

Appendix A Figures

Figure 1: FEMA Hurricane Katrina Surge Inundation and Advisory Base Flood Elevation Map MS-I11

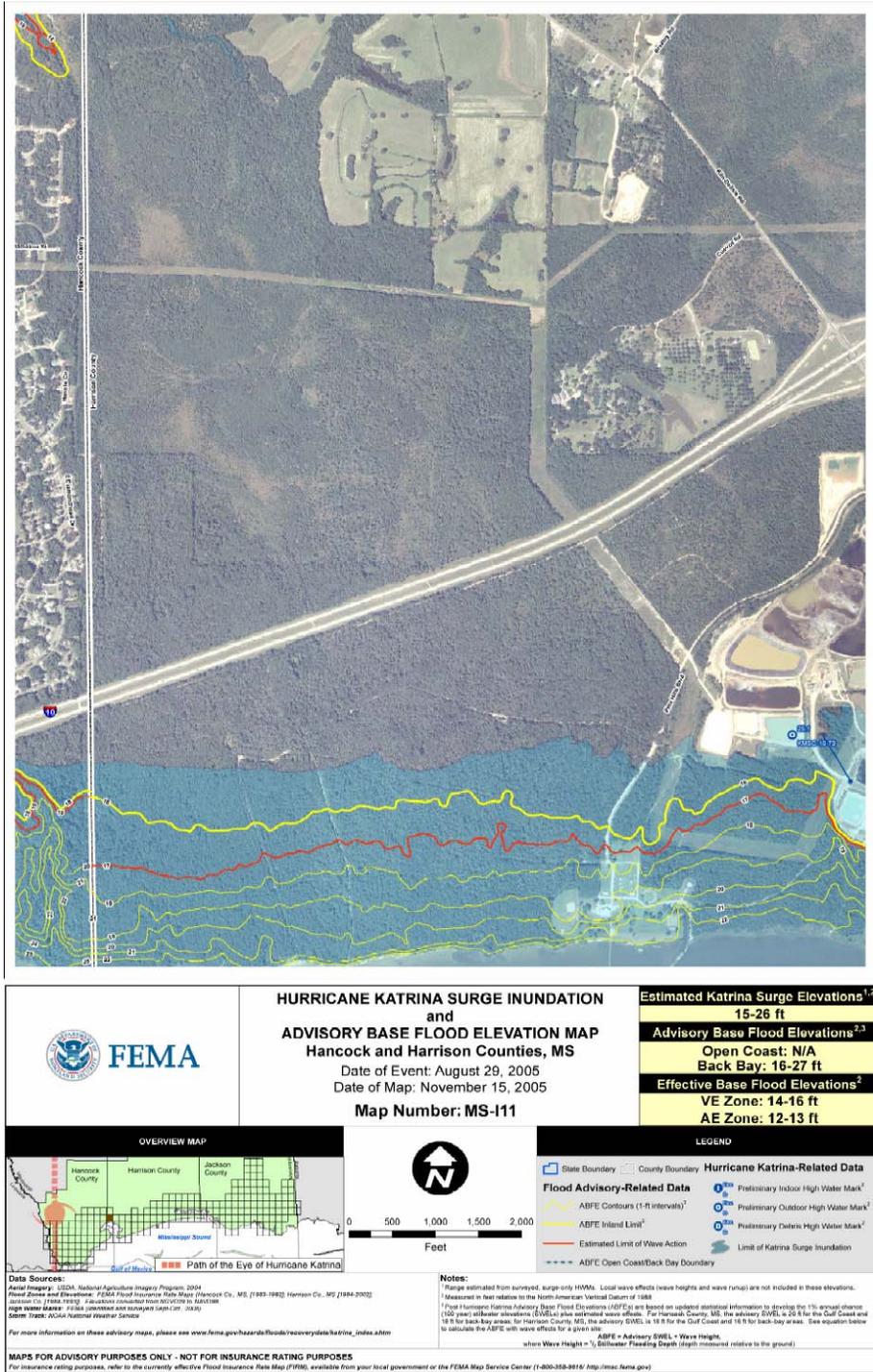
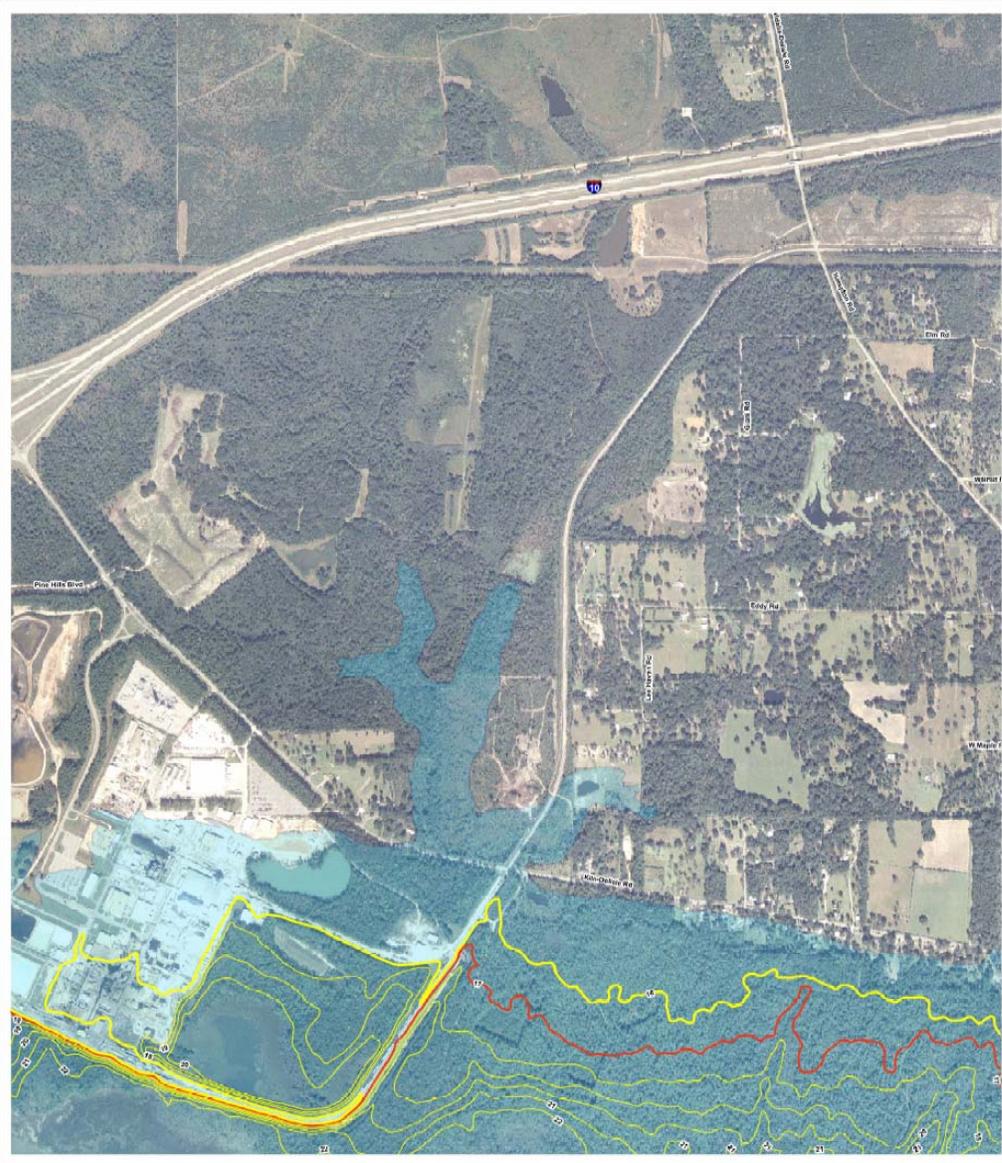


Figure 2: FEMA Hurricane Katrina Surge Inundation and Advisory Base Flood Elevation Map MS-I12



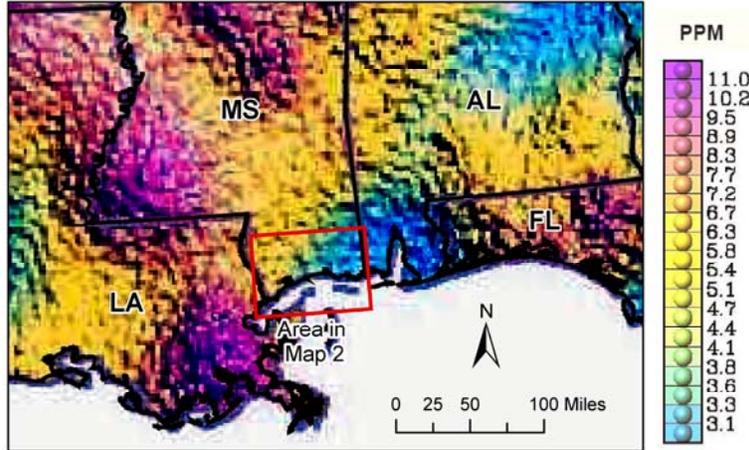
	<p align="center">HURRICANE KATRINA SURGE INUNDATION and ADVISORY BASE FLOOD ELEVATION MAP Harrison County, MS Date of Event: August 29, 2005 Date of Map: November 15, 2005 Map Number: MS-I12</p>	<p>Estimated Katrina Surge Elevations^{1,2} 24-25 ft</p>		
		<p>Advisory Base Flood Elevations^{2,3} Open Coast: N/A Back Bay: 16-24 ft</p>		
		<p>Effective Base Flood Elevations² VE Zone: 15 ft AE Zone: 12-14 ft</p>		
<p>OVERVIEW MAP</p>		<p>LEGEND</p> <table border="0"> <tr> <td> <p>Flood Advisory-Related Data</p> <ul style="list-style-type: none"> State Boundary County Boundary ABFE Contours (1-ft intervals)² ABFE Inland Limit² Estimated Limit of Wave Action ABFE Open Coast/Back Bay Boundary </td> <td> <p>Hurricane Katrina-Related Data</p> <ul style="list-style-type: none"> Preliminary Indoor High Water Mark² Preliminary Outdoor High Water Mark² Preliminary Debris High Water Mark² Limit of Katrina Surge Inundation </td> </tr> </table>	<p>Flood Advisory-Related Data</p> <ul style="list-style-type: none"> State Boundary County Boundary ABFE Contours (1-ft intervals)² ABFE Inland Limit² Estimated Limit of Wave Action ABFE Open Coast/Back Bay Boundary 	<p>Hurricane Katrina-Related Data</p> <ul style="list-style-type: none"> Preliminary Indoor High Water Mark² Preliminary Outdoor High Water Mark² Preliminary Debris High Water Mark² Limit of Katrina Surge Inundation
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<p><small>Data Sources: USDA, National Agriculture Imagery Program, 2004 Aerial Imagery: FEMA Flood Insurance Rate Maps (HIRMs) Jackson Co., MS (1993-1992) Harrison Co., MS (1991-2002) Jackson Co. FEMA 1993 Elevations converted from NGVD83 to NAVD83 High Water Marks: 24-25 ft (estimated) 2005 (USACE) (1/17, 2010) Datum: 1988 ADJUSTED NATIONAL MEAN SEA LEVEL</small></p> <p><small>For more information on these advisory maps, please see www.fema.gov/hazards/floods/recoverydata/katrina_index.shtml</small></p> <p><small>Notes: ¹ Surge estimated from surveyed, surge-only HWM. Local wave effects (wave heights and wave runup) are not included in these elevations. ² Measured in feet relative to the North American Vertical Datum of 1988. ³ Post-Hurricane Katrina Advisory Base Flood Elevations (ABFEs) are based on updated statistical information to develop the estimated 1% annual chance (100 year) return period elevation (AVE) plus estimated wave effects. For Harrison County, MS, the advisory AVE is 18 ft for the Gulf Coast and 16 ft for back-bay areas. See equation below to calculate the ABFE with wave effects for a given site: ABFE = Advisory SWEL + Wave Height, where Wave Height = 1/3 SWLwater Flooding Depth (depth measured relative to the ground)</small></p> <p><small>MAPS FOR ADVISORY PURPOSES ONLY - NOT FOR INSURANCE RATING PURPOSES For insurance rating purposes, refer to the currently effective Flood Insurance Rate Map (FIRM), available from your local government or the FEMA Map Service Center (1-800-368-6614; http://msc.fema.gov)</small></p>				



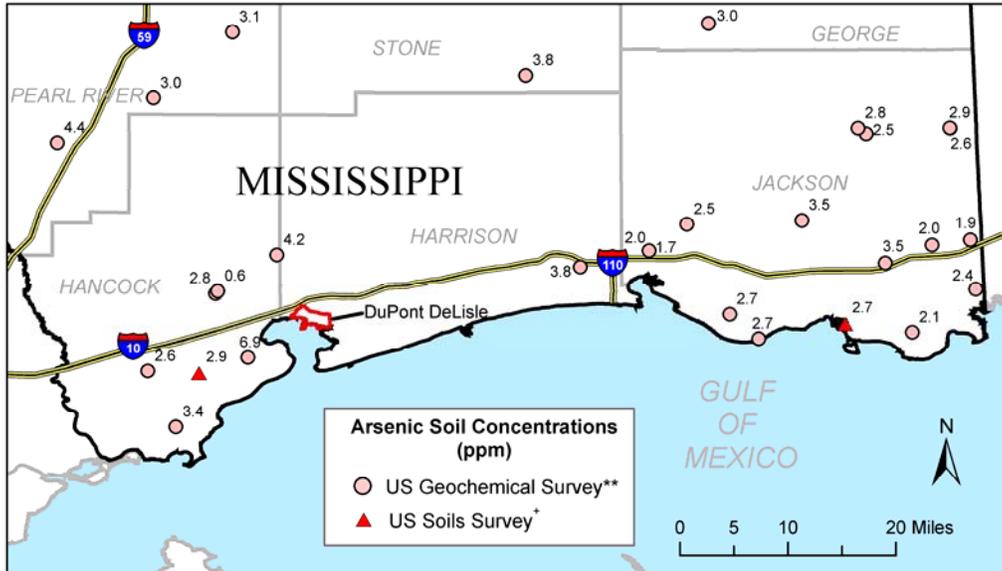
Figure 4: Arsenic Soil Concentrations in Southern Mississippi

Arsenic Soil Concentrations in Southern Mississippi

Map 1. Interpolated surface map of arsenic distribution in soils and other surficial materials in southern Mississippi and adjacent states*



Map 2. Soil sample locations and arsenic values in southern Mississippi .



*Gustavsson, N, Bølviken, B, Smith, D.B., and Severson, R.C., 2001. Geochemical Landscapes of the Conterminous United States. New Map Presentations for 22 Elements. U.S. Geological Survey Professional Paper 1648. U.S. Department of the Interior U.S. Geological Survey, Denver, CO. <http://pubs.usgs.gov/pp/p1648/>. [accessed December 6, 2005]. Note: These maps were based on the Boemgen and Shacklette (1981) report referenced below.

**U.S. Geological Survey, 2004, The National Geochemical Survey - database and documentation: U.S. Geological Survey Open-File Report 2004-1001, U.S. Geological Survey, Reston VA. <http://tin.er.usgs.gov/geochem/>. [accessed December 5, 2005].

*Boemgen, Josephine G., and Shacklette, Hansford T., 1981, Chemical Analyses of Soils and Other Surficial Materials of the Conterminous United States: U.S. Geological Survey Open-File Report 81-197, U.S. Geological Survey, Denver, CO. <http://tin.er.usgs.gov/ussoils/>. [accessed July 1998].

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Figure 5: Calcium Soil Concentrations in Southern Mississippi

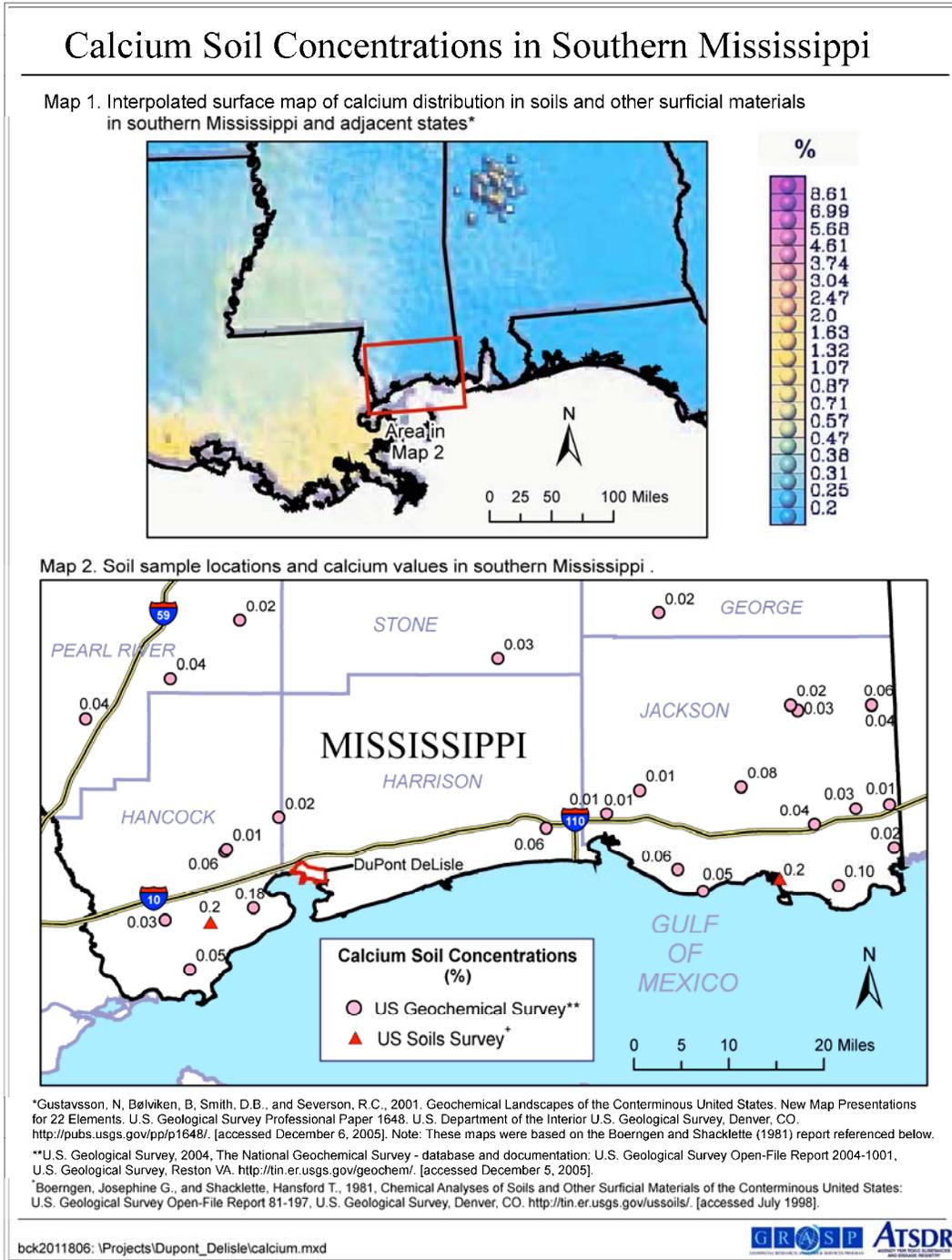
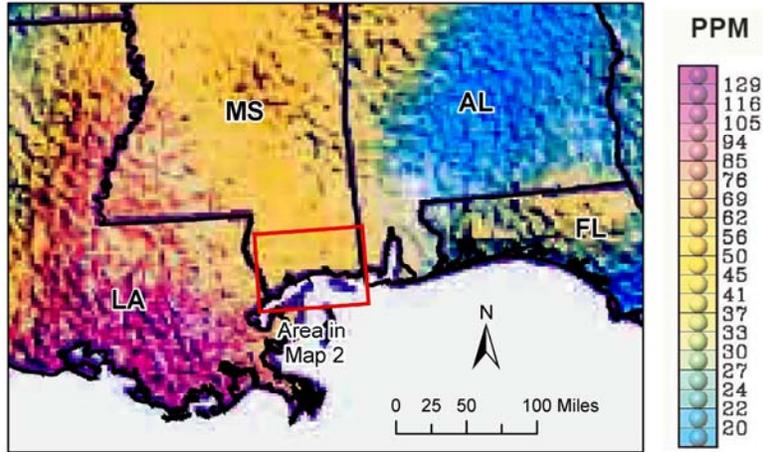


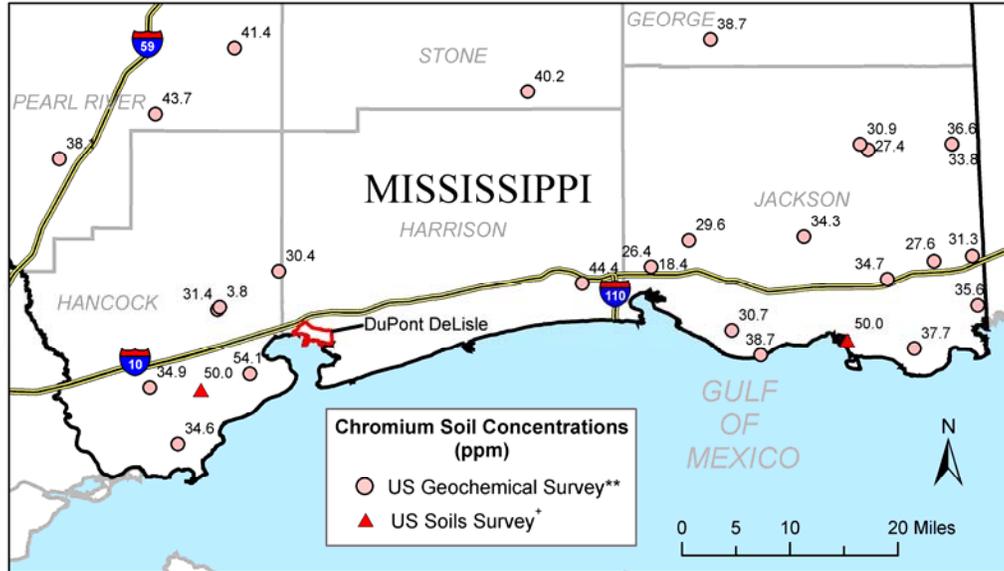
Figure 6: Chromium Soil Concentrations in Southern Mississippi

Chromium Soil Concentrations in Southern Mississippi

Map 1. Interpolated surface map of chromium distribution in soils and other surficial materials in southern Mississippi and adjacent states*



Map 2. Soil sample locations and chromium values in southern Mississippi .



*Gustavsson, N., Bølviken, B., Smith, D.B., and Severson, R.C., 2001. Geochemical Landscapes of the Conterminous United States. New Map Presentations for 22 Elements. U.S. Geological Survey Professional Paper 1648. U.S. Department of the Interior U.S. Geological Survey, Denver, CO. <http://pubs.usgs.gov/pp/p1648/>. [accessed December 6, 2005]. Note: These maps were based on the Boerngen and Shacklette (1981) report referenced below.

**U.S. Geological Survey, 2004, The National Geochemical Survey - database and documentation: U.S. Geological Survey Open-File Report 2004-1001, U.S. Geological Survey, Reston VA. <http://tin.er.usgs.gov/geochem/>. [accessed December 5, 2005].

Boerngen, Josephine G., and Shacklette, Hansford T., 1981, Chemical Analyses of Soils and Other Surficial Materials of the Conterminous United States: U.S. Geological Survey Open-File Report 81-197, U.S. Geological Survey, Denver, CO. <http://tin.er.usgs.gov/ussoils/>. [accessed July 1998].

Figure 7: Mercury Soil Concentrations in Southern Mississippi

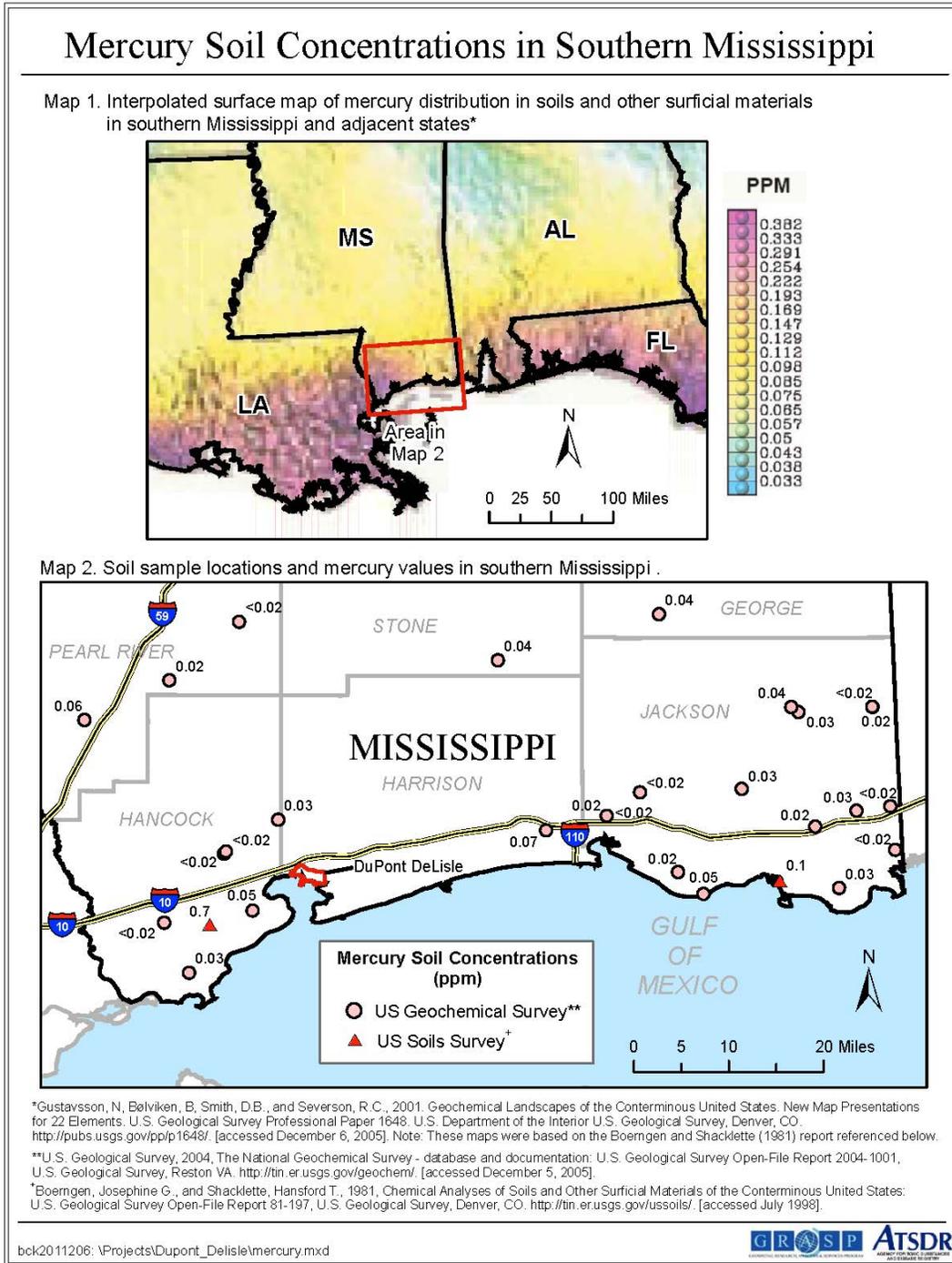


Figure 8: Potassium Soil Concentrations in Southern Mississippi

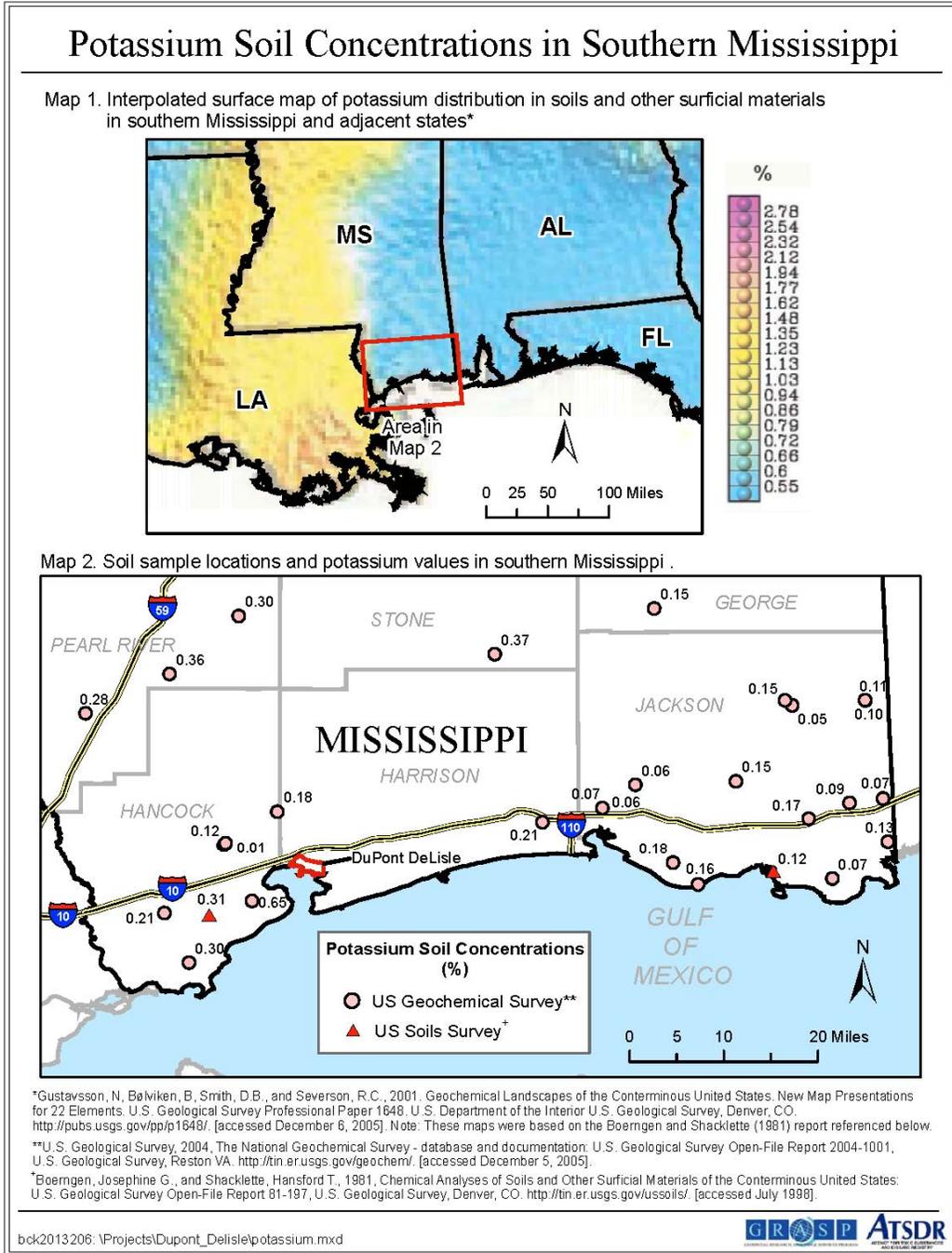


Figure 9: Sodium Soil Concentrations in Southern Mississippi

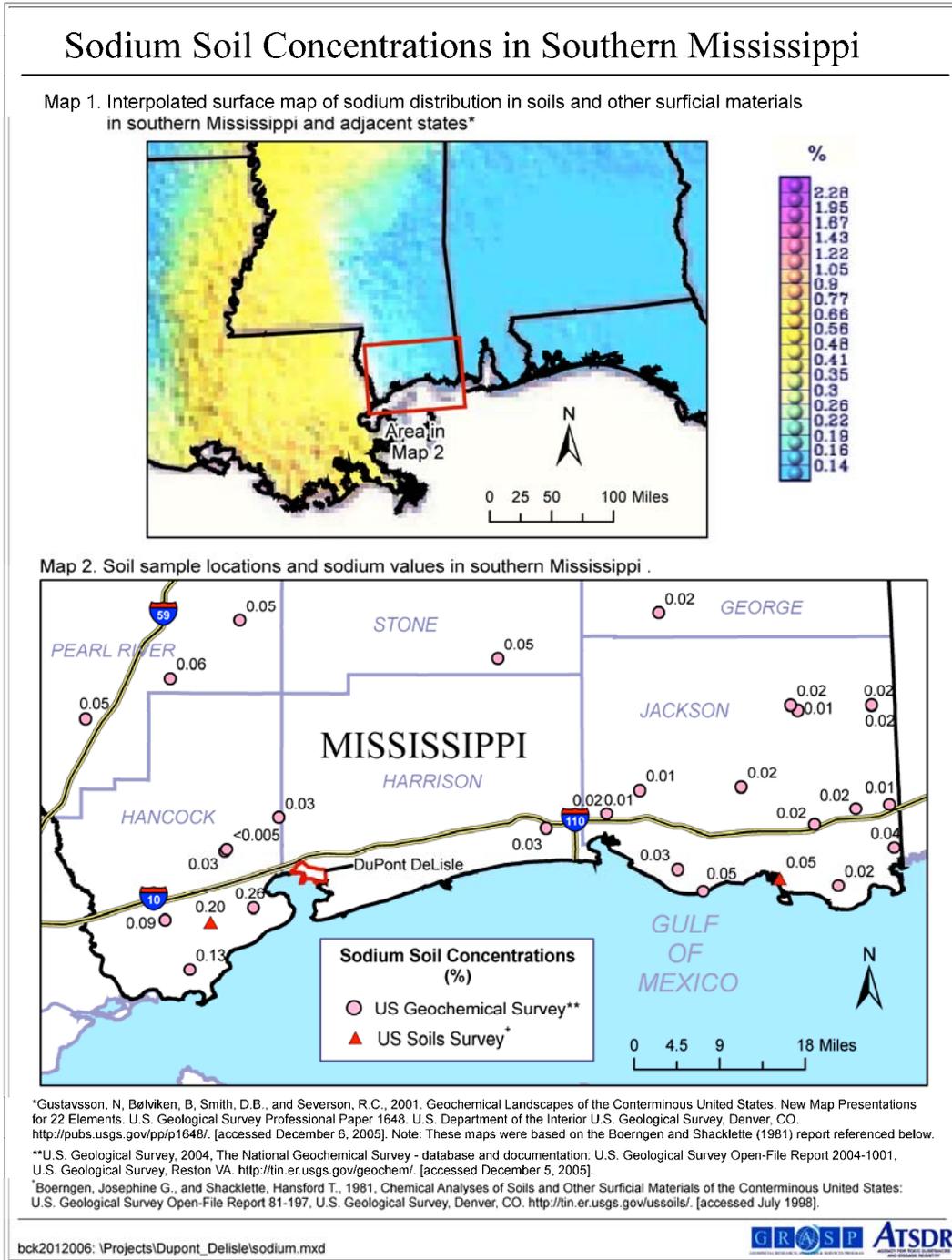
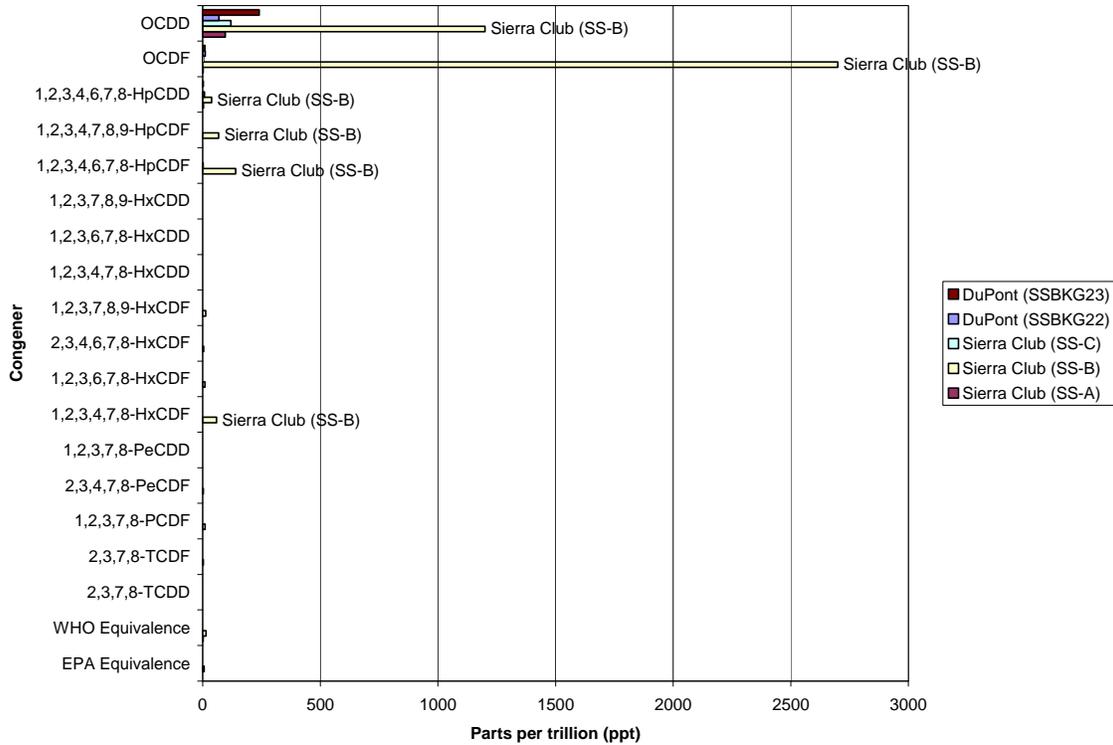


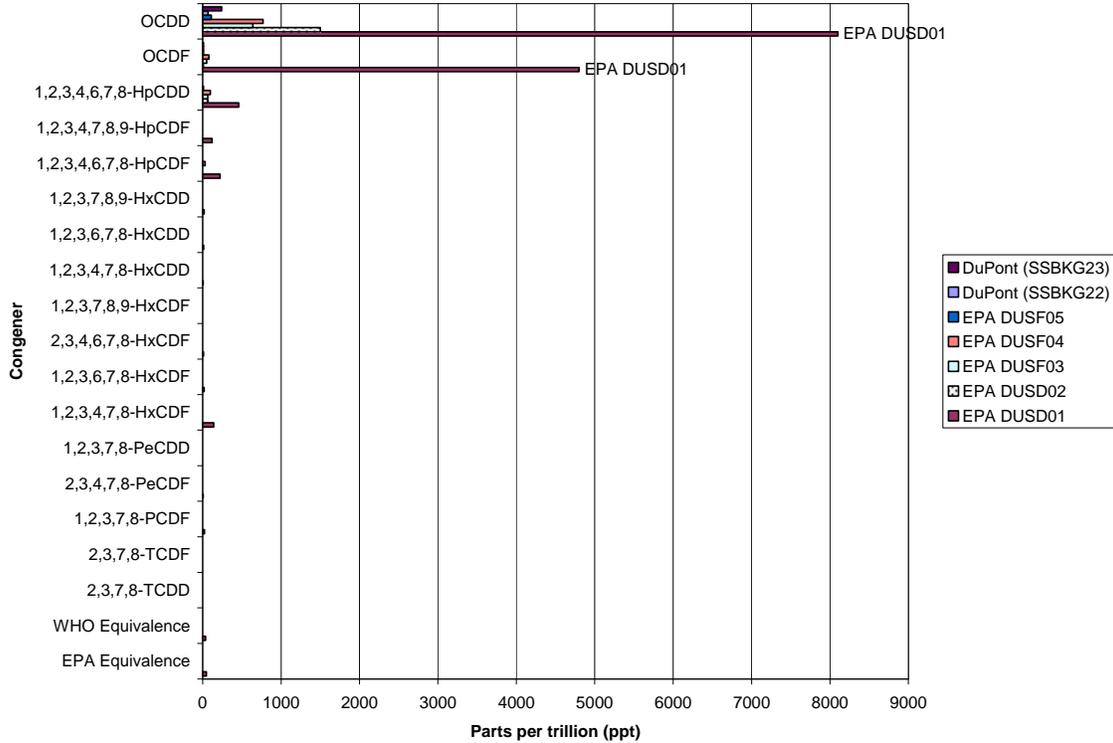
Figure 10: Dioxin Congener Profile (Sierra Club Samples and DuPont DeLisle 2002 RCRA Facility Investigation Phase II Background Samples, ng/kg ; ppt)



Abbreviations

2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
2,3,7,8-TCDF	2,3,7,8-tetrachlorodibenzofuran
1,2,3,7,8-PCDF	1,2,3,7,8-pentachlorodibenzofuran
2,3,4,7,8-PeCDF	2,3,4,7,8-pentachlorodibenzofuran
1,2,3,7,8-PeCDD	1,2,3,7,8-pentachlorodibenzo-p-dioxin
1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-hexachlorodibenzofuran
1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-hexachlorodibenzofuran
2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-hexachlorodibenzofuran
1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-hexachlorodibenzofuran
1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-heptachlorodibenzofuran
1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-heptachlorodibenzofuran
1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
OCDF	Octachlorodibenzofuran
OCDD	Octachlorodibenzo-p-dioxin

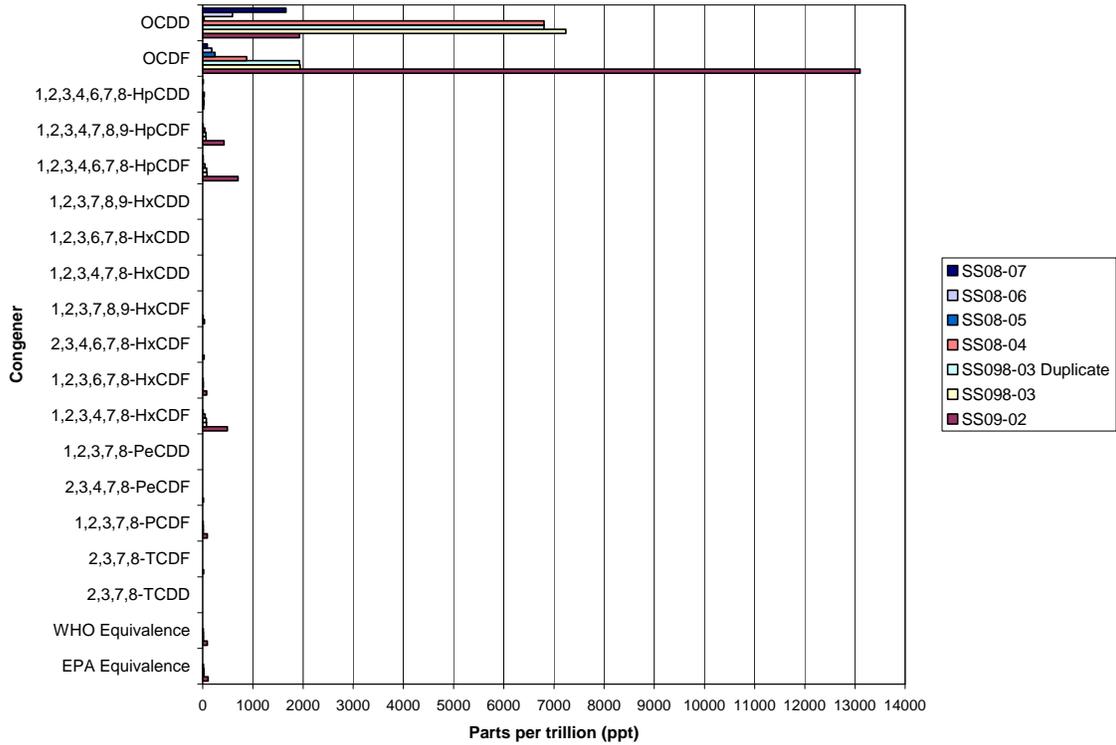
Figure 11: Dioxin Congener Profile (EPA Post Hurricane Katrina Samples and DuPont DeLisle 2002 RCRA Facility Investigation Phase II Background Samples, ng/kg ; ppt)



Abbreviations

2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
2,3,7,8-TCDF	2,3,7,8-tetrachlorodibenzofuran
1,2,3,7,8-PCDF	1,2,3,7,8-pentachlorodibenzofuran
2,3,4,7,8-PeCDF	2,3,4,7,8-pentachlorodibenzofuran
1,2,3,7,8-PeCDD	1,2,3,4,7,8-pentachlorodibenzo-p-dioxin
1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-hexachlorodibenzofuran
1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-hexachlorodibenzofuran
2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-hexachlorodibenzofuran
1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-hexachlorodibenzofuran
1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-heptachlorodibenzofuran
1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-heptachlorodibenzofuran
1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
OCDF	Octachlorodibenzofuran
OCDD	Octachlorodibenzo-p-dioxin

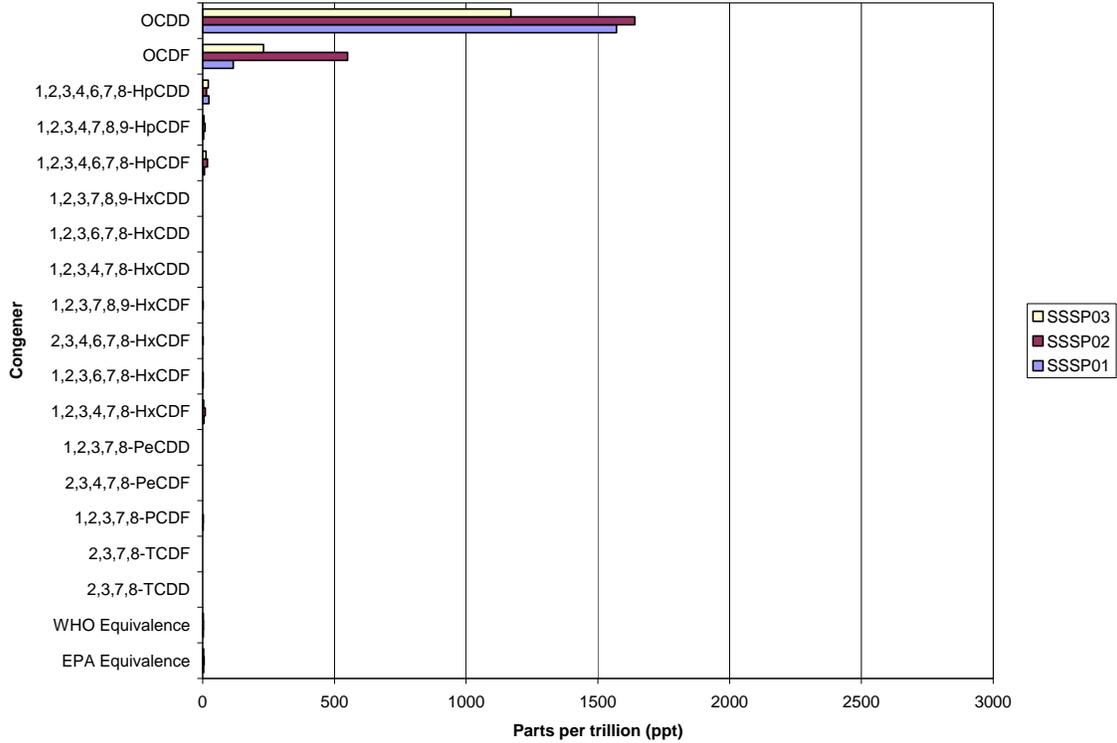
Figure 12: SWMU 8 Soil boring samples (0-2 feet), DuPont DeLisle 2002 RCRA Facility Investigation Phase II (ppt ; ng/kg)



Abbreviations

2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
2,3,7,8-TCDF	2,3,7,8-tetrachlorodibenzofuran
1,2,3,7,8-PCDF	1,2,3,7,8-pentachlorodibenzofuran
2,3,4,7,8-PeCDF	2,3,4,7,8-pentachlorodibenzofuran
1,2,3,7,8-PeCDD	1,2,3,4,7,8-pentachlorodibenzo-p-dioxin
1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-hexachlorodibenzofuran
1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-hexachlorodibenzofuran
2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-hexachlorodibenzofuran
1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-hexachlorodibenzofuran
1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-heptachlorodibenzofuran
1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-heptachlorodibenzofuran
1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
OCDF	Octachlorodibenzofuran
OCDD	Octachlorodibenzo-p-dioxin

Figure 13: SWMU 28 Soil boring samples (0-2 feet), DuPont DeLisle 2002 RCRA Facility Investigation Phase II (ppt ; ng/kg)



Abbreviations

2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
2,3,7,8-TCDF	2,3,7,8-tetrachlorodibenzofuran
1,2,3,7,8-PCDF	1,2,3,7,8-pentachlorodibenzofuran
2,3,4,7,8-PeCDF	2,3,4,7,8-pentachlorodibenzofuran
1,2,3,7,8-PeCDD	1,2,3,4,7,8-pentachlorodibenzo-p-dioxin
1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-hexachlorodibenzofuran
1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-hexachlorodibenzofuran
2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-hexachlorodibenzofuran
1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-hexachlorodibenzofuran
1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-heptachlorodibenzofuran
1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-heptachlorodibenzofuran
1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
OCDF	Octachlorodibenzofuran
OCDD	Octachlorodibenzo-p-dioxin