

Vol.3, No.1

January/February/March/April 1998

Infrared Beam Technology Being Put to Use at NIPA Hardwicke Inc.

NIPA Hardwicke has brought the latest in emissions/odor detection technology to its plant with the installation of the FTIR ("fourier transform infrared" spectrometer).

The FTIR draws on modern laser technology to detect odor-causing organic compounds with an infrared light beam. Once every 5 minutes, the FTIR system transmits an infrared light beam from a telescope transmitter. The beam then passes through the atmosphere along NIPA Hardwicke's fence lines to two separate reflectors. The reflectors reflect the infrared light beam back to the telescope transmitter.

The FTIR then analyzes the portions of the infrared light spectrum that have been absorbed by organic compounds in its path. With this information, the FTIR can determine the type and amount of organic vapors at NIPA Hardwicke's fence line. "Now we have real time, accurate measurements of fence line emissions. That hard data helps give our neighbors confidence that we are protecting our community."

> –Jeff Batson, NIPA Hardwicke manager of environmental affairs

The FTIR was developed from existing military technology and has been in operation at NIPA Hardwicke for approximately a year. At last



FTIR Unit

count, Hardwicke was the only industrial plant east of the Mississippi River to invest in this advanced odor reducing technology. Before the FTIR was installed, NIPA Hardwicke estimated its fence line emissions based on engineering calculations. According to Jeff Batson, manager of environmental affairs, that concerned some of NIPA Hardwicke's neighbors. Batson explains that "now we have real time, accurate measurements of fence line emissions. That hard data helps give our neighbors confidence that we are protecting our community."

If organic vapors are detected, NIPA Hardwicke immediately traces the substance back to its source and works to reduce the emission. According to Dennis Weatherford, vice president of plant services, "The great advantage of the FTIR is that when we know what's at the fence line, we can quickly find the source and correct potential odor problems before they start."

... and from page 2 💻

"We are especially excited about the FTIR technology (see article p. 1) which allows us to detect potential odors at our fence line with an infrared light beam. While this technology is newly arrived, it has the potential to revolutionize the way manufacturers keep odors and other vapors from reaching their neighbors."



Charles Marble, plant manager Health, Safety Environmental



ith and safety. Reflecting BTP's mitment, 30% of all capital expentre in the last three years was related mproving health, safety and environmental Health and safety is a part of our every of our nurmal responsibilities and accounts

It is our normal responsionlines and accountability. The people mon lucencing safety are those doing the job and those managing the vivities. Line managers are responsible for ensuring that establish ety requirements are followed. Following established safe quirements is an employee responsibility. The Health and Safe patiment help the line manager fulfill their responsibilities. To futher enhance safety at all sites, BTP has established are

From the plant manager

BTP Supervisor Training Program (see article p. 4) to recommit the company to managing for safety. Another addition to our safety program is the neorganization of the plant's Safety Committee (see article p. 4). Members of the Safety

Committee take their jobs very seriously, and I thank each and ever one of them for their valuable work. While safety is our top priority, another of our concerns is odo

verduction. Our lask detection and repair program. "L-DAK" (see article p.3) improves hosh satively and oder control. We are especially detect potential odors at our force line with an infrared light beam. While this technology is newly artived, it has the potential to revolutionize the way manufacturers keep odors and other vapors from reaching their neighbors.

The NIPA Hardwicke Community Advisory Panel continues o meet once every two months. At these meetings, NIPA Hardwick fifcials and other community members tackle hard issues and share information and concerns. I urge any of our meighbors to contact a "community Advisory Panel member (see article p. 1) if you have a juestion you would like addressed at a future meeting.