State of Maine Aboveground Supply Tank Replacement Program

Maine Department of Environmental Protection
Jon Woodard
Nathan Thompson
The State of Maine has a lot of.....

Photo by Wit Kosinski Brewer, Maine 207 989 5665
But not a lot of people…
80.2% of single family residents rely of fuel for heat.

Source: Maine Oil Dealers Association.
Through the 1990’s Maine DEP began to see a rise in heating oil above ground storage discharges. Many discharges were caused by tank corrosion, poor installations, and physical breakage of the line from the tank.
AST Discharges in Maine

• Through the 1990’s Maine DEP began to see a rise in heating oil above ground storage discharges.
• Many discharges were caused by tank corrosion, poor installations, and physical breakage of the line from the tank.
Physical Breakage
Physical Breakage
Physical Breakage
Corrosion
## Discharges of petroleum from above ground oil storage tanks in Maine 1995-2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Single Family Residential (#1 &amp; #2 Oil)</th>
<th>All Facilities (all petrol.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>235</td>
<td>380</td>
</tr>
<tr>
<td>1996</td>
<td>342</td>
<td>534</td>
</tr>
<tr>
<td>1997</td>
<td>284</td>
<td>451</td>
</tr>
<tr>
<td>1998</td>
<td>451</td>
<td>638</td>
</tr>
<tr>
<td>1999</td>
<td>434</td>
<td>683</td>
</tr>
<tr>
<td>2000</td>
<td>441</td>
<td>675</td>
</tr>
<tr>
<td>2001</td>
<td>610</td>
<td>906</td>
</tr>
<tr>
<td>2002</td>
<td>469</td>
<td>747</td>
</tr>
<tr>
<td>2003</td>
<td>546</td>
<td>871</td>
</tr>
<tr>
<td>2004</td>
<td>478</td>
<td>801</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4290</td>
<td>6686</td>
</tr>
</tbody>
</table>

*Source: Hazardous Material & Oil Spill System (HOSS)*
Results of discharges

- Bedrock and groundwater well contamination.
- Damage to property & real estate values
- Vapor issues in houses
- Lawsuits and 3rd party claims for affected neighbors or tenants.
- Financial Burden to tank owners required to clean up.
Creation of AST Insurance Fund

• Similar to Maine’s UST Insurance Fund.
• Tank owner Responsible Party.
• Eligible expenses for clean up.
• Deductibles based on gallons of oil stored/owned and compliance with Oil & Solid Fuel Board oil supply installation codes.
Money spent by the State of Maine to Clean Up Contamination at AST Sites 1995 -- 2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Single Family Residential (#1 &amp; #2 Oil)</th>
<th>All Facilities (all petrol.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>$526,679.00</td>
<td>$694,275.00</td>
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<td>1996</td>
<td>$631,618.00</td>
<td>$1,298,600.00</td>
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<tr>
<td>1997</td>
<td>$574,529.00</td>
<td>$1,253,424.00</td>
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<td>1998</td>
<td>$1,166,982.00</td>
<td>$2,138,961.00</td>
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<tr>
<td>1999</td>
<td>$911,494.00</td>
<td>$1,895,395.00</td>
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<td>2000</td>
<td>$1,064,378.00</td>
<td>$1,180,753.00</td>
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<td>2001</td>
<td>$2,177,299.00</td>
<td>$10,633,984.00</td>
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<td>2002</td>
<td>$1,720,589.00</td>
<td>$2,697,972.00</td>
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<tr>
<td>2003</td>
<td>$1,925,526.00</td>
<td>$2,758,729.00</td>
</tr>
<tr>
<td>2004</td>
<td>$1,133,252.00</td>
<td>$1,816,499.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$11,832,346.00</strong></td>
<td><strong>$26,368,592.00</strong></td>
</tr>
</tbody>
</table>

Source: Maine DEP Spill Site Tracking System (SSTS)
State of Maine AST Replacement Program

- Total of all reported Hazmat & Oil Spills in Maine 1995-2004: 28423 (2,800/yr)
- Total of discharges from single family AST’s in Maine 1995-2004: 4290

Source: Maine DEP Hazardous Materials & Oil Spill System (HOSS)
AST Installation Standards

• In Maine The Oil & Solid Fuel Board regulates the installations standards of AST and licensing of heat oil technicians.
• Maine DEP does regulate the clean-up of discharges.
AST Installation Standards

• Maine DEP and Oil & Solid Fuel Board worked together to draft new standards. Some of the first improvements were made by addressing:
  – Solid base
  – Filter protection
  – Height restriction
  – Secondary containment for lines buried in concrete floors
Solid Base
Secondary containment for buried supply lines in concrete floors
Filter Protection & Height Restriction
State of Maine AST replacement program

• 1998: 2 year pilot program started.
• Funded through Groundwater Oil Clean-up Fund
• $1,000,000.00 per year to AST Program
• Program made permanent in 2000
State of Maine AST Replacement Program

• $750,000.00 per year to Community Action Programs (CAPs). These funds will be distributed state wide to homeowners meeting low income eligibility guidelines.

• $250,000.00 to Maine DEP to replace tanks in particularly geologically sensitive areas, regardless of income.

• $25,000.00 for Emergency Responders.
Tenant’s Harbor
Stats on tanks replaced

• Since 1998 the Maine DEP has funded the replacement of above ground heating oil tanks at 5466 homes through the CAP agencies.

• Cost of program to date: $5.8 million
Continuing Efforts

- Public Service Commercials
- Brochures distributed by Maine DEP and Maine Oil Dealers Association
- Reviewing and upgrading installation standards
- Information posted on WebSite
  www.maine.gov/dep
  or specifically for home heating oil tank info:
  www.maine.gov/dep/rwm/homeowner/homeheatingoil
Thanks to Peter Moulton, Ann Hemenway, George Seel, Kara Walker, Ginger McMullen and Computer Guy Josh at the Maine DEP who provided photos or assistance with the presentation.
For More Information....

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Or Check the Website: maine.gov/dep