Attachment 3

Katrina Air Toxics & Particulate Samples

A total of twenty-three grab air sample canisters have been collected so far in response to hurricane Katrina. Initially, three samples were collected in Washington Parish, three in St. Tammany Parish and four samples in Orleans Parish. Later fifteen samples were collected in St. Bernard Parish. Seven of these samples were collected September 4th, three samples were collected September 5th, and the remaining fifteen samples were collected on September 20th. In addition the ambient air monitoring site in Kenner has been reactivated and it began collection air toxics samples starting Sept. 11, 2005.

All samples were analyzed by GC/MS using EPA method TO-15 for a total of 59 target VOC analytes. In addition a PAMS hydrocarbon analysis by GC/FID is performed to quantify total non-methane hydrocarbons and identify 56 common hydrocarbon species.

The majority of the grab samples have been unremarkable showing concentrations of VOCs at or slightly above normal ambient background levels. None of these samples had concentrations approaching neither any of the Louisiana ambient air standards nor any of the ATSDR MRLs.

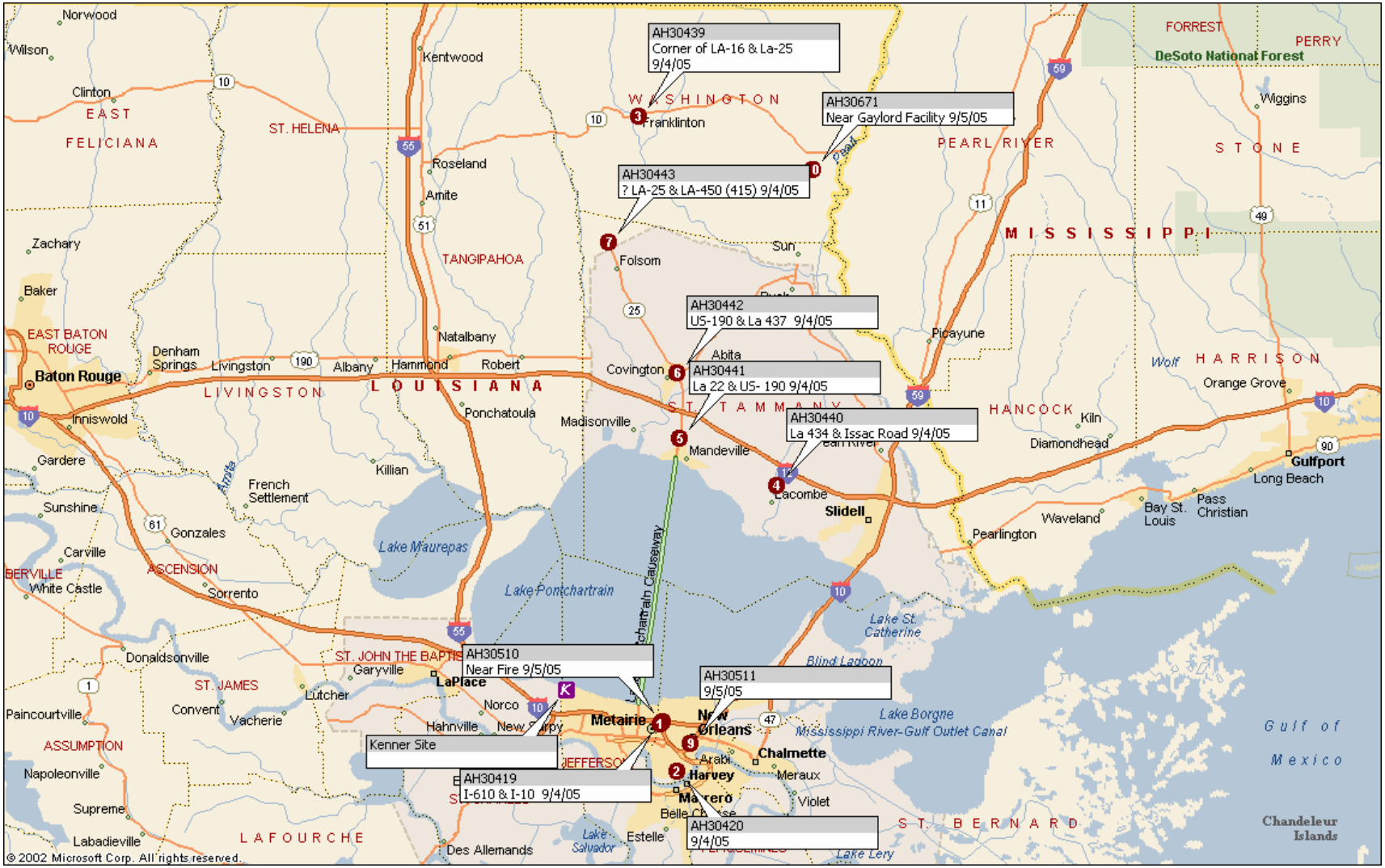
One grab sample collected on Sept 5th near Veterans blvd & West End blvd just north of I-610 was taken near the site of a fire. The sample contained over 21 ppm of total NMOC and just over 56 ppbv of benzene. The benzene concentration in this sample was just over the ATSDR acute MRL for benzene of 50 ppbv. The sample also contained elevated levels of toluene, ethylbenzene & xylenes but none of the concentrations exceeded the acute MRLs. The hydrocarbon profile of the sample resembled gasoline.

Three samples collected in the St. Bernard area also showed slightly elevated levels of Benzene & some other related pollutants but none of these concentrations exceeded the ATSDR acute MRL screening levels. The hydrocarbon profile of the samples resembled gasoline & diesel.

The Kenner site samples so far have been very unremarkable showing the entire target VOCs at or slightly above normal ambient background levels. All of the concentrations were well below what would be expected in an urban area. Since the traffic flow in the area is greatly reduced due to the evacuation this is not unexpected. The PAMS hydrocarbon analysis of the samples have shown some elevated amounts of untargeted compounds which the lab later identified using the GC/MS. The lab tentatively identified these compounds as Methanol and Ethanol. The source of these compounds in the samples is likely either biological or possibly some sampler contamination.

The US EPA has collected several rounds of total particulate samples in both Orleans Parish and in St. Bernard Parish. Because samples were not collected with standard monitors, the mix of particles in the screening samples cannot easily be compared to EPA's standards. However, to provide the public with a point of reference, EPA has compared the results to its Air Quality Index (AQI) for inhalable coarse particles, also known as PM 10. This data comparison showed the particulate concentrations were well below any levels of health concern. The sample results for these samples can be viewed on the EPA web site at the following link http://www.epa.gov/katrina/testresults/air/dataram.html.

Initial Sample Locations



St. Bernard Parish Sample locations