



# AWMA - October 2007

## Session 5: More Hot Air

# Baton Rouge Ozone Update

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# Overview

- **Fenceline Monitoring Project**
- **Plans**
- **8-hr Ozone Status**
- **New Ozone Standard**



# Fenceline Monitoring Project

## Background

- **Some ozone exceedance days were showing increases of >40ppb per hour**
- **Texas was experiencing the same and had attributed the increases to HRVOC**
- **DEQ VOC monitors were picking up HRVOC**
- **Fenceline monitors were designed to help locate sources of HRVOC**
- **Orders issued to 15 facilities in BR area**



# Summary of Results

- **Monitoring period: May-1-05 to Dec -31-06**
- **1 million data points per month**
- **Approximately 2,500 samples analyzed**
- **Trigger set points higher than LDEQ monitors**
- **Plants found source about 25% of time**
- **Portion of samples contained HRVOC, especially ethylene and propylene**



## **Results (continued)**

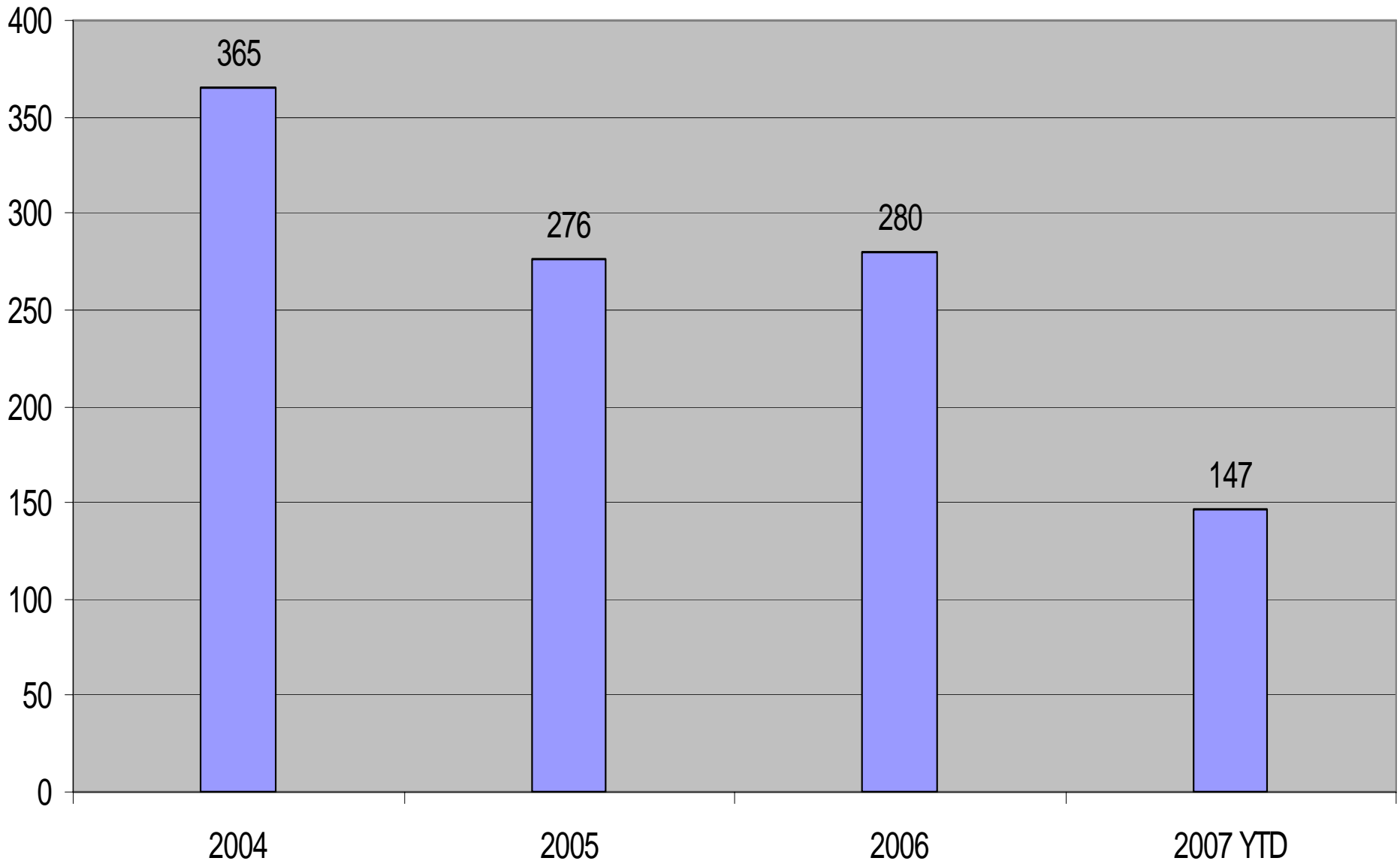
- **Majority of samples contained evaporative gasoline compounds**
- **Monitors picked up large amount of emissions from floating roof tanks, especially during roof landings**
- **Plants attributed some emissions to flares**
- **Plants gained an increased awareness of the effect of operations on emissions**



# Results (continued)

- **VOC strikes at DEQ monitors dropped by 25% (see graphs)**
- **Chapter 39 HRVOC reportable quantities (RQs) declined significantly (see table)**

# Strikes at DEQ Monitors





# Results (continued)

- VOC strikes at DEQ monitors dropped by 25% (see graph)
- Chapter 39 HRVOC reportable quantities (RQs) declined significantly (see table)





## Chapter 39 HRVOC Reportable Quantities: >100 lbs

	Number	Total Amount (lbs)	>1000 (lbs)	>10,000 (lbs)	Largest (lbs)
2004	71	250,000	25	3	66,000
2005	24	80,000	10	3	21,000
2006	29	57,300	11	0	9,800
Thru 10/1/07	22	66,800	7	3	22,300



# Plans

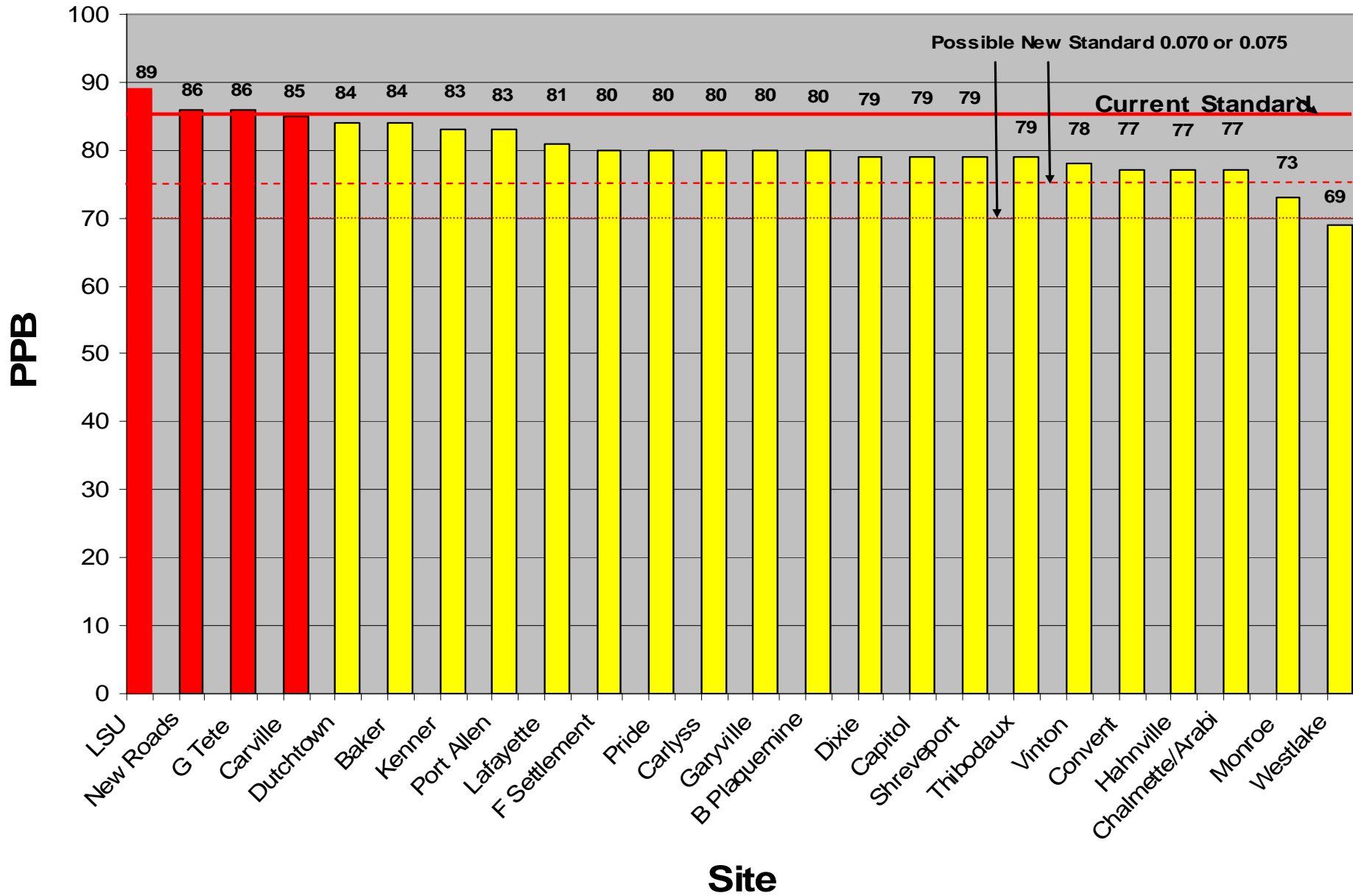
- **One facility will put domes and vent controls on 13 floating roof tanks**
- **Some facilities are evaluating if non-emergency streams can be removed from the flare header**
- **DEQ is considering ‘procedural’ revisions to tank and flare regulations**
- **Will wait for model before considering major rule revisions**



# 8-hr Ozone Status

- **4 monitoring stations in nonattainment**
  - **LSU – April 30**
  - **Grosse Tete – June 22**
  - **Carville – June 22**
  - **New Roads (P Coupee) – May 20**
- **23 exceedances on 14 days**
- **Missed June 15, 2007 attainment date – waiting for bump-up to ‘moderate’ by end of year**

# 8-Hr Design Value as of October 1, 2007





# **New Standard Overview**

- **EPA has proposed revisions to lower the 8-hr ozone standard to the 70 to 75 ppb range.**
- **Also, considering 84 ppb and down to 60 ppb**
- **Revisions reflect new scientific evidence about ozone and its effects on people and the public welfare.**
- **Agency will issue final rule by March 12, 2008.**

# Nonattainment Parishes Under Proposed Ozone NAAQS (0.075 ppm to 0.070 ppm)

2004-2006 Ozone Monitor Data  
June 2007 (OMB)

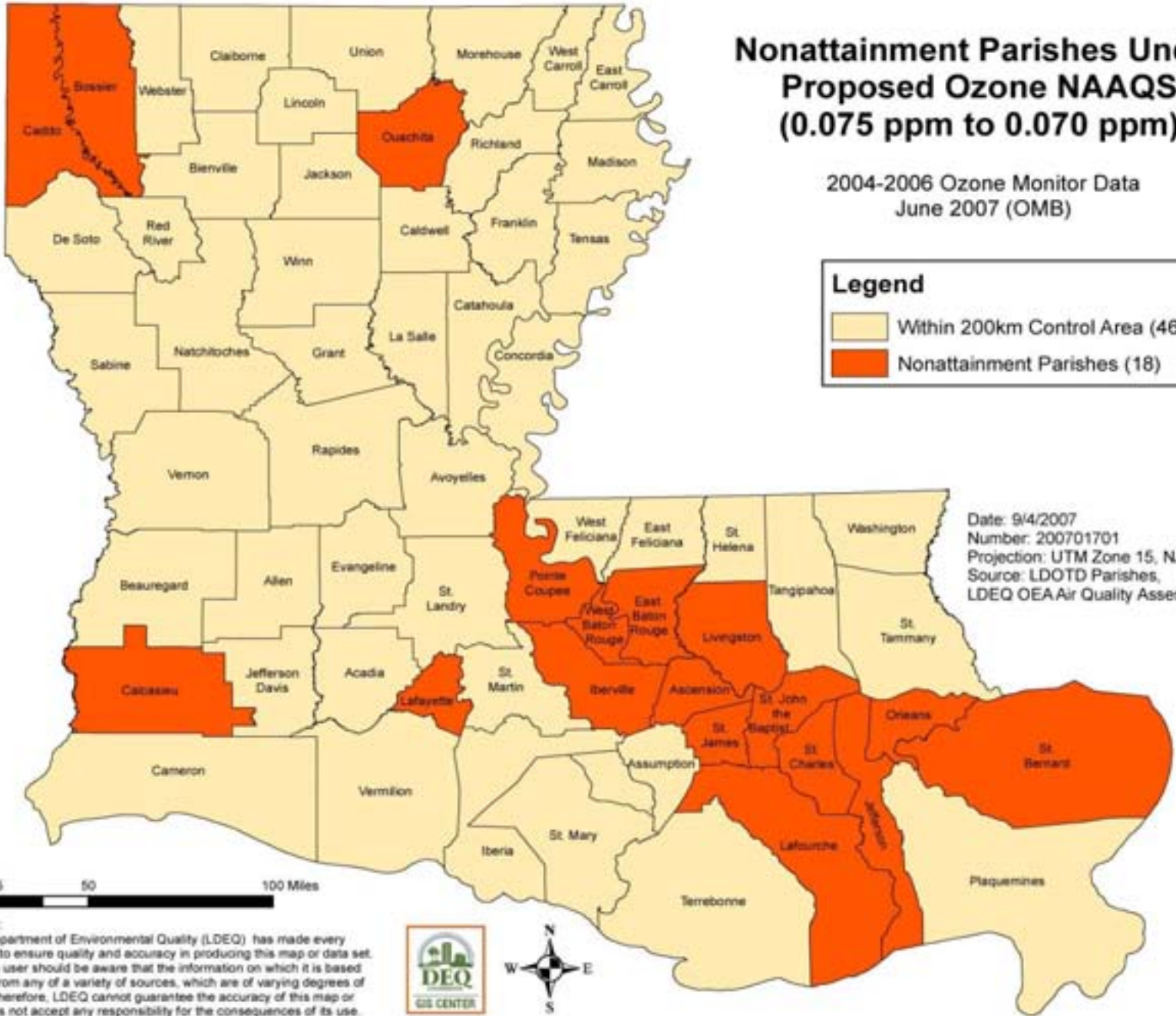
**Legend**

- Within 200km Control Area (46)
- Nonattainment Parishes (18)

Date: 9/4/2007  
Number: 200701701  
Projection: UTM Zone 15, NAD 83  
Source: LDOTD Parishes, LDEQ OEA Air Quality Assessment Data



**LDEQ Disclaimer:**  
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# **Federal Regulations Applied by 2020**

- **CAIR**
- **CAMR**
- **Clean Air Visibility Rule**
- **Clean Air Nonroad Diesel Rule**
- **Light-Duty Vehicle Tier 2 Rule**
- **Heavy Duty Diesel Rule**
- **Locomotive and Marine Vessel Rule**
- **Small Spark-Ignition Engine Rule**



# **EPA Proposal to Apply Known Controls by 2020**

**Applied in nonattainment parishes and parishes  
within 200 km (approx. 125 mi.)**

- Point Sources – maximum controls applied to industrial sources**
- Controls on Area Sources (dry cleaners, bakeries, paint shops, etc.)**
- Mobile Sources – diesel trucks, continuous I/M, eliminate truck idling, commuter programs**



# EPA Projections for Louisiana in 2020 After Application of Known Controls (0.075 ppm to 0.070 ppm)

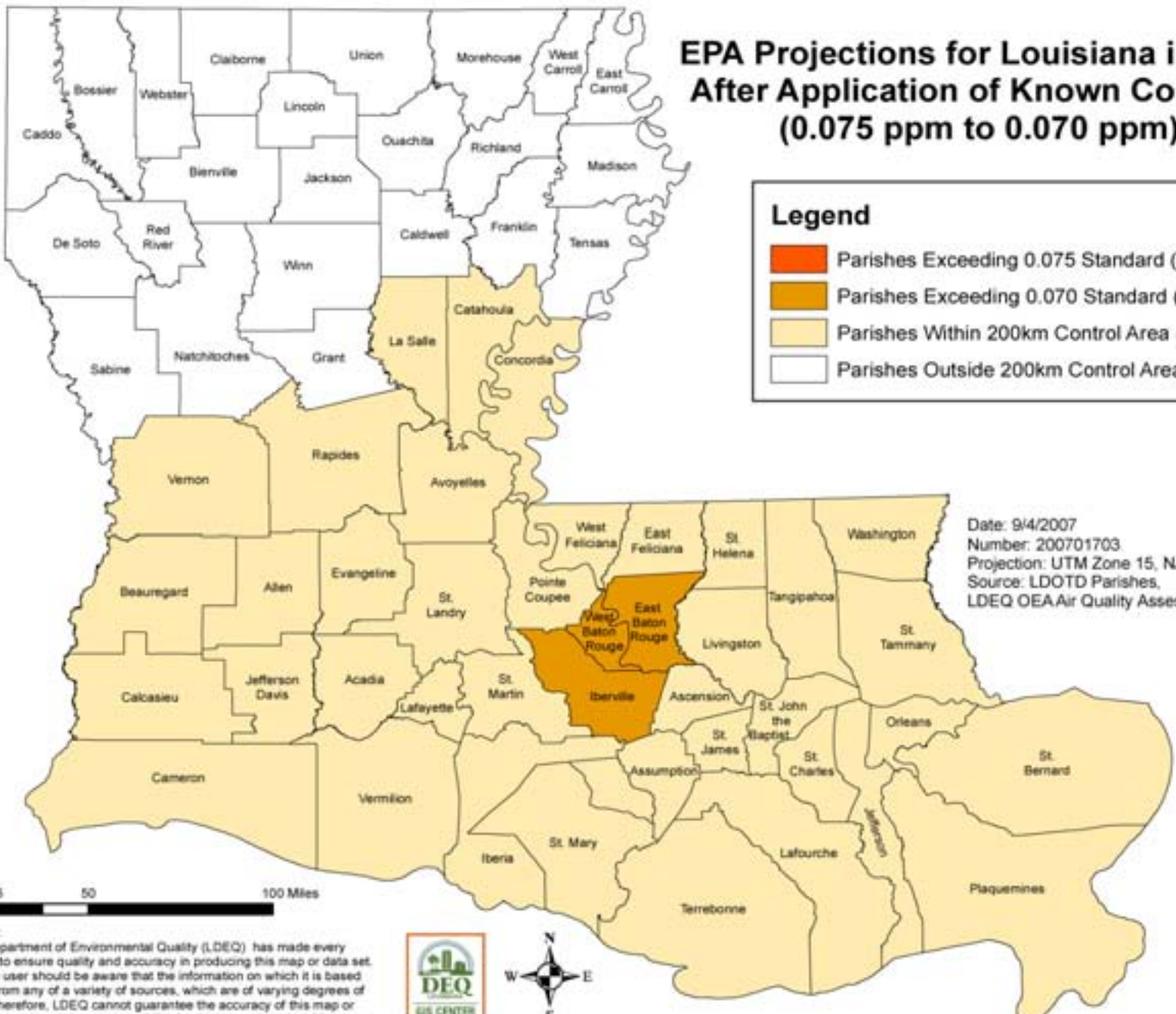
## Legend

- Parishes Exceeding 0.075 Standard (0)
- Parishes Exceeding 0.070 Standard (3)
- Parishes Within 200km Control Area (38)
- Parishes Outside 200km Control Area (23)

Date: 9/4/2007  
 Number: 200701703  
 Projection: UTM Zone 15, NAD 83  
 Source: LDO TD Parishes,  
 LDEQ OEA Air Quality Assessment Data

0 25 50 100 Miles

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# The End

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