

# Summary of Recent LDEQ Ozone Orders October 2004

## Overview and Affected Facilities

In response to the recent ozone exceedances in the five-parish area, Governor Blanco announced that the Department of Environmental Quality issued an administrative order to 16 Baton Rouge-area facilities requiring them to install air monitors around their perimeters. Additionally, 6 of the 16 plants will be required to conduct emissions audits to quantify potential sources of ozone causing pollutants. The 16 plants that received an administrative order all emit highly reactive VOCs (HRVOCs). HRVOCs, even in small quantities, can lead to the formation of large amounts of ozone. For the purposes of the Administrative Order, HRVOCs consists of 1,3-butadiene, butanes, ethylene, propylene, toluene, and xylenes.

The 16 facilities required to install air monitors are as follows:

1. BASF Corporation: Ascension Parish
2. Crompton Manufacturing Company: Ascension Parish
3. Shell Chemical Geismar: Ascension Parish
4. Williams Olefins LLC: Ascension Parish
5. Vulcan Chemicals: Ascension Parish
6. DSM Copolymer: East Baton Rouge Parish
7. ExxonMobil Baton Rouge Plastics Plant: East Baton Rouge Parish
8. ExxonMobil Chemical Company: East Baton Rouge Parish
9. ExxonMobil Chemical Baton Rouge Polyolefins: East Baton Rouge Parish
10. ExxonMobil Refinery and Supply: East Baton Rouge Parish
11. Plantation Pipeline Company: East Baton Rouge Parish
12. Dow Chemical: Iberville Parish
13. Syngenta Crop Protection: Iberville Parish
14. Baton Rouge Fractionators Plant 1: West Baton Rouge Parish
15. Placid Refining Company: West Baton Rouge Parish
16. DSM Copolymer: West Baton Rouge Parish

The 6 facilities required to conduct emissions audits are as follows:

1. ExxonMobil Baton Rouge Plastics Plant: East Baton Rouge Parish
2. ExxonMobil Chemical Company: East Baton Rouge Parish
3. ExxonMobil Chemical Baton Rouge Polyolefins: East Baton Rouge Parish
4. ExxonMobil Refinery and Supply: East Baton Rouge Parish
5. Baton Rouge Fractionators Plant 1: West Baton Rouge Parish
6. Placid Refining Company: West Baton Rouge Parish

## **Summary of Recent LDEQ Ozone Orders October 2004**

### **Fenceline Monitoring Requirements**

Facilities are required to submit a plan for a fenceline monitoring program to LDEQ within 45 days of receipt of the Administrative Order. The fenceline monitoring program must be implemented by March 1, 2005. The program must consist of four monitoring stations, located on or near the property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility.

Each monitoring station must be equipped with a continuous total nonmethane organic carbon analyzer, which must be operated year-round. All data must be recorded and submitted to LDEQ as 10-minute averages. The analyzer must be integrated with a summa canister sampler that can automatically collect a 20-minute air sample when the analyzer exceeds a predetermined concentration threshold. Each canister sample must be analyzed via gas chromatography/flame ionization detection for a compound target list approved by LDEQ. All data must be submitted to LDEQ on a monthly basis beginning April 15, 2005. Subsequent data submissions are due on the 15<sup>th</sup> of each month.

The facility must also install a summa canister sampler to collect a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations, or may be installed off-site at a location determined to be in the predominant down-wind direction. The sample must be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana Ambient Air Quality Standards for seven of the Toxic Air Pollutant VOCs are being exceeded. All data must be submitted to LDEQ on a monthly basis beginning April 15, 2005. Subsequent data submissions are due on the 15<sup>th</sup> of each month.

## **Summary of Recent LDEQ Ozone Orders October 2004**

### **Environmental Audit Requirements**

The purpose of the environmental audits for the six facilities specified above is to document all potential sources of releases of HRVOC and to perform testing of certain specified emission sources. An environmental audit and test plan must be submitted to LDEQ within 45 days of receipt of the Administrative Order. The approved audit and test plan must be implemented by December 1, 2004. The results of the audit and testing must be submitted to LDEQ by March 1, 2005.

There are 6 main requirements for the audits and testing:

1. Document all units that handle highly reactive VOCs.
2. Document and quantify HRVOC emissions for all potential release sources of HRVOCs including routine/continuous emission sources, non-routine sources, emergency/safety emission sources, and other HRVOC emission sources.
3. Audit the leak detection and repair (LDAR) program where HRVOC are handled to document that all regulated sources are included, and incorporate missing sources into the LDAR program.
4. Conduct testing or other LDEQ approved methodology to confirm emission estimates for HRVOC transport activities such as loading, unloading, and incoming and outgoing pipelines.
5. Conduct LDEQ approved testing of all flares that handle HRVOC and have a reported destruction efficiency of 98% or greater to confirm that the claimed destruction efficiency is achieved.
6. Conduct sampling of all inlets to cooling towers with potential HRVOC emissions.