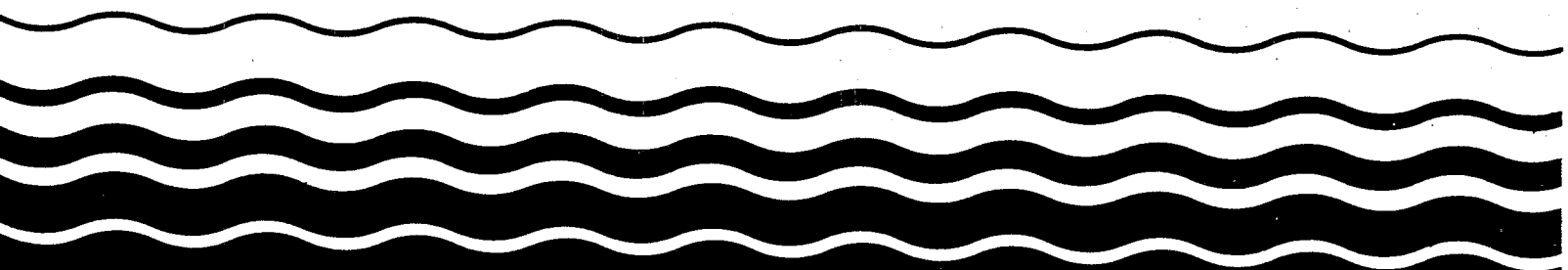


Water

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# State Water Quality Standards Summary: Alaska





# DISCLAIMER

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The reader should consult the water quality standards of a particular State for exact regulatory language applicable to that State. Copies of State water quality standards may be obtained from the State's Water Pollution Control Agency or its equivalent.

Additional information may also be obtained from the:

Standards Branch  
Criteria and Standards Division (WH-585)  
Office of Water Regulations and Standards  
U.S. Environmental Protection Agency  
Washington, D.C. 20460  
202-475-7315

This document may be obtained only from the National Technical Information Service (NTIS) at the following address:

National Technical Information Service  
5285 Front Royal Road  
Springfield, Virginia 22161  
703-487-4650

The NTIS order number is: PB89-141642.



## ALASKA

### Responsible Agency:

Alaska Department of Environmental Conservation  
Div. of Environ. Quality Management  
Pouch O

Juneau 99811  
907-465-2640

### State Contact:

Mr. Dan Easton  
Manager  
Water Pollution Control Program  
Alaska Dept. of Environ. Conservation  
Pouch O  
Juneau 99811 907-465-2653

### Standards Available From:

Alaska Dept. of Environmental Conservation  
Pouch O

### State Contact:

Juneau 99811  
907-465-2653 Fee: none Mailing List: yes

### State Narrative Language For: Antidegradation

(a) No person may conduct an operation which causes or contributes to a violation of the water quality standards established by this chapter.

(b) The water quality standards set by this chapter apply to human activities which result in alterations to waters within the jurisdiction of the state. The water quality standards established by this chapter constitute the degree of degradation which may not be exceeded in a water body.

(c) Waters with natural characteristics of higher quality than the water quality criteria for the uses set out in 18 AAC 70.020 must be kept at the existing quality, except where an applicant for a permit issued or certified under 18 AAC 15, a short-term variance issued under 18 AAC 70.015, or a reclassification granted under 18 AAC 70.055 shows to the department's satisfaction that:

1. Reducing water quality is justified because of necessary economic or social development;
2. Reducing water quality will not harm present or potential uses of the waters; and
3. All wastes and other substances to be discharged will be treated using the methods found by the department to be most effective.

(d) No person may discharge or cause the discharge of any waste or substance into waters within the jurisdiction of the state without first treating and controlling the discharge to ensure that the quality of the receiving water does not violate the water quality standards set by this chapter.

(e) The department will, in its discretion, issue a compliance order for activities or sources of waste or substances in existence on December 19, 1982 that cause a violation of the water quality standards set by this chapter. The compliance order must provide a detailed plan to bring the activity into compliance with this section.

### State Narrative Language For: Toxics

Shall not exceed Alaska Drinking Water Standards or EPA Quality Criteria for Water as applicable to the substance.

### State Narrative Language For: Free From

Petroleum hydrocarbons, oils and grease shall not cause a visible sheen upon the surface of the water. Also, they shall not exceed concentrations which individually or in combination impart odor or taste as determined by organoleptic tests.

Floating solids, debris, sludge, deposits, foam, and scum shall not alone or in combination with other substances or wastes make water unfit or unsafe for use, cause a film, sheen, or discoloration on the surface of the water or adjoining shoreline, cause beaching of toxic or deleterious substances, or cause a sludge, solid emulsion to be deposited beneath or upon the surface of the water within the water column on the bottom or upon adjoining shorelines.

### State Narrative Language For: Mixing Zones

(a) In applying the water quality criteria of 18 AAC 70.020, the department (Alaska Dept. of Environmental Conservation) will, in its discretion, prescribe its permits or certifications a volume of dilution for an

## ALASKA

effluent or substance within a receiving water. Water quality standards may be exceeded within this mixing zone. However the standards must be met at every point outside its boundaries. The department will not allow mixing zones if:

- (1) There is significant potential for adverse environmental or health effects due to discharge of a substance that bioaccumulates in food chains; concentrates in sediments, or is persistent, carcinogenic, mutagenic or teratogenic, or
- (2) Other potential environmental or health effects are so adverse that a mixing zone is not appropriate. A mixing zone will be granted only after the applicant has shown to the department's satisfaction that wastes or substances that may exceed the water quality criteria limits will be treated using methods found by the department to be most effective.
- (b) The department will, in its discretion, establish effluent limitation requirements in its wastewater disposal permits in lieu of or in addition to a defined mixing zone.
- (c) No individual mixing zone or combination of mixing zones will be permitted to form a barrier to the migratory routes of aquatic species.
- (d) Unless it is demonstrated to the satisfaction of the department, in accordance with (e) of this section, that the size limitations can be increased, mixing zones will be as small as practicable.
- (e) A person conducting an operation for which a mixing zone is sought or required by the department shall submit to the department all information necessary for assignment of a mixing zone.

## ALASKA

### Classifications:

Drinking, Culinary  
and Food Processing  
Fresh Water

Agricultural  
Fresh Water

Includes irrigation and stock watering.

Aquaculture  
Fresh Water

Industrial  
Fresh Water

Includes any water supply used in association with a manufacturing or production enterprise (other than food processing) including mining, placer mining, energy production or development.

Contact Recreation  
Fresh Water

Secondary Recreation  
Fresh Water

Fish and Wildlife  
Fresh Water

Growth and propagation of fish, shellfish and other aquatic life, and wildlife including waterfowl and furbearers.

\*Abbreviated name for this designated use.

Aquaculture  
Marine Waters

Seafood Processing  
Marine Waters

Industrial  
Marine Waters

Includes any water supply used in association with a manufacturing or production enterprise (other than food processing) including mining, placer mining, energy production or development.

Contact Recreation  
Marine Water

Secondary Recreation  
Marine Waters

Fish and Wildlife  
Marine Waters

Growth and Propagation of fish, shellfish and other aquatic life, and wildlife including seabirds, waterfowl and furbearers.

\*Abbreviated name for this designated use.

Shellfish Harvesting  
Marine Waters

Harvesting for consumption of raw mollusks or other aquatic life.

# ALASKA

	All Classes	Drinking, Culin..	Agricultural	Aquaculture
Physical				
pH				
Upper Value		8.5	9.0	8.5
Lower Value		6.0	5.0	6.5
Secondary Upper Limit			8.5	
Dissolved Oxygen				
Lower Value				
Temperature		4   mg/L	3   mg/L	
Upper Value		15   C	30   C	20   C
Turbidity				
Upper Value		Narr.	Narr.	Narr.
Chlorides				
Upper Value		200   mg/L		
Sulfates				
Upper Value		200   mg/L		
Total Dissolved Solids				
Upper Value		500   mg/L	1000   mg/L	1500   mg/L
Nutrients				
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Coliform				
Upper Value		Narr.	Narr.	Narr.
Secondary Upper Limit		Narr.	Narr.	Narr.



# ALASKA

	Industrial	Contact Recreat..	Secondary Recre..	Fish and Wildli..
Physical				
pH				
Upper Value	9.0	8.5	9.0	9.0
Lower Value	5.0	6.5	5.0	6.5
Dissolved Oxygen				
Upper Value	Narr.	mg/L	mg/L	17 mg/L
Lower Value		4 mg/L	4 mg/L	5 mg/L
Temperature				
Upper Value	25 C	30 C		20 C
Turbidity				
Upper Value	Narr.	Narr.	Narr.	Narr.
Total Dissolved Solids				
Upper Value	Narr.			1500 mg/L
Nutrients				
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Coliform				
Upper Value	Narr.	Narr.	Narr.	
Secondary Upper Limit	Narr.	Narr.	Narr.	

# ALASKA

	Aquaculture	Seafood Process..	Industrial	Contact Recreat..
Physical				
pH				
Upper Value	8.5	8.5	9.0	8.5
Lower Value	6.5	6.0	5.0	6.5
Dissolved Oxygen				
Lower Value	7	mg/L		
Temperature				
Upper Value		15 C	25 C	
Temperature Change				
Upper Value	1	C		
Secondary Upper Limit	0.5	C		
Turbidity				
Upper Value	25	NTU	Narr.	25 NTU
Total Dissolved Solids				
Upper Value	1500	mg/L	Narr.	
Nutrients				
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Coliform				
Upper Value	Narr.	Narr.	Narr.	Narr.
Secondary Upper Limit	Narr.	Narr.	Narr.	Narr.

# ALASKA

Secondary Recre.. Fish and Wildli.. Shellfish Harve..

## Physical

pH

Upper Value	9.0	8.5	8.5
Lower Value	5.0	6.5	6.0

Temperature Change

Upper Value		1 C	1 C
Secondary Upper Limit		0.5 C	0.5 C

Turbidity

Upper Value	25	NTU	Narr.	Narr.
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Total Dissolved Solids

Upper Value		1500	mg/L
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## Nutrients

Toxic Metals

Pesticides

Organics

## Bacteria

Fecal Coliform

Upper Value	Narr.	Narr.
Secondary Upper Limit	Narr.	Narr.

