

**** STANDARD OPERATING PROCEDURES ****

GORE-SORBER™ SCREENING MODULES

June 4, 1993

**IF YOU HAVE ANY QUESTIONS AFTER YOU HAVE READ THESE INSTRUCTIONS,
PLEASE CALL MARK STUTMAN OR BARBARA KEAVENEY AT (410) 392-3300.**

DESCRIPTION: GORE-SORBER Screening Modules are pollution detection sensors, utilizing Gore's patented sorbent containers and apparatus. The heart of our GORE-SORBER Screening Module is GORE-SORBER Passive Sorbent Collection Device ("sorber"), a container constructed of GORE-TEX® expanded polytetrafluoroethylene (ePTFE, similar to Teflon®) tubing. The sorbent mixture has been carefully selected to detect a broad range of volatile and semivolatile organic compounds. Replicate sorbers are housed in the bottom of an outer length of ePTFE tubing and sealed. The outer length of tubing serves as a sensor insertion and retrieval means.

CAUTION: GORE-SORBER Screening Modules are specially cleaned and stored after manufacturing. They must remain sealed in their shipping vials until deployment. **Do not store or use** them near cigarette smoke, gasoline, diesel fumes of exhaust, styrofoam peanuts, solvents, insect repellents, sunblocks, hand lotions or any other source of volatile organic compounds.

REQUIRED TOOLS: To date, most GORE-SORBER Screening Modules have been installed in 9/16" to 1" diameter holes, using a slide hammer and tile probe, or an electric rotary hammer auger. Installation depth is site dependent, but 3-4' is normally sufficient. Some of the recommended tools for a GORE-SORBERSM Screening Survey are :

- Fluorescent spray paint, flags, or some other reliable means of location marking
- Correctly scaled site map
- Pen, clipboard, field notebook, chain-of-custody form, and this instruction sheet
- Measuring tapes, transit, or other distance measuring device
- Electric rotary hammer with 1" carbide tipped bit (31"- 36" long)
- Extension cords
- Electric power source (AC power outlet or generator)
- Slide hammer /Tile probe
- GORE-SORBER Screening Modules & Vials (supplied)
- Corks with screw eyes (supplied)
- Insertion rod (supplied)
- Surgical gloves
- Paper towels and water (de-con of the auger and insertion rod)
- Trash bag
- Knife, scissors, and a pair of needle-nose pliers.



W. L. Gore & Associates, Inc.
101 Lewisville Rd., P.O. Box 1100, Elkton, MD 21922-1100
Phone: 410-392-3300 Fax: 410-398-6624

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FIELD DEPLOYMENT / INSTALLATION: Locate and mark all Screening Module locations on the ground using the spray paint and/or flags. Be sure to mark the locations well in order to ease retrieval. Create a narrow diameter hole, using a slide hammer and tile probe, or a rotary electric hammer auger. Wearing surgical gloves, remove the GORE-SORBER Screening Module from its sealed container. Note that each module has a unique serial number recorded on the top of the module and a metal tag attached to the module. Each vial is also individually numbered. **Record this number on the site map immediately!** Insert the stainless steel insertion rod into the pocket in the bottom of the module, and lower it into the hole. Be sure the module goes the entire way down the hole. If a large resistance is felt during insertion, remove the module and re-drill the hole. Re-insert the module. When the module is completely inserted into the hole, press the insertion rod against the side of the hole. Twist the rod and pull it out. Attach the end of the module to the screw eye in a cork. **Do not remove the metal ID tag!** Coil the excess retrieval cord and push it with the metal label into the hole. Cork the hole to prevent the intrusion of rain and atmospheric gasses during exposure. If the cork does not fit snugly into the hole, wrap a short length of the module retrieval cord around the cork and re-insert the cork into the hole. Decontaminate the auger and insertion rod after each use, using standard procedures (i.e. paper towels & clean water). If the surgical gloves become contaminated, replace them before handling any further modules.

GORE-SORBER MODULE RETRIEVAL: Some tools recommended for GORE-SORBER Module retrieval are:

- Cooler(s) with adequate supply of chilled ice packs, or water ice cubes (required)
- Original GORE-SORBER Module vials and racks (required)
- Site map with module locations (required)
- Distance measuring equipment
- Cork screw
- Knife, scissors, needle-nose pliers
- Small shovel
- Patching compound and equipment for concrete and asphalt holes (if required)
- Trash bag
- Surgical gloves.

Remove cork with cork screw. Wearing surgical gloves, wrap retrieval cord once or twice around your hand. Using a slow, steady tension, pull the cord straight up out of the ground. **Double check the Module ID# on the site map!** Cut off the cork and discard. **Put the entire retrieval cord back into the correctly labeled vial, including the metal tag.** Tightly reseal the vial. Using the vial racks and cooler, return the exposed vials and all supplies to the address below via Federal Express Overnight Service {(800) 238-5355}. **DO NOT** use Styrofoam "peanuts" or any other packing material which may contain volatiles or outgas and contaminate sorbers during shipment. Bubble packing is acceptable. Address the cooler to:

**SCREENING MODULES LABORATORY
W. L. GORE & ASSOCIATES, INC.
101 LEWISVILLE ROAD
ELKTON, MD 21921
ATTN: NOTIFY LAB IMMEDIATELY UPON DELIVERY!!**

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