

# 2<sup>nd</sup> Annual Fugitive Emissions – Leak Detection and Repair Symposium

Houston, Texas  
Hyatt Regency Houston Airport

## 4 February 2003

### ISA Training Institute Seminar Speaking the Language of LDAR—A Beginner’s Guide

Attend the training and you will receive:

- Seminar Noteset
- Certificate of Completion for 0.7 CEU

## 5–6 February 2003 Technical Conference

Attend the conference and you will receive:

- Conference Presentations Noteset
- Certificate of Attendance
- Credit for 14 Professional Development Hours
- List of Conference Attendees (an invaluable networking tool!)

## Product Showcase

Space is still available – contact Rodney Jones at [rjones@isa.org](mailto:rjones@isa.org) or (919) 990-9418.

The ISA Technical Conference Series was developed to meet the informational and educational needs of instrumentation, systems, and automation professionals around the country. These conference and training events feature industry experts who’ll provide you with the latest topical information and answer your most pressing business questions.

Don’t miss out on this opportunity to tap into the expertise of respected industry professionals and get world-class training, all in one location.

## Series Sponsors:



ISA—The Instrumentation, Systems, and Automation Society



## ISA Technical Conference Series Schedule

■ 2 <sup>nd</sup> Annual Conference on NOx Emissions and Source Monitoring	18–20 February 2003	Los Angeles, CA
■ Industrial Network Security Technical Conference	4–6 March 2003	Los Angeles, CA
■ ISA Safety Symposium	17–20 March 2003	Houston, TX
■ .net/OPC Technical Conference	1–3 April 2003	Los Angeles, CA
■ Wireless Communications Technical Conference	15–17 April 2003	Memphis, TN

## Product Showcase Participants

- EC Systems
- EnRUD Resources
- Environmental Analytics
- Environmental Monitoring Service, Inc.
- Essential Information Systems, Inc.
- URS Corporation
- And many more



ISA Technical Conference Series

# FUGITIVE EMISSIONS - LDAR SYMPOSIUM

Presentations: 8:00 a.m. – 5:00 p.m., Registration opens at 7:30 a.m.

## 5 FEBRUARY 2003

### Dave Holloway, *Shaw Environmental*

*Title: Effective Approaches For Managing Leak Detection and Repair (LDAR) Programs*

Holloway will discuss approaches for successful LDAR programs. This presentation will point out that there is no single differing LDAR program type that will work effectively for all facilities because of size, and varied regulatory requirements. Many facilities are looking for better ways to reduce risk by optimizing LDAR programs while keeping the cost from draining their budgets. Many other facilities have only recently been regulated by LDAR rules because of new Maximum Achievable Control Technology (MACT) standards along with increased controls for grandfathered facilities.

### Graham "Buzz" Harris, *URS*

*Title: Comparative Monitoring as a Tool for LDAR Quality Assurance*

This presentation will discuss procedures for doing comparative monitoring, interpreting results, and using comparative monitoring as part of quality assurance for an LDAR program. This session is based on the United States Environmental Protection Agency National Enforcement Investigation Center procedure for conducting comparative monitoring to determine the quality of Method 21 measurements performed over a period of time. Previous audit techniques relied on an LDAR observation technique to identify faults. Observation approaches can help identify a misunderstanding of Method 21 procedures. However, observation is not effective at identifying longer-term problems such as lapses in concentration, overly quick monitoring, or intentionally falsifying data. Comparative monitoring can detect gross problems in Method 21 that have occurred over the time leading up to the audit.

### Mike Smylie, *Environ*

*Title: Use of a Gas Imaging Device for Detecting Fugitive Emissions in Chemical Plants*

Smylie will present results of field studies that compare fugitive emissions leak control effectiveness using optical gas imaging technology to that obtained using the current Method 21 protocol. Preliminary results indicate that gas imaging is able to identify high leakers while monitoring both regulated and unregulated components, and can do so at a rate three to 50 times faster than the monitoring rate using Method 21.

### Roy Massengale, *EnRUD Resources, Preseident/Owner*

*Title: Complying with Texas Commission on Environmental Quality (TCEQ) Chapter 115 - LDAR Requirements*

Massengale will focus on compliance requirements for LDAR, specifically Subchapter D, Division 3 (Reg. V – Non-attainment Areas) and Subchapter H, Division 4 (HRV's in Houston/Galveston Non-attainment area). A brief time will be spent summarizing cooling tower requirements as they relate to the El Paso Method testing. The TCEQ is revising the industrial source control requirements codified in Chapter 115. This revision contains new and modified rules/requirements to reduce emissions of VOC's (Volatile Organic Compounds) and HRV's (Highly Reactive VOC's) from four key industrial sources: fugitives, flares, process vents, and cooling towers.

### Shannon Baker, *EC Systems*

*Title: LDAR Data Management Wish List – Now it's possible*

Baker will reveal not only what you should be looking for in a data management system, but also what's possible when you use today's information technology to address the complex requirements of managing LDAR program operations, reporting, and record keeping.

## 6 FEBRUARY 2003

### Rex Moses, *Environmental Analytics*

*Title: The LDAR Technician's Role in an LDAR Program*

Moses will draw attention to the daily reality of the LDAR technician's role and highlight meaningful ways to maximize the human's contribution to a well-run LDAR program. He notes that a successful LDAR program is a blending of a number of different, essential components. Among them are financial management, regulatory expertise, computer hardware and specialized data management software, field analytical equipment and data recordation devices along with safety programs and practices, to name a few. Inevitably, however, all of these components, including the hours of planning and untold dollars expended on them, pale in significance to the single most important ingredient in a successful LDAR program: the skill, knowledge, motivation and integrity of the field technician. Without a properly motivated and empowered field staff, the rest of the investment in LDAR compliance is at risk.

### Nesha MacMurdo, *DuPont Dow Elastomers*

*Title: Elastomeric Valve Stem Packing for Reduced Fugitive Emissions and Improved Process Control*

MacMurdo will focus on leak reduction technology for control valves—specifically, engineered packing systems with elastomeric components designed to reduce fugitive emissions to below background levels. Their extremely low frictional characteristics also improve process control. The advantages and/or disadvantages of various non-elastomer packing systems will be discussed (i.e. PTFE v-rings, graphite, braided PTFE, etc.); including performance comparisons using the ISA 75.25.01 test standard for measuring control valve response.

### Stephen Wing, *Dresser Measurement & Control*

*Title: Control Valve Low Emissions Stem Sealing*

Wing's presentation, will cover the importance and benefits of effective sealing for reciprocating or linear motion control valves. The presentation will cover key end user considerations based on current EPA requirements, typical stem sealing solutions (both standard and environmental), and future needs for low emissions compliance. The discussion will focus on the effects on valve stem seal performance, valve controllability, packing life, process yield, and maintenance costs. Test standards and criteria will be defined. Specific information on key factors, such as stem friction, actuator sizing, packing box design, etc., will be reviewed relative to initial equipment specification and overall operating life cycle for control valves. Appropriate statistics and test data also will be presented. This presentation will benefit process control engineers, reliability engineers, plant managers, environmental managers, and field maintenance personnel.



**Live—LDAR Analyzer  
Demonstration and Panel  
Discussion on LDAR  
Regulatory Enforcement**

**See first hand the usability of instruments**

**To view program updates, visit:**

**[www.isa.org/FugitiveEmissions](http://www.isa.org/FugitiveEmissions)**

**Additional space for the Product  
Showcase is available. For details,  
contact Rodney Jones at (919) 990-  
9418 or e-mail [rjones@isa.org](mailto:rjones@isa.org).**



### **Conference Moderator/Chair: John Cermenaro, Vice President, *EC Systems Corporation***

Cermenaro became involved with LDAR from the data management software side of the business. He has had articles published by ASME and Pollution Engineering. He has presented numerous times on the topic of LDAR program optimization. ISA is proud to welcome John Cermenaro back as Fugitive Emissions-LDAR Symposium 2003 Conference Moderator and Chair.

**[www.isa.org/FugitiveEmissions](http://www.isa.org/FugitiveEmissions)**

# Speaking the Language of LDAR – A Beginner's Guide

- Tuesday, 4 February 2003
- CEU Credit: 0.7
- Course Hours:  
8:00 a.m. – 4:00 p.m.
- Course No.: SP06C

The purpose of this workshop is to gain a basic understanding of what fugitive emissions leak detection and repair (LDAR) programs are all about. You will learn terminology, why LDAR programs are required (regulations overview), and the six aspects of every successful program - component identification, location identification, monitoring, data collection, repairs, and data management. LDAR is very specialized and has its own language. This course will equip you with the fundamentals needed to speak that language.

## You Will Be Able To:

- Locate information pertaining to LDAR regulations
- Recognize the meaning of common LDAR terminology
- Know where to look for information about LDAR regulatory applicability
- Understand LDAR tagging requirements and options
- Recognize what's involved with the care and feeding of LDAR field instrumentation (calibration, certification, etc.)
- Understand the requirements of EPA Method 21
- Recognize what to look for in the field when monitoring
- Choose among options for data collection in the field
- Recognize what is necessary to document and demonstrate compliance
- Establish ways to self-audit your LDAR program

## You Will Cover:

- **Setting Up a New LDAR Program or Evaluating an Existing Program:** Three different types of LDAR programs • Establishing roles and responsibilities for program management • Primary aspects of all LDAR programs • Where to find regulatory information pertaining to LDAR • Reading and understanding regulations • Component identification • Location identification
- **Equipment:** How to equip an LDAR monitoring technician • Analyzers • Analyzer calibration and certification • Data Collection
- **Monitoring:** What monitoring technicians are supposed to do • EPA Method 21 basics • What to look for in the field • What do to when a leak is discovered
- **Data Management:** LDAR databases • Reporting
- **Auditing:** What to expect if audited • Self-auditing



[www.isa.org/FugitiveEmissions](http://www.isa.org/FugitiveEmissions)

## Shannon Baker - Instructor

Shannon Baker works for EC Systems Corporation in Louisville, KY, where she provides technical support for the ORR LeakDAS software products and is an instructor for topics that include LDAR Program Administration, Field Monitoring, and Data Management. She started out as an LDAR field monitoring technician in 1992. By 1996 she was managing LDAR programs for sites in the Midwest. Baker has applied her hands-on LDAR experience to assist over a hundred sites optimize their LDAR programs.

# Fugitive Emissions - LDAR Symposium

4-6 February 2003  
Hyatt Regency Houston Airport  
Houston, Texas

Hyatt Regency Houston Airport  
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## Pricing

**2-day Conference Only** .....\$395 Members;  
\$475 Nonmembers

**1-day Conference Only** .....\$295 Members;  
\$345 Nonmembers

**Training Course** .....\$395 Members;  
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*ISA reserves the right to cancel any training course because of insufficient registrations.*

02-7742-102

## Fugitive Emissions-LDAR Symposium Registration Form



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### 2. Registration Information

*Check all that apply:*

**1-Day Training Seminar** 4 February *Check one:*  Member — \$395  Nonmember — \$445

**2-Day Technical Conference** 5&6 February *Check one:*  Member — \$395  Nonmember — \$475

**1-Day Technical Conference** 5 February *Check one:*  Member — \$295  Nonmember — \$345

**I wish to purchase a copy of the Conference Proceedings**

*Check one:*

\$50 —Attendees before the event or onsite

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**TCFEP3**

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