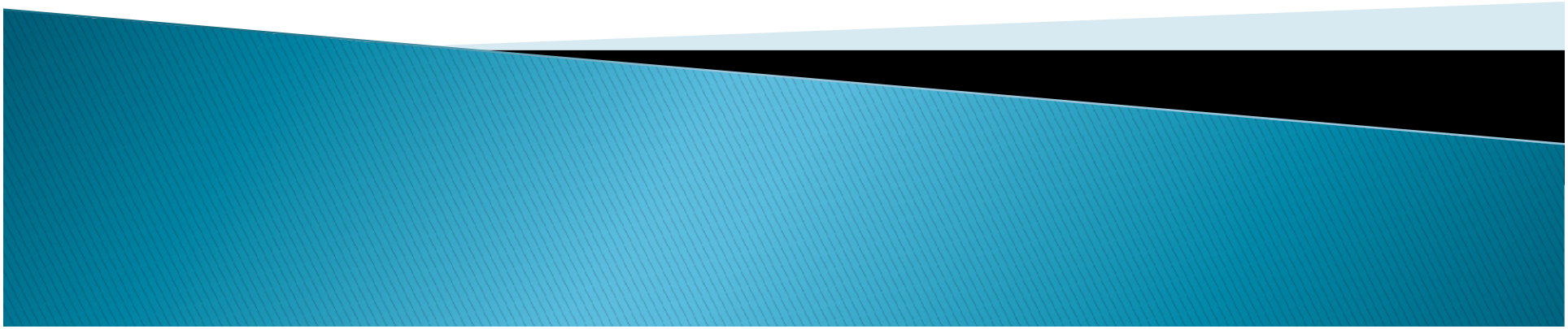
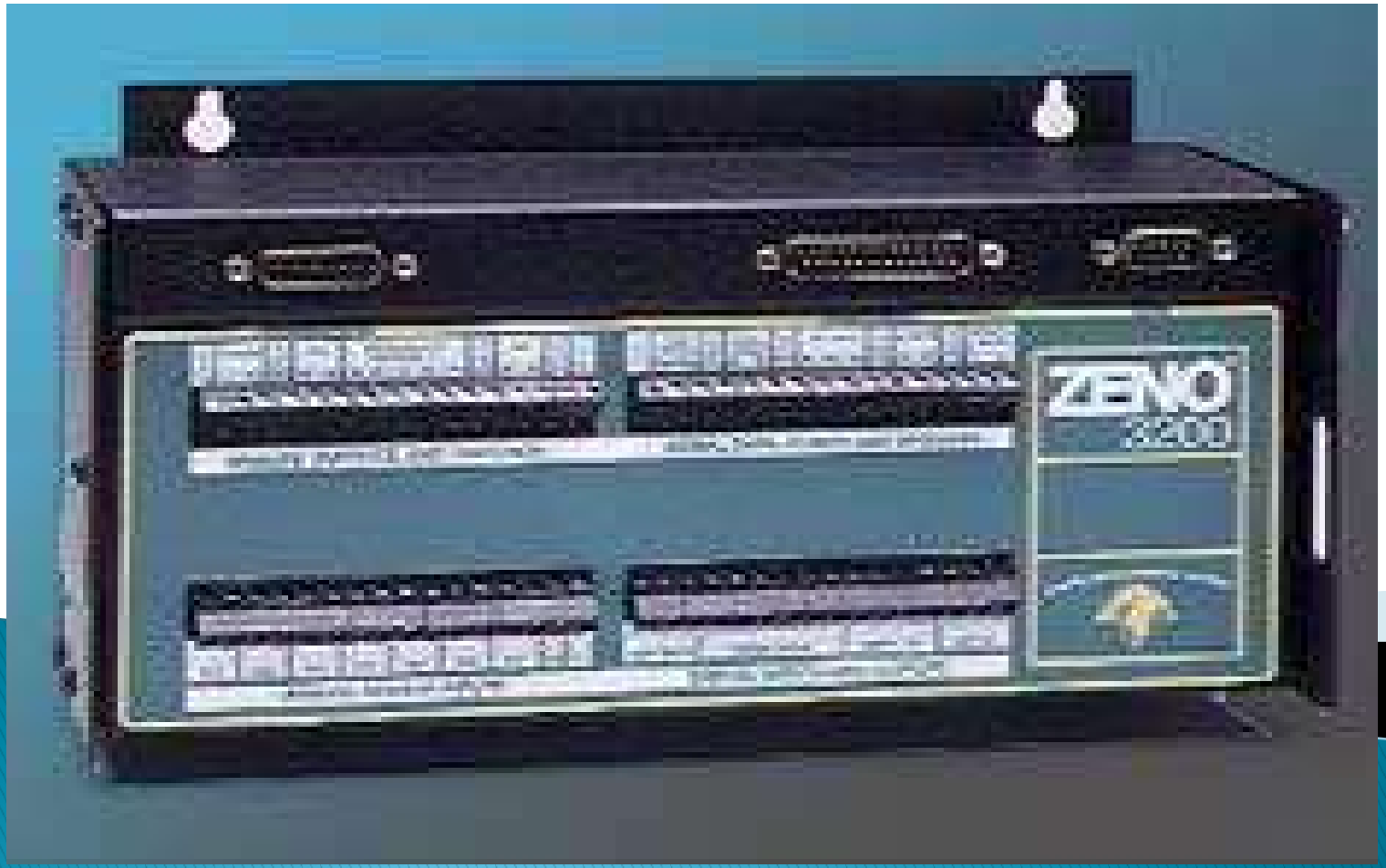
Overview of Ambient Air Monitoring at TAMUK



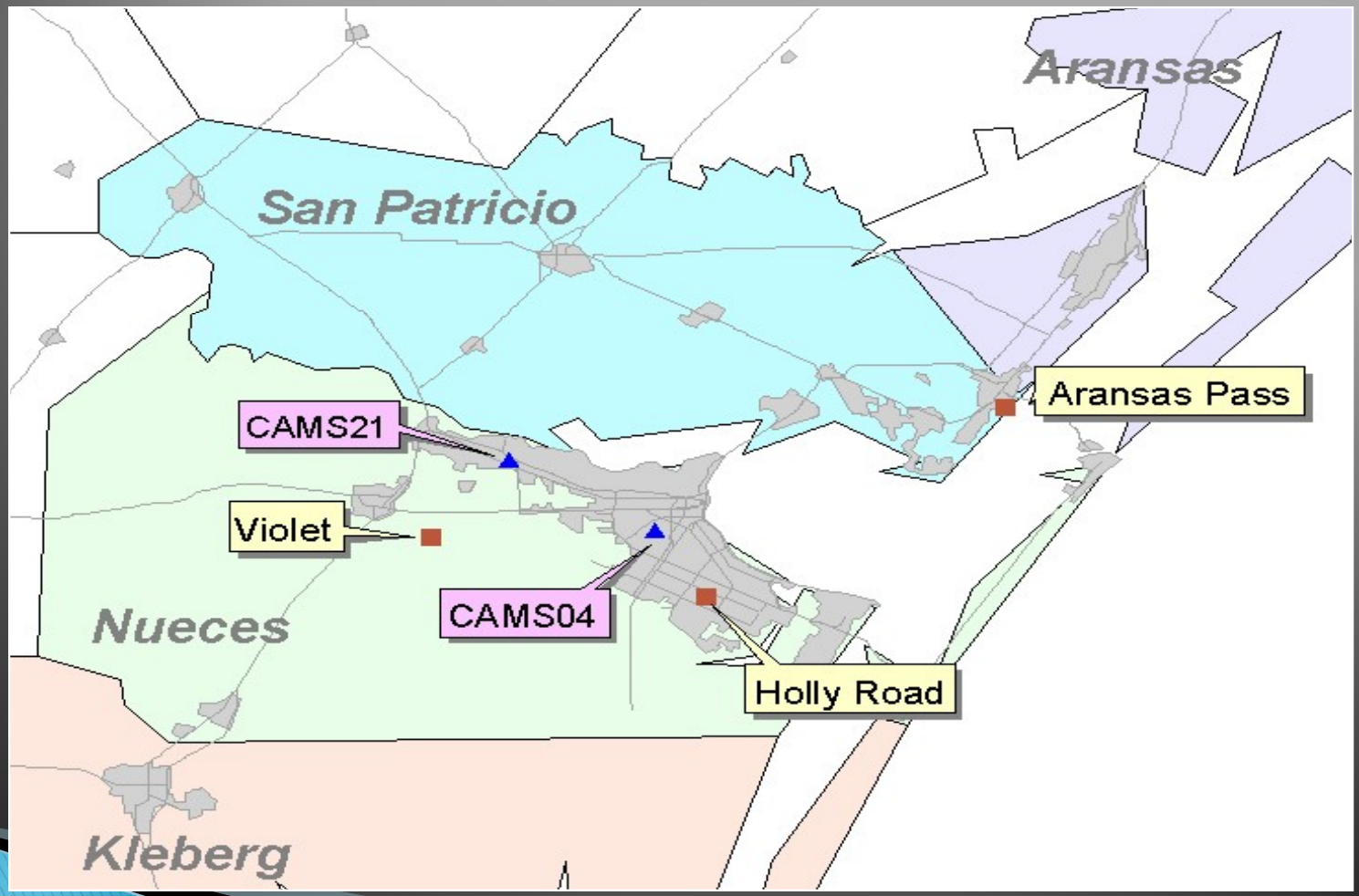
Ambient Ozone Monitoring

- TAMUK conducts additional ozone monitoring from state grants. The additional sites provide another data point for comparison to air quality models and evaluate Corpus Christi's attainment status.
- Additional meteorological parameters such as air temperature, relative humidity, wind speed, and wind direction.

A Data logger Collects the data and data is downloaded Remotely via Phone



Old and New Monitoring Sites for Ozone



Typical Site

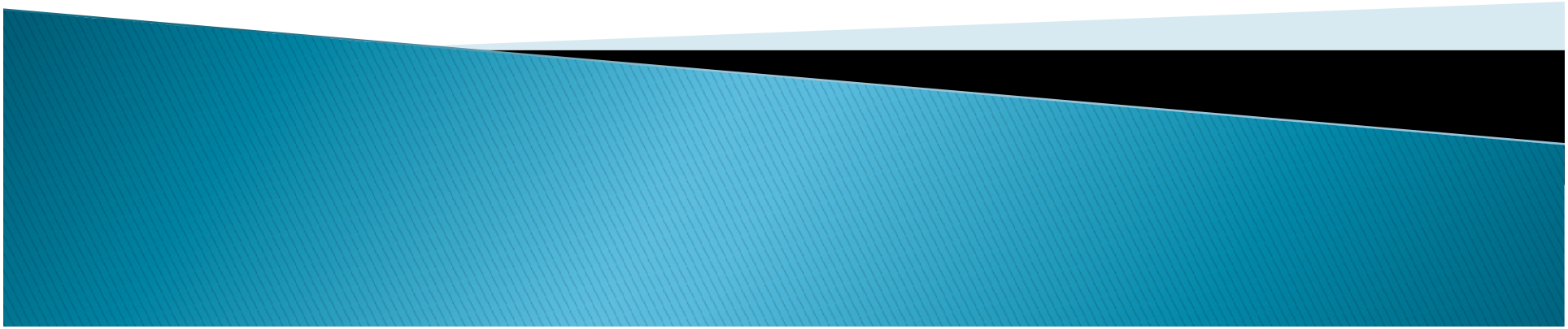
TCEQ Sites for Ambient Air Monitoring

TAMUK ALSO DOES MONITORING OF PETROCHEMICAL VAPORS

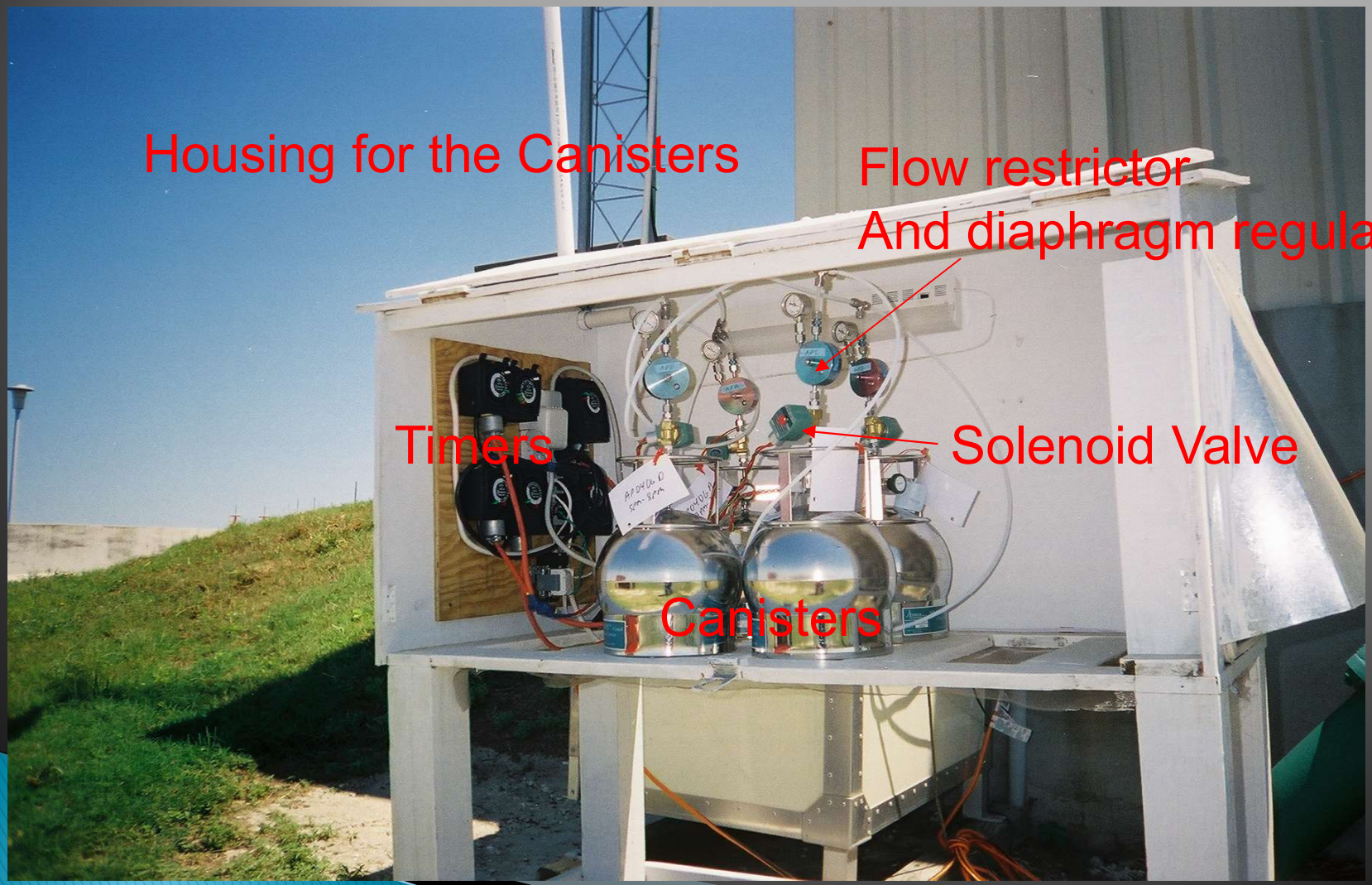
These are compounds such as benzene, natural gas(methane, butane), gasoline production. These compounds contribute to ground level ozone formation.

The air is collected in stainless steel canisters and then analyzed with a gas chromatograph.

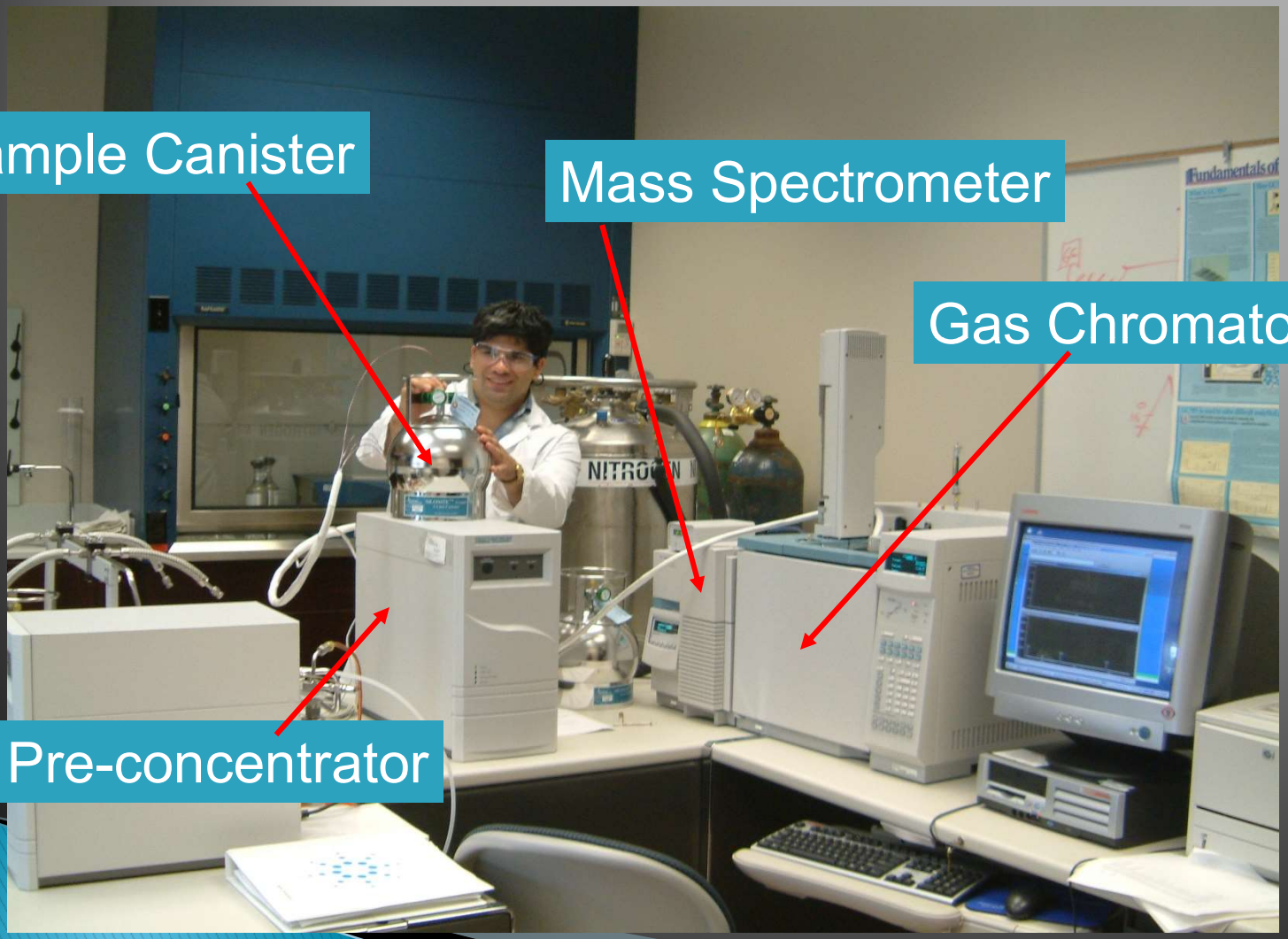
The concentrations are recorded and compared with other monitors set out by TCEQ.



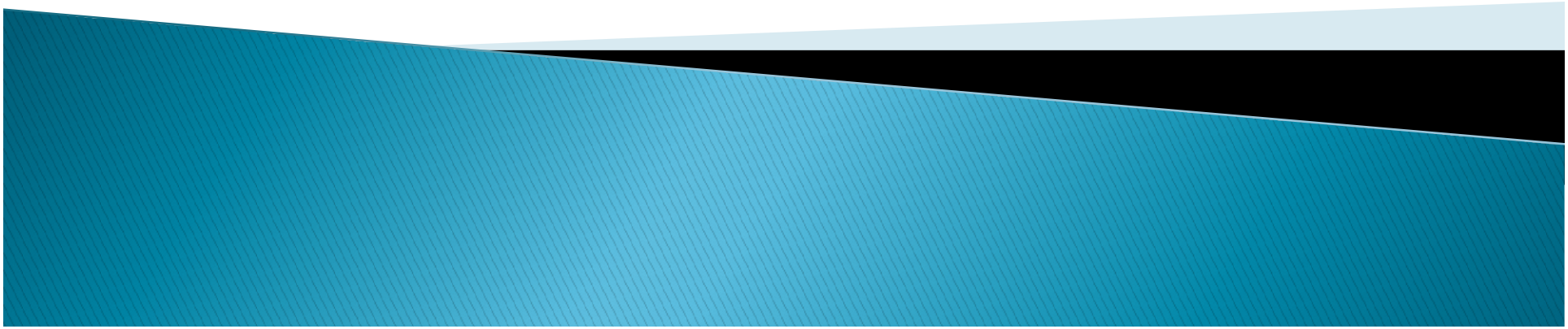
VOC Monitoring



GC-MS Analytical System



TAMUK also conducts particulate matter sampling.



Particulate Matter Sampler

Flightline Aircraftsman
NAS Corpus Christi, Texas & Corpus Christi Army Depot
Wednesday • November 12, 1997 • Vol. 2, No. 21

NASCC aids environmental study

by JO2(SW) Matt Sainopulos

Not far from the MWR marina stands a nondescript aluminum shed, connected by wires to a fragile looking metal frame. While this curious contraption may not garner more than a brief look from passers by, the equipment it contains is helping researchers to determine the level of air pollution in the Corpus Christi area.

As part of a cooperative effort with the Texas Natural Resource Conservation Commission (TNRCC) and Texas A&M University at Corpus Christi, NASCC has provided space for an atmospheric contaminant tester, designed to collect and analyze a variety of pollutants. The tester is part of a network of such devices located throughout the Corpus Christi area. The information gathered by this network is used by students at Texas A&M C.C. to chart the level of air pollution in the area, and helps them to determine the source and type of pollutants. The students, mostly Masters Degree candidates, hope to use the results of the study to make recommendations for reducing the level of air pollution in the area.

The tester, the only such equipment in the network to be located on Navy property, is provided with electricity, space and physical security by NASCC. The director of TNRCC's Monitoring Operations Division is impressed with the level of cooperation that the project has received from NASCC.

"This site is particularly important to our network," said TNRCC's Doyle Pendleton. "The location is ideally suited to monitor pollutants that drift in from offshore and gives us some firm data on locally generated pollutants as well."

"We have received excellent cooperation from the Navy," said Dr. John Kuruvilla, Texas A&M C.C.'s assistant professor of environmental engineering. "We were very happy to be able work with the Naval Air Station starting this season." Kuruvilla went on to say that the help given by NASCC shows a high level of concern for the local environment. "The Naval Air Station's assistance demonstrates their dedication to protecting and preserving the environment."

The study is funded through the 1999 calendar year, with hopes that funding can be found to extend the study beyond that time.