ExxonMobil Lail Property
East Greenwich Township and Borough of Paulsboro, Gloucester County, New Jersey
Site History

- 30,000 Cubic Yards of Alumino-silicate Material (ASM) Deposited in 1950’s
- 1985 Investigation of Buried Drums
- 1995 Mobil Signed MOA for Cleanup
- 2001 Mobil Signed MOA for ASM
- 2005 ExxonMobil Signed ACO for Remediation of ASM and PCB Residuals
- 2008 ExxonMobil Implements Remedial Actions (RA)
Site Characteristics

• Former Borrow Pit
• Tidally Influenced Embayment on Mantua Creek
  – contains up to 4’ of water during high tide
  – isolated puddles during low tide
• Emergent Wetland
• Surrounding Upland Areas Impacted
• Sediment PCB levels up to 21,000 ppm observed
  (Screening level is 0.07 ppm)
• Killifish tissue PCB levels up to 8.4 ppm
• Eagle Nest in Vicinity of Site – Failed until nest moved
Lail Property, Gloucester County, New Jersey
Lail Property, Gloucester County, New Jersey

2002 Aerial Photograph Base Map

Approximate Boundary of Lail Property

MANTUA CREEK

500 1000 1500 2000 2500 Feet
Lail Property, Gloucester County, New Jersey

Approximate Boundary of Lail Property
Material Placed Into the Former Borrow Pit

- Placed Into the Borrow Pit During the 1950s
- Catalyst Used in the Petroleum Industry
- Consists of Aluminosilicate Material (ASM)
- ASM Passed Through a Bath Containing Aroclor 1254
- Fired to a Glass-like Consistency
DRBC Sampling Effort

• Delaware River Basin Commission Sampled Tributaries to Delaware River
• Lail Property located on Mantua Creek, sample collected downstream of Site
• Mantua Creek exhibited highest level of PCBs in surface water of all tributaries sampled
Dry Weather Total PCB Concentrations plus Blanks
Non-detects set to Zero
flagged data set to reported value

Comparison of Total PCB Concentrations in Analytical and Quality Control Samples
Site Photographs

• Slide 11 shows (clockwise) Site at high tide, ASM Beads in Sediment, Waterfowl Nest, ASM Beads collected from Subsurface
Excavation of ASM and Surrounding Sediment to 1 ppm

• Material excavated to pre-delineated extent
• Post-excavation samples collected every 900 ft²
• Samples exhibiting > 1 ppm required further excavation
• Backfill to within 4 ft of previous elevation once post-excavation sample confirmation received
Site Photographs

- Slide 14 shows (clockwise) Construction Road (top two photos), Air Monitoring Station, Stone Berm to reduce tidal influence
- Slide 15 Shows (clockwise) Truck being detarped for loading, Truck being loaded, Wastewater Treatment Plant, Truck being decontaminated
- Slide 16 shows various views of dewatered sediments being removed
- Slide 17 shows various views of site during construction
- Slide 18 shows Raccoon Tracks and Carp and Killifish in surface water
Post RA Results

- Slides 20 and 21 shows status of all excavated cells
- Slide 22 shows all upland area PCB results above 1 ppm
- Slide 23 shows all sediment area PCB results above 1 ppm
Post RA Results

• Slide 25 shows various views of post RA restoration

• Slide 26 shows various views of post RA planting
Excavation Results

- 87,600 cubic yards of material removed (30,000-40,000 cubic yards contained ASM)
- $46.2 million, approximately $0.5 million estimated for implementing 5 year plan
- Excavation of sample locations above 1 ppm
5 Year Sampling Plan

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<th>Location</th>
<th>Sample Type</th>
<th>Year</th>
<th>Parameter</th>
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<td>Embayment</td>
<td>Forage fish tissue</td>
<td>1 (3, 5 if needed)</td>
<td>PCB Aroclors</td>
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<tr>
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<td>Young of the year tissue</td>
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<tr>
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<tr>
<td>Mantua Creek</td>
<td>Forage fish tissue</td>
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<td>PCB Aroclors</td>
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<td>Mantua Creek</td>
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<td>PCB Aroclors</td>
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<td>Little Mantua Creek</td>
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Historic Data for Comparison

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<td>1.92 mg/kg</td>
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<td>1.15 mg/kg</td>
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