any water, surface or underground, contained within, flowing through or bordering upon the Morongo Indian Reservation or any portion thereof over which the Tribe has jurisdiction.
52. The term "wetland" means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

V. DESIGNATED USES

- A. The Standards contained herein are intended and shall be construed to be consistent with the Clean Water Act, which declares its objective to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The Tribe shares that objective for its waters, and further adds the objective of restoring and maintaining the cultural and spiritual integrity of its waters.
- B. The following classifications represent existing and potential uses of all water resources on the Morongo Reservation: groundwater recharge, municipal and domestic supply, agricultural, recreation, culturally significant, wildlife and livestock habitat, and freshwater

habitat. The codes used are defined in Table 1:

Table 1 Description of Designated Water Uses

Use	Code	Description
Groundwater Recharge	GWR	Uses of water include natural or artificial recharge.
Municipal and Domestic Supply	MUN	Uses of water for municipal, domestic and community water systems.
Agricultural Supply	AGR	Uses of water include pasture and crop irrigation, stock watering, horticulture, and support of vegetation for range grazing, as well as other miscellaneous uses in support of farming and ranching.
Primary Contact Recreation	REC-I	Uses of water include recreational activities involving actual body contact with the water where ingestion of water is reasonably possible. These include, but are not limited to, swimming, wading, and the use of natural hot springs.
Secondary Contact Recreation	REC-II	Uses of water includes recreational activities that involve the presence of water but do not require contact with it, such as gathering, hiking, boating, hunting, fishing, sightseeing, and aesthetic enjoyment of scenery.
Culturally Significant	CUL	Uses of water include the traditional use of a surface water for cultural purposes by members of the Tribe. This may involve body contact with the water and provision of adequate flow for ceremonial purposes. Other activities may include plant gathering in or around water bodies, with limited or no direct contact with water.
Wildlife and Livestock Habitat	WILD	Uses of water include those that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife, livestock, and the water and food sources.
Warm Freshwater Habitat	WARM	Uses of water include those which support warm water ecosystems, including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Cold Freshwater Habitat	COLD	Uses of water include those which support cold water ecosystems, including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

- C. Water quality objectives are narrative and numeric criteria that were developed to ensure the continued support of existing and proposed designated uses of water resources. Use designations outlined in these Standards apply to all tribal waters of the Reservation. Use designations for the major named waters, are shown in Table 2 below. Unnamed tributaries have the same designated uses as those waters to which they are a tributary. The designated uses encompass existing, present, and potential uses. In some cases, uses may only occur seasonally because of limiting environmental conditions (sufficient flow may not exist year-round for primary contact recreation) and designation of the use does not indicate the authorization or approval of the use.

Table 2 Surface Water Use Designation

Water Body	GWR	MUN	AGR	REC-I	REC-II	CUL	WILD	WARM	COLD
Deep Canyon Creek	X		X	X	X	X	X	X	
Hathaway Creek	X	X	X	X	X	X	X	X	
Lake Morongo	X	X	X	X	X	X	X	X	
Lion Canyon Creek	X	X	X	X	X	X	X	X	
Millard Canyon Creek	X	X	X	X	X	X	X		X
One Horse Creek	X		X	X	X	X	X	X	
One Horse Spring	X		X		X	X	X	X	
Potrero Creek	X	X	X	X	X	X	X	X	
SP Springs	X	X	X	X	X	X	X	X	
Stubbe Canyon Creek	X		X	X	X	X	X	X	
San Gorgonio River	X	X	X	X	X	X	X	X	
Wood Canyon Creek	X	X	X	X	X	X	X		X
The Bog	X	X	X	X	X	X	X	X	
Percolation Ponds	X	X	X	X	X		X	X	

VI. WATER QUALITY CRITERIA

The following criteria set forth limits or levels of water quality characteristics for surface waters

to ensure the reasonable protection of designated uses from degradation or unreasonable effect of pollution. The following narrative standards apply to all Tribal waters, unless stricter standards are imposed.

A. Narrative Criteria

1. General Requirements. All waters shall be free from toxic, radioactive, conventional, non-conventional, deleterious or other polluting substances in amounts that would prevent attainment of the designated uses specified in Section V.
2. Aesthetic Qualities. All waters shall be free from substances attributable to wastewater of domestic or industrial origin or other discharges which adversely affect beneficial uses, not limited to:
 - (a) Settling to form objectionable deposits;
 - (b) Floating as debris, scum, grease, oil, wax, or other matter that may cause nuisances; and
 - (c) Producing objectionable color, odor, taste, or turbidity.
3. Biostimulatory Substances. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
4. Dioxins. No dioxin compounds will be discharged to any water within the Reservation boundaries.
5. Sediment. The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect any beneficial use(s).
6. Suspended Solids and Settleable Solids. Discharges shall not contain suspended or settleable solids in concentrations which increase the turbidity of receiving waters unless it can be demonstrated that such alteration does not affect beneficial uses.
7. Tainting Substances. Water shall be free of unnatural materials which individually or in combination produce undesirable flavors in the edible portions of aquatic organisms.
8. Temperature. The natural receiving water temperature of surface waters shall not be altered by discharges unless it can be demonstrated that such alteration in temperature does not adversely affect beneficial uses.
9. Total Dissolved Solids. Discharges shall not increase the total dissolved solids content of receiving waters, unless it can be demonstrated that such an increase in total dissolved solids does not adversely affect beneficial uses of receiving waters.
10. Toxicity. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. The survival of aquatic life in surface waters

subjected to a discharge or other controllable water quality factors shall not be less than that for the same water body in areas unaffected by the discharge.

11. Turbidity. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

B. Numeric Criteria

1. Bacteria. In waters where recreation may occur, the following bacterial objectives apply. For primary contact recreation, the *Escherichia coli* geometric mean should not exceed 126 Most Probable Number per 100 milliliters nor shall the statistical threshold value exceed 410 Most Probable Number per 100 milliliters. ~~For secondary contact recreation, the geometric mean should not exceed 630 Most Probable Number per 100 milliliters nor shall any sample exceed 2000 Most Probable Number per 100 milliliters.~~
2. Dissolved Oxygen. Discharges shall not decrease the dissolved oxygen of receiving waters below 5.0 milligrams per liter.
3. pH. Discharges shall not cause any changes in pH detrimental to beneficial uses. Acceptable pH values range from 6.5 to 9.0.
4. Radioactivity. Radionuclides shall not be present in waters in concentrations which are deleterious to human, plant, animal or aquatic life or that result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal or aquatic life.

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the limits listed below:

Constituent	Maximum Contaminant Level (picocuries per liter)
Combined radium-226 and radium-228	5
Gross alpha particle activity (excluding radon and uranium)	15
Tritium	20,000 ¹
Strontium-90	8 ²
Beta/photon emitters	4 millirem ³
Uranium	20

¹ Equivalent to 4 millirem per year dose to total body.

² Equivalent to 4 millirem per year dose to bone marrow.

³ 4 millirem per year annual dose equivalent to the total body or any internal organ.

5. Aquatic life criteria. The aquatic life criteria for these water quality standards are contained in Tables 1, 2, 3, 4, and 5 of Appendix A. The aquatic life criteria apply to all waters designated for the protection of wildlife and freshwater habitat in Section V.
6. Human health criteria. The human health criteria for these water quality standards are contained in Table 6. Risk-based criteria for carcinogenic substances shall be applied such that the upper-bound excess cancer risk is less than or equal to one in 1,000,000, which means the probability of one excess cancer per million people exposed. For all waters with the designated use of Municipal and Domestic Supply specified in Section V, the human health criteria for “Water Plus Organisms” as presented in Table 6 apply.

VII. ANTIDegradation Policy

- A. Tier 1. Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
- B. Tier 2. Where the quality of waters exceeds the level necessary to support the propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Tribe finds, after appropriate coordination and public participation, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the Tribe shall assure water quality adequate to protect existing uses fully. Further, the Tribe shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.
- C. Tier 3. Where high quality waters constitute such a designation, an Outstanding Tribal Resource Water designation may be adopted. The level of water quality of these waters shall be maintained and protected. These may include, but are not be limited to, waters that have outstanding water quality, unique aquatic ecology, or recreational, ceremonial, or aesthetic characteristics that qualify them for such a designation by the Tribe. See Section IV.A.27 definition of Outstanding Tribal Resource Water.
- D. In those cases where potential water quality impairment associated with a thermal discharge is involved, the decision to allow such degradation shall be consistent with section 316 of the Clean Water Act.

VIII. ANTIDegradation Implementation Methods

- A. The antidegradation policy in Section VII and these antidegradation implementation methods shall be applied to all waters of the reservation included in Section III.
 1. All waters receive protection for existing instream uses consistent with Section VII(A).
 2. High quality water protection consistent with Section VII(B) will be identified on a parameter-by-parameter basis. Each parameter for which water quality would be lowered by the regulated activity shall be considered and evaluated independently

consistent with Part C of this section. The Tribe is not expected to maintain a list of waters receiving protection consistent with Section VII(B).

3. Waters provided protection as an Outstanding Tribal Resource Water consistent with Section VII(C) will be identified following the process outlined in Part D of this section and a comprehensive list shall be maintained by the Tribe.
 4. The requirements of Section VII(B) will be triggered by all new or expanded regulated activities. Regulated activities include, but are not limited to, any activity that requires a permit, license or water quality certification pursuant to section 401, 402, and 404 of the Act.
- B. Existing instream uses are protected consistent with Section VII(A). For all waters, the Tribe shall ensure that the level of water quality necessary to protect existing uses is maintained. To achieve this requirement, the Tribe shall consider whether a discharge would lower the water quality to the extent that it would no longer be sufficient to protect and maintain the existing uses of that water body. Such consideration shall be based on all existing and readily available water quality-related data and information, as well as any additional water-quality related data and information submitted during the public comment period for the permit or license.
- C. High quality waters are protected consistent with Section VII(B). High quality waters are water bodies in which, on a parameter-by-parameter basis, the quality of the waters exceeds levels necessary to support protection and propagation of fish, shellfish, and wildlife and recreation in and on the water. The Tribe shall ensure that no action resulting in a lowering of water quality occurs unless all components needed for analysis, including an alternatives analysis and socio-economics analysis, are available to the Tribe and found to adequately support the lowering of water quality as necessary to accommodate important economic and social development in the area in which the water is located.
- D. The Tribe's decision to assign a water as an Outstanding Tribal Resource Water shall be subject to applicable public participation requirements. Any data and information relevant to the decision shall be available at least thirty days before the hearing. To the extent possible, public notice regarding the decision to assign a reservation water as an Outstanding Tribal Resource Water should be coordinated with other required notices for public review.
1. For reservation waters assigned as Outstanding Tribal Resource Water, the Tribe shall ensure, through the application of appropriate controls on point and nonpoint pollutant sources, that water quality is maintained and protected. No new or expanded point source discharges will be allowed to an Outstanding Tribal Resource Water, and no new or expanded point source discharges to tributaries to Outstanding Tribal Resource Water resulting in lower water quality in the Outstanding Tribal Resource Water will be allowed. The Tribe intends to allow short-term, temporary degradation in an Outstanding Tribal Resource Water as long as the short-term, temporary degradation is limited to the shortest possible time, does not impact existing uses, and does not alter the essential or special characteristics that make the water an Outstanding Tribal Resource Water.

IX. PROHIBITION OF DISCHARGES

- A. All discharges that may adversely affect water quality are prohibited without an approved and applicable federal permit, Tribal permit, or a motion approved by the Tribal Council. The discharge shall not cause a violation of any applicable water quality standard or objective for receiving waters as required by this Ordinance and/or the Clean Water Act. Any activity shall not cause substantial alteration of hydroperiod, flows, groundwater or surface water quality, or fish and wildlife habitat. All activities shall comply with all applicable federal and Morongo Band of Mission Indian laws, including those related to sediment control, pollution control, floodplain restrictions, storm water management, and on-site wastewater disposal. All activities that could potentially cause a discharge shall follow all appropriate best management practices associated with that activity or required by the applicable permit.
- B. The use or discharge of recycled water shall not unreasonably affect beneficial uses, cause a condition of nuisance, or cause the underlying groundwater to exceed any applicable water quality objectives,
- C. Notice shall be given by the entity responsible (discharger) to the Environmental Protection Department within ninety (90) days, but no less than thirty (30) days, before undertaking any of the following (or similar) activities in a stream, stream bank, or wetland: the removal, excavation, grading, or dredging of soil, sand, organic matter, or material of any kind; the dumping, discharging, or filling with any material; the draining, flooding, or disturbing of the water level or water table; the placing of obstructions or dams; the destruction or alteration of vegetation (e.g., through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a wetland) which substantially changes the vegetation, topography, or hydrology; or activities that would result in the introduction of sediment, excess nutrients, or pollutants or in a change in the physical or chemical characteristics of wetland water, including quantity.
- D. In the event of an emergency, when there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur without completion of an activity that may cause a discharge, the Environmental Protection Department shall be notified within twenty-four (24) hours of initiating such activity. Emergency work must conform to all applicable permit conditions, including those obtained after the fact, and may be subject to additional requirements, inspection, and/or project modifications to comply with any pertinent laws.
- E. Except as permitted pursuant to this Ordinance, any person that discharges any pollutant into the waters of the Reservation shall notify the Environmental Protection Department of such discharge within twenty-four (24) hours of the discharge and shall fully disclose the information regarding the discharge including the type of pollutant, the amount, the location, and other information required by the Environmental Protection Department. Such notice does not absolve the discharger of responsibility.

~~X. VARIANCES~~

- ~~A. The Tribal Council may allow variances from these Standards on a case-by-case basis. Variances shall be for specific pollutants, time limited, and shall not forego the current designated use. Where a designated use for a water body is not now attainable but the water body can be expected to make reasonable progress towards improvement in water quality, variances are to be issued rather than removing the designated use for~~

~~that water body. A variance may be allowed in certain cases where the appropriateness of specific criteria is questionable. The variance shall provide a period of time during which issues concerning the appropriateness of the criteria must be resolved.~~

- ~~1. A variance shall be valid for no more than three years.~~
- ~~2. Variances are not renewable but may be reissued again upon adequate justification.~~
- ~~3. A variance shall be granted only after appropriate public participation.~~
- ~~4. A WQS variance must include:~~
 - ~~(a) Identification of the pollutant(s) or water quality parameter(s), and the water body/water body segment(s) to which the WQS variance applies. Discharger(s)-specific WQS variances must also identify the permittee(s) subject to the WQS variance.~~
 - ~~(b) The requirements that apply throughout the term of the WQS variance. The requirements shall represent the highest attainable condition of the water body or water body segment applicable throughout the term of the WQS variance based on the documentation required in this section. The requirements shall not result in any lowering of the currently attained ambient water quality, unless a WQS variance is necessary for restoration activities. The Tribe must specify the highest attainable condition of the water body or water body segment as a quantifiable expression that is one of the following:~~
 - ~~(i). For discharger(s) specific WQS variances:~~
 - ~~1) The highest attainable interim criterion; or~~
 - ~~2) The interim effluent condition that reflects the greatest pollutant reduction achievable; or~~
 - ~~3) If no additional feasible pollutant control technology can be identified, the interim criterion or interim effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the Tribe adopts the WQS variance, and the adoption and implementation of a Pollutant Minimization Program.~~
 - ~~(ii). For WQS variances applicable to a water body or water body segment:~~
 - ~~1) The highest attainable interim use and interim criterion; or~~
 - ~~2) If no additional feasible pollutant control technology can be identified, the interim use and interim criterion that reflect the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the Tribe adopts the WQS variance, and the adoption and implementation of a Pollutant Minimization Program.~~
 - ~~(c) A statement providing that the requirements of the WQS variance are either the highest attainable condition identified at the time of the adoption of the WQS~~

~~variance, or the highest attainable condition later identified during any reevaluation of the variance, whichever is more stringent.~~

- ~~(d) The term of the WQS variance, expressed as an interval of time from the date of approval or a specific date. The term of the WQS variance must only be as long as necessary to achieve the highest attainable condition and may not be longer than three years.~~

~~5. Supporting documentation must include:~~

- ~~(a) Documentation demonstrating the need for a WQS variance.~~
- ~~(b) Documentation demonstrating that the term of the WQS variance is only as long as necessary to achieve the highest attainable condition. Such documentation must justify the term of the WQS variance by describing the pollutant control activities to achieve the highest attainable condition, including those activities identified through a Pollutant Minimization Program, which serve as milestones for the WQS variance.~~
- ~~(c) In addition to documentation demonstrating the need and term of the WQS variance, for a WQS variance that applies to a water body or water body segment:
 - ~~(i). Identification and documentation of any cost-effective and reasonable best management practices for nonpoint source controls related to the pollutant(s) or water quality parameter(s) and water body or water body segment(s) specified in the WQS variance that could be implemented to make progress towards attaining the underlying designated use and criterion. The Tribe must provide public notice and comment for any such documentation.~~
 - ~~(ii). Any subsequent WQS variance for a water body or water body segment must include documentation of whether and to what extent best management practices for nonpoint source controls were implemented to address the pollutant(s) or water quality parameter(s) subject to the WQS variance and the water quality progress achieved.~~~~

~~B. The Environmental Protection Department, with consent from the Tribal Council, may authorize short term activities that may cause temporary violations of the Standards if the Tribe determines that such activities are necessary to accommodate legitimate uses or emergencies or to protect public health and welfare. A short term variance shall not exceed 90 days and will only be allowed for activities that are not likely to cause permanent or long term impairment of designated uses, and which result in the present or immediate enhancement or maintenance of designated uses. Examples of activities that may be the subject of a short term variance are riparian restoration activities, bank stabilization, mosquito abatement, algae and weed control, or tracers used in hydrological studies. Such authorization shall not be granted for activities that could result in an adverse impact on any species designated as sensitive by the Tribe. The Environmental Protection Department shall specify the degree of variance, the time limit, and the restoration procedures where applicable. Nothing herein shall be intended to supersede existing Tribal and federal permitting processes or requirements.~~

XI. TRIBAL ADMINISTRATION OF ENVIRONMENTAL PROTECTION AGENCY PROGRAMS

- A. Section 518 of the Clean Water Act authorizes the Environmental Protection Agency to treat eligible Indian Tribes with reservations in a manner similar to the manner in which the Environmental Protection Agency treats a state for a variety of purposes, including administering each of the principal Clean Water Act regulatory programs and receiving grants under several Clean Water Act authorities. The Tribe may be treated in the same manner as a state and implement provisions of the Clean Water Act that the Tribe deems necessary to further improve water quality and strengthen sovereignty over the Tribe's water resources. The Tribe may also develop and administer water quality control programs in instances where the Environmental Protection Agency does not have regulatory authority defined.
- B. If the Tribe finds it beneficial to implement water quality standards under Clean Water Act authority and administer additional Clean Water Act programs, the Manager, with the approval of the Tribal Council, shall apply to the Environmental Protection Agency in accordance to Title 40 of the Code of Federal Regulations Section 131.8. and may seek delegation of federal permitting authority under Clean Water Act Section 303, Clean Water Act Section 401, Clean Water Act Section 402, and/or Clean Water Act Section 404.

XII. COMPLIANCE ASSISTANCE

Under Tribal Council Motion 071407-06, the Environmental Protection Department was granted authorization to implement a compliance assistance component. Under this component, the Environmental Protection Department has the authority to schedule and execute compliance assistance inspections of commercial and industrial developments located on the Reservation with the intent to assist those developments to reach and/or maintain compliance with federal and Tribal water laws, regulations and rules, including this Ordinance.

XIII. ENFORCEMENT PROVISIONS

- A. The Environmental Protection Department may utilize the Legal Department for enforcement proceedings. The Legal Department is authorized to commence a civil action in the Morongo Tribal Court seeking appropriate relief, including a permanent or temporary injunction, for a violation of this Ordinance and any regulations, policies or procedures established under this Ordinance.
- B. The Morongo Tribal Court shall have jurisdiction to enforce, including civil contempt powers, the Ordinance within the exterior boundaries of the Morongo Band of Mission Indians' Reservation.
- C. In the event of a violation of this Ordinance, the Morongo Tribal Court may, by written order, take immediate action to abate the problem, with appropriate written notice to the violator, explaining the nature of the violation and, if appropriate under the circumstances, provide the violator with a specific period of time following such immediate action in which to correct the violation.
- D. In the event of an imminent or current action that is likely to endanger or cause damage to the public health, safety, or welfare of the environment, the Tribal Court may issue a

preliminary injunction or temporary restraining order, if it finds:

1. irreparable injury is likely to result if equitable action is not taken;
2. the injunction or restraining order is in the public interest;
3. a remedy at law is insufficient to protect from the injury; and
4. the Environmental Protection Department would likely prevail on the merits, if a full hearing were held.

(a) Any such order shall be effective immediately upon issuance and shall remain in effect for a period not to exceed sixty (60) days. The Tribal Court, after notice and a hearing, according to the applicable policies and procedures, may issue a permanent injunction or permanent restraining order, if it finds:

- (i) irreparable harm will result, if the injunction or order is not issued;
- (ii) considering both sides, a remedy in equity is warranted;
- (iii) the Environmental Protection Department would prevail on the merits; and
- (iv) a permanent order is in the public interest.

- E. An injunction issued pursuant to this Ordinance may be either mandatory, prohibitive or a combination of both.
- F. Any civil penalties imposed under Section 10 of this Ordinance shall not limit any other remedies that may be available to the Tribe, including the filing of a civil or criminal action in any court of competent jurisdiction.
- G. The Tribal Council, by written motion, may establish, through policies and procedures, a process for the enforcement of this Ordinance.

XIV. PENALTIES FOR VIOLATIONS OF THIS ORDINANCE

- A. Unless another penalty is specifically later adopted by the Tribal Council, any violation of this Ordinance may result in a civil fine or penalty in an amount determined by the Tribal Court but not to exceed \$5,000 per occurrence, plus the actual costs incurred by the Tribe to remediate and clean up any effects resulting from the violation, plus an added fee of \$500. Each day of the violation constitutes a separate violation. Action under this section does not bar enforcement of this Ordinance or rules or orders issued under it by injunction or other appropriate remedy. All remedies are cumulative.
- B. Specific actions of remediation and/or clean up may be ordered at the Tribal Court's discretion.
- C. Any person found responsible for a violation of this Ordinance may appeal the citation or any fine or penalty imposed by the Environmental Protection Department pursuant to this Ordinance to the Morongo Appellate Court.
- D. Violations of the Federal Clean Water Act regulations under the jurisdiction of the

Environmental Protection Agency will be subject to penalties pursuant to Sections 309 and 311 of the Clean Water Act and will be enforced by the Environmental Protection Agency or an Environmental Protection Agency-approved Tribal enforcement policy.

- E. All fines and/or penalties collected under this Ordinance shall be maintained in a separate fund to be utilized by the Environmental Protection Department for the purpose of funding remediation, clean up and the continued monitoring of sites.

XV. EFFECTIVE DATE

This Ordinance shall take effect immediately upon approval by the General Membership of the Tribe.

XVI. SAVINGS CLAUSE

Nothing in this Ordinance shall be deemed to affect, modify, amend or repeal any provisions of any other ordinance of the Tribe.

XVII. SEVERABILITY

The provisions of this Ordinance are severable. If any part or provision hereof is ruled to be void or unenforceable by a court of competent jurisdiction, the decision of the court so ruling shall not affect or impair the application of any remaining provisions of this Ordinance.

XVIII. TRIENNIAL REVIEW

Water quality standards shall be reviewed on a triennial basis for the purposes of determining what revisions are necessary to comply with applicable Federal and Tribal regulations and water quality goals. This process shall meet the requirements of Clean Water Act Section 303(c) and implementing regulations at 40 CFR 131.20. Any water quality standards that do not include the goal uses specified in Clean Water Act Section 101(a)(2), shall be reexamined every three years to determine if any new information has become available. If such new information indicates the Clean Water Act goal uses are attainable, the Tribe shall revise the Standards accordingly. Proposed revisions to the Tribe's Standards and the supporting information and analyses will be made available to the public prior to a public hearing. Public hearings will be held in accordance with Tribal laws and Environmental Protection Agency provisions in 40 CFR 25.5.

XIX. AMENDMENTS

- A. In the event that the Tribe receives Environmental Protection Agency approval to administer federally authorized water quality standards, and the rules and regulations developed by the Environmental Protection Agency for those programs are inconsistent or do not have comparable provisions in this Ordinance, the Tribal Council may amend this Ordinance solely to the extent necessary to ensure consistency with applicable federal laws and regulations.
- B. In the event that the Environmental Protection Agency adopts or amends rules or regulations that apply to Tribal lands and which are inconsistent with this Ordinance, the Tribal Council may amend this Ordinance solely to the extent necessary to ensure consistency with applicable federal laws and regulations.

- C. In the event that pursuant to Section 14(a) or (b), the Tribal Council amends this Ordinance or any tribal regulation implementing this Ordinance, the Tribal Council shall ensure the General Membership receives notice of the amendment(s) so made at the next General Membership meeting.
- D. This Ordinance may be amended by the General Membership of the Tribe. The Tribal Council, in a declared emergency may amend provisions of this Ordinance, which amended provisions shall remain in effect for a period not to exceed one-hundred and eighty (180) days, after which time the amended provisions shall be of no force or effect, unless extended for good cause or unless adopted by vote of the General Membership. In the event of any emergency amendment(s), the Tribal Council shall notify Tribal Members of all such amendments at the next regularly scheduled General Membership meeting.

CERTIFICATION

APPENDIX A. AQUATIC LIFE AND HUMAN HEALTH TABLES

Table 1. Aquatic Life Criteria

Compound	Chemical Abstracts Service (CAS) Number	Criterion Maximum Concentration (CMC) (µg/L)	Criterion Continuous Concentration (CCC) (µg/L)
Acrolein	107028	3	3
Aldrin ^a	309002	3	-
Alkalinity ^b		-	20000
alpha-Endosulfan ^{a,c}	959988	0.22	0.056
Aluminum pH 5.0 - 10.5	7429905	The criteria is based on the water chemistry data (for pH, hardness, and dissolved organic carbon) entered into the criteria calculator for a given location.	
Ammonia	7664417	See Table 4	
Arsenic ^{d,e}	7440382	340	150
beta-Endosulfan ^{a,c}	33213659	0.22	0.056
Cadmium ^e	7440439	See Table 1b	
Carbaryl	63252	2.1	2.1
Chlordane ^a	57749	2.4	0.0043
Chloride	16887006	860000	230000
Chlorine	7782505	19	11
Chlorpyrifos	2921882	0.083	0.041
Chromium (III) ^e	16065831	See Table 1b	
Chromium (VI) ^e	18540299	16	11
Copper ^e	7440508	See Table 2	
Cyanide ^f	57125	22	5.2
Demeton	8065483	-	0.1
Diazinon	333415	0.17	0.17
Dieldrin	60571	0.24	0.056 ^a
Endrin	72208	0.086	0.036 ^g

Compound	Chemical Abstracts Service (CAS) Number	Criterion Maximum Concentration (CMC) (µg/L)	Criterion Continuous Concentration (CCC) (µg/L)
gamma-BHC (Lindane)	58899	0.95	-
Guthion	86500	-	0.01
Heptachlor ^a	76448	0.52	0.0038
Heptachlor Epoxide ^{a,h}	1024573	0.52	0.0038
Iron	7439896	-	1000
Lead ^e	7439921	See Table 1b	
Malathion	121755	-	0.1
Mercury	7439976	See Table 5	
Methoxychlor	72435	-	0.03
Mirex	2385855	-	0.001
Nickel ^e	7440020	See Table 1b	
Nonylphenol	84852153	28	6.6
Oxygen, Dissolved ⁱ	7782447		
Parathion	56382	0.065	0.013
Pentachlorophenol	87865	19 ^j	15 ^j
pH		-	6.5 – 9
Polychlorinated Biphenyls (PCBs) ⁱ			0.014
Selenium	7782492	See Table 3	
Silver ^{a,e}	7440224	See Table 1b	
Sulfide-Hydrogen Sulfide	7783064	-	2
Temperature ^k		-	-
Toxaphene	8001352	0.73	0.0002
Tributyltin (TBT)		0.46	0.072
Zinc ^e	7440666	See Table 1b	

Compound	Chemical Abstracts Service (CAS) Number	Criterion Maximum Concentration (CMC) (µg/L)	Criterion Continuous Concentration (CCC) (µg/L)
4,4'-DDT ^a	50293	1.1	0.001

Footnotes to Table 1:

- a. These criteria are based on the 1980 criteria, which used different Minimum Data Requirements and derivation procedures from the 1985 Guidelines. If evaluation is to be done using an averaging period, the acute criteria values given are not to be exceeded and should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.
- b. The CCC of 20mg/L is a minimum value except where alkalinity is naturally lower, in which case the criterion cannot be lower than 25% of the natural level.
- c. This value was derived from data for endosulfan and is most appropriately applied to the sum of alpha-endosulfan and beta-endosulfan.
- d. This recommended water quality criterion was derived from data for arsenic (III), but is applied here to total arsenic.
- e. Freshwater and saltwater criteria for metals are expressed in terms of the dissolved metal in the water column. See Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria. See Table 1a for conversion factors.
- f. These recommended water quality criteria are expressed as µg free cyanide (CN/L).
- g. The derivation of the CCC for this pollutant did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels.
- h. This value was derived from data for heptachlor and there was insufficient data to determine relative toxicities of heptachlor and heptachlor epoxide.
- i. For fresh waters, see Quality Criteria for Water, 1986 ("Gold Book").
- j. Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH and values displayed in table correspond to a pH of 7.8. $CCC = e^{1.005(pH) - 5.134}$, $CMC = e^{1.005(pH) - 4.869}$
- k. Criteria are species dependent. See Quality Criteria for Water, 1986 ("Gold Book").
- l. This criterion applies to total PCBs, (e.g., the sum of all congener or all isomer or homolog or Aroclor analyses.)

Table 1a: Conversion Factors for Dissolved Metals

Metal	Freshwater CMC	Freshwater CCC
Arsenic	1.000	1.000
Cadmium	$1.136672 - [(\ln \text{ hardness})(0.041838)]$	$1.101672 - [(\ln \text{ hardness})(0.041838)]$
Chromium III	0.316	0.860
Chromium VI	0.982	0.962
Copper	0.960	0.960
Lead	$1.46203 - [(\ln \text{ hardness})(0.145712)]$	$1.46203 - [(\ln \text{ hardness})(0.145712)]$
Mercury	0.85	0.85
Nickel	0.998	0.997
Selenium	—	—

Metal	Freshwater CMC	Freshwater CCC
Silver	0.85	—
Zinc	0.978	0.986

Table 1b: Parameters for Calculating Freshwater Dissolved Metals Criteria That Are Hardness-Dependent

Chemical	mA	bA	mC	bC	Freshwater Conversion Factors (CF)	
					CMC	CCC
Cadmium	0.9789	-3.866	0.7977	-3.909	$1.136672 - \frac{1}{\ln(\text{hardness})}(0.041838)$	$1.101672 - \frac{1}{\ln(\text{hardness})}(0.041838)$
Chromium III	0.8190	3.7256	0.8190	0.6848	0.316	0.860
Lead	1.273	-1.460	1.273	-4.705	$1.46203 - \frac{1}{\ln(\text{hardness})}(0.145712)$	$1.46203 - \frac{1}{\ln(\text{hardness})}(0.145712)$
Nickel	0.8460	2.255	0.8460	0.0584	0.998	0.997
Silver	1.72	-6.59	—	—	0.85	—
Zinc	0.8473	0.884	0.8473	0.884	0.978	0.986

Hardness-dependent metals' criteria may be calculated from the following:

CMC (dissolved) = $\exp\{mA \ln(\text{hardness}) + bA\}$ (CF)

CCC (dissolved) = $\exp\{mC \ln(\text{hardness}) + bC\}$ (CF)

~~Table 1. Copper Aquatic Life Criteria for Fresh Waters~~

Metal	CAS No.	Criterion Maximum Concentration ^a (µg/L)	Criterion Continuous Concentration ^b (µg/L)
Copper	7440508	Acute (CMC) and chronic (CCC) freshwater copper criteria shall be developed using EPA's 2007 <i>Aquatic Life Ambient Freshwater Quality Criteria - Copper</i> (EPA 822-R-07-001), which incorporates use of the copper biotic ligand model (BLM).	
^a The CMC is the highest allowable one-hour average instream concentration of copper. The CMC is not to be exceeded more than once every three years.			
^b The CCC is the highest allowable four day average instream concentration of copper. The CCC is not to be exceeded more than once every three years.			

Table 2. Selenium Aquatic Life Criteria for Fresh Waters

Criterion Element	Magnitude	Duration	Frequency
Fish Tissue ^a (Egg-Ovary) ^b	15.1 mg/kg dw	Instantaneous measurement ^c	Not to be exceeded
Fish Tissue ^a (Whole Body or Muscle) ^d	8.5 mg/kg dw or 11.3 mg/kg dw muscle (skinless, boneless filet)	Instantaneous measurement ^c	Not to be exceeded

Criterion Element	Magnitude	Duration	Frequency
Water Column ^e (Monthly Average Exposure)	1.5 µg/L in lentic aquatic systems 3.1 µg/L in lotic aquatic systems	30 days	Not more than once in three years on average
Water Column ^e (Intermittent Exposure) ^f	$WQC_{int} = \frac{WQC_{30-day} - C_{bkgrnd}(1 - f_{int})}{f_{int}}$	Number of days/month with an elevated concentration	Not more than once in three years on average

^a Fish tissue elements are expressed as steady-state.
^b Egg/ovary supersedes any whole-body, muscle, or water column element when fish egg/ovary concentrations are measured.
^c Fish tissue data provide point measurements that reflect integrative accumulation of selenium over time and space in fish population(s) at a given site.
^d Fish whole-body or muscle tissue supersedes water column element when both fish tissue and water concentrations are measured.
^e Water column values are based on dissolved total selenium in water and are derived from fish tissue values via bioaccumulation modeling. Water column values are the applicable criterion element in the absence of steady-state condition fish tissue data.
^f 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 ≥ 0.033 (corresponding to 1 day).

Table 3. Ammonia Aquatic Life Criteria for Fresh Waters

mg Total Ammonia Nitrogen (TAN)/L	
Acute (CMC) equation (1 hour average)	$CMC = MIN \left(\left(\frac{0.275}{1 + 10^{7.204-pH}} + \frac{39.0}{1 + 10^{pH-7.204}} \right), \right. \\ \left. \left(0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}} \right) \times (23.12 \times 10^{0.036 \times (20-T)}) \right) \right)$
Chronic (CCC) equation (30-day rolling average)*	$CCC = 0.8876 \times \left(\frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) \times (2.126 \times 10^{0.028 \times (20-MAX(T,7))})$

Note: Ammonia criteria are a function of pH and temperature. At the standard normalized pH of 7.0 and temperature of 20 °C, 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.

* 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 °C more than once in 3 years on average.

Note to Table 4: 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.

~~Table 5. Mercury Aquatic Life Criteria~~

~~To be protective of downstream uses, mercury objectives consistent of those with the state of California will be adopted. Values for C (water column concentration) based on water body type and beneficial use.~~

Beneficial Use of the Receiving Water ^a	COMM, CUL, WILD, MAR, RARE	COMM, CUL, WILD, MAR, RARE	COMM, CUL, T-SUB, WILD, MAR, RARE	T-SUB	T-SUB	SUB
Water body type	Flowing water bodies (generally, rivers, creeks, streams, and waters with tidal mixing)	Slow moving water bodies ^b (generally, lagoons, closed estuaries, and marshes)	Lakes and reservoirs	Flowing water bodies (generally, rivers, creeks, streams, and waters with tidal mixing)	Slow moving water bodies ^b (generally, lagoons, closed estuaries, and marshes)	Any
Values for "C"	12 ng/L total mercury	4 ng/L total mercury	Case-by-case ^c	4 ng/L total mercury	1 ng/L total mercury	Case-by-case ^c
^a COMM, MAR, RARE, T-SUB, and SUB uses reflect those of the state of California. While no such uses apply to tribal waters, they may apply downstream. ^b Slow moving water bodies are stationary or relatively still water bodies that are expected to have higher potential to methylate mercury than flowing water bodies. ^c The permitting authority shall calculate C from the water quality objective, and may use available data, including U.S. EPA's recommended national bioaccumulation factors and chemical translators.						

~~For additional guidance on interpreting the mercury objectives, see the California State Water Resources Control Board's *Final Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*.~~

Table 6. Human Health Criteria

Calculated Human Health Criteria based on a Fish Consumption Rate of 22 grams/day and a Cancer Risk Level of 1,000,000 people (10⁻⁶)

Pollutant	CAS Number	Water + Organism (µg/L)	Organism Only (µg/L)
1,1,1-Trichloroethane ^a	71556	10000	200000
1,1,2,2-Tetrachloroethane	79345	0.2	3
1,1,2-Trichloroethane ^a	79005	0.55	8.6
1,1-Dichloroethylene ^a	75354	300	20000
1,2,4,5-Tetrachlorobenzene	95943	0.03	0.03
1,2,4-Trichlorobenzene ^a	120821	0.069	0.073

Pollutant	CAS Number	Water + Organism (µg/L)	Organism Only (µg/L)
1,2-Dichlorobenzene ^a	95501	1000	3000
1,2-Dichloroethane ^a	107062	9.9	630
1,2-Dichloropropane	78875	0.9	30
1,2-Diphenylhydrazine	122667	0.03	0.2
1,2-Trans-Dichloroethylene ^a	156605	100	4000
1,3-Dichlorobenzene	541731	7	10
1,3-Dichloropropene	542756	0.27	11
1,4-Dichlorobenzene ^a	106467	300	900
2,4,5-Trichlorophenol ^b	95954	300	600
2,4,6-Trichlorophenol ^b	88062	1.4	2.7
2,4-Dichlorophenol ^b	120832	10	60
2,4-Dimethylphenol ^b	105679	100	2000
2,4-Dinitrophenol	51285	10	300
2,4-Dinitrotoluene	121142	0.048	1.6
2-Chloronaphthalene	91587	800	1000
2-Chlorophenol ^b	95578	30	800
2-Methyl-4,6-Dinitrophenol	534521	2	30
3,3'-Dichlorobenzidine	91941	0.049	0.14
3-Methyl-4-Chlorophenol ^b	59507	500	2000
4,4'-DDD	72548	0.00012	0.00012
4,4'-DDE	72559	0.000017	0.000017
4,4'-DDT	50293	0.00003	0.00003
Acenaphthene ^b	83329	70	90

Pollutant	CAS Number	Water + Organism (µg/L)	Organism Only (µg/L)
Acrolein	107028	3	400
Acrylonitrile	107131	0.061	6.7
Aldrin	309002	7.4e-7	7.4e-7
alpha-BHC	319846	0.00035	0.00038
alpha-Endosulfan	959988	20	30
Anthracene	120127	300	400
Antimony ^{a,c,d}	7440360	5.3	580
Arsenic ^{c, j}	7440382	0.014	0.047
Asbestos ^{a,c,e}	1332214	7 million fibers/L	--
Barium ^{a,c,e,f}	7440393	1000	--
Benzene ^a	71432	0.58	15
Benzidine	92875	0.00014	0.01
Benzo(a) Anthracene	56553	0.0012	0.0013
Benzo(a) Pyrene ^a	50328	0.00012	0.00013
Benzo(b) Fluoranthene	205992	0.0012	0.0013
Benzo(k) Fluoranthene	207089	0.012	0.013
beta-BHC (beta-HCH)	319857	0.0079	0.014
beta-Endosulfan	33213659	20	40
Bis(2-Chloro-1-Methylethyl) Ether	108601	200	3000
Bis(2-Chloroethyl) Ether	111444	0.03	2.1
Bis(2-Ethylhexyl) Phthalate ^a	117817	0.32	0.37
Bis(Chlormethyl) Ether	542881	0.00015	0.017
Bromoform ^a	75252	7	110

Pollutant	CAS Number	Water + Organism (µg/L)	Organism Only (µg/L)
Butylbenzyl Phthalate	85687	0.1	0.1
Carbon Tetrachloride ^a	56235	0.4	5
Chlordane ^a	57749	0.0003	0.00031
Chlorobenzene ^{a,b}	108907	100	800
Chlorodibromomethane ^a	124481	0.8	20
Chloroform ^a	67663	60	2000
Chlorophenoxy Herbicide (2,4,5-TP) [Silvex] ^a	93721	100	400
Chlorophenoxy Herbicide (2,4-D) ^a	94757	1300	12000
Chrysene ^a	218019	0.12	0.13
Copper ^{a,b,c,e}	7440508	1300	--
Cyanide ^a	57125	4	400
Di-n-Butyl Phthalate	84742	20	30
Dibenzo(a,h) Anthracene	53703	0.00012	0.00013
Dichlorobromomethane ^a	75274	0.94	26
Dieldrin	60571	0.0000012	0.0000012
Diethyl Phthalate	84662	600	600
Dimethyl Phthalate	131113	2000	2000
Dinitrophenols	25550587	10	1000
Dioxin ^c	1746016	4.6e-9	4.7e-9
Endosulfan Sulfate	1031078	20	40
Endrin	72208	0.03	0.03
Endrin Aldehyde ^a	7421934	1	1
Ethylbenzene ^a	100414	67	120

Pollutant	CAS Number	Water + Organism (µg/L)	Organism Only (µg/L)
Fluoranthene	206440	20	20
Fluorene	86737	50	70
Gamma-BHC (HCH); Lindane ^a	58899	4.1	4.3
Heptachlor ^a	76448	0.0000057	0.0000057
Heptachlor Epoxide ^a	1024573	0.000031	0.000031
Hexachlorobenzene ^a	118741	0.000076	0.000077
Hexachlorobutadiene ^a	87683	0.009	0.009
Hexachlorocyclohexane (HCH) - Technical	608731	0.0064	0.0098
Hexachlorocyclopentadiene ^{a,b}	77474	3	4
Hexachloroethane	67721	0.1	0.1
Indeno(1,2,3-cd) Pyrene	193395	0.0012	0.0013
Isophorone	78591	34	1800
Manganese ^{b,c,e,g}	7439965	50	100
Methoxychlor ^a	72435	0.02	0.02
Methyl Bromide	74839	100	10000
Methylene Chloride ^a	75092	20	1000
Methylmercury ^{c,h}	22967926	N/A	0.3 mg/kg
N-Nitrosodi-n-Propylamine ^c	621647	0.0047	0.46
N-Nitrosodimethylamine ^c	62759	0.00065	2.7
N-Nitrosodiphenylamine ^c	86306	3	5.5
Nickel ^{e,d}	7440020	470	1500
Nitrates ^{a,c,e}	14797558	10000	--
Nitrobenzene ^b	98953	10	500

Pollutant	CAS Number	Water + Organism (µg/L)	Organism Only (µg/L)
Nitrosamines ^c	--	0.000766	0.418
Nitrosodibutylamine ^c	924163	0.006	0.2
Nitrosodiethylamine ^c	55185	0.000766	0.418
Nitrosopyrrolidine ^c	930552	0.016	31
Pentachlorobenzene	608935	0.1	0.1
Pentachlorophenol (PCP) ^{a,b}	87865	0.02	0.04
pH ^{c,e}	--	5-9	--
Phenol ^b	108952	4000	300000
Polychlorinated Biphenyls (PCBs) ^{a,c,i}	1336363	0.000058	0.000058
Pyrene	129000	20	30
Selenium ^{a,e}	7782492	160	3800
Solids Dissolved and Salinity ^{c,e}	--	250000	--
Tetrachloroethylene ^a	127184	10	28
Thallium ^c	7440280	0.22	0.43
Toluene ^a	108883	57	500
Toxaphene ^a	8001352	0.00068	0.00069
Trichloroethylene ^a	79016	0.6	7
Vinyl Chloride ^a	75014	0.022	1.6
Zinc ^{b,e}	7440666	7000	23000

Footnotes:

- EPA has issued a Maximum Contaminant Level (MCL) for this chemical which may be more stringent. Refer to [EPA's National Primary Drinking Water Regulations](#).
- The criterion for organoleptic (taste and odor) effects may be more stringent. Refer to [National Recommended Water Quality Criteria - Organoleptic Effects](#).
- EPA did not update its National Recommended Human Health Water Quality Criteria for this pollutant in 2015. This table's criteria values are calculated using the 2015 revised inputs for body weight, drinking water intake rate, and a fish consumption rate of 22 g/day (refer to [2015 EPA](#)

[Updated Ambient Water Quality Criteria for the Protection of Human Health](#)). The criteria values in this table therefore may not match the values in EPA's Human Health Criteria Table which are based on pre-2015 inputs.

- d. This criterion was revised to reflect EPA's q1* or RfD as contained in the [Integrated Risk Information System \(IRIS\)](#) as of May 17, 2002. The fish tissue bioconcentration factor (BCF) is from the 1980 Ambient Water Quality Criteria document.
- e. Criteria for these pollutants are from the [National Recommended Water Quality Criteria - Human Health Criteria Table](#). They are not calculated based on this table's inputs for fish consumption rate and cancer risk level.
- f. This human health criterion is the same as originally published in the [Quality Criteria for Water, 1976 \("Red Book"\)](#) which predates the 1980 methodology and did not utilize the fish ingestion BCF approach. This same criterion value is published in the [Quality Criteria for Water, 1986 \("Gold Book"\)](#).
- g. The Human Health for the consumption of Water + Organism criterion for manganese is not based on toxic effects, but rather is intended to minimize objectionable qualities such as laundry stains and objectionable tastes in beverages.
- h. This fish tissue residue criterion for methylmercury is based on the total fish consumption rate.
- i. This criterion applies to total PCBs (e.g., the sum of all congener or all isomer or homolog or Aroclor analyses).
- j. This criterion for arsenic refers to the inorganic form only.