



Department to Conduct Infrared Camera Surveys to Reduce Fugitive VOC Leaks

Who is affected by this initiative?

Any facility with the potential to have fugitive leaks of volatile organic compounds (VOCs) such as petroleum, chemical, water treatment, landfills and other facilities throughout New Jersey.

Why is DEP concerned about VOC fugitive leaks?

Fugitive leaks of VOCs are a major source of VOC emissions and contribute to the air pollution in New Jersey, especially ground level ozone. New Jersey is classified as Severe Non-Attainment for ozone pollution by the United States Environmental Protection Agency.

VOCs are precursors for the formation of ozone. Two kinds of pollution—VOCs and nitrogen oxides (NO_x)—react when it's hot and sunny and produce ozone. Ozone does not come directly from tailpipes or smokestacks. The VOCs that form ozone come from vehicle and industrial exhaust as well as evaporation of gasoline, solvents and paints, and many other sources. Ozone is of particular concern during the summer months.

Ozone irritates the lungs and breathing passages, causing coughing and pain in the chest and throat. Ozone increases susceptibility to respiratory infections and reduces the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and lowered lung efficiency. When ozone reaches unhealthy levels, children and people with asthma are most at risk.

What is DEP doing?

The Department of Environmental Protection's Compliance and Enforcement Program has recently purchased a FLIR Infrared Camera which is capable of rapidly scanning large areas and miles of piping; this highly specialized infrared camera or thermal imager finds gas leaks and is especially good at finding leaks of VOCs.

The use of the FLIR Infrared Camera will help find VOC leaks at petroleum, chemical, water treatment, landfills and other facilities throughout New Jersey as a compliance assistance tool. The Department will then ensure that these leaks are repaired by the facilities to reduce the emissions of VOCs prior to taking formal leak detection procedures which could result in enforcement actions, and thereby reduce the formation of ozone faster than would be achieved by traditional compliance and enforcement procedures.

COMPLIANCE ADVISORY

The Department currently has 13 inspectors trained in the use of the FLIR Infrared Camera in the air, water, solid waste and hazardous waste programs.

What should I do?

All facilities that process VOCs or may have fugitive emissions of VOCs should evaluate their facility to minimize such emissions.

Who should I contact with questions?

Air Compliance and Enforcement - Northern Field Office (Bergen, Essex, Hudson Hunterdon, Morris, Passaic, Somerset, Sussex, and Warren Counties)	973-656-4444
Air Compliance and Enforcement – Central Field Office (Mercer, Middlesex, Monmouth, Ocean, and Union Counties)	609-584-4100
Air Compliance and Enforcement – Southern Field Office (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties)	856-614-3601

Where can I get more information?

The following web sites can be accessed for additional information regarding this advisory:

Compliance & Enforcement <http://www.nj.gov/dep/enforcement/>

Air Quality Permitting Program <http://www.nj.gov/dep/aqpp/>

Air Regulations <http://www.state.nj.us/dep/aqm/>

Information on the FLIR Camera
<http://www.goinfrared.com/cameras/Gas-Detection/gasfindir>

Visit the following Web site for general information:

Contact NJDEP: <http://www.nj.gov/cgi-bin/dep/contactdep.pl>

To comment on this advisory:

<http://www.nj.gov/dep/enforcement/survey.html>

Please note this advisory is intended to be a summary explanation of a department initiative. It does not include all potentially applicable requirements. If you have any questions related to compliance with this initiative, please contact the Enforcement numbers listed above.