

Oil Spill Clean Up

We have had a considerable amount of feedback on the use of SorbaSolv™ for oil spill clean up. The following is a summary of some of the work that has been done using both booms and particulate.

Surface Spills: first containing the spill by completely or partially surrounding the spill with SorbaSolv™ booms tied together best handles floating spills. Smaller spills (up to 10,000 square feet) can be diked with approximately \$2,000 worth of SorbaSolv™ booms. Once contained, applying SorbaSolv™ particulate to the spill easily collects the surface oil. For most conditions, simple dumping of the particulate onto the spill is sufficient as capillary, wind and wave action will suffice to disperse the SorbaSolv™ through the entire spill. A more rapid method is the use of lawn vacuums, cellulose insulation machines or snow blowers to apply the loose particulate. Distances of 25 to 50 feet are possible using this method. Drifting and dusting of the sprayed SorbaSolv™ may be controlled by water misting the spray downwind and driving it in the desired direction. SorbaSolv™ is unique in the act that it will turn dark brown through black (Depending on the oil color) as it absorbs. The operator can determine the end point of application when the excess SorbaSolv™ remains its normal light gray color. SorbaSolv™ works equally well in both fresh and salt water. Higher temperatures enhance absorption and flotation. Temperatures at or below freezing will slow down the process but not stop it.

Larger spills are most easily handled by using the SorbaSolv™ booms as sweeps to collect and “herd” the spill in the desired direction as the surface oil is absorbed by the particulate. Collection of the absorbed oil can be accomplished with clamshell buckets, rakes, skimmers, vacuums, or the like. Oil/ SorbaSolv™ agglomerates may be moved by the use of pressure water hoses without sinking. Entrapped water should be allowed to drain before dumping into receiving vessel to decrease volume and weight. No oil will drain back.

Disposal: Collected oil may be recovered from booms and pillows by simple wringing out similar to a mop wringer. Oil can be removed from particulate in a similar fashion by exerting pressure from 25 to 50 PSI. The recovered oil is unchanged except for a small amount of emulsified water. If burning is the preferred method, SorbaSolv™ will act as a wick to control the burn and contribute about 7,000 BTU per pound with less than 2% ash. As SorbaSolv™ is biodegradable and acts as a nutrient, any uncollected SorbaSolv™ treated oil will biodegrade more rapidly than free oil.

Beach Clean Up: The most effective clean up method we have developed is the use of spray applied SorbaSolv™ particulate at low tide. The area to be cleaned is diked off with SorbaSolv™ booms offshore at a distance roughly equal the width of the shoreline to be cleaned. The SorbaSolv™ particulate is sprayed over the contaminated area to give a uniform coat. Very large rocks with deep cavities may have to be water wet to drive the SorbaSolv™ between narrow crevices. Any areas appearing dark should be resprayed to leave a light gray excess of SorbaSolv™. Fine sand or stone areas that have been penetrated by oil should be disked, plowed,

harrowed or rototilled to contact the oil with SorbaSolv™. As the tide comes in, the oil/ SorbaSolv™ will float to the surface. Some hand working with pitchfork may be necessary to free entrapped SorbaSolv™. Our results have shown that the effect of three or 4 tides usually will clean about 99% of the oil from the shore. Severely entrapped oil can be pressure washed out to contact clean SorbaSolv™ as can entrapped oil/ SorbaSolv™ agglomerates.

The above cleaning method can be demonstrated by coating stone/sand mixes with oil and sprinkling on SorbaSolv™ particulate. Some minor stirring may be required, depending on size distribution. After a few minutes, add water (fresh or salt) and skim off the agglomerate. Allow the stone/sand mix to dry and it will be found to be COMPLETELY free of oil.

Finally, SorbaSolv™ is an entirely new chemical, not just a cellulose/chemical mix. Technically, it is the Zincal Stearate salt of cellulose.