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Scott Wins CGA Safety Award

The Compressed Gas Association (CGA) recently honored Scott Specialty Gases at its Annual Meeting in Tampa, Florida, by naming Scott as recipient of the prestigious Leonard Parker Pool Safety Award for 2001. This is the third time the international supplier of pure and mixed specialty gases has been recognized by the CGA. Scott also received the safety award in 1989 and again in 1998.

The Leonard Parker Pool Safety Award was initiated in 1978 to honor participating CGA members that have shown the greatest improvement in safety performance. Each year an Association member company from each of three levels of employee exposure hours is honored for having the highest percentage of improvement involving annual occupational injury and illness. Scott Specialty Gases was honored for having the greatest improvement in safety among companies having between 400,000 and 1.5 million employee exposure hours.

Acid Rain: Are You Out of Compliance?

The U.S. Environmental Protection Agency (EPA) recently indicated that some acid rain utilities are not fully complying with the Federal Acid Rain Code. According to the EPA, when it comes to the use of EPA protocol gases used to calibrate continuous emission monitoring systems, utilities often do not fully understand the regulations. Daily monitoring and electronic reporting are not enough. Code CFR 40 Parts 72.2 and 75, and the *EPA Field Audit Guidelines* outline the following requirements. EPA officials have recently indicated they will more aggressively pursue violations of these requirements and that substantial penalties and fines can result.

- Daily span calibrations must be performed using an "EPA protocol gas" that is *certified* by the gas supplier to be traceable to a recognized standard (such as NIST) and *certified* to be within at least 2% of the concentrations indicated on the cylinder label.
- A Certificate of Accuracy, provided by the gas supplier, must be on file and readily accessible for each cylinder of zero/span calibration gas mixture in use.

- A zero/span gas calibration mixture cannot be used if the certification period has expired (as indicated on the cylinder's Certificate of Accuracy). Concentration values may no longer be accurate beyond this date.

- A zero/span calibration mixture cannot be used if pressure inside the cylinder drops below 150 psi. Below this point there is insufficient pressure to enable the EPA to adequately audit the contents of the cylinder.

- Zero calibrations must be performed using zero ambient material that is *certified* by the gas supplier not to contain concentrations of SO₂, NO_x, and THC (total hydrocarbons) above 0.1 ppm (parts per million), or a concentration of CO above 1 ppm, or a concentration of CO₂ above 400 ppm.

- A cylinder containing an EPA protocol gas or zero gas may be returned to the original supplier for recertification—but only if the cylinder pressure has not dropped below 500 psi.

See inside page 3 for an EPA-approved Q/A and Q/C procedure that can help ensure you comply with CFR 40 parts 72.2 and 75.



“Favored” by the EPA is Not a Good Thing

According to the *EPA Acid Rain Program CEMS Field Audit Manual*, “favored elements” that lead to a decision to select a unit for audit are: 1] Missing quality assurance data—failure to conduct daily calibrations, scheduled RATAs or Linearity Tests; and 2] Failed quality assurance tests—frequently failed daily calibrations and aborted runs on RATAs or Linearity Tests.

What happens if you’re selected for an EPA audit? First off, you must shut down operations while your management team pulls together reports and historical data to satisfy EPA questions. EPA auditors will visit your operation, looking for violations. According to EPA auditors, violations they most frequently encounter are:

1. The original Certificate of Accuracy for a cylinder of protocol gas (which must be supplied by the gas supplier for each cylinder of certified protocol gas) has been lost or misplaced.

2. Cylinders of protocol gases are in use for which the cylinder certification periods have expired.

Certification usually expires two years after the date a mixture was prepared, but a cylinder can be returned to the gas supplier for possible recertification, provided cylinder pressure is not below 500 psi.

3. Cylinders of protocol gases are in use in which pressure has fallen below 150 psi.

4. Lesser grades of calibration mixtures or ambient materials are in use instead of *certified* EPA protocol gases and *certified* zero air or zero nitrogen. Keep in mind that once you are targeted for an audit, EPA auditors can examine your records as far back as three years looking for proof that you have been using properly certified calibration gases and ambient materials. You can be fined up to \$25,000 per day (as far back as three years). EPA auditors can also reduce the number of emissions credits you are allowed. Remember also that your facility must remain shut down until you comply with all regulations, which can prove to be the most costly proposition of all. ■

Equipment Update Modular Laboratory Support System

Scott’s new modular system makes it easier than ever to control specialty gas pressure, purity, filtration and distribution at point-of-use when your gas source is located remotely. Preassembled panels contain any combination of pressure regulators, purifiers, moisture traps and outlet valves to meet virtually any laboratory requirement. Snap-in design makes it a snap to expand this system to accommodate future laboratory needs. Panels can be wall or bench mounted, or configured to support island workstations. Components are designed, built, tested and cleaned to maintain the highest level of purity for all types of specialty gas applications.



In the News

NIST Partners with Scott to Develop New Technology

Plumsteadville, PA—Partnering with the National Institute of Standards and Technology (NIST), Scott Specialty Gases has perfected new reactive gas technology that enables them to produce two new nitric oxide (NO) Standard Reference Material (SRM) precursors at concentrations of 0.5 and 1.0 parts-per-million. NO, present in automobile exhaust, is a major contributor to smog and acid rain. The research was partially funded by the automotive industry and will result in NIST selling new SRMs to emissions testers for measuring trace amounts of NO in automobile exhaust.

In an article appearing in the March 18, 2002 issue of NIST Update, NIST reported it partnered with Scott to develop “NO standards that are 10 times lower in concentration without magnifying sensitivity to other contaminants that may be present.” The NIST/Scott initiative has resulted in several reactive gas innovations, including a unique cylinder inerting process that protects NO mixtures against contamination from the cylinder in which the gas is contained. The process advancement also extends shelf-life, thus eliminating the need for emissions testers to return the standards to NIST for annual recertification. NIST anticipates the new NO SRMs will be available in 2004. ■

“EPA-approved” Q/A and Q/C Procedure Ensures Compliance

eScott® Regulatory Compliance Assurance takes the guesswork out of compliance with Federal regulations.

Scott Specialty Gases now makes it easy for you to comply with the latest environmental regulations. Our eScott Online Supply Chain Management System provides you with real-time and historical documentation and product usage information that satisfies EPA auditors should they visit your facility. And you can use eScott to purchase all the certified EPA protocols, zero air, zero nitrogen (and any other mixtures or pure gases you may need), plus appropriate high-performance gas handling equipment. In addition, online purchasing and other e-tools empower you to reduce your cost of purchasing while managing your on-site cylinder inventory more efficiently.

eScott® Regulatory Compliance Assurance includes:

Compliance Class™ Mixtures adhere to EPA G1 and G2 procedures, are NIST-traceable and are certified to be $\pm 2\%$ accurate—guaranteed, with dual analysis. In addition, Scott’s exclusive Aculife® cylinder inerting processes provide the longest mixture stability and shelf-life available.

RATA Class™ Mixtures provide Compliance Class protection, plus guaranteed $\pm 1\%$ accuracy for added compliance assurance. They are the most accurate calibration mixtures in the world and can save you up to \$80,000/year in repeat RATA testing.

No Scott customer using RATA Class mixtures has ever failed a RATA due to inaccurate calibration gas.

Low Nitric Oxide Protocols are world exclusive 0.5 ppm Low NOx and blended NO/CO protocol gases.

Ammonia Standards are world exclusive traceable standards for Title V permits, 27e and 7e tests for ammonia-slip.

eScott® Supply Chain Management Internet-based real-time and historical data that satisfies EPA auditors as a Q/A and Q/C procedure... plus takes cost out of purchasing and managing your calibration gases (*see side bar for details*).

High-Performance Equipment including stainless steel pressure regulators, manifolds and other delivery equipment to ensure the integrity of your calibration gas mixtures and provide lasting protection against corrosion. Turnkey CEMStations™ are also available to reduce installation and maintenance expense.

Technical Assistance from the specialty gas experts who co-authored original EPA Protocol Gas Regulations.

On-Time Delivery from regional manufacturing facilities, with centralized production processes and controls that have passed all EPA blind audits. We maintain the world’s largest inventory of NTRM, SRM and PRM traceability standards. Our Aculife cylinder inerting processes ensure product stability while Acublend® technology provides seamless, order-to-order consistency.



eScott® Supply Chain Management includes:

- ◆ Electronic Certificates of Accuracy for all cylinders in your inventory. You can view or download these critical documents 24/7, quickly and easily at scottgas.com. You’ll never misplace cylinder documentation.
- ◆ Expiration e-mail alerts when the certification periods for mixtures in your inventory are about to expire. You’ll never accidentally use an expired mixture to perform your calibrations.
- ◆ Secure, private web pages at scottgas.com. You can access these pages 24/7 to update a central file containing cylinder pressure, location and usage data for every cylinder in your inventory at all of your operating locations.
- ◆ E-Z reorders from a custom FOLIO™ of products, with electronic invoicing thus, eliminating clerical errors and reducing labor intensive purchasing paperwork.

Available exclusively on scottgas.com

For complete information about how eScott Regulatory Compliance Assurance can help you comply with Federal environmental regulations, log on to scottgas.com to request a copy of Bulletin No. 1116. Or call Scott Technical Services at 800-21-SCOTT today.

Make your life easy ...

Let Our Technical Experts Solve Your Problems

Internet access to our products and services is fundamental—but specialty gases can be complicated. So why waste time or risk making a costly mistake when you aren't sure what you need? Call us toll-free and tap into our 40 years of experience. Let our team of engineers worry about what will work well for you and what won't.

One conversation with a Scott technical expert will convince you we can help you:

- Improve your profitability with products that do the job most cost-effectively.
- Make smart decisions based on accurate answers to technical issues and questions.
- Sharpen your competitive edge by implementing innovative solutions to your unique application challenges.
- Jump a full step ahead of environmental regulations with guidance from environmental specialists who've "been there, done that."
- React more quickly in your business climate by receiving quotes for custom products within four hours.



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—Leanne Merz, Director of e-Commerce & Tech Services

—George Bean, Manager Tech Services

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