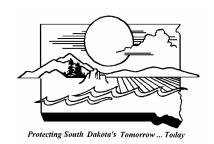
# South Dakota Department of Environment and Natural Resources

# Continuing Planning Process (CPP) Document



Prepared by the South Dakota

Department of Environment and Natural Resources

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#### SOUTH DAKOTA CONTINUING PLANNING PROCESS

#### **Section I: Introduction**

#### What is the South Dakota Continuing Planning Process?

The Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977, requires the states to maintain under Section 303(e), a Continuing Planning Process (CPP) plan. This may be described as an umbrella document that coordinates all aspects of water pollution control in an effort to ensure the states maintain progress toward protecting and preserving water quality. Planning changes have occurred since the approval of the CPP that was submitted to the U.S. Environmental Protection Agency (EPA) in 1978. This CPP describes processes used to manage water quality programs and the relationships between these activities by addressing each of the minimum nine federal CPP elements required under the Clean Water Act. The state CPP is a description of the state's water quality management and planning activities, providing references to technical documents and sources that explain water quality programs in greater detail. The state's codified laws and rules, EPA references, and other sources of information in the CPP will provide the best sources of additional information for understanding and appreciating the complexity of the water quality management process. Several Internet sites are also presented throughout the CPP.

#### **The Continuing Planning Process Elements**

#### **Nine Required Elements**

The following nine processes are the minimum required to be described under the Clean Water Act (See: 40 CFR Part 130.5). Water quality management planning is discussed within the context of these nine elements found in Section II.

- 1. The process for developing effluent limitations and schedules of compliance at least as stringent as those required by sections 301(b)(1) and (2), 306 and 307, and at least stringent as any requirements contained in applicable water quality standards in effect under authority of section 303 of the CWA.
- 2. The process for incorporating elements of any applicable areawide waste treatment plans under section 208, and applicable basin plans under section 209 of the CWA.
- 3. The process for developing total maximum daily loads (TMDLs) and individual water quality based effluent limitations for pollutants in accordance with section 303(d) of the CWA and 40 CFR Sec. 130.7(a).
- 4. The process for updating and maintaining Water Quality Management (WQM) plans, including schedules for revision.
- 5. The process for assuring adequate authority for intergovernmental cooperation in the implementation of the State WQM program.

- 6. The process for establishing and ensuring adequate implementation of new or revised water quality standards, including schedules of compliance, under section 303(c) of the CWA.
- 7. The process for assuring adequate controls over the disposition of all residual waste from any water treatment processing.
- 8. The process for developing an inventory and ranking, in order of priority of needs for construction of waste treatment works required to meet the applicable requirements of sections 301 and 302 of the CWA.
- 9. The process for determining the priority of permit issuance.

#### **Continuing Planning Process Summary**

Section 303(e) of the federal Clean Water Act requires each state to have and maintain a Continuing Planning Process (CPP). The South Dakota CPP was approved by Region 8 of the U.S. Environmental Protection Agency (EPA) in 1978. The South Dakota CPP from 2002 through 2013 is a current picture of operating activities. Updating the CPP will address how the Department of Environment and Natural Resources (DENR) does business and allow for opportunities to plan process changes that accommodate what DENR would like to do in the future. The South Dakota CPP 2002 through 2013 reflects the ongoing internal planning processes and sources of information available in DENR as well as EPA reference documents.

The CPP plan will be formally updated about every twelve years and will serve to document changes within the Department. The CPP will be updated through revisions posted on the DENR's Web site as appropriate. The plan addresses the nine federally required elements with information that describes and supports the continuous planning process. An earlier CPP update may take place if changes take place to federal regulations or guidance and these changes dictate that an update is needed.

The Clean Water Act requires that state CPP plans reflect how the agencies manage their particular water quality program. The DENR's update of the CPP includes many aspects of the continuous water pollution control planning effort in South Dakota. The federal CPP requirements within this plan are linked to descriptions of water quality control processes of DENR together with the appropriate reference documents and other relevant sources of information. The CPP document is submitted to EPA Region 8 for their review of the CPP, ensuring that the approved planning process remains consistent with the Clean Water Act.

#### **Continuing Planning Process Development and Update**

The Water Resources Assistance Program coordinates the collection and revision of various documents used to write the CPP. DENR permit, enforcement and fiscal programs are asked to contribute updates for the nine minimum federal CPP elements plus any other information DENR determines that describes the CPP efforts of DENR. The CPP is a snapshot of important activities that help to describe how DENR carries out its mandate under state and federal law. The director of the Division of Financial and Technical Assistance coordinates the South Dakota Continuing Planning Process. Relevant legal authority, department and EPA reference

documents, as well as other sources of information, are listed at the end of each element to provide further information on the program's operational activities or processes.

The CPP will be formally updated in July 2013 and approximately every twelve years thereafter. Revisions to individual CPP elements will be made annually as necessary and placed on the DENR's Web site:

http://www.state.sd.us/denr/DFTA/WatershedProtection/TMDL/TMDL.htm

# Description of South Dakota's Water Quality Management Process

Under the South Dakota Clean Water Law (South Dakota Codified Laws Chapter 34A-2), the pollution of the waters of this state constitutes a menace to public health and welfare, creates public nuisances, is harmful to wildlife, fish and aquatic life, and impairs domestic, agricultural, industrial, recreational and other legitimate beneficial uses of water. Whereas the problem of water pollution in this state is closely related to the problem of water pollution in adjoining states, it is hereby declared to be the public policy of this state to conserve the waters of the state and to protect, maintain and improve the quality thereof for water supplies, for the propagation of wildlife, fish and aquatic life, and for domestic, agricultural, industrial, recreational and other legitimate uses; to provide that no waste be discharged into any waters of the state without first receiving the necessary treatment or other corrective action to protect the legitimate and beneficial uses of such waters; to provide for the prevention, abatement and control of new and existing water pollution; and to co-operate with other agencies of the state, agencies of other states and the federal government in carrying out these objectives.

The biennial 305(b) report is prepared by DENR pursuant to Section 305(b) of the Clean Water Act Amendments of 1977 (P.L. 95-217). The purpose of the report is to provide an assessment of the water quality of South Dakota's water resources and to summarize state programs established to prevent and control water pollution. The report informs the citizens of South Dakota and the US Environmental Protection Agency (EPA) on the quality of state water resources, and serves as the basis for management decisions by DENR for the protection of water quality. EPA uses information from 305(b) document to report the states' progress in meeting and maintaining Clean Water Act goals for the ecological health of the state's waters and their domestic, commercial and recreational uses. DENR uses the information in the report along with population data, economic analyses, program capability assessments, and other appropriate information sources to plan and prioritize water pollution control activities. The 305(b) document is also used to prepare the state's 303(d) list of impaired waterbodies.

South Dakota DENR uses the 305(b) report as a tool to stimulate formulation of nonpoint source (NPS) projects and to produce a priority water body list for the program. The 305(b) report is routinely sent to all state conservation districts and water development districts. Each looks at watershed information for their geographical area of interest. This helps them focus on the location, nature and severity of water problems in their areas. This generally leads to public discussions, which start the long process towards nonpoint source pollution control

implementation. The 305(b) report is also shared with the Nonpoint Source Task Force, which is a sixty member advisory organization. This helps them focus their efforts and provides information used in the priority water body ranking system. The NPS program also uses the 305(b) document to supplement news articles released through DENR's information officer. Finally, the report is currently being utilized by the US Forest Service to screen grazing permits that require detailed National Environment Policy Act (NEPA) reviews before reissuance. The water quality assessment in the report relies heavily on the statistical analyses of data generated by DENR, EPA, US Geological Survey, and the US Army Corps of Engineers along with the personal observations of field samplers, the results of many specialized investigations and best professional judgement. While this assessment is as comprehensive as resources permit, undoubtedly some of the state's water quality problems, particularly localized ones, do not appear in this report. South Dakota Law (SDCL 34A-2-4 and 34A-2-6) authorizes the Secretary of DENR to provide the assessment of current state water quality to EPA and to the people of the State of South Dakota.

The South Dakota 303(d) Waterbody Report lists impaired waterbodies within South Dakota which need the development of Total Maximum Daily Loads (TMDLs). Included with this listing are basis for listings, prioritizations, and schedules for development. Supporting documentation such as methodologies used for listings, public participation procedures, and maps are also included.

TMDLs are an important tool for the management of water quality. The goal of TMDLs is to ensure that waters of the state attain water quality standards. EPA defines a TMDL as "the sum of the individual waste load allocations for point sources and load allocations for both nonpoint sources and natural background sources established at a level necessary to achieve compliance with applicable surface water quality standards." TMDLs must be developed for waters that do not meet water quality standards after technology-based requirements have been applied to point source dischargers. Each TMDL should address a specific waterbody or watershed, and specify quantifiable targets and associated actions that will enable a given waterbody to attain and maintain applicable water quality standards.

States must submit to EPA the "waters identified and loads established" for review and approval. The report and list fulfills the first part of this requirement (identifying the waters). Once identification and priority ranking of TMDL waters are completed, states are to develop TMDLs at a level necessary to achieve the applicable state water quality standards. TMDLs must allow for seasonal variations and a margin of safety that accounts for any lack of knowledge concerning the relationship between effluent limits and water quality.

#### Water Quality Planning

South Dakota DENR monitors the surface water in the state through an established ambient water quality sampling program, special intensive water quality surveys, fish surveys, total maximum daily load assessments, surface water discharge (SWD) permit monitoring requirements, and individual state and federal lakes/nonpoint source projects. Aside from DENR, the United States Geological Survey, the Corps of Engineers and the US Forest Service also conduct limited monitoring throughout the state. All data resulting from these monitoring

efforts are available from the responsible agency. All DENR data has been entered into the United States Environmental Protection Agency STORET computer system.

Water samples collected by DENR are analyzed for physical, chemical, and biological parameters to provide baseline data for the determination of potential effects of point and nonpoint sources of pollution. Baseline data and trend analysis are also used as a management tool to determine the effectiveness of control programs on existing point and nonpoint sources and for directing future control activities. Water samples help determine whether or not a waterbody is meeting its assigned water quality beneficial uses. The state's Committee on Water Pollution in 1967 first established water quality standards for all surface waters. The Water Management Board completed the final steps of its most recent triennial review and revisions in December 1998 and the US EPA formally approved South Dakota's Standards on March 29, 2000. These standards consist of beneficial use classifications and water quality criteria necessary to protect these uses. All surface waters in the state are classified for one or more of the following beneficial uses:

- (1) Domestic water supply waters;
- (2) Coldwater permanent fish life propagation waters;
- (3) Coldwater marginal fish life propagation waters;
- (4) Warmwater permanent fish life propagation waters;
- (5) Warmwater semipermanent fish life propagation waters;
- (6) Warmwater marginal fish life propagation waters;
- (7) Immersion recreation waters;
- (8) Limited contact recreation waters;
- (9) Fish and wildlife propagation, recreation, and stock watering;
- (10) Irrigation waters; and
- (11) Commerce and industry waters.

All streams in South Dakota are assigned the beneficial uses (9) and (10) unless otherwise stated in ARSD 74:51:03. Lakes listed in Uses Assigned to Lakes 74:51:02 are assigned the beneficial uses of (7) and (8) unless otherwise specified. All lakes in South Dakota are assigned the beneficial use (9) unless otherwise stated in the same reference.

The DENR Water Quality Monitoring program consisted of 94 active instream stations for most of the 1995 through 1999 reporting period as reflected in the 2000 305(b) Water Quality Assessment Report to Congress. The network was expanded in 1999 to a total of 134 stations. Sampling station locations are determined by assessing areas located within high quality beneficial use classifications, located above and below municipal/industrial discharges, or within problem watersheds. Currently, DENR collects these samples on a monthly, quarterly, or biannual basis. This type of water sampling is invaluable for monitoring historical information, natural background conditions, possible runoff events, and acute or chronic water quality problems.

Typically, grab samples are collected mid-stream, either from a bridge or by wading. Some stations may have to be sampled from the bank depending on the conditions. Every station is sampled in the same manner and location each time. When the sample has been collected, the

sampler immediately obtains the water and air temperatures, pH reading, and dissolved oxygen content. Water depth and width as well as other visual observations are also recorded. The samples are properly preserved and transported to the laboratory for analysis. Sample test results are entered into STORET.

The most commonly sampled parameters include fecal coliform, conductivity, hardness, BOD5, alkalinity, residue (TS, TSS, TDS), pH, ammonia, nitrates, and phosphorous (total and dissolved). Several stations are sampled for sodium, calcium, and magnesium during the irrigation season. Stations which are located along streams that receive mine drainages are also analyzed for cyanide, cadmium, lead, copper, zinc, chromium, mercury, nickel, silver, and arsenic.

DENR also has a list of 132 lakes, one fourth of which are normally monitored annually so that each lake is monitored during a four-year period. The general criteria for the lakes are those that have a surface area of at least 100 acres, are publicly owned, or have a regional significance. Each lake is sampled twice (once in early summer and once in late summer) and chemical, biological, and physical parameters are collected and analyzed or measured. This monitoring tracks change in lakes over time and in most cases satisfies the post implementation monitoring of a TMDL.

Ambient station locations, descriptions, and schedules can be found at the DENR website:

#### http://www.state.sd.us/denr/DES/Surfacewater/WQM%20Map.htm

Water quality monitoring surveys and lake assessment work are performed by the Surface Water Quality and Water Resources Assessment Programs to document stream and lake improvement areas, stream degradation areas, develop TMDLs, or to provide data for verifying surface water discharge limits.

#### **Public Involvement**

DENR follows the state of South Dakota's rule making process as provided for in South Dakota Codified Laws Chapter 1-26 (Administrative Procedures and Rules). Inquiries and comments to public notices and comments at public hearings may be made by the public in written letters to DENR or in oral and written statements made at the rulemaking hearing.

DENR requests public comment and participation in cases where federal regulations or state rules require such a process, and also where DENR determines that public participation would enhance and improve the final outcome. Parties interested in specific issues (e.g. surface water discharge permits, water quality standards, etc) notify DENR of their desire to receive notice of all proposed activities related to the particular issue. When specific permits, rules, TMDLs or other activities are proposed, the appropriate interested parties are notified and provided opportunity for input.

# Section II: Elements Required by the Clean Water Act (40 CFR Part 130.5)

1. The process for developing effluent limitations and schedules of compliance at least as stringent as those required by sections 301(b)(1) and (2), 306 and 307, and at least stringent as any requirements contained in applicable water quality standards in effect under authority of section 303 of the CWA.

DENR's procedures for developing effluent limitations and schedules of compliance are contained in the Administrative Rules of South Dakota, Chapter 74:52:03. Further information is available on the South Dakota Legislative Research Council's website:

#### http://legis.state.sd.us/rules/index.cfm

2. The process for incorporating elements of any applicable areawide waste treatment plans under section 208, and applicable basin plans under section 209 of the CWA.

The Division of Financial and Technical Assistance in DENR is responsible for all areawide waste treatment plans in South Dakota. Therefore, this centralization of areawide waste treatment plans ensures that all elements of the plans are incorporated on a statewide basis.

3. The process for developing total maximum daily loads (TMDLs) and individual water quality based effluent limitations for pollutants in accordance with section 303(d) of the CWA and 40 CFR Sec. 130.7(a).

DENR's TMDLs for pollutants in accordance with the CWA is available at DENR's website:

#### http://www.state.sd.us/denr/DFTA/WatershedProtection/TMDL/TMDL.htm

DENR's 1998 Clean Water Act section 303(d) water bodies list describes the process for developing TMDLs. The department is in the process of developing a 2002 303(d) list which will be distributed for public comment in June 2002. The department's 1998 list is available at DENR's website:

#### http://www.state.sd.us/denr/Documents/

4. The process for updating and maintaining Water Quality Management (WQM) plans, including schedules for revision.

DENR uses a combination of a biennial 305(b) report and watershed basin assessments for planning purposes. The latest 305(b) report can be found on DENR's website:

http://www.state.sd.us/denr/DFTA/WatershedProtection/WQInfo.htm#Publications

### 5. The process for assuring adequate authority for intergovernmental cooperation in the implementation of the State WQM program.

DENR has full authority to enter into cooperative activities with the local state and federal governmental agencies pursuant to SDCL Chapter 1-24 (Joint Powers Authorization). It is available on the South Dakota Legislative Research Council's website:

#### http://legis.state.sd.us/statutes/index.cfm

# 6. The process for establishing and assuring adequate implementation of new or revised water quality standards, including schedules of compliance, under section 303(c) of the CWA.

DENR's rules governing the establishment and implementation of new or revised water quality standards, including schedules of compliance, are listed in the Administrative Rules of South Dakota, Chapter 74:51:01-03, and are available at on the South Dakota Legislative Research Council's website:

#### http://legis.state.sd.us/rules/index.cfm

## 7. The process for assuring adequate controls over the disposition of all residual waste from any water treatment processing.

DENR's controls for the disposition of residual waste from any waste treatment processing are contained in SDCL Chapter 34A-2 (Water Pollution Control), SDCL Chapter 34A-6 (Waste Management) and the rules promulgated thereunder. These statutes and rules are available at the South Dakota Legislative Research Council's website:

#### http://legis.state.sd.us/statutes/index.cfm

# 8. The process for developing an inventory and ranking, in order of priority of needs for construction of waste treatment works required to meet the applicable requirements of sections 301 and 302 of the CWA.

DENR's inventory and ranking, in order of priority, of needs of construction of waste treatment works required to meet the CWA is contained within the State Water Facilities Plan, Clean Water Intended Use Plan and Project Priority List. The rules concerning the Clean Water State Revolving Fund Program may be found in the Administrative Rules of South Dakota 74:05:08. The Intended Use Plan and Project Priority are available from the DENR's website:

#### http://www.state.sd.us/denr/DFTA/WWFunding/clean water srf program2.htm

#### 9. The process for determining the priority of permit issuance.

DENR currently has effective permits for all discharges of pollutants to waters of the state. The applicable rules governing the issuance of Surface Water Discharge Permits are contained in

Administrative Rules of South Dakota Article 74:52. Applications for permits are processed when received and appropriate permits are issued when necessary.

# **Section III: Flow Chart of South Dakota CPP Process** (See page 11)

#### Flow Chart of SD Continuous Planning Process

