Containing Askarel Liquid Spills with Dow Imbiber Beads "S"

Ecologists and environmentalists have voiced serious concern about the danger of spills of polychlorinated biphenyls (PCB's). Askarel liquids used in many electrical applications have a high concentration of PCB. DOW Imbiber Beads offer a new method of containing accidental askarel spills.

What is the Problem?

Electrical transformers are often filled with a liquid known as askarel. Askarel is the generic name for a non-flammable liquid dielectric insulation. Askarel liquid contains a polychlorinated biphenyl (PCB) which is chemically inert, fire resistant, heat stable, non-corrosive and exhibits a high dielectric strength under the operating conditions found in transformers and capacitors.

There is mounting evidence that PCB's have adverse effects on the environment. The problem, therefore, becomes one of capture and containment of the askarel liquid in the event of an accidental spill or rupture of a transformer.

DOW Imbiber Beads

DOW Imbiber Beads "S" have exhibited a capacity to capture and contain askarel liquids. Suitably designed devices employing DOW Imbiber Beads "S" provide a method of containing an accidental spill. As backup protection against overflow, a soil sealant system containing Imbiber Beads will provide double protection for capture and containment of the askarel liquid.

Contaminated containment materials can be disposed of safely through high temperature incineration.

What are Imbiber Beads?

Imbiber Beads are a family of materials, generally based on a crosslinked swellable polymer, in a bead form. These compounds have the unique ability to imbibe and hold many times their own weight of fluid – in this case askarels.

A partial list of chemicals which can be imbibed with Imbiber Beads "S" follows:

cumene
divinyl benzene
ethyl benzene
benzene
pyridine
toluene
chlorobenzene
dichlorobenzene
benzyl chloride
methyl bromide
xylenes
epichlorohydrin
dibromochloropropane
styrene
trichloroethane
trichlorofluoromethane
chloroform
chloromethane
dichlorodifluoromethane
perchloroethylene
trichloroethylene
halogenated hydrocarbons
ethylene dichloride
trichlorobenzene/PCB mixture

Property Information, DOW Imbiber Beads "S"

- Beads are spherical, solid and are available in sizes ranging from 100 to 35 mesh.
- Solubility: Insoluble in water, methanol, acetone. Swellable in most aromatic hydrocarbons, benzene, toluene, styrene, chlorohydrocarbons, etc.

  Density: 1.05 g/cc
- Shelf life: Indefinite, opened or sealed

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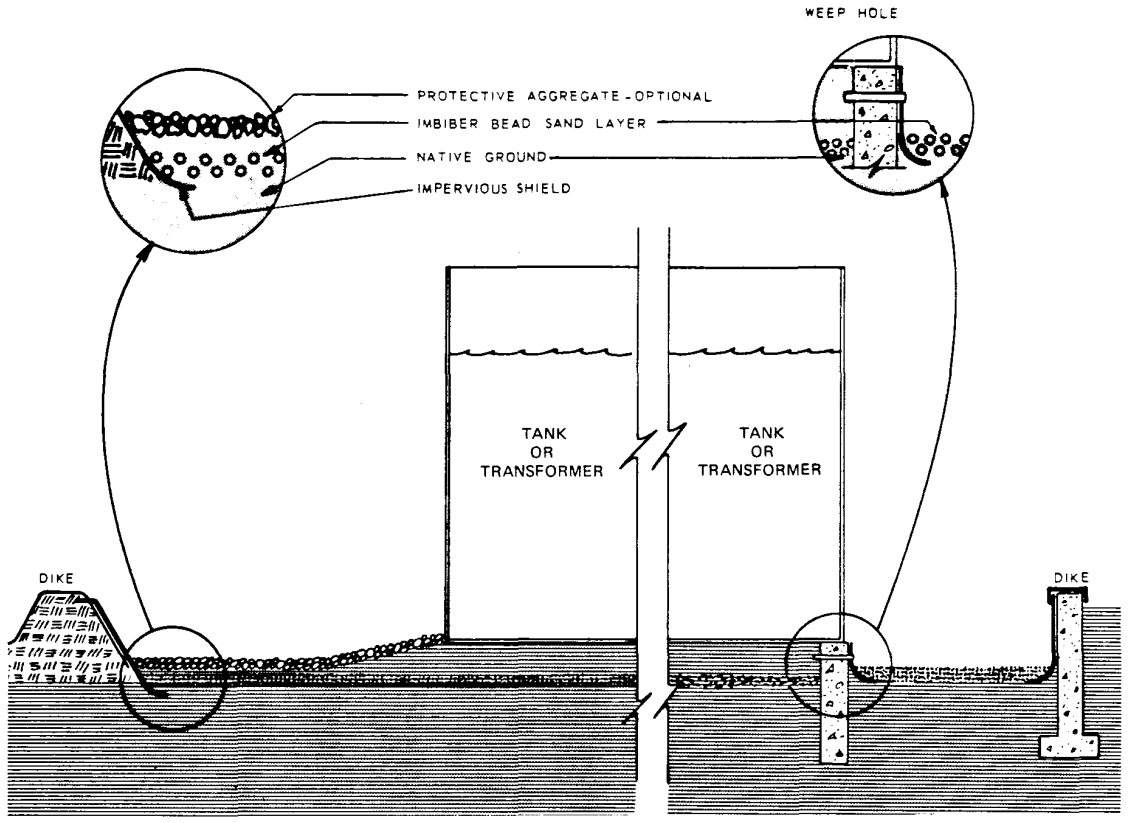

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IMBIBER BEAD SOIL SEALANT FOR HAZARDOUS MATERIALS

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