

Exhibits

Exhibit A

**In response to many questions about the use of the NAPL FLUTE system in its several forms:**

Our NAPL FLUTE technique uses a color reactive hydrophobic material to detect the LNAPL/DNAPL. The mechanism is that the pure product is wicked into the color striped cover material and carries the stripe dye with the NAPL to form a stain on the back side of the striped material. If the DNAPL has its own color, that also shows on the absorbent material. The best use of the cover material is to emplace it in the earth (typically in contact with a hole wall) and to allow any free product present in the formation to be wicked into the reactive cover. Under water or in the vadose zone, there is very little evaporation of the DNAPL during the wicking process. Our web site shows several methods of installation of the cover in the ground.

The several methods are:

1. Emplacement in the earth via direct push rods in sediments.
2. Emplacement into open stable holes on an everting carrier liner, usually fractured rock.
3. Emplacement through sonic casing on a carrier liner similar to direct push method
4. Assessment of core from a variety of methods including sonic core.

Of the several approaches, the in situ assessments are the more reliable with the installation via direct push rods the least disturbing of the in situ pore fluids. But, it is quite common for the cover material to be used to assess core. However, we have several examples of no evidence of NAPL in the fractures of rock core, but the installation of the NAPL FLUTE liner in the core hole showed extensive fractures bleeding NAPL. The fracture fluids may be lost during the rock coring process. Soil samples collected without the addition of drilling fluids have a better chance of retaining the pore fluids, but it depends upon the particular coring procedure and permeability of the core and whether from the vadose zone or the saturated zone.

The cover material is sold in a strip form for assessing core. The best method is like that which we use for sonic core: The reactive cover in tubular form is slipped over the core barrel and a transparent plastic sleeve, closed at the end, is slipped over that. The core is then extruded into the concentric bag. Any NAPL pore fluids which contact the cover are wicked into the cover and produce a very visible stain as seen through the clear plastic cover. If the FLUTE cover material is simply placed on the core, the concern is the high evaporation rate of the many DNAPLs. As the cover wicks the NAPL, the NAPL is

evaporating. If the NAPL is very volatile, like TCE, the stain is much reduced if there is only a small amount of TCE.

The NAPL FLUTE system is nontoxic, unlike Sudan IV which is highly toxic. The NAPL FLUTE reaction is not so much the same for all oily substances as is the Sudan IV dye reaction. Non solvent materials do not mobilize the NAPL FLUTE dye. The color of the NAPL may still be quite obvious. The NAPL FLUTE system reacts to pure product alone, not the dissolve phase. The EPA has used our system. We don't have any formal EPA approval. It is not a quantitative measurement, but pretty graphic. We have a list of materials which have been tested for reaction with our cover material. They are attached.

If you have any questions, call FLUTE at 888-333-2433 or email us at info@flut.com. Or, go to our web site at www.flut.com under either "systems" or "applications".

Some of the NAPLs and DNAPLs that react with the NAPL FLUTE system

We, and our customers, have tested the following compounds with our NAPL FLUTE reactive cover:

- Motor oil, gear oil, thread cutting oil
- Gasoline
- Diesel fuel
- Creosote
- Chlorobenzene
- Dichlorobenzene
- Trichloroethylene
- Tetrachloroethylene
- Dichloroethane(also called ethylene dichloride)
- Carbon tetrachloride
- Benzene
- Lindane (an insecticide)
- Acetone
- Xylene
- Toluene
- Dowtherm
- PCBs

These compounds all react with the reactive cover, but in somewhat different fashion. The motor oil, gear oil, Dowtherm, PCBs, and thread cutting oils do not leach the dye from one side to the other, but they do wet the cover to a much more translucent state. It looks like oil on paper. Some oily compounds show extensive staining from the color of the compound. That is especially true for creosote.

The other compounds all leach the dye from one side to another producing a blotch of mixed color. The trichloroethylene leaches the dye somewhat more aggressively than the tetrachloroethylene, but it is hard to tell the difference when the cover is retrieved. Acetone, xylene and toluene all evaporate very quickly and may leave a muted stain if the stain is not obtained underground and/or under water. There has been a report of the dye being entirely washed out of the cover by a massive stain, but even then the edges and striped side of the cover show the effect.

The gasoline and diesel fuel leach the dye less aggressively than the other leaching compounds. Consequently, there is extensive wetting of the cover, with wicking for long distances with the fuels, but the dye migration is slower. However, when the cover dries, there is clear evidence that the dye is leached from the front to the back side by these fuels. Gasoline actually bleeds the red dye stripe more than the other two colors.

For more information on the utility of the NAPL FLUTE system, call 1-888-333-2433.