



Overview of the Clean Air Act and Air Permitting in Mississippi

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History

- A 1952 episode led to **Britain's Clean Air Act of 1956**, which called for smokeless fuels for home heating.
- In 1955, **U.S. Air Pollution Control Act** gave authority to U.S. Department of Health's Public Health Service (research & training).
- In 1963, **U.S. Clean Air Act** was passed



History

- 1970 Clean Air Act Amendments:
 - Created U.S. Environmental Protection Agency
 - Created National Ambient Air Quality Standards (NAAQS)
 - Primary - public health
 - Secondary - public welfare
 - Forced States to submit Plans for attainment of NAAQS by 1975.
 - How standards will be achieved, maintained, and enforced.

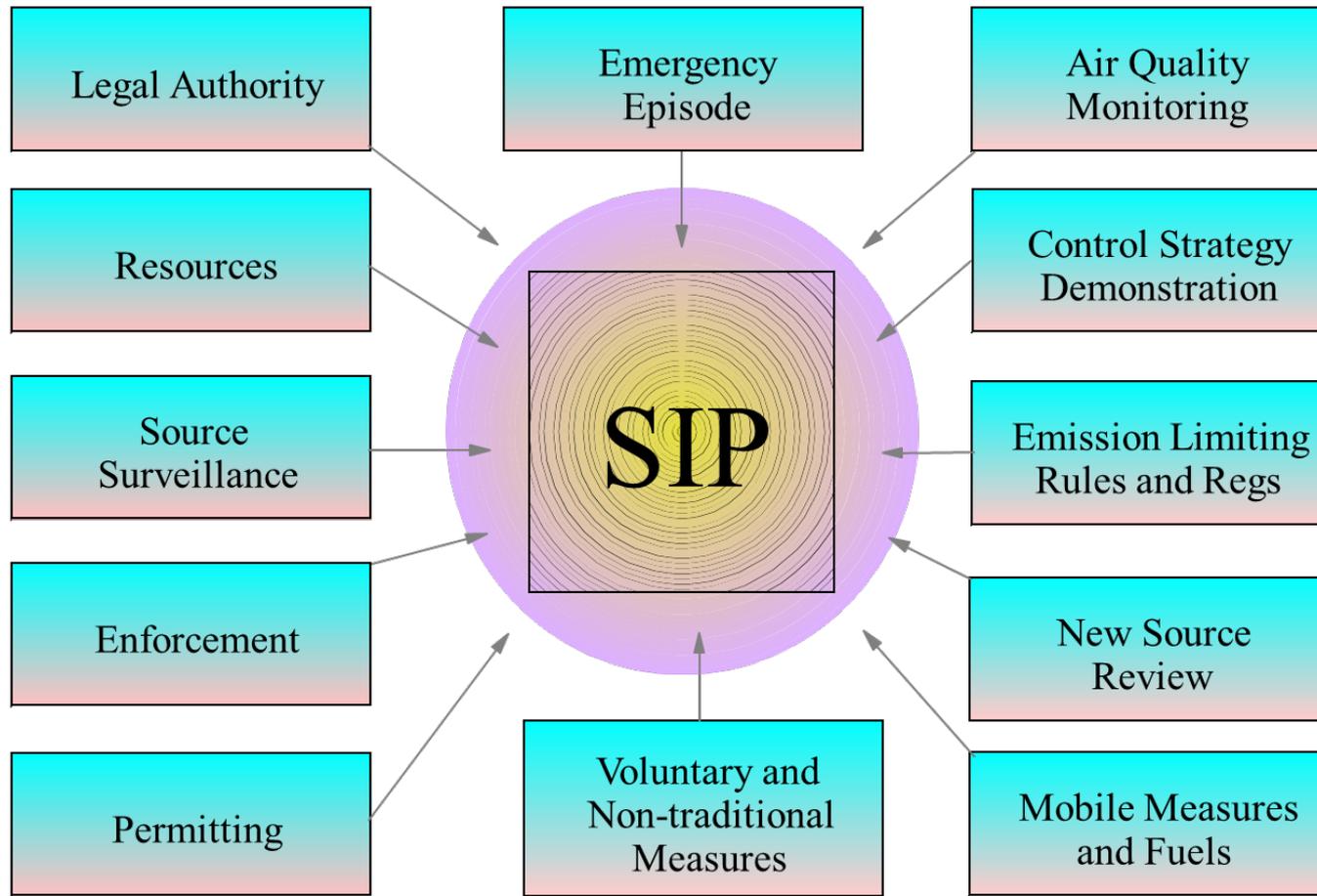


History

- Miss. State Implementation Plan (SIP)
 - Submitted in early 1970's.
 - In 1978, the MS Legislature consolidated five state agencies into the **Department of Natural Resources**.
 - Mississippi Geological Survey
 - Board of Water Commissioners
 - Air and Water Pollution Control Commission
 - Park Commission
 - Mineral Lease Commission
- In the 1989 Legislative session, the **Department of Environmental Quality** was formed
 - (Park Comm. was moved to the Dept. of Wildlife, Fisheries, & Parks)



State Implementation Plan (SIP)



Source: epa.gov



History

Clean Air Act Amendments of 1977

- Established **New Source Review (NSR)** and **Prevention of Significant Deterioration (PSD)**
 - Defines major sources and major modifications
 - Pre-construction review of adequate environmental controls for new facilities or any modifications to existing facilities that would create a "significant increase" of a regulated pollutant.



History

- U.S. Clean Air Act Amendments of 1990, stemmed from concerns about:
 - Warming trends (greenhouse gases)
 - Cooling trends (PM and sulfates)
 - Ozone depletion
- Created **Title V Permitting Program**
(Mississippi TV Program approved in 1995)



National Ambient Air Quality Standards (NAAQS)

- Established by the [Clean Air Act](#), modified over the years
- “Criteria Pollutants” considered harmful to public health and the environment
 - [Primary standards](#) provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly.
 - [Secondary standards](#) provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.



National Ambient Air Quality Standards (NAAQS)

Pollutant [final rule cite]		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide [76 FR 54294, Aug 31, 2011]		primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead [73 FR 66964, Nov 12, 2008]		primary and secondary	Rolling 3 month average	0.15 µg/m ³ ⁽¹⁾	Not to be exceeded
Nitrogen Dioxide [75 FR 6474, Feb 9, 2010] [61 FR 52852, Oct 8, 1996]		primary	1-hour	100 ppb	98th percentile, averaged over 3 years
		primary and secondary	Annual	53 ppb ⁽²⁾	Annual Mean
Ozone [73 FR 16436, Mar 27, 2008]		primary and secondary	8-hour	0.075 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particulate Pollution Dec 14, 2012	PM _{2.5}	primary	Annual	12 µg/m ³	annual mean, averaged over 3 years
		secondary	Annual	15 µg/m ³	annual mean, averaged over 3 years
		primary and secondary	24-hour	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	primary and secondary	24-hour	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide [75 FR 35520, Jun 22, 2010] [38 FR 25678, Sept 14, 1973]		primary	1-hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: epa.gov



National Ambient Air Quality Standards (NAAQS)

- All monitors in Mississippi meet all the NAAQS.
 - PM, SO₂, NO_x, CO, Ozone and Lead.
- We are only **one of two** states East of the Mississippi River that meet all the Standards.



Mississippi 8-Hour Ozone 2010-2013

Ozone Standard = 75 ppb

County	2011	2012	2013	3-Year Average 2011 – 2013
Bolivar	73	76	65	71
DeSoto	72	74	65	70
Hancock	68	67	63	66
Harrison	74	73	62	69
Hinds	73	68	59	66
Jackson	72	74	66	70
Lauderdale	66	63	61	63
Lee	64	67	61	64



Mississippi Annual PM_{2.5} 2011-2013

PM_{2.5} Standard = 12 µg/m³

County	2011	2012	2013	3-Year Average 2011 - 2013
DeSoto	9.7	9.5	9.6	9.6
Forrest	11.6	11.0	10.2	11.0
Grenada	9.2	9.4	9.3	9.3
Hancock	9.2	9.4	8.0	8.9
Harrison	10.1	9.9	8.8	9.6
Hinds	11.2	10.3	9.7	10.4
Jackson	9.6	9.2	8.9	9.2



Mississippi 24-Hour PM_{2.5} 2011-2013

PM_{2.5} Standard = 35 µg/m³

County	2011	2012	2013	3-Year Average 2011 - 2013
DeSoto	19.2	17.5	20.1	19
Forrest	21.7	20.6	21.2	21
Grenada	21.4	17.6	21.0	20
Hancock	17.0	20.3	15.7	18
Harrison	18.3	20.5	17.6	19
Hinds	21.7	19.1	22.0	21
Jackson	19.8	21.7	19.3	20



Mississippi 1-Hour SO₂ 2011-2013

Sulfur Dioxide Standard = 75 ppb

County	City	2011	2012	2013	3-Year Average 2011 – 2013
Jackson	Pascagoula	21	21	27	23



New Source Performance Standards (NSPS)

- Section 111 of the Clean Air Act authorized the EPA to develop technology based standards which apply to **specific categories** of stationary sources.
 - EX: manufacturers of glass, cement, rubber tires and wool fiberglass.
 - As of 2005, there were approximately 75 NSPS.



National Emission Standards for Hazardous Air Pollutants (NESHAP)

- Section 112 of the Clean Air Act lists 187 Hazardous Air Pollutants (HAPs, or air toxics)
- HAPs are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.
- Post 1990: these standards require application of technology based emissions standards called Maximum Achievable Control Technology (MACT).



MDEQ Mission

To safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation.



Commission on Environmental Quality



Commission on Environmental Quality

Commission Meetings:

Normally held the fourth Thursday of each month.

9:00 AM (unless announced otherwise)

MDEQ, 515 E. Amite ST
Jackson, MS (unless announced otherwise)

To receive meeting notices:
E-mail jbailey@deq.state.ms.us

http://www.deq.state.ms.us/mdeq.nsf/page/About_Commission?OpenDocument

Commission Agendas:		Commission Minutes:	
2014	January 23, 2014 February 27, 2014 April 24, 2014 May 22, 2014 July 24, 2014	2014	no January meeting, did not have quorum. February 27, 2014 March 27, 2014 Meeting Canceled April 24, 2014 Meeting Canceled May 22, 2014 June 26, 2014 Meeting Canceled
2013	February 28, 2013 April 25, 2013 May 23, 2013 July 25, 2013 August 22, 2013 October 24, 2013	2013	February 28, 2013 April 25, 2013 May 23, 2013 July 25, 2013 August 22, 2013 October 24, 2013



Mississippi Environmental Quality Permit Board



Mississippi Environmental Quality Permit Board

Permit Board Meetings:

Normally held the second Tuesday of each month.

9:00 AM (unless announced otherwise)

MDEQ, 515 E. Amite Street,
Jackson, MS (unless announced
otherwise)

To receive meeting notices:
E-mail ksmith@deq.state.ms.us

http://www.deq.state.ms.us/mdeq.nsf/page/About_PermitBoard?OpenDocument





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Thank you for your attention!

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