

APPENDIX A

FIGURES

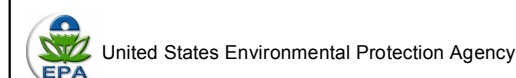
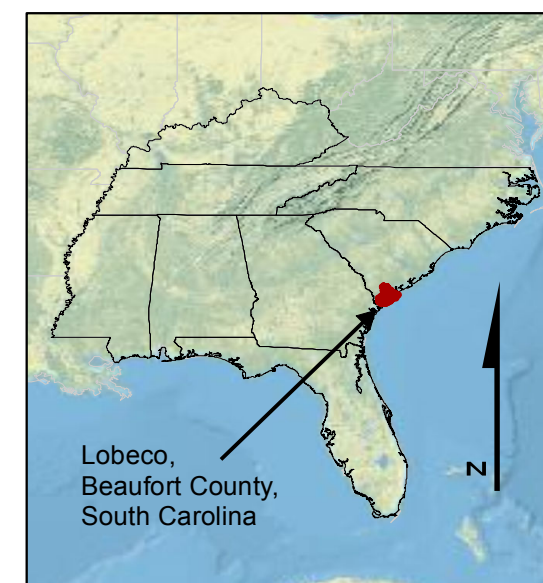


Legend

 Site Boundary

Topographical Reference:
USGS QD ID - 32080-E6
Quad Name - Dale

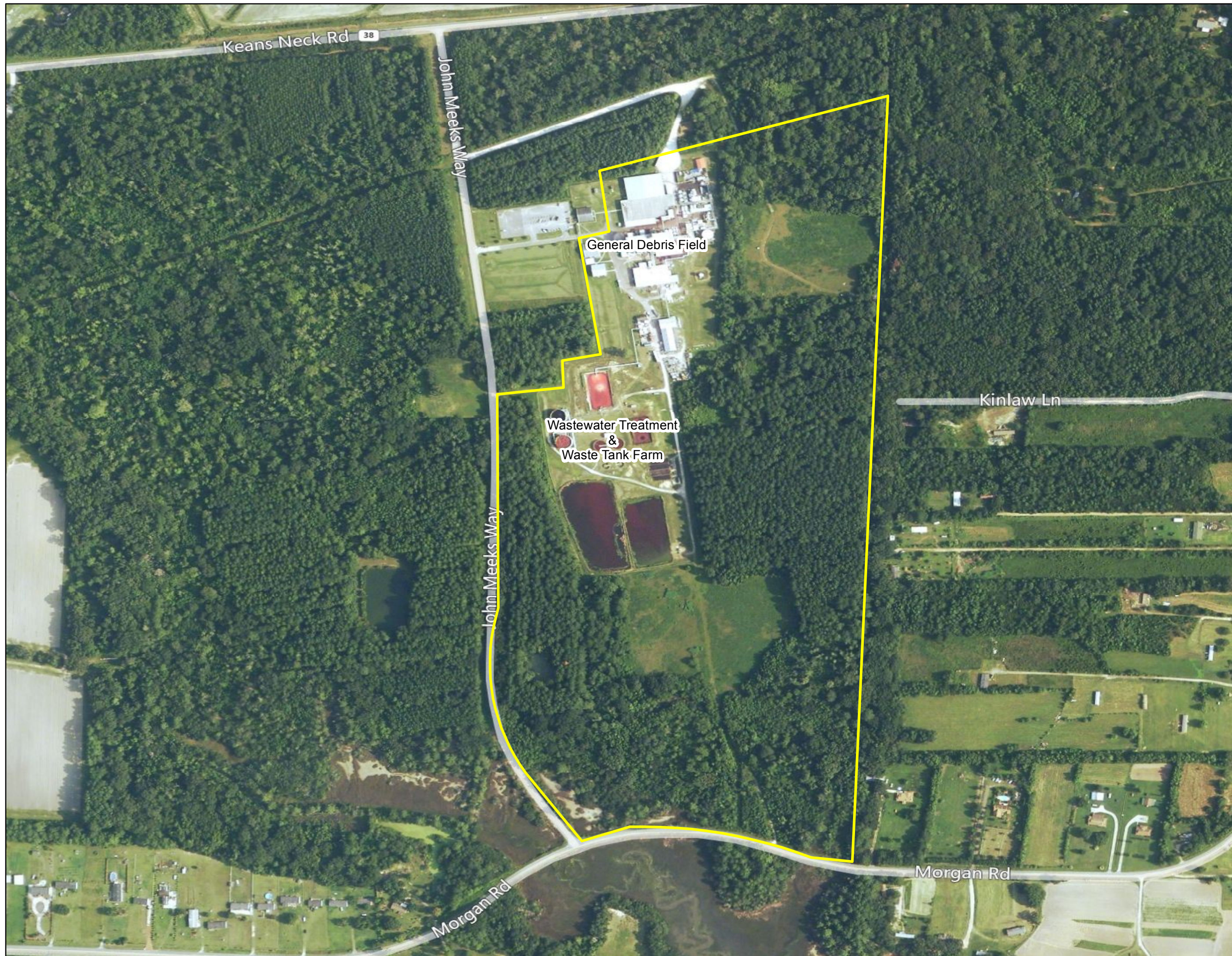
Feet
0 2,000 4,000



**LOBECO PRODUCTS REMOVAL
INVESTIGATION**
LOBECO,
BEAUFORT COUNTY,
SOUTH CAROLINA
TDD No. TNA-05-003-0154

**FIGURE 1
TOPOGRAPHICAL MAP**






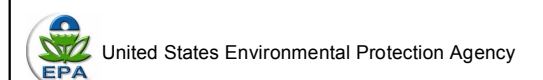
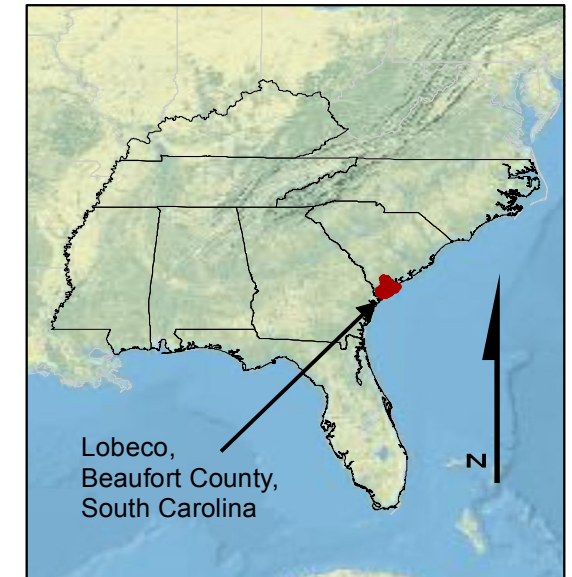
Aerial By: BING

Disclaimer: This map is intended for visual orientation use only. In no way is this map to be used for precise locational use.

Legend

 Site Boundary

Feet
0 400 800

**LOBECO PRODUCTS REMOVAL
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LOBECO,
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**FIGURE 2
AERIAL MAP**



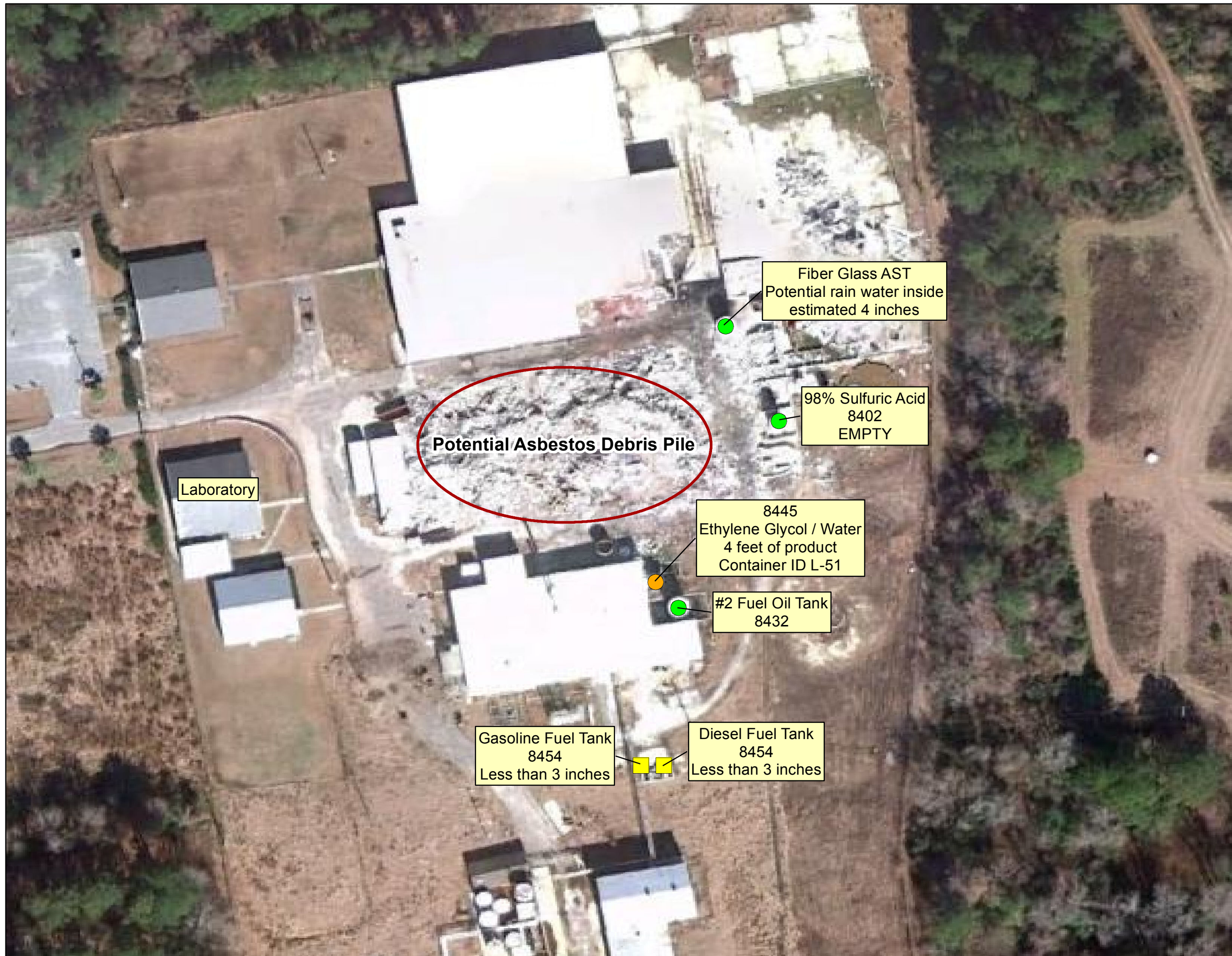


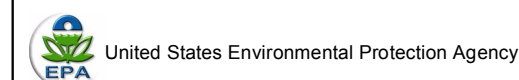
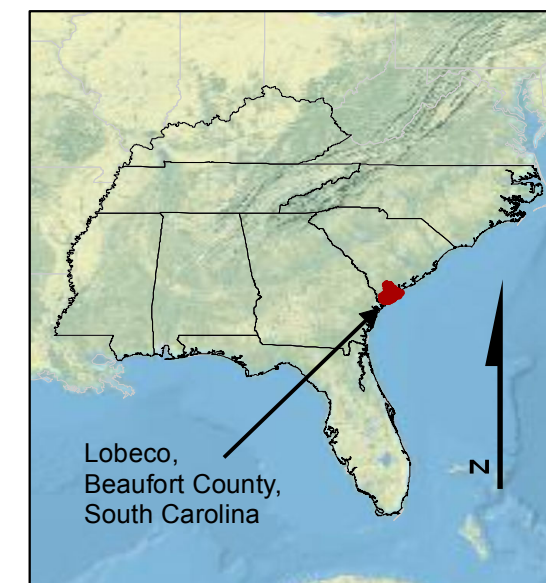
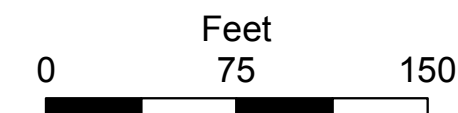
Image by: Google

Disclaimer: This map is intended for visual orientation use only. In no way is this map to be used for precise locational use.

Legend

- Tank with product
- Tank without product
- Fuel Tank

Notes:
AST - Above ground storage tank



**LOBECO PRODUCTS REMOVAL
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**FIGURE 3
DEBRIS FIELD AND
PROCESS TANK MAP**



E:\GIS Workspace\Lobeco Products Removal\003-0154-1365\Mxd\Fig 2 Aerial Map Lobeco Products Removal.mxd



Image by: Google

Disclaimer: This map is intended for visual orientation use only. In no way is this map to be used for precise locational use.

Legend

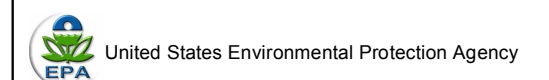
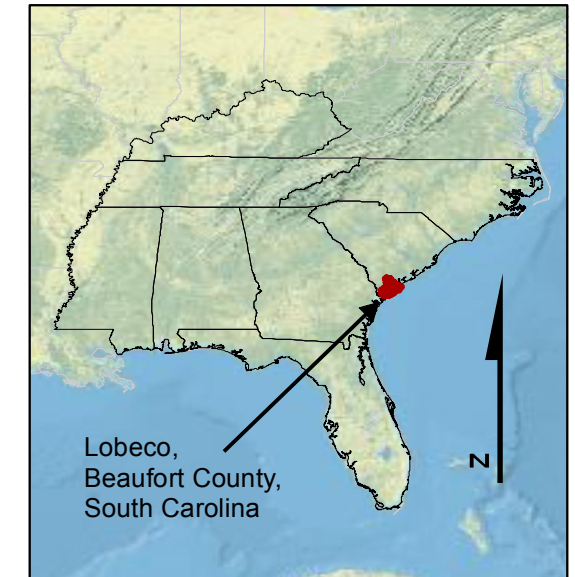
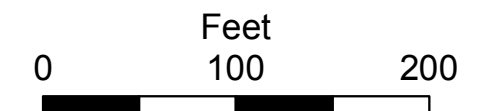
- ◆ Sample Water
- ▲ Sample Sludge

Notes:

L - Lobeco

SW- Waste Water

SD - Sludge



**LOBECO PRODUCTS REMOVAL
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**FIGURE 4
WASTE WATER TREATMENT
AND SAMPLE LOCATION MAP**



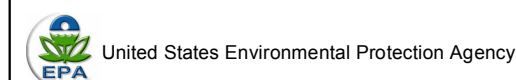
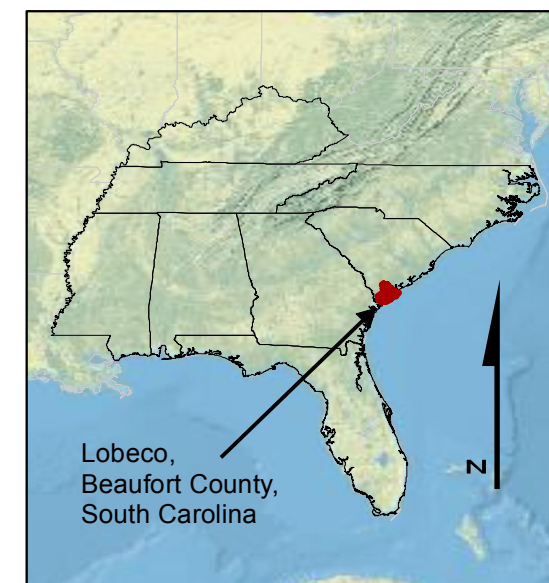


Image by: Google

Disclaimer: This map is intended for visual orientation use only. In no way is this map to be used for precise locational use.

Legend

- Tank with product
- Tank without product
- Hydrochloric acid totes



**LOBECO PRODUCTS REMOVAL
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TDD No. TNA-05-003-0154

**FIGURE 5
WASTE WATER TANK FARM MAP**



APPENDIX B

TABLES

TABLE 1
LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF HAZARD CATEGORIZATION RESULTS

Container ID	Container Type	Construction	Size (gal)	Volume Contained	Container Contents	Physical State	Color(s) of product	Clarity	Peroxide (Y/N)	Oxidizer (Y/N)	pH	Classification	Water Reactive (Y/N)	Water Solubility (S/P/I)	Organic Solubility (S/P/I)	Flammable (Y/N)	Chlorides (Y/N)	Specific Notes
L-1	Drum	Steel	55	1/4	N/A	Liquid	Clear	Clear	N	N	5	Neutral	N	S	I	N	N	Consolidated
L-2	Drum	Steel	55	<1/4	N/A	Liquid	Black	Clear	N	N	5	Neutral	N	I	S	N	N	Consolidated
L-3	Drum	Poly	55	1/4	N/A	Liquid	Clear	Clear	N	N	7	Neutral	n	S	I	N	N	Consolidated
L-4	Drum	Poly	55	1/4	N/A	Solid	white	Opaque	N	N	7	Neutral	N	P	I	N	N	Alumina
L-5	Drum	Poly	55	3/4	N/A	Liquid/ Sludge	Clear/Gray	Clear/ opaque	N/N	N/N	7/7	Neutral	N/N	S/P	I/I	N/N	N/N	Bottom layer has lots of small rocks
L-6	Drum	Steel	55	1/4	N/A	Liquid	Black	Opaque	N	N	7	Chloride	N	N	S	N	Y	
L-7	Drum	Poly	55	1/2	N/A	Liquid	Clear	Clear	N	N	13	Base/ Oxidizer	N	S	I	N	N	
L-8	Drum	Poly	55	1/4	N/A	Liquid	Clear	Clear	N	N	<2	Acid	N	S	i	N	N	
L-9	Drum	Steel	55	1/4	N/A	Liquid	Clear	Clear	N	N	7	Chloride	N	I	S	N	Y	
L-10	Drum	Poly	35	Full	N/A	Liquid	Dark	Opaque	N	N	7	Neutral	N	S	I	N	N	
L-11	Drum	Steel	55	1/4	N/A	Liquid	Clear	Clear	N	N	5	Flammable	N	I	P	Y	N	
L-12	Drum	Steel	55	3/4	N/A	Liquid	Red	Clear	N	N	7	Neutral	N	I	S	N	N	Viscous
L-13	Drum	Steel	55	Full	N/A	Liquid	Clear	Clear	N	N	7	Neutral	N	I	S	N	N	
L-14	Drum	Poly	55	Full	N/A	Solid	White	Opaque	N	N	7	Neutral	N	I	I	N	na	Alumina
L-15	Drum	Steel	55	Full	N/A	Liquid	Clear	Clear	N	N	5	Neutral	N	S	I	N	N	
L-16	Drum	Poly	55	1/4	N/A	Liquid	Clear	Clear	N	N	13	Base	N	S	I	N	N	
L-17	Drum	Poly	55	<1/4	N/A	Liquid	Pink	Clear	N	N	<1	Acid/ Chloride	N	S	I	N	Y	
L-18	Drum	Poly	55	<1/4	N/A	Liquid	Clear	Clear	N	N	14	Base	N	S	I	N	N	
L-19	Drum	Poly	55	3/4	Dodecylbenzene Sulfonic Acid	Gel	Brown	Clear	N	N	<2	Acid/ Chloride	N	P	I	N	Y	
L-20	Drum	Poly	55	Full	Phosphoric Acid	Liquid	Clear	Clear	N	N	4	Acid	N	S	I	N	N	
L-21	Drum	Poly	55	1/4	Phosphoric Acid	Liquid	Clear	Clear	N	N	4	Acid	N	S	I	N	N	
L-22	Bucket	Poly	5	1/2	N/A	Liquid	Clear	Clear	N	N	10	Neutral	N	S	I	N	N	Consolidated
L-23	Drum	N/A	55	3/4	N/A	Liquid	Black	Clear	N	N	7	Neutral	N	I	S	N	N	oil & debris
L-24	Bucket	steel	5	1/4	N/A	Liquid	Yellow	Clear	N	N	5	Chloride	N	I	S	N	Y	Consolidated
L-25	Bucket	Poly	5	1/4	N/A	Liquid	Yellow	Clear	N	N	5	Neutral	N	I	S	N	N	Consolidated
L-26	Bucket	Poly	5	1/4	N/A	Liquid	Red	Clear	N	N	9	Neutral	N	S	I	N	N	Consolidated
L-27	Bucket	Poly	5	1/4	N/A	Liquid	Amber	Clear	N	N	5	Neutral	N	I	S	N	N	Consolidated
L-28	Bucket	Poly	5	1/4	N/A	Liquid	Black	Clear	N	N	7	Neutral	N	I	S	N	N	Consolidated
L-29	Bucket	Steel	5	1/2	Citron Lithium Grease							Neutral						Consolidated
L-30	Bucket	Poly	5	1/2	Chevron Heavy Duty Motor Oil	Liquid	Black	Opaque				Neutral						Consolidated
L-31	Bucket	Poly	5	1/4	Chevron Heavy Duty Motor Oil	Liquid	Black	Opaque				Neutral						Consolidated
L-32	Bucket	Poly	5	Full	blue dye	Solid	Blue	Opaque	n	N	4	Neutral	N	P	S	N	N	Blue Dye
L-33	Tote	Poly	200	Full	2 each	Solid	Teal	Opaque	N	N	2	Acid	N	S	I	N	N	4x4x2.5
L-34	Drum	Steel	55	Full	4 each carbon scrubber	Solid	Black	Opaque	N	N	5	Neutral	N	I	I	N	N	Carbon Pellets
L-35	Tote	Poly	300	Full	2 totes	Solid	Tan	Opaque	N	N	4	Neutral	N	I	S	N	N	
L-36	Tote	Poly	300	Full	heat transfer oil	Liquid	Black	Opaque	N	N	7	Neutral	N	I	S	N	N	

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LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF HAZARD CATEGORIZATION RESULTS

Container ID	Container Type	Construction	Size (gal)	Volume Contained	Container Contents	Physical State	Color(s) of product	Clarity	Peroxide (Y/N)	Oxidizer (Y/N)	pH	Classification	Water Reactive (Y/N)	Water Solubility (S/P/I)	Organic Solubility (S/P/I)	Flammable (Y/N)	Chlorides (Y/N)	Specific Notes
L-37	Jug	Steel	1	Full	N/A	Liquid	Clear	Clear	N	N	6	Flammable	N	I	S	Y	N	Consolidated
L-38	Bucket	Steel	2	1/2	N/A	Liquid	Black	Opaque	N	N	6	Flammable	N	S	P	Y	N	Consolidated
L-39	Bucket	Poly	3	Full	N/A	Liquid	Milky White	Opaque	N	N	7	Neutral	N	I	P	N	N	Consolidated
L-40	Bucket	Poly	2	Full	N/A	Gel	Clear	Cloudy	N	N	5	Neutral	N	P	I	N	N	Consolidated
L-41	Jug	Poly	1	Full	N/A	Gel	Clear	Clear	N	N	6	Neutral	N	P	I	N	N	Consolidated
L-42	Bucket	Poly	5	N/A	Twine - no sample													
L-43	Bucket	Poly	2	1/2	N/A	Gel	Amber	Opaque	N	N	6	Neutral	N	S	P	N	N	Consolidated
L-44	Jug	Poly	1	Full	N/A	Liquid	Red	Opaque	N	N	6	Flammable	N	I	P	Y	N	Consolidated
L-45	Jug	Poly	1	1/2	N/A	Liquid	Amber	Clear	N	N	13	Base	N	S	I	N	N	Consolidated
L-46	Bucket	Poly	3	1/2	N/A	Liquid	Brown	Cloudy	N	N	6	Neutral	N	S	I	N	N	Consolidated
L-47	Jug	Poly	1	1/2	N/A	Liquid	Blue	Clear	N	N	7	Neutral	N	S	I	N	N	Consolidated
L-48	Bucket	Poly	5	1/2	N/A	Solid	Brown Beads	Opaque	N	N	7	Neutral	N	P	I	N	N	gravel
L-49	AST	Steel	325	Full	Ethylene Glycol/Water	Liquid	Clear	Clear	N	N	7	Neutral	N	S	I	N	N	
L-50	AST	Steel	600	Full	Defoamer FO-120	Liquid	White	Opaque	N	N	7	Neutral	N	S	I	N	N	
L-51	AST	Steel	450	<1/4	Mag-Ox-No-2 8443	Liquid	Clear	Clear	N	N	10	Neutral	N	S	I	N	N	
L-52	AST	Steel	60g solid	<1/4	Alkaline WasteTank	Solid	Dark Red	Opaque	N	N	12	Base	N	S	I	N	N	
L-53	Drum	Steel	55	3/4	Foamex n320	Liquid/ Liquid	Clear/ Orange	Clear/ Cloudy	N	N	4/4	Neutral	N	I/S	S/I	N/N	N/N	
L-54	Drum	Steel	2	1/2	N/A	Liquid	Orange	Cloudy	N	N	5	Flammable	N	I	S	Y	N	consolidated
L-55	Jug	Poly	1	Full	N/A	Liquid	Orange	Cloudy	N	N	5	Neutral	N	S	I	N	N	
L-56	Bucket	Steel	5	Full	Furfyl Alcohol UN2874	Sludge	Black	Opaque	N	N	6	Flammable	N	P	I	Y	N	
L-57	AST	Steel	40	<1/4	98% Sulfuric Acid 8402	Liquid	Clear	Clear	N	N	<0	Acidic	N	S	I	N	N	
L-58	Drum	Steel	55	1/2	FAME Drum	Liquid	Amber	Cloudy	N	N	5	Neutral	N	I	S	N	N	
L-59	Glass Jars	Poly	1	Full	Lab Mix of Product	Liquid	Mix/Dark	Opaque	N	N	2	Acidic	N	S	P	N	N	Lab Mix, Multiple jars
L-60	Jug	Poly	1	Full	Montaline SP1	Liquid	Clear	Clear	Y	N	5	Peroxide	N	P	I	N	N	Formed gel with Water
L-61	Jug	Poly	1	Full	Montaline AP575	Liquid	Clear	Clear	N	N	5	Neutral	N	P	I	N	N	
L-62	Jug	Poly	1	Full	Montaline AP6	Liquid	Brown	Opaque	N	N	10	Neutral	N	P	I	N	N	
L-63	Jug	Poly	1	Full	Montaline SPCV A3	Liquid	Amber	Cloudy	Y	N	4	Peroxide	N	P	I	N	N	

Notes:

- AST - Above ground storage tank
- gal - Gallons
- I - Insoluble
- N/A - Information not available
- N - No

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LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF HAZARD CATEGORIZATION RESULTS

Container ID	Container Type	Construction	Size (gal)	Volume Contained	Container Contents	Physical State	Color(s) of product	Clarity	Peroxide (Y/N)	Oxidizer (Y/N)	pH	Classification	Water Reactive (Y/N)	Water Solubility (S/P/I)	Organic Solubility (S/P/I)	Flammable (Y/N)	Chlorides (Y/N)	Specific Notes
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P - Partially soluble

S - Soluble

Y - Yes

Not applicable

TABLE 2
LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF AST AND POND VOLUMES

Tank ID	Diameter (ft)	Height (ft)	Depth (ft)	Estimated Volume (gallons)	Comments
Waste Water Treatment ASTs					
8438	10	14	N/A	Empty	
8409	12	26	N/A	300	Sulfuric Acid
8434	10.5	10	N/A	Empty	
L-52	12	12	N/A	450	Alkaline, 6 inches of Product, solid bottom
8437	10	14	N/A	Empty	Mag OX No 1
8443	10	14	N/A	3350	NFPA 1-0-0
Process Area ASTs					
Diesel Tank	15	14	N/A	1320	assuming 1 foot depth
Ethylene Glycol	10	10	N/A	2400	Ethylene Glycol/water fire suppressant plus 2 totes for total of approximately 3000 gallons
Sulfuric Acid	12	N/A	N/A	Empty	
Diesel Tank 2	6	10	N/A	30	Two Horizontal Tanks, assuming < 3 inches per tank approximately 30 gallons per tank
Unlabeled	14	N/A	N/A	385	assume less than 4 inches of product
Waste Water Process Tanks					
North Aeration Tank	60	25	N/A	148000	
South Aeration Tank	60	25	N/A	445000	
NW Clarifier Tank	50	10	N/A	125000	
NE Clarifier Tank	50	10	N/A	125000	
SW Clarifier Tank	30	10	N/A	470000	
SE Clarifier Tank	30	10	N/A	50200	
Waste Water Process Ponds					
Equalization Basin	160	85	3	305205	
Aerobic Digester Basin	110	60	3	148000	

Notes

AST - Above ground storage tank
ft - feet
N/A - Not available

TABLE 3
LOBECO PRODUCTS REMOVAL INVESTIGATION
LABORATORY BUILDING CHEMICAL INVENTORY

Chemical Name	Container	Approximate Amount	English Conversion	other information
FLAMMABLE CABINET				
Kerosene	4L Amber	1 L	1 Qt	
Ether	4L Can	1 L	1 Qt	
WoodStain	1Q Can	1 Qt	1 Qt	
Flammable Waste	Safety Can	10 L	2 Gal	
SHELVES				
Sodium Hydroxide Pellets	1kg Poly Bottle	1 Kg	2.2 lbs	
Ma (OH) ₂ Saturated Soln	1L Poly	400 mL	1 pint	
Honeywell AmSurf Turf Grade 90/10 Wax/L2V @1.5% (Solid)	1L Glass	250 g	0.5 lbs	
Honeywell AmSurf Turf Grade 80/20 Wax/ELV @1.5% (Solid)	1L Glass	250 g	0.5 lbs	
PCS Comercial Urea Coated with 2 coats EME-1 & 60/40xlink	250pl Glass	100 g	0.22 lbs	
Urea "Prils" G-29-73	30mL glass jar	100 g	0.22 lbs	
Urea "Prils" G-29-73	30mL glass jar	100 g	0.22 lbs	
Potassium Iodide 20% Soln.	500 mL Poly	500 mL	1 pint	
Potassium Iodide ACS	500 mL Glass	450 g	1 lbs	
Sodium Thiosulfate 99%	Poly	250 g	0.5 lbs	
Unknown-Pyranine DMPS NaCl Soln	Large Poly jar	3 L		
BaCl ₂ Solution	500 mL Poly	500 mL	1 pint	
Potassium Permanganate	glass jar	500 g	1 lbs	
Ammonia from Totes 28.3% Soln	500 mL glass jar	400 mL	1 pint	
Telomer BN Std	glass jar	200 mL	0.5 pint	
PTSA Soln FP Batch #44	500 mL glass jar	500 ml	1 Qt	
Unknown-DDBSA viscous Liquid	glass jar	1 L	1 Qt	
Unknown-Na, Lignosulfonate Solid	500 mL glass jar	600 g	1.5 lbs	
Unknown- Kga-200 Solid	500 mL glass jar	full	0.5 lbs	

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LOBECO PRODUCTS REMOVAL INVESTIGATION
LABORATORY BUILDING CHEMICAL INVENTORY

Chemical Name	Container	Approximate Amount	English Conversion	other information
1-Benzoylamino-4-bromoanthraquinone	200mL jar	100 g	0.22 lbs	
Unknown-G22-139 ESO+EDA in PPG 1:1 Epoxide :Amine	500 mL jar	200 g	0.44 lbs	
Karl-Fisher Reagent	1L Amber	500 mL	1 pint	
Warner G Smith Nonionic T-9	1Qt Metal Can	0.5 Qt	1 pint	
Warner G Smith Blown Soya	1Qt Metal Can	0.5 Qt	1 pint	
2-nitro-p-Phenetidine (CAS 1096A-88-1)	poly over glass	13 g	0.03 lbs	
Tembec Chemical- Grade Formule S007	1L Poly	1 L	1 Qt	
Magnesium Hydroxide/Mag	Poly	500g	1.1 lbs	
Unknown- G-33-24 50/50 AT7251/AT 725	glass bottle	100 mL	0.21 pints	
Corsicana-Corsamate DCB (Diamino Dibenzoate)	glass bottle	250 mL	0.42 pints	
Unknown- Macol NP 9.5 Nonyl Phenol Polyester	glass bottle	250 mL	0.42 pints	
Unknown- EP533 BASF	glass bottle			
Unknown- LP981127 DAR	glass bottle	30 g	0.07 lbs	
Calcium Chloride 4-30 mess	glass bottle	500 g	1.10 lbs	
Unknown- EME- ? G33 Epoxide x 1/2 Fster	glass bottle	100ml	0.21 pint	
Ruetgers-Nease Naxan 220	Poly Bottle	500 mL	1 pint	
Ruetgers-Nease Naxan ABL	Poly Bottle	500 mL	1 pint	
AlcoChemiscals - Versa TL-4	Poly Bottle	500 mL	1 pint	
AlcoChemiscals - Versa TL-71	Poly Bottle	500 mL	1 pint	
AlcoChemiscals - Versa TL-73	Poly Bottle	500 mL	1 pint	
AlcoChemiscals - Versa TL-77	Poly Bottle	500 mL	1 pint	
AlcoChemiscals - Versa TL-125	Poly Bottle	500 mL	1 pint	

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LABORATORY BUILDING CHEMICAL INVENTORY

Chemical Name	Container	Approximate Amount	English Conversion	other information
AlcoChemiscals - Versa TL-130	Poly Bottle	500 mL	1 pint	
Unknown-ArrMaz Infineum R-335	Glass bottle	500 mL	1 pint	
Unknown- G21-57 Solid	Glass bottle	200g	0.44 lbs	
Deforest- Low foam Wetting A Korylated Alcohol	Glass bottle	500 mL	1 pint	
Unknown- FD+334 PAM diluted to 40.6%	Glass bottle	500 mL	1 pint	
Unknown- KAO Cord SA PCH T-252 Fatty Amine	Glass bottle	500 mL	1 pint	
Unknown- Corsatrile DTN	Glass bottle	500 mL	1 pint	
Kenrich Petrochemical- Ken Reactant- KRTTS	poly	250 mL	0.5 pint	CAS numbers: 6147-49-0, 67-63-6, 3432-36-9
Kenrich Petrochemical- Ken Reactant- KR 5S	poly	250 mL	0.5 pint	CAS numbers: 6147-49-0, 67-63-6, 3432-36-9
Kenrich Petrochemical- Ken Reactant- Lica 12	poly	250 mL	0.5 pint	CAS numbers: 6147-49-0, 67-63-6, 3432-36-9
Kenrich Petrochemical- Ken Reactant- N2 12	poly	250 mL	0.5 pint	CAS numbers: 6147-49-0, 67-63-6, 3432-36-9
Sodium Hydroxide 0.25N	poly bottle	1 L	1 Qt	
Ammonia Hydroxide .5M	poly bottle	1 L	1 Qt	
Unknown- KGA-517	glass jar	500 mL	1 pint	
Unknown- AO-35M	glass jar	150 mL	0.3 pint	
Unknown- LS Paratine	glass jar	50ml	0.11 pint	
Unknown- G24-99	glass jar	50ml	0.11 pint	
Unknown- 2-322	glass jar	50ml	0.11 pint	
Unknown- EME-2 G-22-155	glass jar	50ml	0.11 pint	
Lobeco Products- Seppic Montaline SPCV A3 Lot 81041	glass jar	3-500 mL	1 pint	3 bottles

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LABORATORY BUILDING CHEMICAL INVENTORY

Chemical Name	Container	Approximate Amount	English Conversion	other information
Lobeco Products- Seppic Montaline SPCV A3 Lot 72241	glass jar	500 mL	1 pint	
2N HCL	2L Carboy	1 L	1 Qt	
Sodium Thiosulfate .1N	4L Poly	3 L	3 Qt	
Unknown- Unlabeled Test Tube	glass	15 mL	0.03 pint	
Ultradoss 70DG	Glass	500 mL	1 pint	
BASF-Capro 1 treated with Galoryl (Solid)	Poly jar	400 g		
BASF-Capro 1 untreated (Solid)	Poly jar	400 g		
Sulfuric Acid Batch RM (Red)	1L poly	1 L	1 Qt	
Fisher Sulfuric Acid	2.5L Glass Bottle	2.5 L	2.6 Qt	
REFRIDGERATOR				
Polyamine 99%	250 mL glass	250 mL	0.5 pint	
2-Butanone Peroxide	250 mL glass	250 mL	0.5 pint	
Divinylbenzene	250 mL glass	250 mL	0.5 pint	
Trifluoroacetic ????	250 mL glass	250 mL	2 bottles	
Dimethylcarbonate	250 mL glass	250 mL	0.5 pint	
Tetrabutyl Peroxide	250 mL glass	250 mL	0.5 pint	
Phenol	250 mL glass	250 mL	0.5 pint	
?????naphthalenesulfonic	250 mL glass	250 mL	0.5 pint	
Propylamine	250 mL glass	250 mL	0.5 pint	
Wastewater Coliform Standard	2 vials	1 mL	0.03 ounces	
2,2-azobisisobutyro-nitrile		250 mL	0.5 pint	
Ammonium Acetate		250 mL	0.5 pint	
Ethylene Glycol	1L glass	1 L	1 qt	
Pottasium Permanganate Stock Soln .8914 g/L	glass	250 mL	0.5 pint	
Hydrogen peroxide, Aq 20-40%	glass	250 mL	0.5 pint	
Lyphilzed Microorganisms	3 containers	1 mL	0.03 ounces	

TABLE 3
LOBECO PRODUCTS REMOVAL INVESTIGATION
LABORATORY BUILDING CHEMICAL INVENTORY

Chemical Name	Container	Approximate Amount	English Conversion	other information
AT-740 Batch 75	8 drm vials	8x20 mL	5.5 ounces	
Bleach Soln- 12%	glass	250 ml	0.5 pint	
Divinylbenzene 80%	glass	250 ml	0.5 pint	
Glycidol 96% 2,3-Epoxy-1-propanol	glass	250 ml	0.5 pint	
ADDITIONAL ITEMS FROM WAREHOUSE TAKEN TO LABORATORY				
Witconate Ammonium AOS	1.5L	1.5 L	1.6 Qt	
Huntsman XSA 80 Batch 33882	Poly	500 mL	1 pint	Labeled Flammable and Corrosive
TexacoChemical- Jeffamine M-2005 Polyetheramine	Glass	500 mL	1 pint	
Rhodapon BOS (formerly Spirex BOS)	Glass	500 mL	1 pint	
Deforest Enterprises -Dephos HP-739	Glass	500 mL	1 pint	
Henkel- POE(3)triethalamine	Glass	500 mL	1 pint	
Ethoxy Chemicals-Ethoxy 1358 W421	glass	500 mL	1 pint	Labeled Danger Corrosive
American Cyanamide Co- Sodium Dioctylsulfosuccinate in Ethanol &water	glass	1L	1Qt	
ICI Americas Willinington DE- Product Code 11922	glass	1L	1 Qt	Warning Causes Eye irritation
Mazer Chemicals-102513 MAPEG CO16				
Castor Oil	glass	500 mL	1 pint	
Tridecyl Ether	500 mL	500 mL	1 pint	Cloudy at bottom of bottle
Lipocal L-4	Poly	500 mL	1 pint	
Unknown-Base X-4057 from 3,3,5-Trimethylhexane	glass	500 mL	1 pint	
Unknown-Base X-4057 from PPG 724	glass	500 mL	1 pint	
Unknown-Base X-4057 from 2-ethylhexanol	glass	500 mL	1 pint	
Unknown-Base X-4057 from PEG-200	glass	500 mL	1 pint	
Unknown-Base X-4057 from PEG 400	glass	500 mL	1 pint	

TABLE 3
LOBECO PRODUCTS REMOVAL INVESTIGATION
LABORATORY BUILDING CHEMICAL INVENTORY

Chemical Name	Container	Approximate Amount	English Conversion	other information
Unknown-Base X-4057 from PPG-425	glass	500 mL	1 pint	

TABLE 4
LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF SAMPLES

Sample ID	Matrix	Location	Sample Date	Latitude	Longitude	Analysis Requested								
						VOC	SVOA	Pesticides	PCB	Herbicides	Metals	Mercury	PCM	PLM
L-SW-001	Waste Water	N. Aeration Tank	1/17/2012	32.553617	-80.730257	X	X	X	X	X	X	X		
L-SW-002	Waste Water	S. Aeration Tank	1/17/2012	32.553303	-80.730203	X	X	X	X	X	X	X		
L-SW-003	Waste Water	NW Clarifier	1/17/2012	32.553281	-80.729746	X	X	X	X	X	X	X		
L-SW-004	Waste Water	NE Clarifier	1/17/2012	32.553328	-80.729518	X	X	X	X	X	X	X		
L-SW-005	Waste Water	SW Clarifier	1/18/2012	32.553028	-80.729686	X	X	X	X	X	X	X		
L-SW-006	Waste Water	SE Clarifier	1/18/2012	32.553074	-80.729479	X	X	X	X	X	X	X		
L-SW-007	Waste Water	Aeration Pond	1/18/2012	32.553885	-80.729643	X	X	X	X	X	X	X		
L-SW-008	Waste Water	Digester Basin	1/18/2012	32.553488	-80.729282	X	X	X	X	X	X	X		
L-SD-001	Sludge	Digester Basin	1/18/2012	32.553388	-80.729254	X	X	X	X	X	X	X		
L-SD-002	Sludge	Digester Basin	1/18/2012	32.553388	-80.729254	X	X	X	X	X	X	X		
L-ACM-001	Bulk	Debris Field	1/18/2012	NA	NA									X
L-ACM-002	Bulk	Debris Field	1/18/2012	NA	NA									X
L-ACM-003	Bulk	Debris Field	1/18/2012	NA	NA									X
L-ACM-004	Bulk	Debris Field	1/18/2012	NA	NA									X
L-ACM-005	Bulk	Debris Field	1/18/2012	NA	NA									X
L-ACM-006	Bulk	Debris Field	1/18/2012	NA	NA									X
L-ACM-007	Air	Debris Field	1/18/2012	NA	NA								X	
L-ACM-008	Air	Blank	1/18/2012	NA	NA								X	

Notes:

N - North	NA - Not Applicable
S - South	VOC - Volatile Organic Compounds
NW - Northwest	SVOA - Semi-volatile Organic Compounds
NE - Northeast	PCB - Polychlorinated Biphenyls
SW - Southwest	PCM - Phase Contrast Microscopy
SE - Southeast	PLM - Polarized Light Microscopy

TABLE 5
LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF WASTEWATER SAMPLE RESULTS

Sample ID	RSL Tap Water	RAL Tap Water	L-SW-001	L-SW-002	L-SW-003	L-SW-004	L-SW-005
Location			North Aeration Tank	South Aeration Tank	NW Clarifier	NE Clarifier	SW Clarifier
Sample Type			Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Collection Date			1/17/2012	1/17/2012	1/17/2012	1/17/2012	1/18/2012
Matrix			Wastewater	Wastewater	Wastewater	Wastewater	Wastewater
Metals, Total (ug/L)							
Aluminum	37000	86400	5080	1970	68 U	68 U	5720
Antimony	15	34.6	3.5 U	11.3	3.5 U	3.5 U	3.5 U
Arsenic	0.045	4.48	5 U	5 U	5 U	5 U	5 U
Barium	7300	17300	13.8	49.2	14.6	15.3	153
Calcium	NL	NL	59900	74400	83400	85200	273000
Chromium	NL	NL	410	70.2	2.46	1.88	105
Cobalt	11	25.9	18.4	6.89	1 U	1 U	16.9
Copper	1500	1300	526	284	28.6	28.4	52.8
Iron	26000	60500	141000	10300	306	344	157000
Lead	NL	15	11.2	9.86	3.3 U	3.3 U	6.99
Magnesium	NL	NL	206000	157000	155000	160000	45400
Manganese	NL	2070	2220	520	141	120	4710
Nickel	730	1730	321	125	10.7	13.9	154
Potassium	NL	NL	17400	50400	47200	45800	19400
Selenium	180	432	47.6	9.35	7.86	6 U	46.1
Sodium	NL	NL	167000	132000	144000	146000	25200
Thallium	0.37	5.6	5 U	5 U	5 U	5 U	6.2
Vanadium	180	436	1 U	6.32	1 U	1 U	1 U
Zinc	11000	25900	639	501	349	1010	1050
Herbicides (ug/L)							
2,4,5-TP	3700	8640	0.25 U	2.5 U	2.5 U	2.5 U	0.25 U
MCP P	37	86.4	50 U	500 U	500 U	500 U	124
VOC (ug/L)							
Acetone	22000	55500	5 U	5 U	5 U	5.02	5.48
SVOC (ug/L)							
2-Methylnaphthalene	150	346	0.943 U	0.943 U	1 U	0.943 U	0.943 U
Pyrene	1100	2590	0.943 U	1.4	1 U	0.943 U	0.943 U

TABLE 5
LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF WASTEWATER SAMPLE RESULTS

Sample ID	RSL Tap Water	RAL Tap Water	L-SW-006	L-SW-007	L-SW-008
Location			SE Clarifier	Aeration Pond	Digester Basin
Sample Type			Field Sample	Field Sample	Field Sample
Collection Date			1/18/2012	1/18/2012	1/18/2012
Matrix			Wastewater	Wastewater	Wastewater
Metals, Total (ug/L)					
Aluminum	37000	86400	5120	21000	68 U
Antimony	15	34.6	3.5 U	3.5 U	3.5 U
Arsenic	0.045	4.48	5 U	5.68	5 U
Barium	7300	17300	161	50.3	2.25
Calcium	NL	NL	222000	212000	92700
Chromium	NL	NL	32.6	170	2.27
Cobalt	11	25.9	24.1	9.95	1 U
Copper	1500	1300	24.2	804	24.3
Iron	26000	60500	257000	99900	327
Lead	NL	15	24.1	16.2	3.3 U
Magnesium	NL	NL	37600	369000	88300
Manganese	NL	2070	5250	1070	22.6
Nickel	730	1730	138	236	8.28
Potassium	NL	NL	15500	56200	69700
Selenium	180	432	73.6	33.6	7.23
Sodium	NL	NL	22500	93600	107000
Thallium	0.37	5.6	7.65	5.69	5 U
Vanadium	180	436	1 U	29	1 U
Zinc	11000	25900	6730	795	7.22
Herbicides (ug/L)					
2,4,5-TP	3700	8640	0.25 U	0.145 J	0.25 U
MCP P	37	86.4	218	50 U	50 U
VOC (ug/L)					
Acetone	22000	55500	5.56	16.8	5 U
SVOC (ug/L)					
2-Methylnaphthalene	150	346	0.943 U	1.22	0.943 U
Pyrene	1100	2590	0.943 U	3.19	0.943 U

Notes:

Shaded Black - Analyte concentration exceeds the associated RAL

Shaded Grey - Analyte concentration is greater than the associated RSL but less than the RAL

Bold - Analyte was detected above the sample quantitation limit

U - Analyte was not detected above the associated sample quantitation limit.

J - Value is estimated

NL - Comparison value is not established for analyte

RAL - Removal Action Level (April 2008)

RSL - Region 4 Regional Screening Level (June 2011)

SVOC - Semivolatile Organic Compounds

ug/L - Micrograms per liter

VOC - Volatile Organic Compounds

TABLE 6
LOBECO PRODUCTS REMOVAL INVESTIGATION
SUMMARY OF SLUDGE SAMPLE RESULTS

Sample ID	Adjusted RCRA TCLP (Rule of 20)	RAL Worker Soil	L-SD-001	L-SD-002
Location			Digester Basin	Digester Basin
Sample Type			Field Sample	Field Duplicate
Collection Date			1/18/2012	1/18/2012
Matrix			Sludge	Sludge
Metals, Total (mg/kg)				
Aluminum	NL	3290000	4120 J	6200
Antimony	NL	1360	1.85	1.76
Arsenic	100	177	2.78	4.26
Barium	2000	681000	1140	1890
Beryllium	NL	6700	0.328	0.51
Cadmium	20	2700	0.361	0.511
Calcium	NL	NL	23600	25900
Chromium	100	154000	136 J	255
Cobalt	NL	1010	3.14	5.32
Copper	NL	NL	1180	1460
Iron	NL	2380000	13500	23500
Lead	100	1200	28.3	33.3
Magnesium	NL	NL	82000 J	166000
Manganese	NL	75500	156 J	255
Nickel	NL	68100	66.5	116
Potassium	NL	NL	592	565
Selenium	20	17000	4.3	6.36
Silver	100	17000	0.251 U	0.376
Sodium	NL	NL	458	540
Thallium	NL	221	1.26 UJ	1.86
Vanadium	NL	17200	18.3	31.9
Zinc	NL	1020000	223 J	466
Mercury	1	93.1	0.322	0.367
Pesticides (ug/kg)				
delta-BHC	NL	NL	712	345
VOC (ug/kg)				
Ethylbenzene	NL	3180000	6060	6130
Toluene	NL	155000000	1830 J	2190 J
Xylenes (total)	NL	8570000	36900	37600
SVOC (ug/kg)				
2-Methylnaphthalene	NL	13600000	289000	203000
Naphthalene	NL	2180000	13200	10100 J
Pyrene	NL	55000000	310000	395000

Notes:

Shaded Black - Analyte concentration exceeds the associated Adjusted RCRA TCLP value and the RAL.

Shaded Grey - Analyte concentration is greater than the associated RAL

Bold - Analyte was detected above the sample quantitation limit

U - Analyte was not detected above the associated sample quantitation limit.

J - Value is estimated

mg/kg - Milligrams per kilogram

NL - Comparison value is not established for analyte

RAL - Removal Action Level (April 2008)

RCRA - Resource Conservation and Recovery Act

SVOC - Semivolatile Organic Compounds

TCLP - Toxicity Characteristic Leaching Procedure

ug/kg - Micrograms per kilograms

VOC - Volatile Organic Compounds