Mississippi Open Burning Laws and Requirements

MDEQ Local Solid Waste Enforcement Officers Training March 26-27, 2013 Jackson, MS

Mississippi Conservation Law

§ 49-17-29(1)(a) ...Prohibitions....

Except as in compliance with paragraph (b)....it is unlawful for any person to cause pollution of the air in the state or to place or cause to be placed any wastes or other products or substances in a location where they are likely to cause pollution of the air. It is also unlawful to discharge any wastes....into the air of the state which exceed standards of performance, hazardous air pollutant standards, other emission standards set by the Commission, or which reduce the quality of the air below the air quality standards or increments established by the commission or prevent attainment or maintenance of those air quality standards. Any such action is hereby declared to be a public nuisance.

Mississippi Conservation Law

§ 49-17-29(1)(b). ...Prohibitions....

It is unlawful for any person to build, erect, alter, replace, use or operate any equipment which will cause the issuance of air contaminants unless that person holds a permit from the Permit Board (except repairs or maintenance of equipment for which a permit has been previously issued), or unless that person is exempted from holding a permit by a regulation promulgated by the Commission......

Mississippi Solid Waste Law

§ 17-17-9. Burning of garbage, etc

No garbage, or rubbish containing garbage or other putrescible materials, or hazardous wastes shall be burned except in approved incinerators meeting the necessary temperature requirements and air pollution controls as now established or may later be established. The open burning of rubbish shall be permitted only under controlled circumstances where sanitary landfill and landfill is not feasible, and not in proximity to sanitary landfill or landfill operations where spread of fire to these operations may be a hazard in the opinion of the controlling agency.

Air Emissions Regulations

Mississippi Air Emission Regulations (APC-S-1) state:

The open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance; and permitted open burning at hazardous waste disposal facilities subject to regulation under Subtitle C of the Federal Resource Conservation and Recovery Act (RCRA).

Air Emissions Regulations

- Fires set for the burning of agricultural wastes in the field and/or silvicultural wastes for forest management purposes must meet the following conditions:
 - (1) A Permit must be obtained from the Mississippi Forestry Commission.
 - (2) The open burning must occur within a time period allowing adequate diffusion of air pollutants as defined by the permit and the daily weather guides issued by the National Weather Forecast Office.
 - (3) Starter or auxiliary fuels may consist of dried vegetation, petroleum derived fuels of the gasoline, kerosene, or light fuel oil types (diesel), or a combination thereof. Use of or burning of other combustible material that causes excessive visible emission (e.g., rubber tires, plastic materials, etc.) is prohibited.

Air Emissions Regulations

- Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones:
 - (1) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
 - (2) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
 - (3) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator



Dioxins

- Dioxins are formed when products containing carbon and chlorine are burned.
- Dioxins are highly toxic, long-lasting organic compounds.
- They are dangerous even at extremely low levels
- Have been linked to several health problems, including cancer and developmental and reproductive disorders.

Dioxins

- How are we exposed to dioxins?
 - Dioxins accumulate in the food chain.
 - Airborne dioxins can settle onto feed crops, which are then eaten by domestic meat and dairy animals.
 - Dioxins also can settle on water or enter waterways through soil erosion.
 - These dioxins accumulate in the fats of animals, and then in humans when we consume meat, fish, and dairy products.

Broader Concerns???

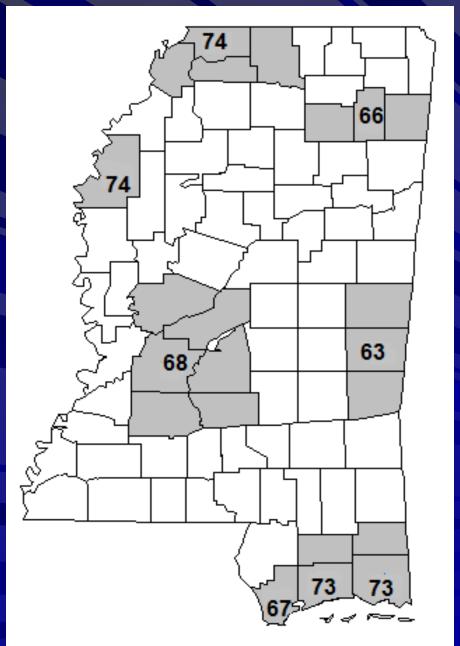
National Ambient Air Quality Standards(NAAQS)

- The Clean Air Act requires EPA to set NAAQS for wide-spread pollutants considered harmful to public health and the environment
- Ozone (O₃), Particulate Matter(PM₁₀, PM_{2.5}), Lead(Pb), Nitrogen Dioxide(NO₂), Sulphur Dioxide (SO₂) and carbon Monoxide (CO)
- All monitors in MS are meeting all the Standards for all pollutants. However, Ozone and PM are close to the standard.
- Also, the Arkansas/Memphis Monitor is exceeding the Standard. Therefore a part of DeSoto County is considered Non-Attainment.

Implications of "Non-Attainment" Status

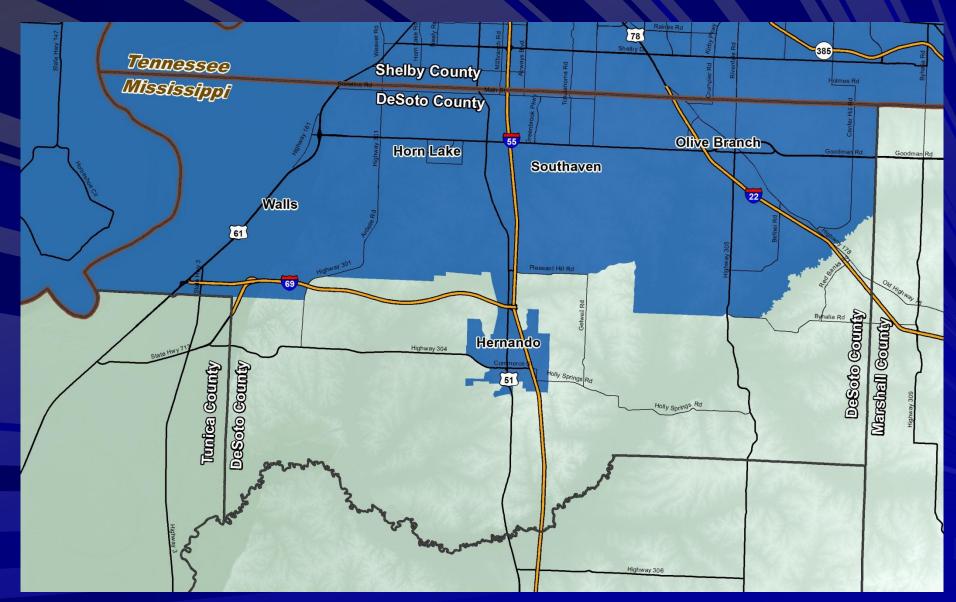
- Potential economic development constraints (e.g., limits to industrial growth)
- Longer & more complicated permitting process
- Potential transportation improvement constraints (e.g., restrictions on highway expansion and development)

2010-2012 8-Hour Ozone Design Values (ppb)

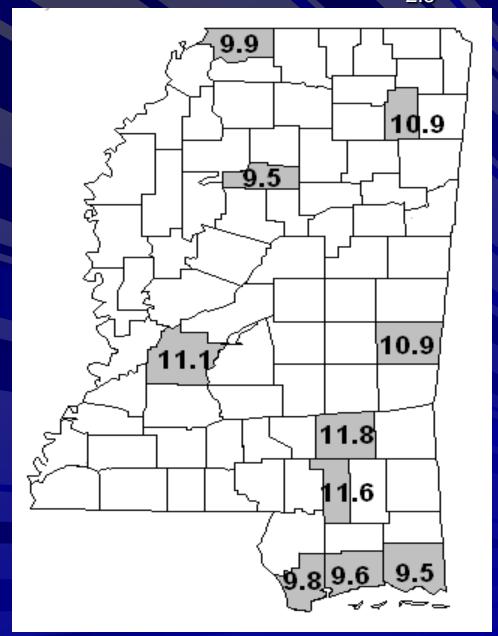


Current Standard = 75 ppb New Standard Proposal Date: Dec 2013

DeSoto County Partial Ozone Nonattainment Area



2009-2011 Annual PM_{2.5} Design Values



Standard = 12 ug/m^3

Some Sources of PM_{2.5}

- Sulfate
 - Oil and Coal-Fired Boilers
 - Small CombustionSources
- Nitrate
 - Highway Vehicles
 - Off-Road Diesel Mobile Sources
 - Fertilizer

- Soil
 - Fugitive Dust
 - Agricultural Operations
 - Industrial Operations
- Combustion Related
 - Diesels
 - Aircraft and Railway
 - Fuel Combustion
 - Open Burning
 - Residential Burning
 - Structural Fires
 - Organic Gases

So What About Homeowners Burning Limbs and Leaves?

- Regulations are not specific on this issue.
 - Is it "Residential Waste"?
- MDEQ Response
 - We believe this is a local government issue
 - These complaints are not being investigated by MDEQ
 - Complaints are being referred to local governments (City, County, Fire Dept.)

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