Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

Massachusetts Oil Spill Prevention & Response Program

Oil Spill Response Trailer Sorbents

Sorbents work on two principles: absorption and adsorption. In most cases sorbent materials are broadcast upon an oil slick and float along its surface until they become saturated with oil. Then the oil-soaked sorbents must be recovered and disposed of or squeezed free of oil and re-used.

Sorbents are not recognized as a primary means of recovering most oil spills for several reasons:

- The application and recovery of sorbent products are labor-intensive activities.
- The problems associated with disposal of oily sorbents are considerable.
- The costs of using sorbents as a primary recovery tool are prohibitive.

Even if sorbents are re-used time and again, the labor necessary to support such recovery efforts makes it uneconomical to use sorbents. Consequently, sorbents are not recommended as a primary recovery tool. Rather, they should be used in mopping up operations, removing sheens, and in areas where conventional skimming devices are ineffective.

In simple terms absorbents serve to soak up spilled products by capillary action. These types of sorbents resemble sponges in both form and function, and are ideal for low-viscosity oil and fuel spills on land or water.

Metal clips link sorbent booms together for adding extra lengths.

Oil-sorbent booms are ideal for rivers, ponds, oceans or where fuel spills occur.

Adsorbents rely on the forces of molecular adhesion that cause heavy oil products to cling to the surface of the sorbent; the oil simply sticks to the sorbent material. Snare, also called pom-poms, nets, and multi-strand sorbents, are most effective on viscous oils.

Sorbents may be re-used numerous times before the sorbent begins to deteriorate. The re-use potential of a sorbent may appear to be an advantage over other methods, but the process of applying the sorbent, recovering it, wringing it free of oil, and reapplying it is labor intensive, time-consuming and expensive, in addition to creating the problem of disposal in conventional landfills.