

EPA'S OZONE ADVANCE PROGRAM

What Participation Could Mean for New Orleans Metro Area

PRESENTATION OVERVIEW

- Ozone Basics
- What is the attainment outlook for this area?
- Why should attainment areas work to reduce ozone?
- Who can participate?
- What are the criteria for program eligibility?
- What might you get out of participating?
- What does participation mean?



WHAT IS OZONE?

- Ozone is commonly referred to as smog.
- It is not emitted, but forms in the atmosphere under certain conditions
- Volatile Organic Compounds (VOC) + NitrogenOxides (NOx) + Sunlight = Ozone
- In other words, emissions from business and industry + cars + sunshine = ozone



THE CLEAN AIR ACT

- Requires EPA to set National Ambient Air Quality Standards (Standards) for 6 Criteria Pollutants;
- These standards are reviewed every 5 years and revised if necessary to protect health and welfare;
- Two types of standards
 - Primary protects public health
 - Secondary protects public welfare;
- The 6 pollutants are: Carbon Monoxide, Lead, Nitrogen Dioxide, Ozone, Particulate Matter and Sulfur Dioxide



DESIGNATION VS. CLASSIFICATION

- Designation means that the monitored design value for the area does not meet the current ozone standard
- Classification is dependent on the numerical design value and provides the obstacle course and time limit on attaining the standard.

NOTE: Designation historically affects parishes in the MSA where the exceeding monitor resides and emission reduction rules apply in them as well as parishes adjacent to the MSA!



CLASSIFICATIONS AND DEADLINES

- Marginal = 3 years
- Moderate = 6 years
- Serious = 9 years
- Severe = 15 years
- Extreme = 20 years



^{*}CAA Sec. 181. Classifications and Attainment Dates

CLASSIFICATION REQUIREMENTS - MARGINAL

Prescriptive Requirements in Clean Air Act

- Major Source threshold set at 100tpy of either VOC or NOx
- Emissions Inventory submittals required on industrial sources
- New Source Review (NSR) permitting requirements
- Permit Offsets of 1.1 to 1
- Subjects projects to Transportation Conformity
- Subjects projects to General Conformity (federal, non-highway projects)



CLASSIFICATION REQUIREMENTS - MODERATE

Prescriptive Requirements

- Must meet Marginal Requirements and:
- 15% Reduction from Baseline Within 6 Years
- RACT on Major Sources
- ⊚ Gasoline RVP of ≤9.0 psi (State currently conforms except Shreveport)
- Stage II Vapor Recovery previously required May not be needed in future
- Vehicle Inspection/Maintenance Program
- Permit Offsets of 1.15 to 1



COSTS OF NONATTAINMENT ON INDUSTRY

- Non-attainment represents a "red flag" in the site selection process for both new facilities and expansions, especially for manufacturing prospects
- Non-attainment involves a more complex, expensive environmental permitting process that can reduce the competitiveness of existing business and industry
- Once in non-attainment, there is potential risk of significant increases in economic costs (e.g., emissions controls, penalty fees) on industry if air quality does not improve sufficiently over time



ECONOMIC IMPACT TO TRANSPORTATION AND GENERAL CONSTRUCTION

- Transportation and General Conformity is required make sure that highway and construction projects do not impede the progress that the state is making toward achieving cleaner air quality.
- Transportation conformity is required by the Clean Air Act to ensure that federal funding and approval are given to highway and transit projects that are consistent with the air quality goals established by a state air quality implementation plan (SIP).
- Emissions budgets are established and projects must conform to those budgets.



POTENTIAL ECONOMIC IMPACT TO CONSUMERS

- Increased cost to industry translates to increased cost of the products industry produces.
- Migher cost of vehicle inspection stickers due to expansion of I/M program.
- Increased fuel costs.

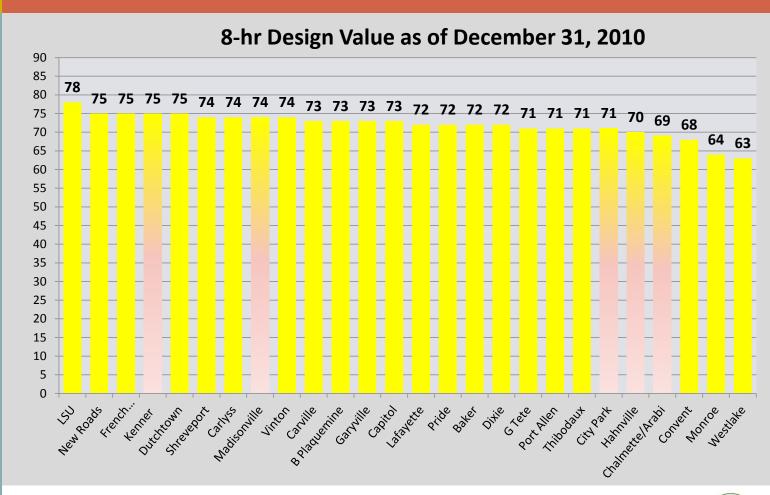


What is the 2008 Ozone Standard

- Air quality in area continues to improve
 - EPA continues to make standard more stringent
 - Imagine a limbo bar...
- 8-hour primary ozone standard to 75 parts per billion (ppb) is protective of human health
 - 1 ppb is equivalent to 1 drop of water in an Olympic sized pool
- Mow is attainment determined?
 - Design Value the 3-year average of the fourthhighest daily maximum 8-hour average ozone concentration measured at each monitor within an area.

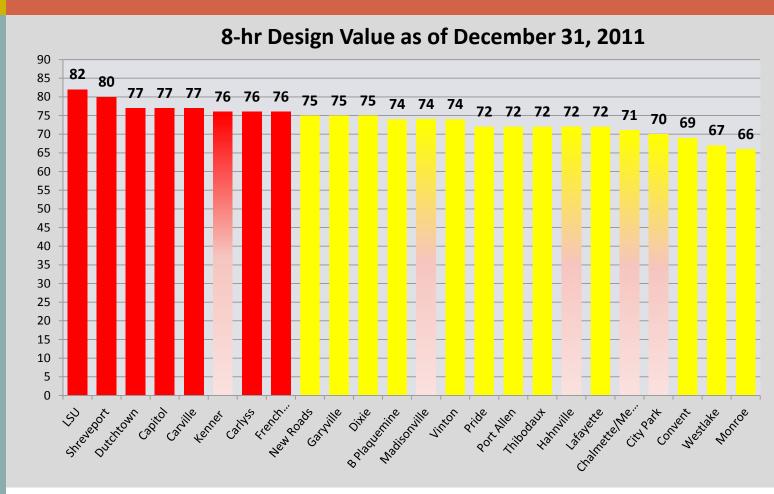


DESIGN VALUE CHART



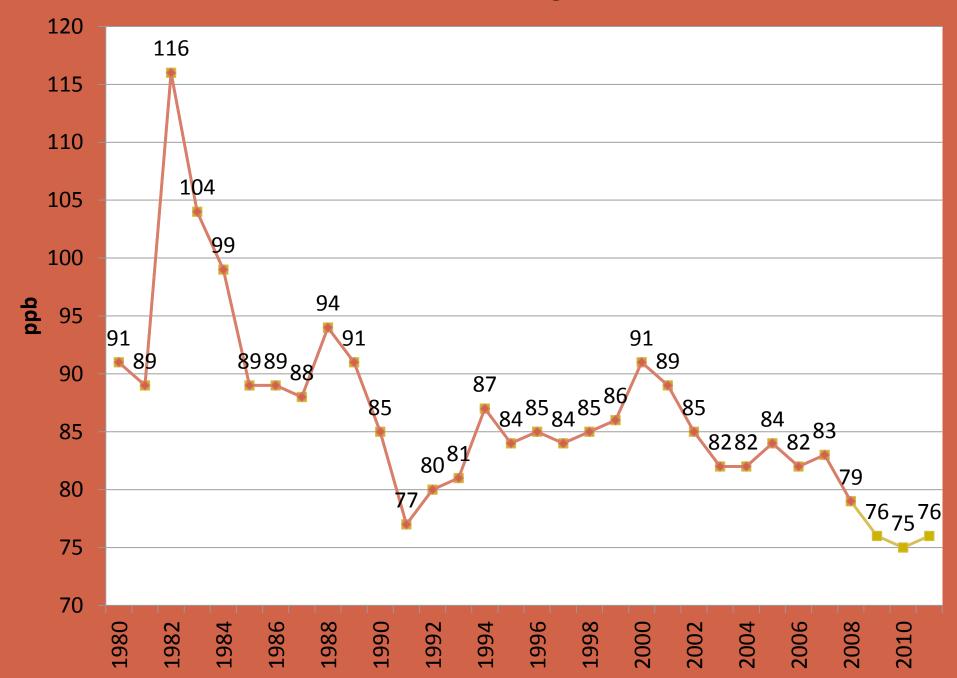


DESIGN VALUE CHART



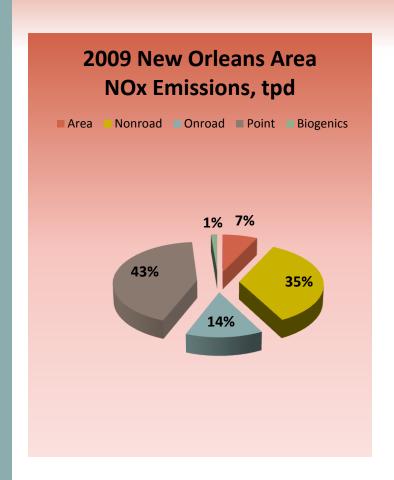


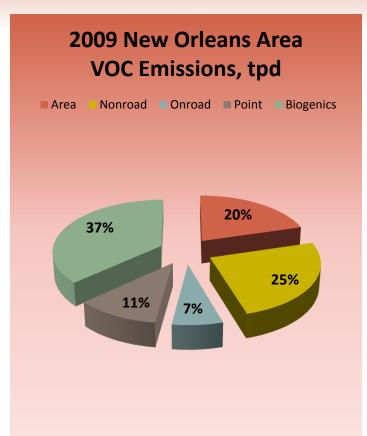
New Orleans Area Ozone Design Values, 8-Hour





JEFFERSON, ORLEANS, PLAQUEMINES, ST. BERNARD, ST. CHARLES, ST. JOHN THE BAPTIST, AND ST. TAMMANY





GETTING BACK TO ATTAINMENT

- Baton Rouge Area rules
 - VOC Controls in DEQ Air Rules Chapter 21
 - NOx Controls in DEQ Air Rules Chapter 22
- DEQ Modeling efforts underway
 - Will help determine if these or other rules would be effective in reducing ozone levels in other areas of the state.
- Federal Rules help address vehicle emissions and fuel formulations



IDEAS FOR EMISSION REDUCTIONS

- Area Sources
- On-road Engines
 - Idling Reduction Policies (Schools and Municipalities)
 - Alternative Fuels and Repowers (Ethanol, biodiesel and natural gas conversions)
 - Bossier City/Parish Natural Gas Conversions
 - School Buses, Public Transport and Utilities Truck Retrofits (Diesel Particulate Filters and Oxidation Catalysts)
 - Caddo Parish DOCs and Caddo Public Schools Buses DPFs
- Non-road Engines
 - Requiring use of lower emitting equipment for local projects
 - KCS and New Orleans Public Belt Railroad Automatic Engine Start-Stop Switches (Emissions Reductions and diesel fuel savings)
- Point Sources
 - DEQ existing rules for VOC and NOx
 - Voluntary actions by industry
 - Consumers using less electricity helps utilities to cut back



OTHER IDEAS

- Ozone Awareness Campaign
 - Meteorologist Training
 - News Spots highlighting ozone



WHAT IS OZONE ADVANCE?

Ozone Advance is a collaborative effort by EPA, states, tribes and local governments to encourage emission reductions in ozone attainment areas, to help them continue to meet the National Ambient Air Quality Standard (NAAQS).



PROGRAM GOALS

- Melp attainment areas take action in order to keep ozone levels below the level of the standard to ensure continued health protection
- Better position areas to remain in attainment
- Efficiently direct available resources toward actions to address ozone problems quickly.



WHY SHOULD ATTAINMENT AREAS WORK TO REDUCE OZONE?

- Ensure continued health protection
- Less resource intensive to implement measures early
- More flexibility to pursue a wide range of options
- Proactive
 - Could better position some areas to stay in attainment
 - If eventually designated, could provide needed reductions that could result in a lower classification and/or that could feed into any eventual SIP
- © EPA could consider early efforts as a factor in exercising for its discretion to redesignate areas not violating in 2008-10 but violating in later years to nonattainment
- Multi-pollutant co-benefits



WHO CAN PARTICIPATE?

- States, tribes, local governments
- © Councils of Government
- Other stakeholders, in conjunction with any of the above
- "Lead"participant?



WHAT ARE THE CRITERIA FOR PROGRAM ELIGIBILITY?

- Area must not be nonattainment for either 1997 or 2008 8-hour standards at the time the they are accepted into the program.
 - Maintenance areas
 - Eventual Marginal areas
- Local entity should generally identify the area
- DEQ will identify the monitor(s) that reflect the area's air quality
- Required emissions inventory reporting should be complete (DEQ handles this)



How do I Participate?

- Submit a letter of intent to EPA prior to initial designations under the 2008 ozone standard
 - Must be received by EPA BEFORE July 20, 2012
 - Copy LDEQ on your submittal
- Submit to:

Environmental Protection Agency

Office of Air Quality Planning and Standards (OAQPS)

Attention: Laura Bunte – Ozone Advance Program C304-01

109 TW Alexander Drive

Research Triangle Park, NC 27711

OR via email to: <u>ADVANCE@epa.gov</u>

DEQ will provide a letter template



WHAT DOES PARTICIPATION MEAN FOR YOU?

- Work to Develop a "path forward" plan within a year
- Plan should
 - Use best efforts to move quickly toward identifying steps that may reduce ozone levels
 - Implement path forward, measures/programs as soon as possible
 - Collect information as to plan effectiveness
 - Informal status check-ins with EPA at least annually



WHAT MIGHT YOU GET OUT OF PARTICIPATING?

- EPA support
- Rallying point for public/stakeholder awareness and involvement
- Framework for action
- Preferred status for DERA grants, see <u>www.epa.gov/cleandiesel/prgnational.htm</u>
- Possible recognition
- Opportunity to highlight measures/programs already underway along with those undertaken as part of Program
- Stakeholder group formation, engagement



QUESTIONS ABOUT OZONE ADVANCE

DEQ

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QUESTIONS ABOUT OZONE ADVANCE

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QUESTIONS ABOUT MOBILE SOURCES

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