

Best Practice: Portable Explosive Vapor Detector



Category: Electronic Surveillance

Location First Observed: Kandla, India

Date First Observed: May, 2005

Description: Portable Explosive Vapor Detector

Discussion: The port purchased a portable explosive vapor detector to assist guards in assessing the atmosphere in vehicles, containers, boxes or packages, or on the clothes of a person. The hand-held digital device tests for the presence of a variety of volatile chemicals associated with the manufacture of various explosives including TNT, NG, PETN, RDX, and EGDN. The port has not had an incident in which the explosive vapor detector revealed any suspicious material. Detectors of various brands can be programmed to alert either silently or with an audible tone. Sealed shipping containers can be tested by using an elevated platform to place the sensor of the explosive vapor detector at a container vent near the top of the container. Detectors can be used to assess every vehicle and container entering a port, or only on suspicious vehicles and containers as part of a response protocol.

Potential Down-side: Cost and maintenance of commercial units is relatively high. Reliance in any high-tech tool can sometimes cause personnel to neglect basic search techniques. Each make and model of explosive vapor detector will detect different types of explosives. Detectors may not detect vapors of improvised explosives, including pipe bombs, flammable gas cylinders, or gasoline and home-made napalm.

Conclusion: An explosive vapor detector is a very valuable tool to have in a security tool-box, so long as security personnel recognize its technical limitations and don't neglect other search and detection techniques.

Cost: Varies; between \$1,500 and \$3,000 USD.