

July 24, 2014

Ozone Advance
c/o Laura Bunte, Mail Code C304-01
U.S. Environmental Protection Agency
Office of Air Quality Planning & Standards
109 TW Alexander Drive
Research Triangle Park, NC 27711

Dear Ms. Bunte,

Lafayette City-Parish Consolidated Government (LCG), would like to submit the following Path Forward letter as required by participation in the U.S. Environmental Protection Agency's Advance Program for Ozone and Particulate Matter. The document will describe and detail the actions and initiatives being undertaken by LCG and the Lafayette Utilities System (LUS) to monitor, control, and reduce volatile organic compounds (VOCs) and oxides of nitrogen (NOx) emissions in the Lafayette area.

Background

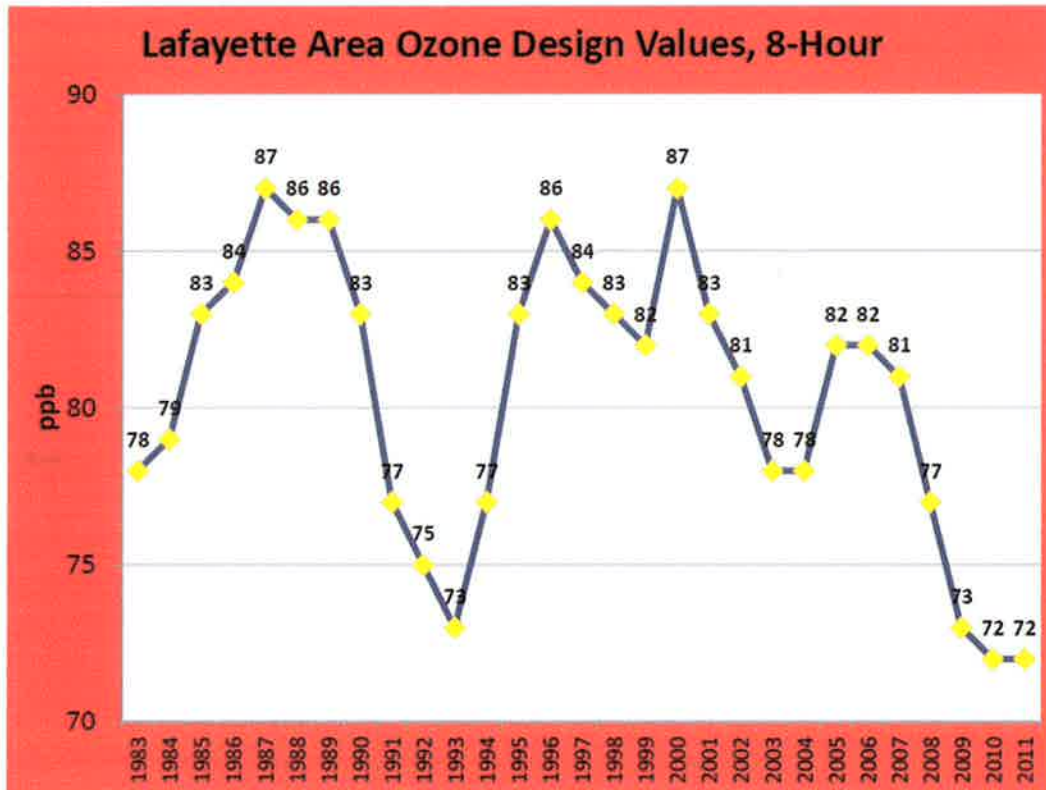
As you know, ground level ozone is created when VOCs and NOx are emitted from businesses, industries, and vehicles and the chemicals react with sunlight. The highest concentration of this ozone occurs on days with high temperatures and limited or no cloud cover. Ozone has been widely shown to cause health and respiratory problems, especially in children, people with existing lung conditions, people who are active outdoors, and older adults.

The Lafayette area has a humid subtropical climate classification. From 2011-2013, the area has received an average of 53.13 inches of annual precipitation. The area has had six days with temperatures over 100 degrees Fahrenheit and 75 days with temperatures between 95 and 99 degrees Fahrenheit. Days with those temperature levels put the area at risk for harmful levels of ozone creation.

The Lafayette area is monitored for ozone and particulate matter smaller than 2.5 micrometers (PM_{2.5}) at the Lafayette USGS station, EPA AQS Number 220550007.

Figure 1 shows the fluctuations in ground-level ozone for the Lafayette area. After spiking in the 80s, 90s, and 00s, levels of ozone formation have started a significant downtrend trend.

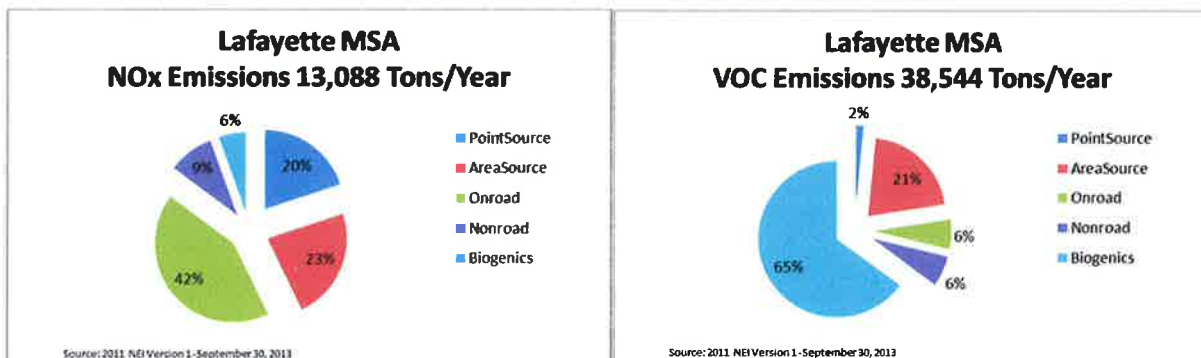
Figure 1.



Local Factors Contributing to Ozone Formation

LA Department of Environmental Quality has identified several factors in the Lafayette area that contribute to ozone formation. Lafayette is the location of the intersection of Interstate 10 and Interstate 49/US Highway 90 and the city is a central location for major distribution centers. There are three operating railways and a regional airport. Lafayette’s economy is primarily based on medical services, air transportation, trucking, offshore food services and retail trade. Area VOC and NOx sources include bulk gasoline, agricultural fires, gas stations, industrial processes, and solvent use.

Figure 2.



Voluntary Actions to Reduce Emissions

LCG has several initiatives and programs that have helped to reduced emissions in the Lafayette area.

1. Compressed Natural Gas – Fleet Conversion and Fueling Station Program
2. Intelligent Transportation Systems
3. Traffic Signal Synchronization
4. Idle Reduction Program
5. Transit Operations
6. Bicycle and Pedestrian Projects
7. Lafayette Utilities System Initiatives
8. Public Awareness of Air Quality

Compressed Natural Gas – Fleet Conversion and Fueling Station Program

Compressed Natural Gas (CNG) is the cleanest burning alternative transportation fuel available today. LCG has undertaken a major effort to provide CNG infrastructure and converting its own fleet to CNG vehicles. The city-parish government owns and operates a fast-fill CNG fueling station that is open 24 hours a day and accepts transactions from both public and private CNG vehicles. Through this program the city-parish has transacted over 100,000 GGE for its own uses and dispensed over 6,000 GGE for private vehicles in FY12-13. For the fleet conversion program, LCG has over 45 cars, trucks and vans converted for dedicated or bi-fuel CNG use. The transit program has 25 CNG transit buses in operations with another four on order.

Intelligent Transportation Systems

Depending on traffic volumes and signal timing, properly managed traffic flow can result in lowering emissions of air pollutants by 10% to 40%. LCG and the state Department of Transportation and Development (DOTD) have worked together to create a regional intelligent traffic network. LCG has deployed significant Intelligent Transportation System elements including a Transportation Management Center and many field devices with communications to help manage traffic within the city limits of Lafayette. The DOTD devices are monitored and controlled from the statewide Transportation Management Center located in Baton Rouge. An inventory of all of the Intelligent Transportation System elements employed in Lafayette area is located in the appendix.

Traffic Signal Synchronization

In addition to the Intelligent Transportation Systems elements, the Traffic Signal Operations division within LCG works closely with LA DOTD to synchronize traffic signals within Lafayette Parish. The Traffic and Transportation division maintains and synchronizes the signals in the City of Lafayette directly and maintains a working relationship with DOTD-District 03 traffic engineers to coordinate with the signals outside of the city.

Idle Reduction Program

Idle Reduction technology has been identified as a major aspect of air quality control. LCG has instituted an Idle Reduction policy. The fleet is monitored by an Automatic Vehicle Tracking

System that monitors vehicle idling. If a vehicle idles for a certain period of time, an alarm is activated inside the vehicle. The alarm is also noted electronically and sent to the supervisor of the department.

Transit Operations

Public transportation can help metropolitan areas meet national air quality standards by reducing overall vehicle emissions, especially if transit systems utilize alternative fuels that limit ozone formation. Lafayette Consolidated Government's operates the Lafayette Transit bus system throughout the city. The network facilitates approximately 1.5 million trips per year. There are 12 daytime routes and four night rides operated on a pulse system. As noted in the CNG section, most of the system utilizes CNG buses.

Bicycle and Pedestrian Projects

In recent years, Lafayette Consolidated Government has developed a strong commitment to developing bicycle and pedestrian facilities. There have been more than eight miles of new bike lanes and bike paths built in the city-parish since 2000. In addition, the Atakapas-Ishak Trail network has added another six miles of shared road and paths for users with another 19 miles planned. The city-parish's comprehensive plan has also emphasized Complete Streets and other bicycle and pedestrian policies as a major priority for the government.

Lafayette Utilities System Initiatives

Lafayette Utilities System (LUS) is the electricity provider for the city of Lafayette. The LUS Power Production division has evaluated its generation resources for reliability and economics and has temporarily suspended the older, less efficient units from operation. LUS has also recently become part of the Midcontinent ISO energy market which will dispatch units in our region based on a combination of reliability and economics.

Proposed Actions/Programs

Public Awareness of Air Quality

The public is an essential part of lowering emissions. Encouraging voluntary actions by individuals and organizations is one of the easiest and lowest cost ways of improving air quality. For example, the education and outreach program The Clean Air Campaign in Atlanta has worked to remove 1.4 million miles of vehicle travel and keep over 700 tons of pollutants out of the air each day.

Notifications on Ozone Alert days, education on modifying behavior to lower emissions, and warnings for vulnerable populations are all part of the Public Awareness Program. This will be achieved by radio and television advertisements, outreach through schools, and engaging the local media, especially local television meteorologists. There are already several programs in place that would allow Lafayette Consolidated Government to integrate air quality information into them.

Lafayette Consolidated Government is committed to lowering emissions, mitigating ozone formation, and improving air quality for our area. We will continue to work with the Louisiana

Department of Environmental Quality and EPA Region 6 to monitor and refine our efforts. LCG appreciates the opportunity to participate in the Ozone Advance Program and hopes for a continued positive outcome for the future.

Sincerely,

A handwritten signature in blue ink, appearing to read "L.J. Durel, Jr.", with a stylized flourish at the end.

L.J. "Joey" Durel, Jr.
City-Parish President
Lafayette Consolidated Government

LJD/cal/am

APPENDIX: Inventory of LCG/DOTD ITS Architecture

ITS Equipment	Description	Stakeholder	Element Name
LCG Traffic App	There is an app developed by an independent party for the Lafayette area to report road network conditions and locations of incidents based on 911 crash calls.	Private Traveler Information Provider	Private Traveler Information Provider
LCG Webpage	LCG has a website with traffic information. There is a webpage with live camera feeds. Also, there is a webpage for Lafayette Transit Service with real-time transit information, however the information is not reliable because some bus routes shown are not functional.	LCG	LCGTT
Traffic Control Signals	There are 190 signals with fiber connection, TS2 Ethernet, and vehicle detection maintained and operated by the City of Lafayette. 127 of these signals are State owned. There are 3 signals that have railroad preemption	Lafayette Consolidated Government	LCGTT Traffic Signals
	There are 260 signals and 91 beacons maintained and operated by LADOTD District 03.	LADOTD	LADOTD District 03 Traffic Signal System
Closed Circuit Television (CCTV)	The City has 82 CCTV (PTZ) cameras. All are IP Sony Cameras with NetGuard camera controlling and viewing software. The video screening is MJPEG protocol.	Lafayette Consolidated Government	ITS Field Equipment
Count Stations	There are 30 permanent count stations	Lafayette Consolidated Government	ITS Field Equipment
Vehicle Detection	There are 44 Bluetooth vehicle detection sites being used to obtain travel time information. There are also 47 wireless magnetometer vehicle detection systems	Lafayette Consolidated Government	ITS Field Equipment
Highway Advisory Radio (HAR)	HAR provides updates to travelers when they tune in to the radio station. This HAR is currently not functional.	LADOTD	ITS Field Equipment
DOTD CCTV	There are 20 CCTV camera locations with PTZ in the Lafayette area.	LADOTD	ITS Field Equipment
DOTD DMS	There are 7 DMS in the Lafayette area.	LADOTD	ITS Field Equipment
DOTD RVD	There are 15 RVDs within the MPO boundary	LADOTD	ITS Field Equipment
DOTD Traffic Control Signals	DOTD maintains 29 signals and 9 beacons in Lafayette Parish	LADOTD	LADOTD District 03 Traffic Signal System
Way 2 Geaux App	Way 2 Geaux is a free app that can be downloaded on smartphones (Android and iPhone) and it provides audio travel advisories from Louisiana DOTD. This app uses the phone's built-in GPS to stream nearby alerts.	LADOTD	Personal Devices
Louisiana 511	This element provides traveler information service provided by the LADOTD in conjunction with private partner.	LADOTD	Louisiana 511
NIXLE	NIXLE is a system activated by Louisiana State Police during emergencies or extended closures on interstate. Subscribers receive message alerts via email and/or text as they are put out by LSP	LSP	Personal Devices