

Development, Acquisition or Production, and Stockpiling

The limitations, and possibilities, of using electro-optical and multi-spectral sensors to monitor the development of biological weapons are similar to those as when aerial photography is utilized. If there are indicators of the development of biological weapons outside of a suspected facility, or if identification of abnormal activity is detected around a specific area, then this type of imagery may be of use to provide **indirect** clues. It is unlikely, if not impossible, to utilize these sensors to detect any type of developmental activity that occurs within an enclosed facility.

Similar comments can be made about the utility of these sensors in attempting to detect the acquisition or production of biological weapons. Only indirect clues of activity around a given facility could be gained using these methods. The inherent properties of spectral signature identification of multi-spectral systems may assist in determining suspected camouflaged buildings or production related components. Prior knowledge of the spectral signatures of a specific area could be useful for monitoring change detection over a period of time. This imagery could also be used for updating the quality of site diagrams or base maps of an area to assist in on-site inspections.

Again, the prospects of detecting the stockpiling or retaining of biological weapons that one is intent on hiding would seem rather unlikely using electro-optical or multi-spectral means.

Infrared Systems

All matter radiates energy at thermal infrared wavelengths, both day and night. The ability to detect and record this thermal radiation in image form, especially at night, has obvious reconnaissance applications that are relevant in a general way to the monitoring of activity related to biological weapons. There must be a distinction