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Environmental Protection
Agency

Office of Water
Regulations and Standards
Washington, DC 20460

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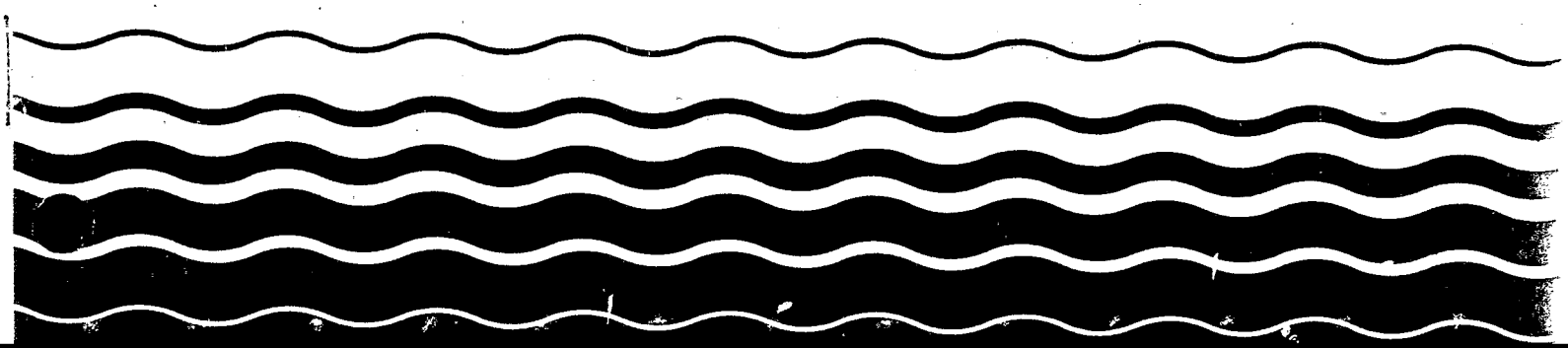
Water

State Water Quality Standards Summary: South Dakota



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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: PB89-142095.

SOUTH DAKOTA

Responsible Agency:

S.D. Board of Water Mgt. c/o Mr. Warren R. Neufeld
Dept. of Water and Natural Resources
Joe Foss Bldg.

Pierre, SD 57501

State Contact:

Standards Available From:

Duanne G. Murphy, Environmental Specialist
S.D. Dept. of Water & Natural Resources
Joe Foss Building

Pierre 57501
605-773-3296 Fee: no Mailing List: yes

State Contact:

State Narrative Language For: Antidegradation

South Dakota Water Pollution Law - Section 34A-2-22. No person may discharge any wastes into the waters of the state which reduce the quality of such waters below the water quality level existing on March 27, 1973.
Section 34A-2-23. Any action in violation of Secs. 34A-2-21 or -22 is hereby declared a public nuisance.
Section 34A-2-24. Notwithstanding Sec. 34A-2-22, discharge of wastes into waters of the state which reduce the quality of such waters below the water quality level existing on March 27, 1973 will be allowed when and if it is affirmatively demonstrated to the board and the board finds by a majority vote of its members, after a public hearing on such request, that there may be a discharge, which discharge will not result in the violation of applicable water standards, which discharge is found justifiable as a result of necessary economic or social development.
South Dakota Water Quality Standards - Compliance with criteria of a beneficial use: No person may discharge or cause to be discharged into any lake or stream pollutants which cause the receiving water to fail to meet the criteria for its beneficial use or uses.
Restrictions where a water has dual classifications: For waters for which more than one beneficial use is specified and for which criteria are established for a parameter that is common to two or more uses, such as coliform organisms, the more restrictive criterion for the common parameter applies.
Application of criterion to contiguous water: Where pollutants are discharged into a segment and the criteria for that segment's designated beneficial use are not exceeded, but such waters flow into another segment whose beneficial use requires a more stringent parameter criterion, the pollutants may not cause the more stringent criterion to be exceeded.

State Narrative Language For: Toxics

Substances which produce concentrations of any substance toxic to humans, animals, plants, or aquatic life may not be discharged or caused to be discharged into any lake or stream. Toxicity of nonbioaccumulative pollutants to aquatic life shall be determined in accordance with 74:03:02:06. Toxicity of bioaccumulative pollutants shall be determined using bioassay methods in accordance with 74:03:02:06 and additional data on the rates and effects of bioaccumulation so that the aquatic community and those organisms including man which use those aquatic organisms for food are protected against potential adverse health effects. Toxic concentrations shall be specified in terms of 24-hour and 30-day average concentrations or maximum concentrations allowed or both. Where numerical criterion has been established for a toxic substance in 74:03:02:33 to 74:03:02:45, inclusive, the provisions of this section do not apply to that substance.

State Narrative Language For: Free From

Raw or treated sewage, garbage, municipal wastes, industrial wastes or agricultural wastes which produce floating solids, scum, oil slicks, material discoloration, visible gassing, sludge deposits, slimes, algal blooms, fungus growths, or other offensive effects may not be discharged or caused to be discharged into any lake or stream.
Substances which prdouce concentrations of any substance toxic to humans, animals, plants, or aquatic life may not be discharged or caused to be discharged into any lake or stream.

No materials may be discharged or caused to be discharged into any lake or stream which will impart undesirable tastes or undesirable odors to the receiving water in concentrations that impair a beneficial use.
No materials may be discharged or caused to be discharged into any lake or stream in concentrations which produce aquatic life which impair a beneficial use or create a health problem.
No insoluble materials of petroleum derivation may be discharged or caused to be discharged into a lake or stream which result in concentrations in excess of 10 mg/l or impart a visible film or sheen to the surface of the water of the adjoining shorelines.

State Narrative Language For: Low Flow

Flow rates for high quality waters - When flow in streams classified for the beneficial use of coldwater permanent fish life propagation, coldwater marginal fish life propagation, or warmwater permanent fish life propagation falls below the minimum 7-day average flow that can be expected to occur once in every 25 years, water quality criteria set forth in 74:03:02:33 to 74:03:02:45, inclusive, do not apply to the water but applicable effluent regulations remain in force.
Flow rates for low quality fishery waters - When the flow in streams classified for the beneficial use of warmwater semipermanent fish life propagation falls below the minimum seven day average flow that can be expected to occur once in every five years or 1.0 cubic foot per second, whichever is greater, water quality set forth in 74:03:02:33 to 74:03:02:45, inclusive, do not apply to the water but any applicable effluent regulations remain in force.

State Narrative Language For: Mixing Zones

Each discharge to a flowing water is entitled to a mixing zone at the edge of which the criterion established for the beneficial uses of the receiving water shall be met. Mixing zones in streams must permit an acceptable passageway for movement of aquatic organisms. The total mixing zone or zones, at any transect of a stream may not contain more than 75 percent of the cross-sectional area of the stream and may not extend over more than 75 percent of the width of the stream or 100 yards, whichever is least. The dimensions of the total mixing zone parallel to the stream flow may not exceed one-half mile. Mixing zone characteristics must not be lethal to aquatic organisms. The 96-hour median lethal concentration for indigenous fish or fish food organisms, whichever is more stringent, may not be exceeded at any point in the mixing zone. Mixing zones may not intersect spawning or nursery areas, migratory routes, water intakes, or mouths of rivers. Mixing zones should not overlap, but where they do, measures shall be taken to prevent adverse synergistic effects.
Lakes not allowed a mixing zone. Discharges to lakes are not entitled to a mixing zone. These effluents shall meet the water quality standards at the point of discharge. No discharge of pollutants is allowed which reaches a lake classified for the beneficial use of fish life propagation and causes impairment of an assigned beneficial use.

Classifications:

Domestic Water
Supply Waters

Coldwater Permanent
Fish Life
Propagation Waters

Coldwater Marginal
Fish Life
Propagation Waters

Warmwater Permanent
Fish Life
Propagation Waters

Warmwater Semiperm.
Fish Life
Propagation Waters

Warmwater Marginal
Fish Life
Propagation Waters

Immersion
Recreation Waters

Limited Contact
Recreation Waters

Wildlife Propagation
& Stock Watering
Waters

Irrigation Waters

Commerce and
Industry Waters

SOUTH DAKOTA

	All Classes	Domestic Water		Coldwater Perma..		Coldwater Margi..	
Physical							
pH							
Upper Value		9.0		8.6		8.8	
Lower Value		6.5		6.6		6.5	
Dissolved Oxygen							
Lower Value				6.0	mg/L		
Temperature							
Upper Value				65	F	75	F
Temperature Change							
Upper Value				4	F	4	F
Chlorides							
Upper Value		250	mg/L	100	mg/L		
Total Dissolved Solids							
Upper Value		1000	mg/L				
Nutrients							
Ammonia							
Upper Value				0.02	mg/L	0.02	mg/L
Nitrates							
Upper Value		10	mg/L				
Toxic Metals							
Arsenic							
Upper Value		0.05	mg/L				
Cadmium							
Upper Value		0.010	mg/L				
Chromium - Total							
Upper Value		0.05	mg/L				
Cyanide							
Upper Value				0.02	mg/L	0.02	mg/L
Secondary Upper Limit				0.005	mg/L	0.005	mg/L
Lead							
Upper Value		0.05	mg/L				
Mercury							
Upper Value		0.002	mg/L				
Barium							
Upper Value		1	mg/L				
Selenium							
Upper Value		0.01	mg/L				
Silver							
Upper Value		0.05	mg/L				
Pesticides							
Organics							
PCBs							
Upper Value				0.001	ug/L	0.001	ug/L
Bacteria							

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	All Classes	Domestic Water	Coldwater Perma..	Coldwater Margi..
Total Coliform Upper Value		Narr.		

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	Warmwater Perma..		Warmwater Semip..		Warmwater Margi..		Immersion	
Physical								
pH								
Upper Value	9.0		9.0		9.0		8.3	
Lower Value	6.5		6.3		6.0		6.5	
Dissolved Oxygen								
Lower Value			5.0	mg/L	4.0	mg/L	5.0	mg/L
Temperature								
Upper Value	80	F	90	F	90	F		
Temperature Change								
Upper Value	4	F	5	F	5	F		
Nutrients								
Ammonia								
Upper Value	0.04	mg/L	0.04	mg/L	0.04	mg/L		
Toxic Metals								
Cyanide								
Upper Value	0.02	mg/L	0.02	mg/L	0.02	mg/L		
Secondary Upper Limit	0.005	mg/L	0.005	mg/L	0.005	mg/L		
Pesticides								
Organics								
PCBs								
Upper Value	0.001	ug/L	0.001	ug/L	0.001	ug/L		
Bacteria								
Fecal Coliform								
Upper Value							Narr.	

SOUTH DAKOTA

	Limited Contact	Wildlife Propag..	Irrigation Wate..	Commerce and
Physical				
pH				
Upper Value	9.0	9.5		9.5
Lower Value	6.0	6.0		6.0
Dissolved Oxygen				
Lower Value	5.0 mg/L			
Temperature Change				
Upper Value		3 F		
Total Dissolved Solids				
Upper Value		2500 mg/L		2000 mg/L
Nutrients				
Nitrates				
Upper Value		50 mg/L		
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Coliform				
Upper Value	Narr.			