### Sensir HazMat ID (continued)

- Applications may include
  - Identifying unknown compounds (particularly when used with other available instrumentation)

### Thermal Imaging Camera

- Imaging based on heat signature
- Applications may include:
  - Identifying hot spots or leaks from pressurized cylinders
  - Determining liquid levels in storage vessels

Staff install a direct-push well for temporary or permanent long term monitoring.

Staff use the radioactive isotope identifier during air monitoring.

Staff conduct depth-discrete soil sampling using the Geoprobe® during a collaborative effort between the Missouri Department of Transportation and the Missouri Department of Natural Resources in determining the presence of hazardous chemicals.

### For More Information

For more information on the experience and equipment you'll need for an environmental situation, call the department's Environmental Services today.


### Missouri Department of Natural Resources

### Environmental Services Program

P.O. Box 176
2710 W. Main St.
Jefferson City, MO 65102

1-800-361-4827 or
(573) 526-3315

www.dnr.mo.gov/alpd/esp



Printed on recycled paper. 4/2005

PUB002164


Missouri Department of Natural Resources

# Environmental Services

*Providing expertise and equipment for any environmental situation.*

# Environmental Services -

*Providing expertise and equipment for your environmental situation.*

The Missouri Department of Natural Resources' Environmental Services Program provides accurate scientific data during environmental situations. To obtain this data, the program performs field work, conducts monitoring, collects samples and provides laboratory testing for environmental pollutants.

The Environmental Services Program has the experience and equipment to collect groundwater, surface water, soil, sediment and indoor air samples under most conditions.

This brochure will provide you with a sampling of the services and equipment the program has available. So, if you are facing an environmental situation and need assistance or equipment, contact the department's Environmental Services Program today.

Front cover photo:
Staff conduct field hazard categorization on unknown liquids at an abandoned drum site in St. Louis.

# Services

## Air Monitoring

The department's Environmental Services Program can conduct air monitoring using instruments such as photoionization detectors, flame ionization detectors, radiation detectors and oxygen/combustible gas indicators.

## Groundwater Well Installation

The department's Environmental Services Program can install direct-push wells for temporary or permanent long term monitoring. Direct-push monitoring can save you significantly over conventionally installed monitoring wells.

## Investigations

The department's Environmental Services Program can determine and identify hazardous characteristics of unknown compounds in the field including flashpoint, corrosivity and reactivity. The program can conduct drum investigations, oversee contractors and are trained in conducting Phase I and Phase II Environmental Assessments.

## Soil Sampling

The department's Environmental Services Program can conduct depth-discrete soil sampling in unconsolidated materials using a Geoprobe®. Staff also use additional specialized equipment such as the membrane interface probe. When used in concert with the Geoprobe®, staff can conduct in situ investigations for soil gas work and soil conductivity.

Staff sample the contents of drums to determine whether the contents are hazardous waste.

# Equipment

## Ground Penetrating Radar

- Can be used to locate underground utilities or any other buried objects.
- Will detect subsurface soil disturbances and bedrock features.

Staff use the ground penetrating radar unit to locate underground utilities or other buried objects.

- Applications may include:
  - petroleum storage tank investigations
  - landfill investigations
  - archeological investigations

## Hapsite®

- Portable gas chromatograph/mass spectrometer
- Ability to analyze air, soil, water and unknown sample matrices
- High-quality field-screening data for identifying and quantifying volatile organic chemicals for real-time decision making in the field
- Applications may include
  - Determine horizontal and vertical contaminants at a site
  - Rule out presence of particular contaminants.

## Robotic Camera System

- Intrinsically-safe - 500 ft cable
- Real-time images
- 360° camera movement
- Applications include:
  - Examining sewer systems (as small as four-inch diameter)
  - Inspecting water well casings (as small as two-inch diameter)
  - Used in any dark confined space in place of live entry for reconnaissance

Staff use the Hapsite® equipment to analyze air, soil, water and unknown sample matrices.

Staff use the Sensir HazMat ID equipment to identify organic and some inorganic solid and liquid compounds.

## Sensir HazMat ID

- Identifies organic and some inorganic solid and liquid compounds using an infrared spectrophotometer
- 23,000 compound library. Can add additional compounds to library when encountered
- Wireless remote operation capable

# Other Services

## Air Quality Monitoring

The department's Environmental Services Program performs statewide monitoring to determine whether pollution levels exceed National Ambient Air Quality Standards; conducts monitoring for specific air toxics, and participates in investigation of air quality problems.

## Chemical Analysis

The department's Environmental Services Program laboratory conducts organic and inorganic analyses in support of regulatory programs within the department and for other state agencies.

## Water Quality Monitoring

The department's Environmental Services Program performs biological assessments related to Total Maximum Daily Loads, trend monitoring of fish contaminants and sediments, assists in developing statewide biological, nutrient and sediment criteria.