CTEH CENTER FOR TOXICOLOGY AND ENVIRONMENTAL HEALTH, LLC

40355 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Real-time Air Monitoring Results
September 07, 2012

This data report discusses real-time air monitoring data collected between September 6th 06:00 and September 7th 06:00 in support of mitigation and remediation operations conducted near Stolthaven's facility near Braithwaite, LA. At approximately 14:37 on September 6th, instantaneous VOC concentrations rapidly reached 80 ppm during sump pump cleaning operations at Dock 3. Workers egressed the area and additional monitoring was performed. Continued VOC levels were detected, requiring respiratory protection during the short-term (less than 15 minutes) completion of the operations. VOC levels outside the immediate work area were not present in excess of work-site action levels.

Real-time air monitoring for VOCs, LEL, Styrene, and Methyl Acrylate was conducted using stationary AreaRAEs and hand-held instruments such as the MultiRAE, and colorimetric detector tubes. Tables 1 and 2 display data summaries for AreaRAE and handheld data respectively. Appendix 1 shows incident site maps.

Table 1
AreaRAE Summary – September 6th 06:00 to September 7th 06:00

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	LEL	4840	0	0 – 0 %
	VOC	4840	0	0 – 0 ppm
Unit 2	LEL	5070	0	0 – 0 %
	VOC	5070	0	0 – 0 ppm
Unit 3	LEL	5242	144	0 – 0 %
	VOC	5242	46	0.1 – 0.1 ppm
Unit 4	LEL	5317	0	0 – 0 %
	VOC	5317	0	0 – 0 ppm
Unit 9	LEL	4737	125	2.3 – 4.1 %
	VOC	4737	787	0.1 – 2.4 ppm
Unit 10	LEL	5359	63	3 – 3.5 %
	VOC	5359	0	0 – 0 ppm
Unit 11	LEL	3538	0	0 – 0 %
	VOC	3538	0	0 – 0 ppm
Unit 12	LEL	4952	0	0 – 0 %
	VOC	4952	50	0.1 – 0.1 ppm
Unit 13	LEL	3851	0	0 – 0 %
	VOC	3851	0	0 – 0 ppm

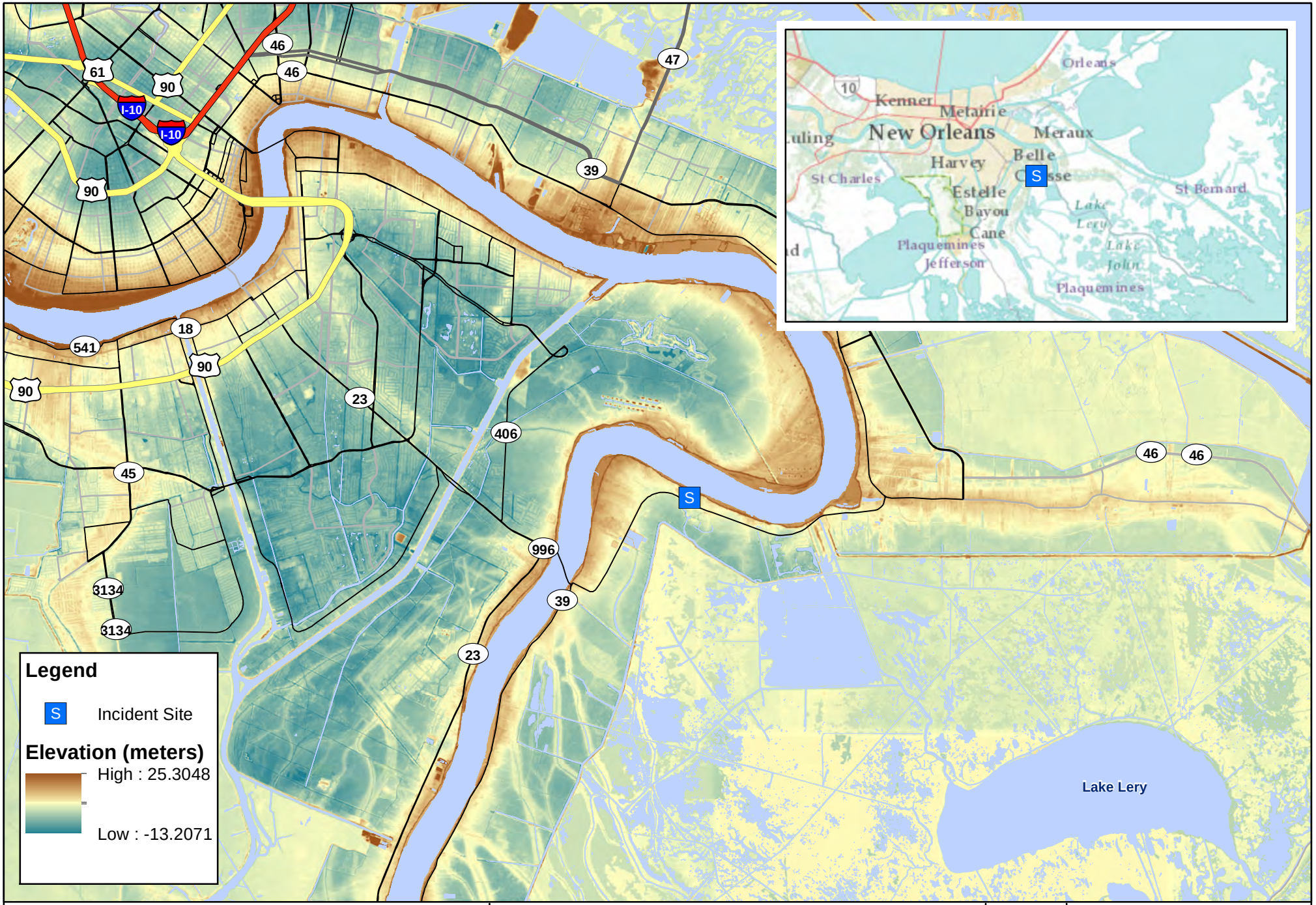
***Detections may include drift events -** Drift is defined as any interference in the electrochemical sensor's ability to accurately report the concentration of a chemical in the atmosphere. Humidity and temperature changes throughout the monitoring period are typical sources of drift.

Table 2
Hand-held Real-time Summary – September 6th 06:00 – September 7th 06:00

Community				
Analyte	**Number of Readings**	**Number of Detections**	**Average Concentration of Detections**	**Highest Concentration**
LEL	168	0	NA	< 1 %
VOC	169	0	NA	< 0.1 ppm
Hot Zone				
Analyte	**Number of Readings**	**Number of Detections**	**Average Concentration of Detections**	**Highest Concentration**
LEL	10	0	NA	< 1.0 %
VOC	40	0	NA	< 0.1 ppm
Work Area				
Analyte	**Number of Readings**	**Number of Detections**	**Average Concentration of Detections**	**Highest Concentration**
LEL	168	0	NA	< 1.0 %
O2	2	2	20.9 %	20.9%
Styrene	1	0	NA	< 0.5 ppm
VOC	290	6	13.6 ppm	80 ppm
Methyl Acrylate	1	0	NA	< 0.2 ppm

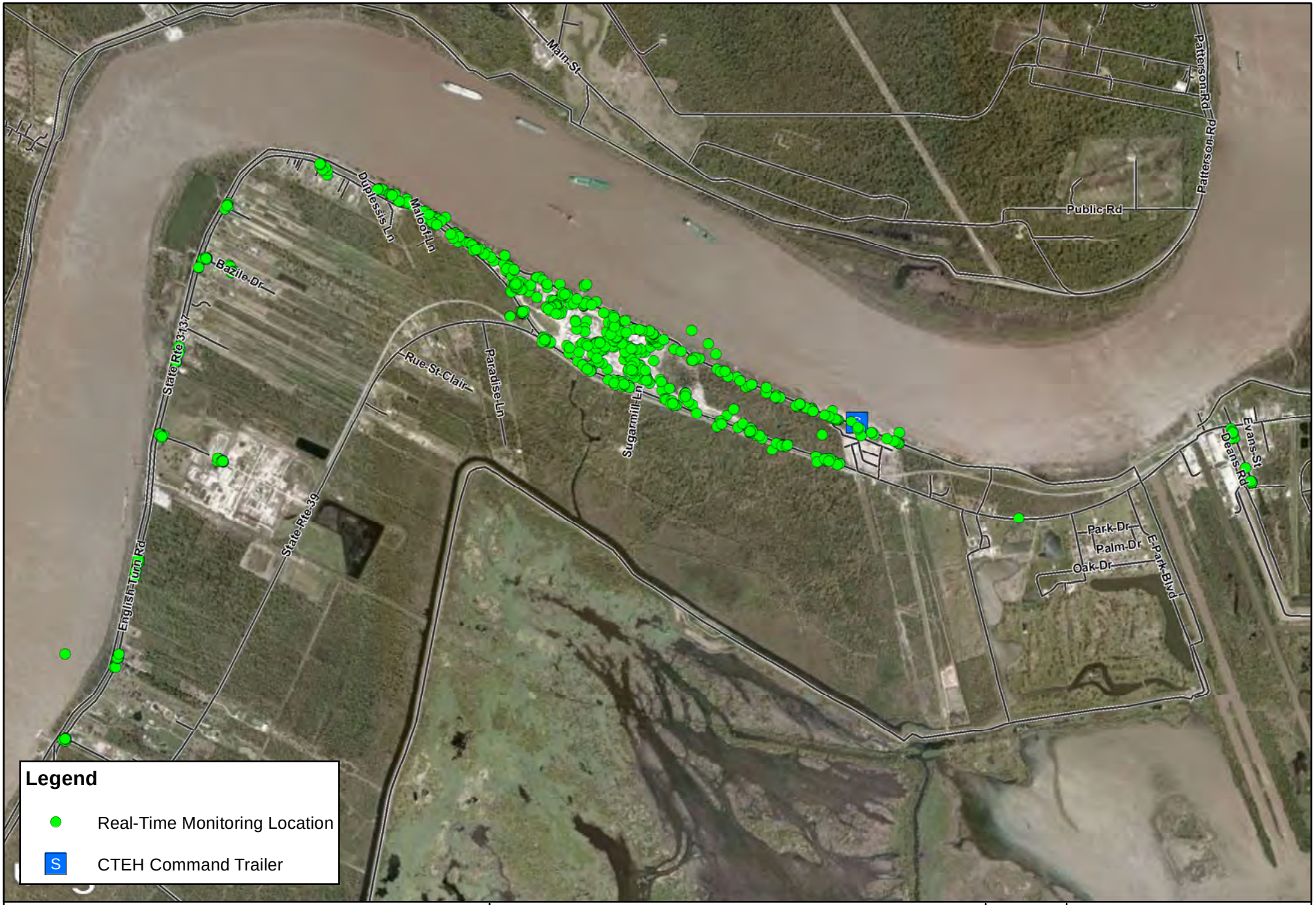
NA = not applicable

Appendix 1:
Incident Maps



Stolthaven Facility Location

CTEH®	Garner Environmental
	Braithwaite, LA
Project No. 40355	St. Bernard Parish
	Print Date: 9/2/2012



Real-Time Monitoring Locations

9/6/12 06:00 to 9/7/12 06:00

0 0.125 0.25 0.5 0.75 1 1.25

Miles

N

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Garner Environmental
Braithwaite, LA
St. Bernard Parish
Print Date: 9/7/2012

Manually-Logged VOC Concentrations 9/6/12 06:00 to 9/7/12 06:00

0 0.125 0.25 0.5 0.75 1 1.25

Miles

N

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Braithwaite, LA

St. Bernard Parish

Print Date: 9/7/2012

Methyl Acrylate Reading Locations

9/06/12 06:00 to 9/07/12 06:00

0 125 250 500 750

Feet

N

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Braithwaite, LA

St. Bernard Parish

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Styrene
Reading Locations
9/06/12 06:00 to 9/07/12 06:00

0 125 250 500 750
Feet

N

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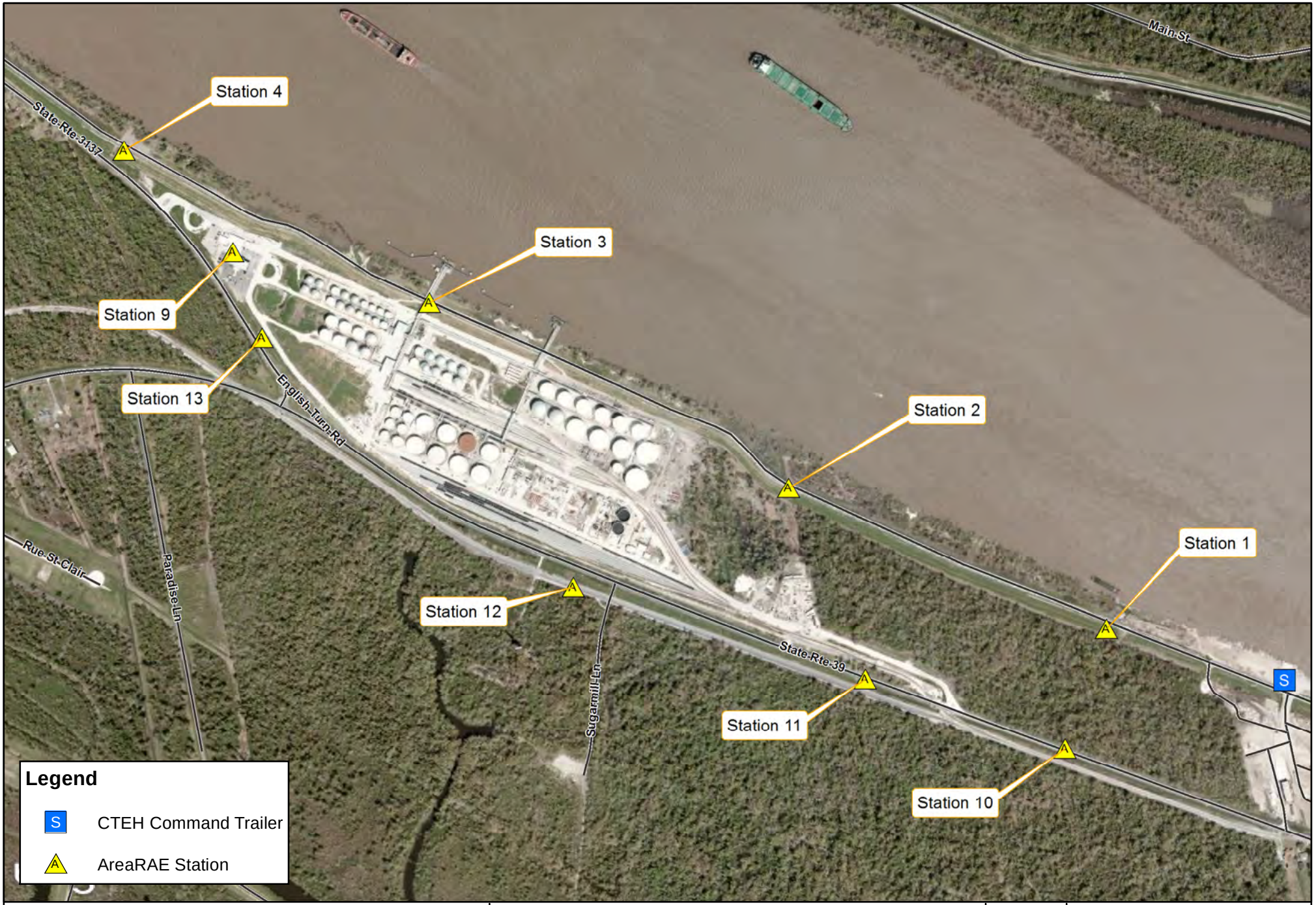

AreaRAE Station Locations

September 06, 2012

0 250 500 1,000 1,500 2,000 2,500

Feet

N

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Braithwaite, LA
St. Bernard Parish
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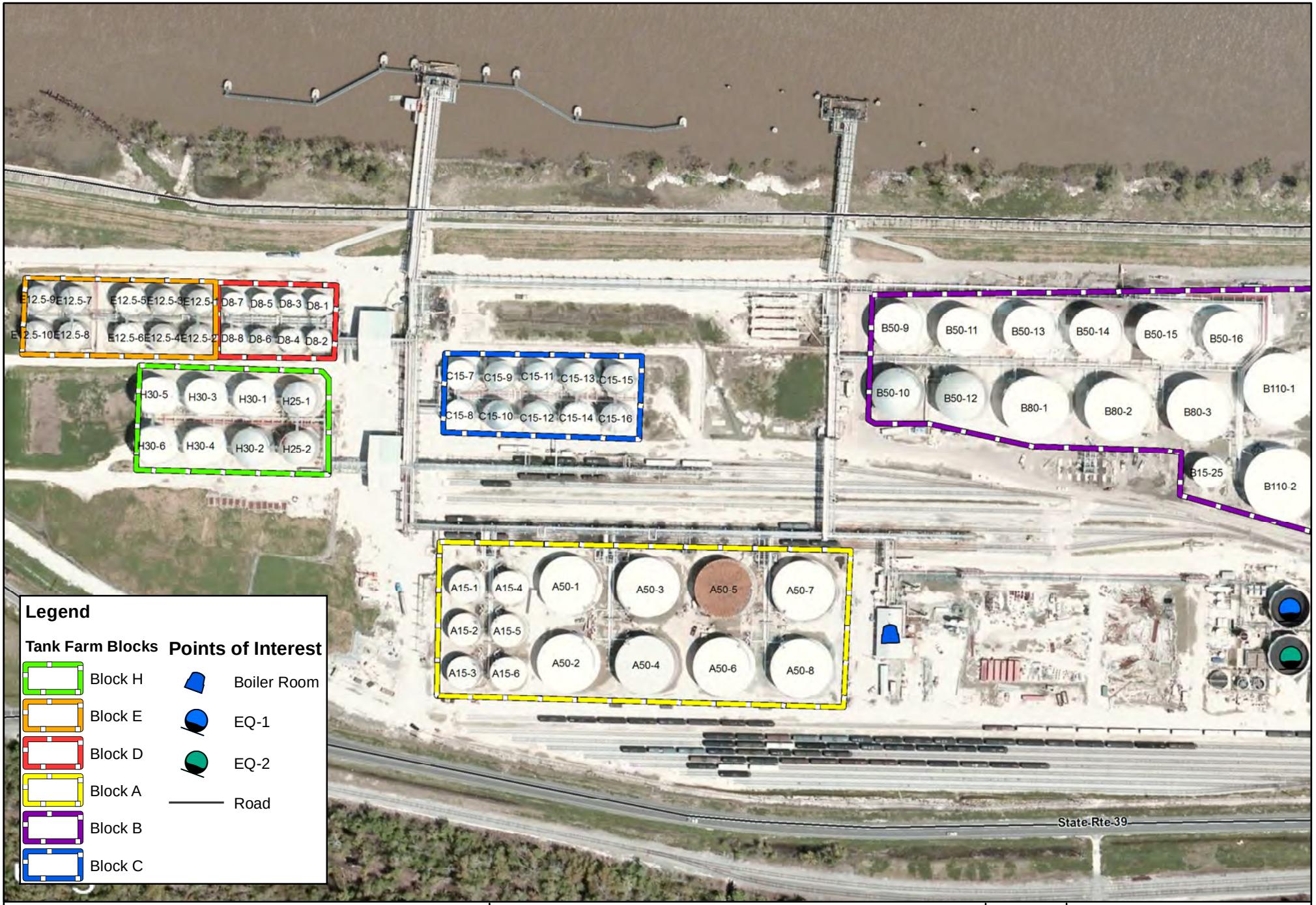

Stolthaven Terminal

0 50 100 200 300 400 500 600

Feet

N

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Garner Environmental
Braithwaite, LA
St. Bernard Parish
Print Date: 9/3/2012