

## Hazardous Materials Storage Inspectors

**Their cubicles may stay empty for most of the day but that does not mean they are not hard at work. In fact, Hazardous Materials Storage Inspectors, or HMSIs, do some of the most important work in the Department of Environmental Quality.**

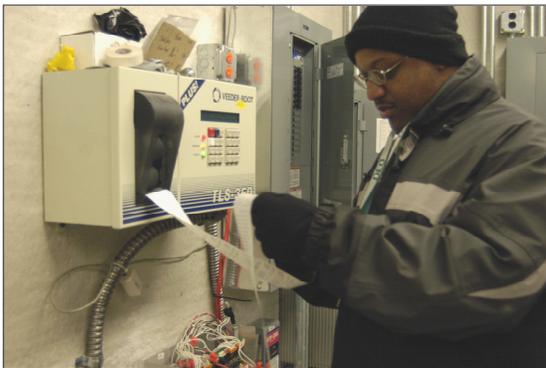
HMSIs spend a great deal of their time inspecting various facilities where storage tank systems are located. These inspections are done to determine whether the storage tank systems are in compliance with the law by checking for conditions that might result in dangerous leaks that could pollute not just the ground and the groundwater, but also create fire or explosion hazards.

Although most of their workday is spent out of the office, HMSI Greg



A propane bottle filling station.

Harris said he starts his day with phone calls and returning messages from individuals around the state who need an inspection, which can include consultants, contractors, and owners (such as gas station owners or private fueling facility owners). After Greg goes through the phone calls, he schedules appointments, returns messages, and then sets off to his first inspection of the day.



HMSI Harris inspects a leak detection system report.

Storage tank systems are split into two categories: aboveground storage tank (AST) and underground storage tank (UST) systems. The ASTs that

HMSIs inspect range from propane tanks, where people get their propane tanks filled for their outdoor grills, to huge tanks containing up to three million gallons of gasoline that are typically located at airports, refineries, and bulk pipeline terminals. Most USTs are usually located at gas stations and, of course, hold the gasoline people use for their vehicles. In

Michigan, there are currently over 3,300 AST facilities and 7,500 UST facilities, where nearly 28,000 storage tanks are located.

To be able to take care of all of



HMSI Harris inspects recently excavated USTs for signs of a release.

these inspections, the DEQ employs 20 HMSIs, all assigned to different districts around the state. Greg Harris is one of the two Lansing District Office inspectors who are responsible for all the facility inspections in Ingham, Eaton, Clinton, Gratiot,



Newly-installed double-walled fiberglass piping ready for inspection.

Shiawassee, Genesee, Lapeer, and Livingston Counties.

As can be expected, the amount of facility inspections that take place every year for active tanks is immense and the DEQ's HMSIs conduct thousands of inspections every year. Last year alone, HMSIs conducted nearly 7,000 (6,677) inspections of UST and AST systems. The inspections HMSIs conduct can range from an investigation of a facility resulting from a citizen complaint, to tank removals, to inspections of new tanks and piping

to ensure the new storage tank systems are installed according to the law.

When a tank is not in compliance with laws and the owner does not correct the problem in time, HMSIs will put a red-tag on the tank signifying its non-compliance. This red-tag tells the owner and those who deliver

fuel to the tank that they are not allowed to put anything into the tank until the owner has fixed the violation and the tank has been re-inspected.

Other inspections can also include opening up the tanks to check on their condition and overseeing the installation or removal of a tank system. If the tank is new, inspections will include checking whether or not tanks and piping have been installed according to the approved installation plan.

Inspections can be fairly simple if they are of a small AST system or

a more difficult task if they are of a UST system. Greg Harris said, "it is easier to inspect AST systems for conditions which may cause a leak because problems are more readily found and easier to repair when compared to underground systems." It is difficult for an HMSI to assess the condition of UST systems since both the piping and the tank are underground. Luckily though, the majority of underground tanks that are



Double-walled fiberglass tanks being installed.



An example of a red tag that is placed on tanks.

now made are double-walled fiberglass tanks or tanks that consist of a steel inner tank with a fiberglass outer tank that will not corrode like the old tanks made solely of steel.

>To find out more about Michigan's storage tank programs, visit the DEQ's Web site at <http://www.michigan.gov/deq> and click on "Land" and then click on "Storage Tanks."