1885: The first legislation was passed to prevent pollution of rivers and other sources of drinking water [11]

1945: Passage of the Minnesota Water Pollution Control Act (included creation of the Water Pollution Control Commission (WPCC)) [4], [11]

1962: Minnesota witnessed two catastrophic oil spills:

December 1962: Petroleum Spill at Richards Oil Plant (Savage, MN)

January 1963: Soybean Oil Spill at Honeymead Soybean Products (Mankato, MN) [11]
1962 – 1963 Minnesota River Oil Spills

Image: [Link to Image](https://www.pca.state.mn.us/featured/away-today-m pca-celebrates-50-years)
1966: A study by the Governor's Committee on Air Resources recommended specific legislation in the field of air pollution control [4]

1967: Minnesota Pollution Control Agency (MPCA) was established (3 years before the first Earth Day and the formation of the U.S. EPA) [1]

1968: The MPCA Air Quality Division began in May of 1968 [5]
Governor Harold LeVander (1967-1971)

- Governor Harold LeVander (R) took office January 2, 1967
- MPCA was established under a Republican governor and Republican controlled state legislature
- Other legislation credited to Governor LeVander:
  1. creation of the Metropolitan Council
  2. creation of the country’s first state Human Rights Department
  3. led Minnesota to become the first state to ratify the 26th amendment (which lowered the voting age from 21 to 18) [9]
• The MPCA was originally organized into three divisions: Water Quality, Air Quality, and Solid Waste [4]

• The Air Quality Division was organized into two sections:

  1. Technical Services
     A. Air Monitoring Unit
     B. Data Analysis Unit
     C. Quality Control Unit

  2. Engineering & Enforcement
     A. Engineering (construction and operating permits, air pollution control regulations)
     B. Enforcement (resolving complaints, emissions inventory) [5]
October 1948: Donora, PA

December 1952: London

Central London during the killer smog, December 1952. At this point, visibility is less than 30 feet. During the height of the smog people could not see their own hands or feet, and buses had to be led by policemen waving with flares.

1940’s and 50’s Air Pollution Episodes
1955-1967 Air Quality Federal Legislation

- June 1955: Air Pollution Control Act
- September 1959: Air Pollution Control Act Extension
- October 1962: Air Pollution Control
- December 1963: The Clean Air Act of 1963
- October 1965: The Motor Vehicle Air Pollution Control Act
- October 1966: The Clean Air Act Amendments of 1966
Clean Air Act (CAA) of 1970

• April 22, 1970: The first Earth Day (organized by Sen. Gaylord Nelson, D-Wis)

• December 2, 1970: United States Environmental Protection Agency (US EPA) was created [3]

• December 31, 1970: CAA was signed by Richard Nixon [2]

• Programs established under the CAA of 1970:
  • National Ambient Air Quality Standards (NAAQS)
  • State Implementation Plans (SIPs)
  • New Source Performance Standards (NSPS)
  • National Emission Standards for Hazardous Air Pollutants (pt. 61 NESHAPs)
“I think that 1970 will be known as the year of the beginning, in which we really began to move on the problems of clean air and clean water and open spaces for the future generations of America” [2]

– Richard Nixon
Minnesota’s State Implementation Plan (SIP)

• Minnesota’s SIP is located under 40 CFR pt. 52, subp. Y

• January 28, 1972: Minnesota’s original SIP was submitted to EPA

• A record of Minnesota’s SIP revisions are found under 40 CFR §52.1222. This section includes:
  • Historic designations of nonattainment areas within Minnesota
  • EPA’s acceptance and incorporation of Minnesota air pollution and permitting rules
  • Federal Implementation Plan (FIP) requirements
January of 1972: Noise Pollution Control Section was established within the MPCA Air Quality Division in response to numerous noise complaints [5]

Minnesota regulations for noise control are still found in Minnesota Administrative Rules at Minn. R. ch. 7030
Minnesota Statewide Point and Area Source Emissions

1972 Point and Area Source Air Emissions

Emissions Inventory 1972 vs. 2016

Reference [5]

References [5], [10]
September 1973: Transportation Control Section was established within the MPCA Air Quality Division to coordinate vehicle emission and transportation control strategies in the Twin Cities. [5]

Transportation control plans for various regions across the state have been submitted in the State Implementation Plan (SIP) revisions.
Prevention of Significant Deterioration (PSD)

• 1977: Clean Air Act Amendments (CAAA) of 1977 added Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) requirements [15]

• 1977 - 2017: Minnesota operated a federally-delegated PSD program

• In 2016, Minnesota submitted a SIP Revision to request approval from EPA to operate a federally-approved state PSD program

• September 26, 2017, EPA approved Minnesota’s PSD Program [82 FR 44736]
Clean Air Act Amendments (CAA) of 1990

• November 15, 1990: CAAA of 1990 signed into law by President George H. W. Bush [12]

• Titles under the CAAA of 1990:

  Title I: National Ambient Air Quality Standards (NAAQS)

  Title II: Mobile Sources

  Title III: Toxics

  Title IV: Acid Deposition (Acid Rain)

  Title V: Permits

  Title VI: Ozone

  Title VII: Enforcement
CAAA of 1990 – Operating Permit Program

• CAAA of 1990 established requirements for each state to implement an operating permit program (Title V) by November 15, 1993

• EPA was required to review each state’s operating permit program submission in one year and approve or disapprove it in whole or in part

• Minnesota’s operating permit program had to be amended to comply with the new Title V permitting program requirements [7]

Image: http://clipart-library.com/clipart/1297876.htm
Minnesota’s Operating Permit Program

• 1995: EPA granted final interim approval of Minnesota’s Title V permit program

• The following changes needed to be made to Minnesota’s Title V program:
  • Semi-annual monitoring and reports
  • Certain administrative procedures (e.g. amendments to permits)
  • Inclusion of permit terms from 40 CFR pt. 70
  • Permit fee structure
  • Requirement to take action on a minor amendment within 90 days of receipt of a complete application

• 2001: EPA granted final approval of Minnesota’s Title V permit program [6]
Types of Permits Issued in Minnesota

• State Registration Permits
• Capped Permits
• General State Permits (e.g. non-metallic mineral processing)
• Environmental management system (EMS) Permits
• Individual State Permits
• Individual Part 70 Permits
• Part 70 General Permits

https://www.pca.state.mn.us/air/types-air-permits
References

[1] https://www.pca.state.mn.us/about
[14] https://gov.ecfr.io/cgi-bin/text-idx?SID=c8597249e23d299c45571ebfc29b20e&mc=true&node=sp40.4.52.y&rgn=div6
pca.state.mn.us
awma-ums.org/how-become-member
Thank you!

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