

**North Dakota Certification  
Clean Air Act  
Section 110(a)(1) and (2) Requirements  
2012 PM<sub>2.5</sub> Annual NAAQS**

Under the Clean Air Act (CAA), States must submit State Implementation Plans (SIPs) to assure compliance with the National Ambient Air Quality Standards (NAAQS). Sections 110(a)(1) and (2) of the Clean Air Act (CAA) require states to adopt and submit to the U.S. EPA “infrastructure” SIPs that address basic program elements to implement, maintain, and enforce new or revised standards including requirements for emissions inventories, monitoring, and modeling among other elements. Each of the basic or infrastructure requirements is listed below along with the corresponding State regulation, State statute or SIP element that implements the requirement.

**Emission limits and other control measures:** Section 110(a)(2)(A) of the Clean Air Act requires SIPs to include enforceable emission limits and other control measures, means or techniques, schedules for compliance, and other related matters.

The North Dakota Air Pollution Control Rules (NDAC 33-15) establishes control requirements for particulate matter including PM<sub>2.5</sub>. The following regulations address the required control measures, means and techniques.

Chapter

33-15-01      General Provisions

This chapter establishes prohibitions against creating air pollution and provides for the enforcement of all air pollution control rules. The chapter provides that all excess emissions, including emission during startup/shutdown and malfunction, are subject to enforcement action.

33-15-02      Ambient Air Quality Standards

This chapter establishes a state ambient air quality standard (SAAQS) for PM<sub>2.5</sub> that is identical to the NAAQS.

33-15-03      Restriction of Emission of Visible Air Contaminants

This chapter establishes visible emissions limits (in terms for opacity) for all sources of air pollution.

33-15-04      Open Burning Restrictions

The chapter prohibits open burning unless specifically authorized.

- 33-15-05 Emissions of Particulate Matter Restricted
- This chapter establishes particulate matter emission limits for industrial processes as well as fuel burning equipment.
- 33-15-06 Emissions of Sulfur Compounds Restricted
- Sulfur dioxide is a precursor to PM<sub>2.5</sub>. This chapter establishes sulfur dioxide limits for both fuel burning equipment and industrial processes.
- 33-15-07 Control of Organic Compound Emissions
- This chapter establishes requirements for the control of organic compounds from industrial processes.
- 33-15-08 Control of Air Pollution from Vehicles and Other Internal Combustion Engines
- This chapter prohibits the removal of air pollution control equipment from vehicles and also prohibits the emissions of unreasonable amounts of emissions from any internal combustion engine.
- 33-15-12 Standards of Performance for New Stationary Sources
- The chapter incorporates by reference the standards in 40 CFR 60.
- 33-15-13 Emission Standards for Hazardous Air Pollutants
- The chapter incorporates the standards in 40 CFR 61.
- 33-15-14 Designated Air Contaminant Sources, Permit to Construct, Minor Source Permit to Operate, Title V Permit to Operate
- The chapter provides a preconstruction permitting program for both major and minor sources, a federally enforceable state operating permit program (FESOP) for minor sources, and a Title V Permit to Operate program for major sources.
- 33-15-15 Prevention of Significant Deterioration of Air Quality
- The chapter incorporates by reference the PSD requirements in 40 CFR 52.21.
- 33-15-17 Restriction of Fugitive Emissions
- The chapter establishes criteria for the control of fugitive emissions (including PM<sub>2.5</sub> emissions).

- 33-15-18      Stack Heights
- The chapter prohibits dispersion of air contaminants through the use of stacks that exceed good engineering practice (GEP).
- 33-15-19      Visibility Protection
- The chapter establishes requirements for the review of major stationary sources and prohibits a source from having an adverse impact on any Class I area.
- 33-15-21      Acid Rain Program
- This chapter incorporates by reference the requirements of 40 CFR 72, 75 and 76.
- 33-15-22      Emission Standards for Hazardous Air Pollutants for Source Categories
- This chapter incorporates by reference the standards in 40 CFR 63.
- 33-15-25      Regional Haze Requirements
- The chapter provides for the application of Best Available Retrofit Technology (BART) to affected sources.

The North Dakota Century Code (NDCC), Chapter 23-25, Air Pollution Control (Appendix B of SIP), in Section 23-25-03 provides the following general authority to regulate sources of PM<sub>2.5</sub>. This section states that the Department shall:

*NDCC 23-25-03.6 - Provide rules and regulations relating to the construction of any new direct or indirect air contaminant source or modification of any existing direct or indirect air contaminant source which the Department determines will prevent the attainment or maintenance of any ambient air quality standard, and require that prior to commencing construction or modification of any such source, the owner or operator thereof shall submit such information as may be necessary to permit the Department to make such determination.*

*NDCC 23-25-03.7 – Establish ambient air quality standards for the state which may vary according to appropriate areas.*

*NDCC 23-25-03.8 – Formulate and promulgate emission control requirements for the prevention, abatement, and control of air pollution in this state including achievement of ambient air quality standards.*

**Ambient air quality monitoring/data system:** Section 110(a)(2)(B) of the CAA requires SIPs to provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, and analyze data on ambient air quality, and upon request, make such data available to EPA.

The 2013 Annual Monitoring Network Plan for North Dakota provides for an ambient air quality monitoring system in the State. North Dakota currently operates nine ambient monitoring sites for PM<sub>2.5</sub>.

NDCC 23-25-03 provides the authority for the Department to conduct ambient air monitoring. This subsection states that the Department shall:

*NDCC 23-25-03.2 – Determine by scientifically oriented field studies and sampling the degree of air pollution in the state and the several parts thereof.*

*NDCC 23-25-03.10 – Require the owner or operator of a regulated air contaminant source to establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment or methods; sample such emissions in accordance with such methods, at such locations, intervals, and procedures; and provide such other information as may be required.*

Ambient monitoring is covered in Chapter 6 of the North Dakota SIP. It provides for the design and operation of a monitoring network, reporting of data obtained from the monitors, and annual network review including notification to EPA of any changes, and public notification of exceedances of NAAQS.

**Program for enforcement of control measures and for the construction or modification of stationary sources:** Section 110(a)(2)(C) requires SIPs to include a program providing for enforcement of all SIP measures and the regulation of construction of new or modified stationary sources as necessary to assure that the NAAQS are achieved, including a permit program as required in parts C and D.

**Enforcement:** NDCC 23-25-10, Enforcement – Penalties – Injunctions, provides authority for enforcement of the North Dakota Air Pollution Control Rules (NDAPCR) and specifies the potential penalties for such violation. NDAC 33-15-01-17, Enforcement, provides general interpretation of enforcement of the NDAPCR.

**Regulation of minor sources and minor modifications:** The following regulations within the NDAPCR and the North Dakota SIP provide for the permitting of minor sources of PM<sub>2.5</sub> and modification of those sources:

NDAC 33-15-14-02	:	Permit to Construct
NDAC 33-15-14-03	:	Minor Source Permit to Operate
NDAC 33-15-14-06	:	Title V Permit to Operate

**Preconstruction PSD permitting of major sources:** NDAC 33-15-15 incorporates by reference all federal PSD regulations through July 1, 2013. This includes permitting requirements for sources of greenhouse gases. The rule also requires compliance with all Ambient Air Quality Standards in NDAC 33-13-02. The revised annual PM<sub>2.5</sub> Ambient Standard was incorporated into NDAC 33-15-02 effective April 1, 2014.

Authority for the permitting programs is found in NDCC 23-25-03 which states that the Department shall:

*NDCC 23-25-03.6 - Provide rules and regulations relating to the construction of any new direct or indirect air contaminant source or modification of any existing direct or indirect air contaminant source which the Department determines will prevent the attainment or maintenance of any ambient air standard, and require that prior to commencing construction or modification of any such source, the owner or operator thereof shall submit such information as may be necessary to permit the Department to make such determination.*

and

*NDCC 23-25-04.1 - Permits and Registration*

- A. No person shall construct, install, modify, use or operate an air contaminant source designated by regulation, capable of causing or contributing to air pollution, either directly or indirectly, without a permit from the Department or in violation of any conditions imposed by such permit.*
- B. The Department shall provide for the issuance, suspension, revocation, and renewal of any permits which it may require pursuant to this section.*
- C. The Department may require that applications for such permits shall be accompanied by plans, specifications, and such other information as it deems necessary.*
- D. Possession of an approved permit or registration certificate does not relieve any person of the responsibility to comply with applicable emission limitations or with any other provision of law or regulations adopted pursuant thereto and does not relieve any person from the requirement that that person possess a valid contractor's license issued under Chapter 43-07.*
- E. The Department by rule or regulation may provide for registration and registration renewal of certain air contaminant sources in lieu of the permit required pursuant to this section.*
- F. The Department may exempt by rule or regulation certain air contaminant sources from the permit or registration requirements set forth in this section when the Department makes a finding that the exemption of such sources of air contaminants will not be contrary to section 23-25-01.1.*

**Interstate transport:** Section 110(a)(2)(D) of the CAA requires SIPs to contain adequate provisions prohibiting any source or other type of emissions activity in one State from 1) contributing significantly to nonattainment of the National Ambient Air Quality Standards

(NAAQS), 2) interfering with maintenance of the NAAQS, and 3) interfering with measures required to prevent significant deterioration or interfering with the implementation of plans related to regional haze or visibility in another State.

The following regulations and SIP provisions address interstate transport:

NDAC 33-15-15	:	Prevention of Significant Deterioration
NDAC 33-15-19	:	Visibility Protection
NDAC 33-15-25	:	Regional Haze Requirements
SIP Section 7.8	:	Interstate Transport of Air Pollution
SIP	:	North Dakota State Implementation Plan for Regional Haze (February 24, 2010)

NDCC 23-25-03 states that the Department shall:

*NDCC 23-25-03.6 – Provide rules and regulations relating to the construction of any new direct or indirect air containment source or modification of any existing direct or indirect air containment source which the Department determines will prevent the attainment or maintenance of any ambient air quality standard, and require that prior to commencing construction or modification of any such source, the owner or operator thereof shall submit such information as may be necessary to permit the Department to make such determination.*

A. Significant Contribution Requirement of Section 110(a)(2)(D)(i)(I) – Prong 1:

Section 110(a)(2)(D)(i)(I) specifically provides that each state's SIP must contain adequate provisions to prohibit air pollutant emissions from within the state that significantly contribute to nonattainment of the NAAQS in any other state. The state's submission must explain whether or not emissions from the state have this impact and, if so, address the impact.

There are no areas designated non-attainment for the PM<sub>2.5</sub> NAAQS in North Dakota. The nearest nonattainment area for the 2012 annual PM<sub>2.5</sub> NAAQS is part of Shoshone County Idaho which is approximately 660 miles from the North Dakota border.

North Dakota collects PM<sub>2.5</sub> ambient monitoring data from nine sites in the state. The TRNP-NU, TRNP-SU and Dunn Center sites are situated in western North Dakota generally in-line with the Idaho nonattainment area. Data from these sites indicate very low concentrations of PM<sub>2.5</sub> on a yearly average basis as shown in the following table:

PM<sub>2.5</sub>  
Annual Design Values  
(ug/m<sup>3</sup>)

Year	TRNP-SU	TRNP-NU	Dunn Center
2010	4.5	8.6	--
2011	4.3	8.7	6.4
2012	4.4	8.1	6.1
2013	4.4	6.5	5.5
2014	4.5	4.6	4.3

The TRNP-SU and TRNP-NU sites are located approximately 700 miles from the Idaho nonattainment area. The prevailing winds in North Dakota are generally in the opposite direction. Because of the great distance and prevailing wind direction, any contribution of PM<sub>2.5</sub> to the Idaho nonattainment area is expected to be insignificant.

The U.S. Environmental Protection Agency, as part of the justification for its FIP for the Cross States Air Pollution Rule (76FR 48208 - 48483), has conducted dispersion modeling to determine the effect North Dakota sources have on downwind PM<sub>2.5</sub> nonattainment areas. EPA determined that North Dakota sources have a maximum annual average contribution to any nonattainment area of 0.06 micrograms per cubic meter (76FR 48240, Table V.D-1). This is substantially less than EPA's significant contribution level of 0.15 micrograms per cubic meter (76FR 48236) or 0.12 micrograms per cubic meter based on the 2012 NAAQS (1% of the NAAQS). Based on this modeling, North Dakota sources did not significantly contribute to any nonattainment area. Since this modeling was completed, sulfur dioxide and nitrogen oxides emissions (precursors to PM<sub>2.5</sub>) from EGUs in North Dakota have been reduced by approximately 27,000 tons per year and 13,000 tons per year respectively from the 2012 Base Case emissions used in the modeling.

Based on the above, North Dakota believes it does not significantly contribute to any nonattainment area for the 2012 annual PM<sub>2.5</sub> NAAQS.

**B. Interfere with Maintenance Requirement of Section 110(a)(2)(D) – Prong 2:**

Section 110(a)(2)(D)(i)(I) specifically provides that each state's SIP must contain adequate provisions to prohibit air pollutant emissions from within the state that interfere with maintenance of the NAAQS in any other state. States' submission must address this independent requirement of the statute. This provision requires evaluation of impacts on areas of other states that are meeting the PM<sub>2.5</sub> NAAQS, not merely areas formerly designated nonattainment that are subject to maintenance SIP. Therefore, the SIP must explain whether or not emissions from the state have this impact and, if so, address the impact.

The nearest maintenance area for PM<sub>2.5</sub> in the U.S. is the Milwaukee-Racine Wisconsin area. This maintenance area is located approximately 450 miles southwest of the North Dakota border in a direction that does support frequent transport of air pollution.

North Dakota collects PM<sub>2.5</sub> ambient monitoring data from several sites. Data from these sites indicate very low ambient concentrations of PM<sub>2.5</sub> as shown in the following table:

PM<sub>2.5</sub>  
Annual Design Values  
(ug/m<sup>3</sup>)

Year	Beulah	Bismarck	Dunn Center	Fargo	Lostwood	TRNP-NU	Hannover	TRNP-SU
2010	6.3	7.1	--	8.5	8.0	8.6	--	4.5
2011	6.3	6.9	6.4	8.1	7.7	8.7	3.9	4.3
2012	6.2	6.8	6.1	8.0	7.5	8.1	4.9	4.4
2013	5.9	6.2	5.5	7.0	6.8	5.5	4.9	4.4
2014	5.2	5.5	4.8	6.2	5.6	4.6	5.2	4.5

The design values in Fargo (next to the Minnesota border) are very similar to annual design values for St Cloud, Minnesota which is located approximately 150 miles east southeast of Fargo directly in-line with the Milwaukee-Racine area. The 2010-2014 annual PM<sub>2.5</sub> design values at the St. Cloud site were 8.6, 8.6, 8.5, 7.9 and 7.0 micrograms per cubic meter. There are no nonattainment areas or maintenance areas for PM<sub>2.5</sub> in Minnesota. It is clear that emissions in North Dakota are not contributing significantly to PM<sub>2.5</sub> concentrations in Minnesota or the Milwaukee-Racine area of Wisconsin. Modeling conducted by EPA for the Cross States Air Pollution Rule (CSAPR) indicated sources in North Dakota contributed a maximum of 0.04 micrograms per cubic meter of PM<sub>2.5</sub> to any maintenance area (76FR 48240, Table V.D-1).

In North Dakota, precursor and direct emissions of PM<sub>2.5</sub> have been steadily declining (see Attachments 1-3). Since 2004, point source SO<sub>2</sub> emissions have decreased 64% from 164,000 tons to 58,500 tons in 2014. NO<sub>x</sub> emissions have declined 36% from 88,000 tons in 2004 to 56,500 tons in 2014. Primary particulate emissions from major point sources have decreased 19% for this same period. Additional reductions of emissions of SO<sub>2</sub>, NO<sub>x</sub> and PM are expected due to the requirements of the Regional Haze SIP.

Based on the above, North Dakota believes its SIP is adequate to prohibit emissions of PM<sub>2.5</sub>, and PM<sub>2.5</sub> precursors, which will prevent or interfere with the maintenance of the NAAQS in any other state.

C. PSD sub-element of 110(a)(2)(D)(i)(II) and 110(a)(2)(J) – Prong 3:

These sections require that sources in North Dakota may not interfere with measures required to be included in the SIP for any other State under Part C to prevent significant

deterioration of air quality and requires North Dakota to have in place a prevention of significant deterioration program for sources in the North Dakota.

New major sources and modifications of major sources are subject to review for all regulated NSR pollutants in accordance with North Dakota's EPA approved PSD program in the SIP. The Department has adopted the Federal PSD rules by reference as they exist on July 1, 2013 into NDAC 33-15-15. These rules incorporate all existing requirements for PM<sub>2.5</sub>. The PSD rules require compliance with the 2012 PM<sub>2.5</sub> NAAQS incorporated in NDAC 33-15-02 and PM<sub>2.5</sub> increments.

D. Visibility sub-element of 110(a)(2)(D)(i)(II) and 110(a)(2)(J) – Prong 4:

These sections require that sources in North Dakota may not interfere with measures required for any other state for visibility protection and requires North Dakota to have in-place measures to protect visibility in North Dakota Class I areas.

North Dakota has in place a SIP to address visibility impairment for major source (PSD) permitting (NDAC 33-15-15), specific visibility impairment (RAVI) and plume blight (NDAC 33-15-19). To date, no sources in North Dakota have been identified as causing “reasonably attributable visibility impairment” in any Federal Class I area. The Department has prepared and submitted to EPA (March 3, 2010) a SIP revision to address regional haze for the current planning period. The SIP and a FIP were approved effective May 7, 2012. The North Dakota SIP includes a long-term strategy which provides for improvement in the most impaired days and no degradation in the least impaired days. The regional haze SIP was developed through a regional planning process. The SIP and FIP provide all measures necessary to achieve North Dakota's fair share of emissions reductions based on that regional process.

The five-year Progress Report for Regional Haze was submitted to EPA in January 2015. The report indicates that the reasonable progress goals established in the SIP have been met (TRNP) or will likely be met (LWA). The report also indicates that the emissions reductions at EGUs required by the SIP, which are the emissions most likely to affect out-of-state Class I areas, will be achieved or exceeded. North Dakota is achieving the emissions reductions established as part of the regional planning process.

**Section 110(a)(2)(D)(ii): Interstate and International Transport Provisions:**

Section 110(a)(2)(D)(ii) requires that each plan include measures that ensure compliance with the applicable requirements of Sections 126 and 115 relating to interstate and international pollution abatement. Section 126(a) of the Clean Air Act (CAA) requires each SIP to include provisions to notify neighboring states of potential impacts from a new or modified source.

The North Dakota PSD rules provide for notifying neighboring states whose land may be significantly affected by emissions from a new or modified source. NDAC 33-15-15-01.2(q)(2)(d) states:

*NDAC-33-15-15-01.(q)(2)(d) - Send a copy of the notice required in subparagraph c to the applicant, the United States environmental protection agency administrator, and to officials and agencies having cognizance over the location where the source or modification will be situated as follows: the chief executive of the city and county where the source or modification would be located; any comprehensive regional land use planning agency; and any state, federal land manager, or Indian governing body whose lands may be significantly affected by emissions from the source or modification.*

Similar notification requirements are provided for minor sources under NDAC 33-15-14-02.6.b(4).

All PSD permit applications are provided to EPA within thirty days of receipt. This includes sources that could affect air quality in Canada. The draft PSD permits, the Air Quality Effects Analyses and the final permits are also submitted to EPA.

No source or sources within North Dakota are the subject of an active finding under Section 126 of the Clean Air Act with respect to any pollutant. In addition, there are no findings under Section 115 of the Clean Air Act against North Dakota with respect to any pollutant.

**Adequate personnel, funding and authority:** Section 110(a)(2)(E) of the CAA requires states to provide for adequate personnel, funding and legal authority under State law to carry out its SIP and related issues.

The authority for the Department to carry out the requirements of the SIP is found in NDCC 23-25-03 which states:

*23-25-03. Power and duties to the Department. The Department shall:*

- *Encourage the voluntary cooperation of persons or affected groups to achieve the purposes of this chapter.*
- *Determine by scientifically oriented field studies and sampling the degree of air pollution in the state and the several parts thereof.*
- *Encourage and conduct studies, investigations, and research relating to air pollution and its causes, effects, prevention, abatement and control.*
- *Advise, counsel, and cooperate with other public agencies and with affected groups and industries.*
- *Issue such orders as may be necessary to effectuate the purposes of this chapter and enforce the same by all appropriate administrative and judicial procedures.*
- *Provide rules and regulations relating to the construction of any new direct or indirect air contaminant source or modification of any existing direct or indirect air containment source which the Department determines will prevent the*

*attainment or maintenance of any ambient air quality standards, and require that prior to commencing construction or modification of any such source, the owner or operator thereof shall submit such information as may be necessary to permit the Department to make such determination.*

- *Establish ambient air quality standards for the state which may vary according to appropriate areas.*
- *Formulate and promulgate emission control requirements for the prevention, abatement, and control of air pollution in the state including achievement of ambient air quality standards.*
- *Hold hearings relating to any aspect or matter in the administration of this chapter, and in connection therewith, compel the attendance of witnesses and the production of evidence.*
- *Require the owner or operator of a regulated air containment source to establish and maintain such records; make such reports; install, use and maintain such monitoring equipment or methods; sample such emissions in accordance with such methods, at such locations, intervals, and procedures; and provide such other information as may be required.*
- *Provide by rules and procedures necessary and appropriate to develop, implement, and enforce any air pollution prevention and control program established by the Federal Clean Air Act, as amended, and the authorities and responsibilities of which are delegatable to the state by the United States environmental protection agency. Such rules may include any and all enforceable ambient standards, emission limitations, and other control measures, means, techniques, or economic incentives such as fees, marketable permits, and actions of emission rights as provided by the Act. The Department shall develop and implement such federal programs if the Department determines there is a benefit to the state.*
- *Provide by rules a program for implementing lead-based paint remediation training, certification and performance requirements in accordance with title 40, Code of Federal Regulations, part 745, sections 220, 223, 225, 226, 227 and 233.*

In addition, NDAC 33-15-01-03 states:

*NDAC 33-15-01-03. Authority. The North Dakota State Department of Health has been authorized to provide and administer this article under the provisions of North Dakota Century Code chapter 23-25.*

The provisions of the SIP mostly are carried out by the Department of Health. The Health Department is “*designated as the agency to administer and coordinate a statewide program of air pollution control*” (NDCC 23-25-02.1). As part of its program, the Department has adopted

rules addressing open burning (NDAC 33-15-04). Under these rules, the Department must, in certain circumstances, approve open burning in advance (NDAC 33-15-04-02). The only portion of the SIP that has been delegated is approval of open burning requests. Several local Health Districts have been delegated this authority.

The State Health Officer may hold public health units (i.e. health districts) responsible for enforcing the Department's rules (see NDCC 23-01-05.2). So, the Department, through its State Health Officer, may delegate to public health units the authority to approve open burning requests. Although the Department has delegated the authority to approve requests, it has not delegated the authority to take enforcement action against a person violating the Department's open burning rules.

As with any other violation of its air pollution requirements, the Department has the authority to enforce its open burning rules "by all administrative and judicial procedures" (see NDCC 23-25-03.5). The Department's authority includes the ability to seek an injunction or to impose NDCC 23-25-10's penalties on any person violating its rules.

There are no other agencies, departments or local units that have been delegated authority to develop any portion of the SIP. The Department of Health retains the responsibility to assure that all requirements of the SIP, including the 2012 PM<sub>2.5</sub> NAAQS, are implemented in accordance with the CAA.

NDAC 33-15-23, Fees, provides the regulatory mechanism for requiring stationary sources that emit air pollutants to pay a fee based on the quantity of emissions emitted. Fees are collected annually from both major sources and minor sources. In addition, fees are charged for reviewing applications for the construction of new or modified sources. Title V fees are adjusted annually to match the change in the consumer price index.

The Department currently has 15 full time staff dedicated to permitting of new or modified sources of air pollution and the enforcement of the air pollution control rules. Another four staff assist on a part time basis. In addition, another 6 people are dedicated to monitoring air quality. No additional staff is projected to be required in the next five years because of the new NAAQS. If additional staff is needed to address new sources of PM<sub>2.5</sub> emissions, the Department believes revenues will be sufficient to support those positions.

NDCC 23-25-04.2 provides the statutory authority for collecting fees.

*NDCC 23-25-04.2, Fees – Deposit in operating fund. The Department by rule or regulation may prescribe and provide for the payment and collection of reasonable fees for the issuance of permits or registration certificates. The permit or registration certificate fees must be based on the anticipated cost of filing and processing the application, of taking action on the requested permit or registration certificate, and conducting an inspection program to determine compliance or noncompliance with the permit or registration certificate. Any moneys collected for permit or registration fees must be deposited in the Department operating fund in the state treasury and must be spent subject to appropriation by the legislative assembly.*

Resources for the operation of the air pollution control program are also addressed in Section 9 of the SIP which was updated in April 2009. The Department has determined that it has adequate resources to implement the 2012 PM<sub>2.5</sub> NAAQS. The Department has addressed the legal authority to collect fees necessary to implement the air pollution control program in section 2.11 of the SIP.

The regulations that control emissions of PM<sub>2.5</sub> or PM<sub>2.5</sub> precursors are described in the section titled “Emission limits and other control measures”.

There are no boards in North Dakota that approve permits; all permit authority is given to the Department of Health.

The North Dakota SIP (Section 2.5) contains requirements for the disclosure of a conflict of interest by anyone that approves permits or enforcement orders. Section 2.5 states:

*North Dakota has no boards that approve permits or enforcement orders. Anyone that approves permits or enforcement orders must comply with the following conflict of interest requirements:*

- 1) *A conflict of interest is defined as the conflict between the duties assigned to the employee and the self-interest or other interests of the employee. Employees must avoid any interest, influence or relationship that might conflict or appear to conflict with the best interests of the Department of Health or the State of North Dakota, or that might affect one’s working judgment or loyalty. Employees must avoid any situation in which their loyalty may be divided and promptly disclose to their division director, section chief or supervisor any situation where an actual or potential conflict may exist.*
  
- 2) *If employees have a potential conflict of interest in any program, contract or legal matter involving the Department of Health or reasonably related to their position with the Department of Health, the employees must notify the division director, section chief or supervisor in writing of the potential conflict and the cause of the potential conflict and remove themselves from any negotiations, deliberations or decisions involving the conflict.*

**Stationary source monitoring system:** Section 110(a)(2)(F) of the CAA requires states to establish a system to monitor emissions from stationary sources and to submit periodic emission reports.

The following State regulations require monitoring of emissions from stationary sources, recordkeeping and reporting of emissions, and monitoring data:

- NDAC 33-15-14-02.9
- NDAC 33-15-14-03.6
- NDAC 33-15-14-06.5

Statutory authority for the monitoring is found in NDCC 23-25-03 which states that the Department shall:

*NDCC 23-25-03.10 – Require the owner or operator of a regulated air containment source to establish and maintain such records; make such reports; install, use and maintain such monitoring equipment or methods; sample such emissions in accordance with such methods, at such locations, intervals, and procedures; and provide such other information as may be required.*

Source surveillance is also addressed in Chapter 8 of the SIP. This chapter provides for the permitting of sources, inspection of the sources, recordkeeping and reporting by sources, and compliance determinations. NDAC 33-15-01-17.2 allows the Department to use any credible evidence for the purpose of establishing whether a source has violated or is in violation of the SIP or any permit that has been issued.

*33-15-01-17. Enforcement.*

- 1. Enforcement action will be consistent with procedures as approved by the United States environmental protection agency.*
- 2. Notwithstanding any other provision in this article, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of this article.*
  - a. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:*
    - (1) A compliance assurance monitoring protocol approved for the source pursuant to subsection 10 of section 33-15-14-06.*
    - (2) A monitoring method approved for the source pursuant to paragraph 3 of subdivision a. of subsection 5 of section 33-15-14-06 and incorporated in a federally enforceable title V permit to operate.*
    - (3) Compliance test methods specified in this article.*
  - b. The following testing, monitoring, and information-gathering methods are presumptively credible testing, monitoring, or information-gathering methods:*
    - (1) Any federally enforceable monitoring or testing methods, including those under title 40, Code of Federal Regulations, parts 50, 51, 60, 61, 63, and 75.*
    - (2) Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in paragraph 1 or in subdivision a.*
- 3. a. No person may knowingly make a false statement, representation, or certification in any application, record, report, plan, or other document filed or required under this article.*
  - b. No person may knowingly falsify, tamper with, or provide inaccurate information regarding a monitoring device or method required under this article.*

Section 8.2 of the SIP commits the Department to the collection and correlation of data, including emissions data, with the applicable requirements. NDAC 23-25-03.10 provides the authority for this data collection by stating the Department shall:

*10. Require the owner or operator of a regulated air contaminant source to establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment or methods; sample such emissions in accordance with such methods, at such locations, intervals, and procedures; and provide such other information as may be required.*

All reports are available for public inspection in accordance with NDAC 33-15-01-16.1. Emissions data are submitted electronically to EPA in accordance with 40 CFR 51.45(b).

NDAC 33-15-01-12.2 provides the Department the authority to conduct its own emission tests.

**Emergency episodes:** Section 110(a)(2)(G) of the CAA requires states to provide for authority to address activities causing imminent and substantial endangerment to public health, including contingency plans to implement the emergency episode provisions in their SIPs.

NDAC 33-15-11, Prevention of Air Pollution Emergency Episodes, provides the means to implement emergency air pollution episode measures and is authorized by NDCC 23-25-03 which states that the Department shall:

*NDCC 23-25-03.5 – Issue such orders as may be necessary to effectuate the purposes of this chapter and enforce the same by all appropriate administrative and judicial procedures.*

NDCC 28-32-32 (Appendix B of SIP) states that in an emergency, the administrative agency (the Department) may take action pursuant to a specific statute as is necessary to prevent or avoid imminent peril to public health, safety or welfare.

In addition, NDCC 23-25-08 states “*when an emergency exists requiring immediate action to protect the public health and safety, the Department may, without notice or hearing, issue an order reciting the existence of such emergency and requiring that such action be taken as is necessary to meet this emergency.*”

NDAC 33-15-01-15.1 makes it unlawful to “*permit or cause air pollution.*” “Air pollution” is defined as “*the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as is or may be injurious to human health, welfare, or property, animal or plant life, or which unreasonably interferes with the enjoyment of life or property*” (see NDCC 23-25-01.2; NDAC 33-15-01-04.3). A person causing or contributing to emissions that endanger public health, welfare, or the environment, would be causing “air pollution” within the meaning of North Dakota law, and would therefore be in violation of NDAC 33-15-01-15.1. This could occur in either an emergency or non-emergency situation.

Under NDCC 23-25-10.5, the Department has the authority to bring an action to enjoin a violation of NDCC 23-25 or its rules. So, the Department may seek a court order to restrain a source from causing or contributing to emissions that endanger public health, welfare, or the environment. In an emergency, this would probably take the form of a preliminary injunction or temporary restraining order (see NDCC 32-06-02; N.D.R. Civ. P. 65).

Prevention of emergency episodes is addressed in Section 5 of the SIP. The SIP includes:

- Section 5.2 - Episode Criteria
- Section 5.3 – Public announcements
- Section 5.4 – Episode Surveillance
- Section 5.5 – Emission Reduction Plan

All of North Dakota is a Priority III area for emergency episodes. Therefore, an emergency contingency plan is not required. The following data demonstrates the Priority III area classification:

PM<sub>10</sub>  
Max. 24-Hr. Avg.  
(ug/m<sup>3</sup>)

Site	2011	2012	2013	2014	Priority III Level
Beulah	53	38	37	55	< 150
Bismarck	74	65	77	57	< 150
Dunn Center	96	103	76	60	< 150
Fargo	98	114	70	93	< 150
Hannover	14	53	40	80	< 150
Lostwood NWR	63	53	51	47	< 150
TRNP-NU	35	35	27	30	< 150
Williston	--	--	91	108	< 150

PM<sub>10</sub>  
Annual Average  
(ug/m<sup>3</sup>)

Site	2011	2012	2013	2014	Priority III Level
Beulah	11	12	9	10	< 60
Bismarck	14	16	14	14	< 60
Dunn Center	14	20	17	15	< 60
Fargo	18	21	17	16	< 60
Hannover	7	14	12	13	< 60
Lostwood NWR	11	13	11	11	< 60
TRNP-NU	8	9	7	6	< 60
Williston	--	--	23	23	< 60

NDAC 33-15-11-04 provides requirements for sources to develop abatement plans in case an air pollution emergency occurs. Table 6 of this section of the rule provides the list of affected sources.

**Future SIP revisions:** Section 110(a)(2)(H) of the CAA requires states to have the authority to revise their SIPs in response to changes in the NAAQS, availability of improved methods for attaining the NAAQS, or in response to an EPA finding that the SIP is substantially inadequate.

NDCC 25-25-03 states that the Department shall:

*NDCC 23-25-03.8 –Formulate and promulgate emission control requirements for the prevention, abatement and control of air pollution in this state including achievement of ambient air quality standards.*

*NDCC 23-25-03.12 – Provide by rules any procedures necessary and appropriate to develop, implement, and enforce any air pollution prevention and control program established by the Federal Clean Air Act, as amended, and the authorities and responsibilities of which are delegatable to the state by the United States environmental protection agency. Such rules may include any and all enforceable ambient standards, emission limitations, and other control measures, means, techniques, or economic incentives such as fees, marketable permits, and auctions of emissions rights as provided by the Act. The Department shall develop and implement such as federal programs if the Department determines there is a benefit to the state.*

The North Dakota SIP, Section 1.14, commits the Department to making the necessary revisions. Section 1.14 states “The Department will revise this implementation plan as may be necessary to take account of revisions of the National Ambient Air Quality Standards (both primary and secondary) or the availability of improved or more expeditious methods of attaining these standards. The Department will also revise the implementation plan whenever the Administrator of the United States Environmental Protection Agency finds, on the basis of information available to the Administrator, that the plan is substantially inadequate to attain the National Ambient Air Quality Standards which it implements or to otherwise comply with additional requirements established under the Federal Clean Air Act. The Department will make such revision only if the finding of the Administrator is in accordance with the requirements of the Federal Clean Air Act.”

**Consultation with government officials, public notification, and PSD and visibility protection:** Section 110(a)(2)(J) of the CAA requires states to provide a process for consultation with local governments, designated organizations and federal land managers (FLMs) carrying out NAAQS implementation requirements pursuant to section 121 relative to consultation.

North Dakota has no transportation control plans, maintenance plans or nonattainment areas. Consultation with government agencies is addressed in Chapter 10 of the SIP. This Chapter of the SIP commits the Department to consultation with adjacent state, local government and other state agencies whenever a SIP revision is required.

Section 110(a)(2)(J) of the CAA further requires states to notify the public if any NAAQS is exceeded in an area and to enhance public awareness of measures that can be taken to prevent exceedances. The North Dakota SIP, Section 6.9, commits the Department to notification of the public, on a regular basis, whenever an ambient air quality standard is exceeded. The public will be advised of the potential health effects, measures which can be taken to prevent future exceedances, and ways they can participate in the regulatory and other efforts to improve air quality. The authority for this notification is found in NDCC 23-25-06. In addition, NDAC 33-15-11-03.1 requires the Department to notify the public whenever an air pollution emergency has been determined to exist.

Section 110(a)(2)(J) of the CAA requires states to meet applicable requirements of Part C related to prevention of significant deterioration and visibility protection. For sources subject to PSD review, the public participation procedures in paragraph (q) of NDAC 33-15-15-01.2 are followed. NDAC 33-15-15-01.2(q) requires notification of the chief executive of the city or county a source is proposing to locate, any regional land use planning agency, and any state, federal land manager or Indian body whose lands will be significantly affected by a proposed source's emissions. Consultation with the FLMs for PSD projects is accomplished in accordance with 40 CFR 52.21 (p) which is incorporated by reference into NDAC 33-15-15-01.2.

The Department has updated the SAAQS for PM<sub>2.5</sub> in NDAC 33-15-02 (July 2014) to be identical to the 2012 NAAQS. Pursuant to NDAC 33-15-15-01.2(k)(i), a PSD applicant must demonstrate compliance with the SAAQS including the 2012 PM<sub>2.5</sub> NAAQS. PSD applicants must address any applicable requirements for any regulated NSR pollutant including greenhouse gases.

For minor source preconstruction review, the public participation procedures of NDAC 33-15-14-02.6 are followed. The requirements are similar to those for PSD projects. For enforcement orders, the requirements of NDCC 23-25-08 and NDCC 28-32 are followed.

The visibility element of this section is not addressed because EPA's interpretation of the CAA indicates it need not be addressed.

**Air quality modeling/data:** Section 110(a)(2)(K) requires SIPs to provide for the performance of air quality modeling for predicting effects on air quality of emissions of any NAAQS pollutant and the submission of such data to EPA upon request.

Air quality modeling is addressed in Section 7.7 of the North Dakota SIP. This section commits the Department to performing air quality modeling to predict the impact of a source on air quality. The section also commits the Department to providing data to EPA on air quality modeling upon request.

Modeling for minor sources is addressed in NDAC 33-15-14-02.4 while modeling for major PSD sources is address in 40 CFR 52.21(k), (l), (m), (n) and (o) as incorporated into NDAC 33-15-15-01.2. Authority for requiring modeling is in NDCC 23-25-03 which states the Department shall:

*NDCC 23-25-03-02 - Determine by scientifically oriented field studies and sampling the degree of air pollution in the state and the several parts thereof.*

and

*NDCC 23-25-03-12 - Provide by rules and procedures necessary and appropriate to develop, implement, and enforce any air pollution prevention and control program established by the Federal Clean Air Act, as amended, and the authorities and responsibilities of which are delegatable to the state by the United States Environmental Protection Agency. Such rules may include any and all enforceable ambient standards, emissions limitations, and other control measures, means, techniques, or economic incentives such as fees, marketable permits, and auctions of emissions rights as provided by the Act. The Department shall develop and implement such federal programs if the Department determines there is a benefit to the state.*

**Permitting fees:** Section 110(a)(2)(L) requires SIPs to include a requirement for each major stationary source to pay permitting fees to cover the cost of reviewing, acting upon, implementing and enforcing a permit until such fee requirement is superseded by EPA approval of a fee program under Title V of the Clean Air Act.

NDAC 33-15-23, Fees, establishes fees for processing Permit to Construct applications, annual operating fees for minor sources and fees for major sources under the Title V Permit to Operate program. These fees are used for reviewing, approving, implementing and enforcing a permit. The authority for the fees is found in NDCC 23-25-04.2.

*NDCC 23-25-04.2. Fees – Deposit in operating fund: The Department by rule or regulation may prescribe and provide for the payment and collection of reasonable fees for the issuance of permits or registration certificates. The permit or registration certificate fees for the issuance of the anticipated cost of filing and processing the application, of taking action on the requested permit or registration certificate, and conducting an inspection program to determine compliance or noncompliance with the permit or registration certificate. Any moneys collected for permit or registration fees must be deposited in the Department operating fund in the state treasury and must be spent subject to appropriation by the legislative assembly.*

The Department collects fees for reviewing permit applications, annual minor source Permit to Operate fees and Title V Permit to Operate fees. North Dakota's Title V Permit to Operate program received full approval from EPA effective August 16, 1999 (64 FR 32433).

**Consultation/participation by affected local entities:** Section 110(a)(2)(M) requires SIPs to provide for consultation and participation in SIP development by local political subdivisions affected by the SIP.

No other state or local entities are responsible for developing the SIP. Implementation and enforcement of open burning request approvals has been delegated to several local health units. The Department retains responsibility for ensuring adequate implementation of all SIP revisions.

No other portions of the SIP have been delegated to other organizations. Regarding SIP and rule revisions, NDCC 23-25-02.6 requires public notice, the opportunity for public comment, and a public hearing. It states: “The advisory council shall hold a public hearing to consider and recommend the adoption, amendment, or repeal of rules, regulations, and standards as provided in this chapter. Notice of such public hearing or hearings must be given by publication of a notice of such hearing or hearings in each of the official county newspapers within the state of North Dakota by at least two publications, one week apart, the last publication being at least thirty days prior to the first hearing. The hearing or hearings must be held in the state capitol in Bismarck and interested parties may present witnesses and other evidence pertinent and relevant to proposed rules, regulations and standards. The advisory council shall consider any other matters related to the purposes of this chapter and may make recommendations on its own initiative to the Department concerning the administration of this chapter.” All public comment and hearings are conducted in accordance with 40 CFR 51.102 and NDAC 28-32 (Appendix B of the SIP).

The North Dakota SIP, Chapter 10, addresses the consultation process the Department will use to coordinate with local political subdivisions that are affected by any SIP revisions. NDCC 23-25-03 requires consultation by stating that the Department shall:

*NDCC 23-25-03.4 – Advise, consult and cooperate with other public agencies and with affected groups and industries.*

Intergovernmental cooperation, Section 10 of North Dakota’s SIP, addresses the process for sharing information and working with other government agencies.

North Dakota has no nonattainment areas. Therefore, consultation with affected entities is not required for transportation conformity or other nonattainment area SIP requirements.

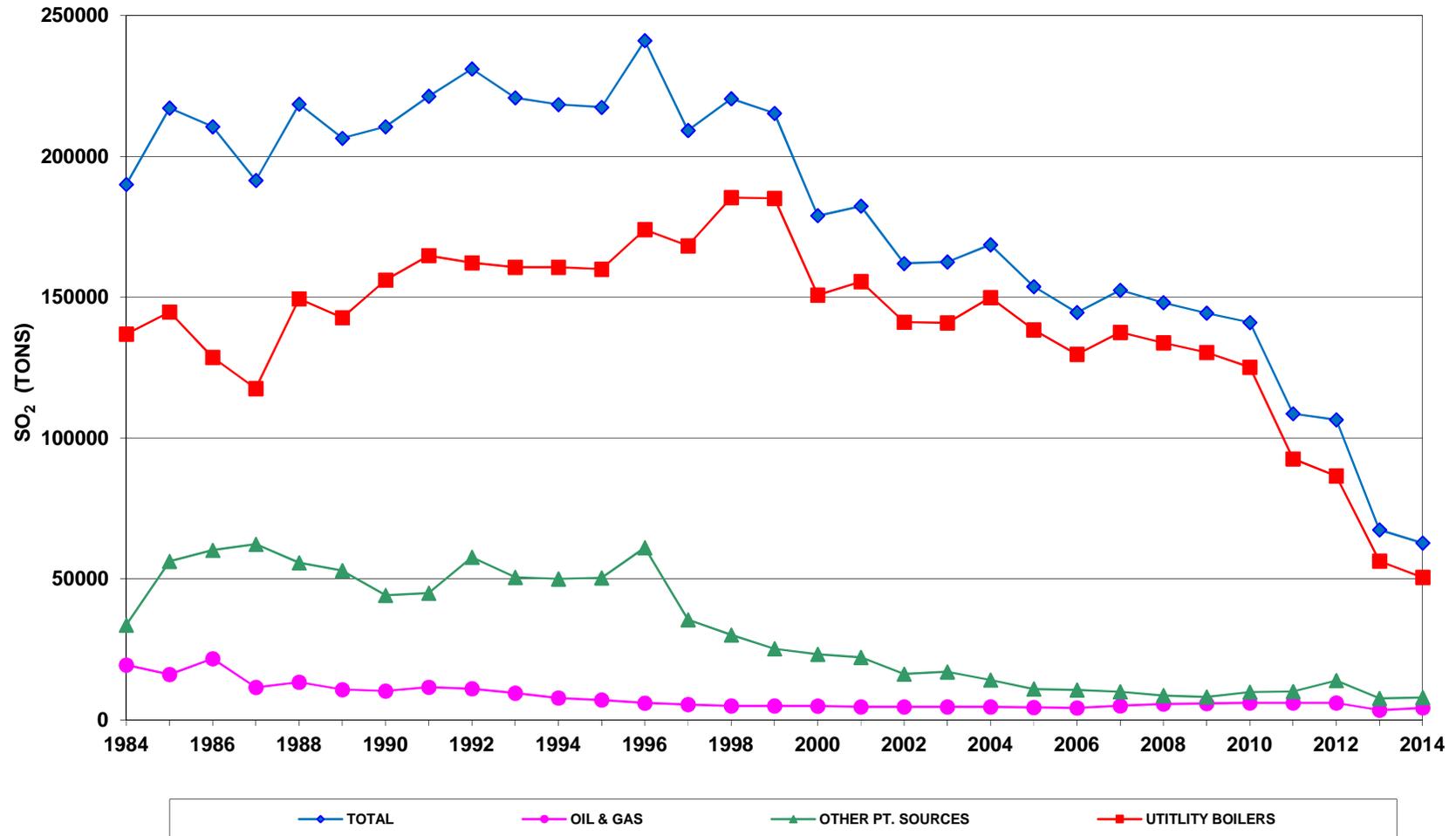
**Conclusion: Based on the information presented above, North Dakota has determined that its state implementation plan is adequate to implement the 2012 annual NAAQS for PM<sub>2.5</sub>.**

#### Attachments

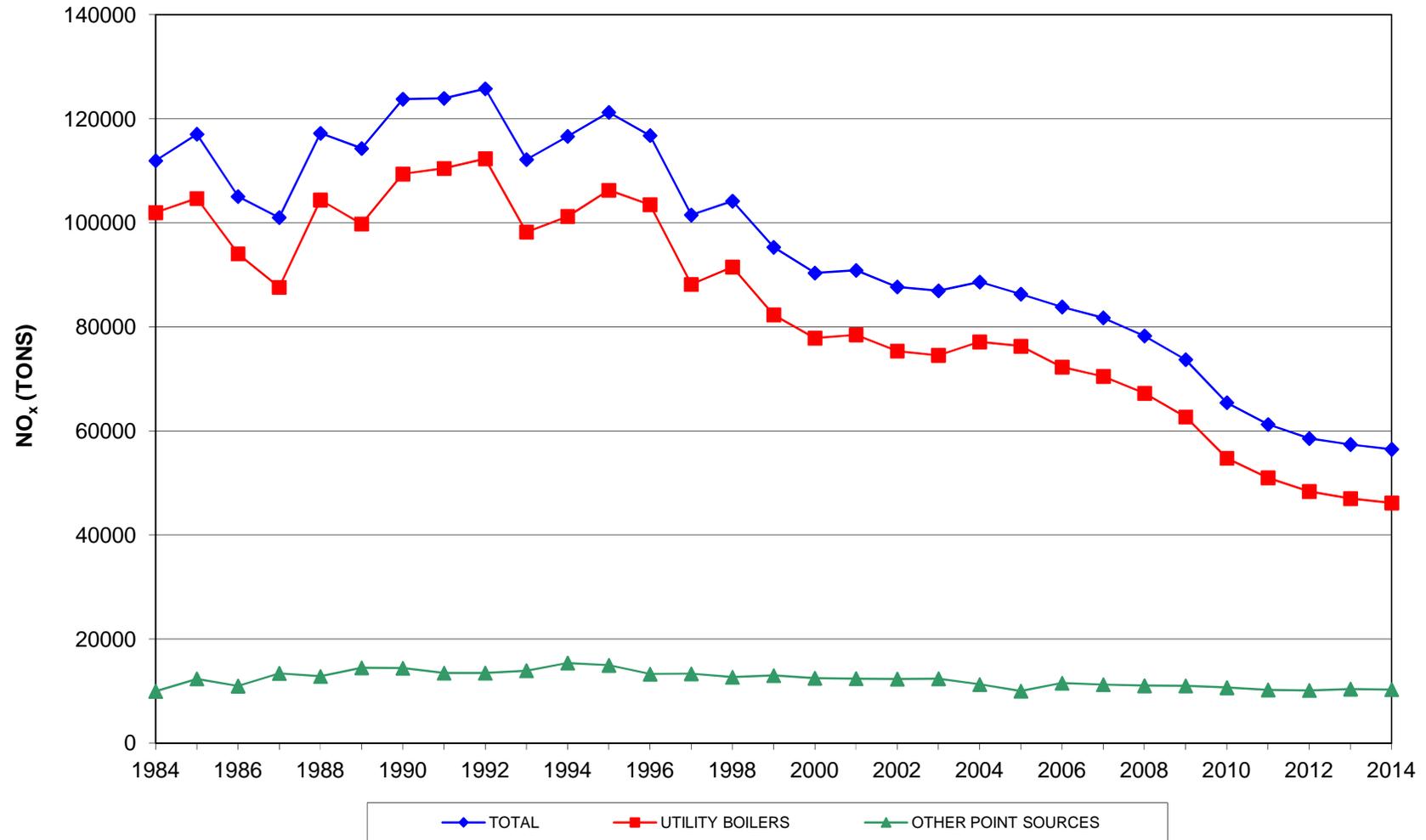
1. SO<sub>2</sub> Emissions Graphs
2. NO<sub>x</sub> Emissions Graph
3. PM Emissions Graph
4. Public Participation Documentation
  - a. Full Public Notice
  - b. Website Notice
  - c. Affidavit of Publication

- d. Invoice of Publication
- e. List of Hearing attendees (No hearing held)
- f. Hearing transcript (No hearing held)
- g. Response to Public Comments (No comments received)
- h. Certification of Hearing (No hearing held)

### NORTH DAKOTA POINT SOURCE SO<sub>2</sub> EMISSIONS



**NORTH DAKOTA  
POINT SOURCE  
NO<sub>x</sub> EMISSIONS**



# NORTH DAKOTA POINT SOURCE FILTERABLE PM EMISSIONS

