

# **DEGESCH America, Inc. Newsletter**

## **Issue XII**

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## **Did you know?**

- The first phosphine fumigant registered in the U. S. was **DEGESCH** Phostoxin®
- The first dust retained phosphine product registered in the U. S. was the **DEGESCH** Prepac®
- The first magnesium phosphide product registered in the U. S. was the **DEGESCH** Fumi-Cel®
- The first phosphine spot fumigant registered in the U. S. was **DEGESCH** Magtoxin® Spot Fumigant
- The first phosphine recirculation method patented in the U. S. was the **DEGESCH** J-System®
- The first phosphine generator patented in the U. S. was the **DEGESCH** Phosphine Generator
- The first portable phosphine "Scrubber" patented in the U. S. was the **DEGESCH** C.A.U.
- The only phosphine fumigant manufacturing facility in the U. S. is **DEGESCH**
- The only application company in the U. S. to fumigate 1,000,000,000 Ft<sup>3</sup> in 30 days was **DEGESCH**
- The Chemtrec® Hotline refers most phosphine questions to **DEGESCH**

Pretty impressive list, isn't it? When you've had as many successes as we've had, it might be easy to rest on your laurels; but that's not how we became a leader in the fumigation industry. We are constantly striving to bring the newest and most effective tools of the trade to the commercial marketplace.

**So what's next, you ask?**

# Phosphine Resistance Test Kit

**Insect resistance! Non-susceptibility! Super bugs!** Call it what you want, but the simple fact is bugs aren't dying the way they used to. We're starting to reap the harvest sown with the seeds of poor fumigation practices. Scientist have known for years what it takes to control insect populations with phosphine, Time, Temperature and Concentration. Too often shortcuts have been taken that led to increased resistance among native insect populations. Inadequate sealing is probably the biggest culprit. Once again the scientist had it right. One of the "Laws" of gases is: A gas fills all of its container, and its shape conforms to the shape of the container that it fills. What does that have to do with sealing, you ask? Simple; a gas continues to expand until a physical barrier like the walls of the structure or the plastic you sealed a door or window with stop it's expansion. The poorer the sealing, the more porous the barrier. The more porous the barrier, the lower the concentration. The lower the concentration, the less time the insects are exposed to a lethal fumigant concentration. If you aren't containing a concentration of the fumigant within the structure for the required exposure period, then you're fogging, not fumigating. If inadequate sealing is the biggest culprit in the creation of resistant insects, then abbreviated exposure periods run a close second. Just because the label lists a minimum exposure period don't assume that you can achieve 100% control using that time period. Governmental bodies that register pesticides generally don't look for efficacy, they determine what is necessary to use the product safely and let the marketplace determine the proper dosage and exposure constraints. So if you're using low dosages and abbreviated exposure periods, you're helping create resistant insects.

Degesch America, Inc. is pleased to offer professional fumigators the first accurate, on-site gauge of insect resistance to phosphine fumigation. Take the guess work out of dosage calculations by accurately predicting insect susceptibility to specific phosphine concentrations. Easy to use, the **Phosphine Resistance Test Kit** is the newest innovation from the company that introduced phosphine fumigation to the United States 50 years ago with the registration of Phostoxin®. The **Phosphine Resistance Test Kit** consists of:

- 1 - 100ml syringe
- 2 - Cannula (Needle like tubes)
- 1 - Rubber hose
- 1 - 5 liter plastic canister
- 1 - Canister lid w/septum
- 10 - Packages phosphine pellets
- 1 - Dilution diagram & table
- 1 - Instructions for use

## Procedure Overview:

1. Collect 20 insects of the same species
2. Add 50 ml of water to plastic canister
3. Add 1 package of pellets to canister
4. Close lid, shake and wait for pellets to dissolve. (About 5 minutes)
5. Determine concentration in canister
6. Using data from the supplied chart, dilute canister concentration to 3,000 ppm
7. Put insects in the syringe fill to 100 ml with canister gas
8. Observe insect behavior/activity and correlate with supplied chart to determine resistance.

The **Phosphine Resistance Test Kit** currently can be used for the following species:

- Cigarette beetle
- Common bean weevil
- Granary weevil
- Rust grain beetle
- Saw toothed grain beetle
- Red flour beetle

As data is developed, additional species will be added to the list and updated copies provided to users.

**Quality products, unsurpassed technical support and extensive product stewardship.**

## Air Quality Permitting

Does your state require an air pollution permit?

A recent message from Gene Harrington with the National Pest Management Association led me to the New Jersey Department of Environmental Protection website where I found the following :

I've re-arranged the order here to make it fit the printed pages better—JRS

We're compiling a list of State requirements pertaining to Air Quality Permits. Please take a second to let us know what's happening in your area. I'll compile the results and make them available in our next edition.

Does your state require any type of air quality permit to be in place prior to fumigation?

Yes  No

Any comments you'd like to include?

Submit

Reset



New  
Jersey  
Department of  
Environmental  
Protection

COMPLIANCE ADVISORY

# Enforcement Alert

*Making You Aware of Anticipated Enforcement Activities*

Compliance and Enforcement

Issued:

#2005-10

## **Use of Fumigants on Agricultural Commodities Requires an Air Pollution Permit**

### **Who is affected by this initiative?**

Pesticide applicators licensed through the Department of Environmental Protection's (DEP) Pesticide Control program to use fumigants in New Jersey are required to obtain an air pollution permit for the use of fumigants on agricultural commodities, such as cocoa beans, coffee beans, fruit, etc.

### **Why is DEP issuing this Enforcement Alert?**

The department has been reviewing the use of fumigants on agricultural commodities at commercial properties such as warehouses. Our review indicates that some applicators are not complying with the New Jersey Air Pollution Control Act and New Jersey Administrative Codes (N.J.A.C. 7:27 et seq.). Specifically, N.J.A.C. 7:27-8.2(c)19 requires that pesticide applicators that are fumigating agricultural commodity products obtain an air pollution permit from the department. In addition, emissions from the fumigation process may also require a state of the art (SOTA) air pollution control device.

### **What is DEP doing?**

The department is reaching out to pesticide applicators that use fumigants to inform them of these and other regulations that govern this practice. A letter is being sent to all applicators licensed by the department's Pesticide Control Program to use fumigants in New Jersey. The department will also be conducting enforcement sweeps for such projects to determine compliance in the very near future. Companies and applicators that do not comply with the air regulations will be subject to enforcement actions, which can include penalties up to \$10,000.00 per day for the first offense.

### **What should I do?**

Applicators can obtain an air pollution control permit by contacting the DEP's Division of Air Quality, Pre-construction Permit program at (609) 292-9258.

## COMPLIANCE ADVISORY

The department also feels that other fumigation projects on commercial premises, where commodities are not involved, should follow best management practices (BMPs) even if no permit is required. These BMPs include:

- 1) Use of an air pollution control when a significant quantity of toxic substances would otherwise be discharged into the outdoor air.
- 2) Notification of local authorities of a fumigation project at least 72 hours prior to the start of fumigation.

### Who should I contact with questions?

<b>NJDEP Air Quality Permitting</b>	<b>609-292-9258</b>
<b>Air Compliance and Enforcement - Northern Field Office</b> (Bergen, Essex, Hudson Hunterdon, Morris, Passaic, Somerset, Sussex, and Warren Counties)	<b>973-656-4444</b>
<b>Air Compliance and Enforcement – Central Field Office</b> (Mercer, Middlesex, Monmouth, Ocean, and Union Counties)	<b>609-584-4100</b>
<b>Air Compliance and Enforcement – Southern Field Office</b> (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties)	<b>856-614-3601</b>

### Where can I get more information?

The following web sites provide additional information:

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

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

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

Pesticides Control Program <http://www.pcpnj.org>

Toxic Catastrophe Prevention Act Program <http://www.nj.gov/dep/rpp/tcpa>

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.

# Methyl Bromide Detectors

## Use of Detection Devices for Methyl Bromide

Several types of detection devices are available to measure the air concentration of methyl bromide during fumigation and aeration/clearing for re-entry. There are several things you should consider when selecting detection equipment:

- Label requirements
- Detection Limitations
- Simplicity of operation
- Reliability
- Performance Requirements and Features
- Support and Service
- Options and Accessories
- Cost

All detection devices must be used according to manufacturer's instructions and recommendations. Many types of detection devices require calibration to ensure an accurate measurement. Calibration should be performed according to manufacturer's instructions and recommended schedule. Detection devices should be treated in the same manner as Personal Protection Equipment and be properly maintained and stored. Just as a properly maintained SCBA may save your life someday, detection devices are used to monitor clearing of methyl bromide from the treatment site. You depend on them to decide when it's safe for you and your clients to go back into the fumigated area. If the devices give you an erroneous result due to lack of calibration or misuse, or if you have chosen the wrong detection device, your life and your client's life are at risk and your business is at risk. All detection devices have detection capability limitations. You must select the detection equipment that is appropriate for the types of monitoring you intend to do. The following are detection limits for each type of equipment you may use during fumigation and aeration/clearing:

Detection Device	Detection Limit	Acceptable Monitoring Activity
Halide Torch	50 ppm	Good for Leak check only; cannot be used for clearing after aeration.
Fumiscope	1 oz/1000ft <sup>3</sup> (257ppm)	Methyl bromide air concentration during fumigation in the treatment area; but <u>cannot</u> be used for final clearing after aeration.
Electronic Detectors	<1ppm; however not approved for final clearing measurement	All periods of fumigation except cannot be used for the final clearing reading. Electronic detectors can have interferences, such as other organics in the air, which will give inaccurate methyl bromide readings.
Colormetric detector tubes	As low as 0.1ppm	Can be used for monitoring for leaks, but more suitable for final clearing of methyl bromide. Colorimetric tubes are the only approved final clearing device.

The Halide Torch is used only for leak detection. The torch consists of an open flame that changes color (shades of green and blue) in the presence of methyl bromide. The detection limit for the halide torch is ~30-50 ppm and cannot be used for clearing for re-entry after aeration. Fumiscopes have thermal conductivity analyzers and can detect methyl bromide in the 1-100 oz/1000 ft<sup>3</sup> range. Note that 1-oz/1000 ft<sup>3</sup> is approximately 260 ppm methyl bromide. This is well above the required 5 ppm for clearing a treatment site. For this reason,

Fumiscopes cannot be used for clearing for re-entry. Fumiscopes were designed for monitoring methyl bromide air concentration during the fumigation period. Remember, you can add back methyl bromide gas only if you are monitoring and measuring the methyl bromide concentration. If you do not monitor, you cannot add methyl bromide after releasing the initial dose.

There are many types of electronic detectors. Electrochemical sensors are used in multiple and single gas detection systems and several units are available. Photoionization detectors have a UV lamp sensor and can detect methyl bromide in the 0-2000 ppm range. There are also infrared type sensors available. However, while the sensors used for these types of detectors can measure methyl bromide, they may also respond to other organic vapors that might be present, e.g. fork-lift exhaust. Therefore, while electronic detectors are very useful for methyl bromide readings in the early stages of aeration, these detectors cannot be used for the final clearing reading.

There are several brands of methyl bromide color detection tubes ( Draeger, MSA, Sensidyne, Matheson-Kitagawa), which are available in many concentration ranges, some as low as 0.1 ppm. Tubes have concentration range markings to give a direct reading and the length of the color corresponds to the methyl bromide concentration. Use only the detector tubes that are compatible with the corresponding air pump. Always read and follow the detector manufacturer's instructions. Misuse or not following the manufacturer's instructions could give you an incorrect result, e.g. false negative reading. Instructions typically

- Instructions for using the pump and tube in the correct orientation and using the correct number of pump strokes.
- Color detection tubes have expiration dates. Make sure you check the date before using the tube. Store the tubes properly and avoid high temperatures.
- Used tubes will fade and not represent the original reading. So, it is not a permanent record. If you need a record of the reading, take a picture of the tube.
- Perform a periodic leak test on the pump. Replace if necessary.

Colormetric Detector Tubes are currently the only authorized way to determine that a site has been cleared to a methyl bromide air concentration of 5 ppm or less. The final methyl bromide air concentration/re-entry clearance reading must be taken with a colormetric tube.

#### **ALWAYS READ AND FOLLOW LABEL DIRECTIONS**

*Source: Great Lakes Chemical Corporation "Fumigation Fax"*

**The GLCC Fumigation Fax is distributed by Lisa Braun. If you would like to be included in the monthly distribution, contact Lisa [here](#).**

## **ProFume® Detectors**

### **"New Detection Device for Confirming Low Concentrations of Vikane® & ProFume® gas fumigants"**

"Approved detection devices that measure low concentrations of Vikane® and ProFume® with sufficient sensitivity must be used to confirm structures are sufficiently cleared of fumigant prior to re-entry and re-occupancy. Following the fumigation period and aeration procedure, fumigators must monitor the breathing zones of each area within a structure using an approved detection device of sufficient sensitivity to confirm that the concentration of Vikane or ProFume is at or below the Permissible Exposure Limit (PEL) before allowing re-entry and re-occupancy into the structure.

Recently, Dow AgroSciences LLC completed performance verification tests on a new detection device, SF-ExplorIR™, that uses non-dispersive infrared (NDIR) technology to detect low concentrations of Vikane and ProFume. Results of performance evaluations indicated that SF-ExplorIR demonstrated sufficient sensitivity to detect Vikane and ProFume at low concentrations and met established performance specifications.

The SF-ExplorIR may now be used as an approved detection device to confirm sufficient dissipation of Vikane and ProFume gas fumigants following fumigation and aeration. Other approved detection devices to confirm low concentrations of Vikane and ProFume are the Interscan analyzer (Model GF1900) (see label) and Miran SaphIRe Analyzer (see label). All approved detection devices must be calibrated and used according to manufacturer's recommendations."

*Source: Dow AgroSciences Product Bulletin*

## **Distributor News**

### **Orkin Buys Industrial Fumigant Company**

Rollins, Inc. (ticker: ROL, exchange: New York Stock Exchange (.N)) News Release - Sep-19-2005

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#### **Rollins, Inc. Announces Agreement to Acquire The Industrial Fumigant Company**

ATLANTA--(BUSINESS WIRE)--Sept. 19, 2005--Rollins, Inc. (NYSE: ROL) a premier North American consumer and commercial services company, today announced that it has entered into a definitive purchase agreement to acquire The Industrial Fumigant Company, (IFC). The transaction is expected to close in October.

From its founding in 1937, IFC has been dedicated to pest management in the Food and Commodity Industries and has a proud legacy of service under the guidance of Don Wilbur and Jim Arnote. In 1996 the company was sold to its employees and has been owned by the IFC Employee Stock Ownership Plan since. Its concentration on a specific industry segment has led IFC to a position of leadership in matters of food plant pest management, auditing, and training. Since being acquired by its employees, IFC has increased its nationwide coverage to 25 offices and 17 warehouses. Based in Olathe, Kansas, IFC employs over 130 associates who have helped build an innovative culture, focused on bringing the latest proven technology available to the food industry. With revenues in excess of \$26 million, the company is the 24th largest company in the pest control industry. You can learn more about IFC by visiting their web site at [www.indfumco.com](http://www.indfumco.com).

Gary W. Rollins, President and Chief Executive Officer of Rollins, Inc., said, "We are extremely pleased to announce this agreement with IFC which is consistent with our strategic plan to accelerate growth in commercial services. Under the leadership of Mike Newland, IFC has earned great loyalty from its customers and employees. Although they will continue to operate independently, we hope to learn a great deal from Mike and his team of experts."

Mike Newland, President and Chief Executive Officer of IFC, stated, "This announcement marks a great day for many people. Rollins, Inc. is adding another jewel to their crown as leaders in the pest management industry. Their business ethics, acumen and hard work have been admired by IFC's

management for some time. IFC's greatest asset and resources has always been its people. The combination of IFC's employees and Rollins' resources will be very beneficial to the food industry. This partnership will be a win, win situation, for the employees, the customers, and the Company. IFC will be able to address its customer's needs on a much larger geographical scale and in areas beyond our core business."

Rollins, Inc. is a premier North American consumer and commercial services company. Through its wholly owned subsidiaries, Orkin, Inc. and Western Pest Services, the Company provides essential pest control services and protection against termite damage, rodents and insects to approximately 1.7 million customers in the United States, Canada and Mexico from over 400 locations. You can learn more about Orkin by visiting our Web sites at [www.orkin.com](http://www.orkin.com), [www.westernpest.com](http://www.westernpest.com) and [www.rollins.com](http://www.rollins.com). You can also find this and other news releases at [www.rollins.com](http://www.rollins.com) by accessing the news releases button.

#### Caution Concerning Forward-Looking Statements

This release contains statements that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These include statements regarding the expected closing date for the IFC transaction and its benefit to the food industry. The actual results of the IFC transaction could differ materially from those indicated by the forward-looking statements because of various risks and uncertainties, including without limitation, general economic conditions; market risk; changes in industry practices or technologies; the ability of IFC and the Company to identify and capitalize on business opportunities arising from the transaction; the Company's ability to integrate IFC into its operations; climate and weather trends; competitive factors and pricing practices; potential increases in labor costs; uncertainties of litigation; and changes in various government laws and regulations, including environmental regulations. All of the foregoing risks and uncertainties are beyond the ability of the Company to control, and in many cases the Company cannot predict the risks and uncertainties that could cause its actual results to differ materially from those indicated by the forward-looking statements. A more detailed discussion of potential risks facing the Company can be found in the Company's Report on Form 10-K filed with the Securities and Exchange Commission for the year ended December 31, 2004.

CONTACT: Rollins, Inc., Atlanta

Harry J. Cynkus, 404-888-2922

SOURCE: Rollins, Inc.

## **Hurricane Katrina Relief**

You've seen the pictures and read the news reports. The devastation to the New Orleans area of the US Gulf Coast has been widely documented. Degesch America, Inc.'s office in Reserve, LA was largely untouched by the storm, but some of our employees were not so lucky. While business is slowly returning to normal, the lives of those affected by the storm are still in turmoil. What can you do to help? Give generously! Below is information about the Agriculture River Recovery Fund (AARF). Degesch America, Inc. is proud to be associated with the AARF and we encourage everyone to contribute.

### **AGRICULTURE RIVER RECOVERY FUND**

[WWW.ARRFUND.ORG](http://WWW.ARRFUND.ORG)

## **Mission:**

“Individuals and businesses from across US agriculture and the international grain industry will unite to “help our own” and provide support for the recovery of the center gulf region by helping those who have served us so well. The Agriculture River Recovery Fund (ARRF) will collect and disburse funds to the people and families that work to serve agriculture and have suffered personal loss or injury, been displaced, or suffered economic loss as a result of Katrina. ARRF grants will act to supplement other assistance efforts.”

## **Objective:**

Supported by solidarity across agriculture, ARRF hopes to raise at least \$US 500,000. The funds collected will be distributed to grain industry and supporting service industry employees as quickly as possible. The ARRF charitable grants will range from \$1,000 to \$10,000. 100% of the funds donated to the ARRF will be distributed as grants to individuals or families. Overhead and operational costs will be covered by in kind support from businesses and individuals working with the ARRF.

## **Advisory Board Member Companies:**

ADM Investor Services, Amstutz and Company, Arent Fox, Bunge North America, Cargill Inc., Centro de Exportadores de Cereals, Chicago Board of Trade, CHS Inc., CoBank, Corn Refiners Association, Decision Leaders, LLC, DTB Associates, **Degesch America Inc**, GAFTA, General Mills, Holyoke Co-op Association, IPC, Kansas City Board of Trade, Kansas Wheat Commission, Kansas Association of Wheat Growers, Minneapolis Grain Exchange, Mitsui and Co., NAEGA, National Barley Growers Association, NGFA, North American Millers' Association, Perdue Farms, Pet Food Institute, Port of Corpus Chrisiti, Rabobank, Sosland Companies, Umbrella Point Consulting LLC, US Wheat Associates, Wheat Export Trade Education Committee , World Perspectives Inc., John Zick

## **Conventions and Conferences**

**Degesch America, Inc. Recertification School**



## Good bye, Charlottesville. Hello, Staunton

The **DEGESCH** America, Inc. Recertification School is moving. After several years in Charlottesville, we looked for a new area to explore. With perfect timing, the historic Stonewall Jackson Hotel & Conference Center, located in the quaint Shenandoah Valley town of Staunton, VA sprang back to life. Several DEGESCH employees were on hand for opening night, September 21, 2005 and when all the reports were in, the consensus was; "This ones a winner". Originally constructed in 1924, the hotel is named after Civil War General Stonewall Jackson. After undergoing a complete renovation, the hotel now offers guests a modern retreat that stays true to it's historical setting.

"Founded in 1747, Staunton's charm has been preserved in its collection of fine old homes and buildings in every style from Queen Anne to Colonial Revival. The rich architectural heritage, combined with the Shenandoah Shakespeare Education Center and its Blackfriars Playhouse, make Staunton a favorite destination for those seeking a charming and intellectually stimulating retreat" - *Source: Stonewall Jackson Hotel Brochure*

Conveniently located near the intersection of Interstate 81 and Interstate 64

## People in the News

### Condolences

Dennis Kasubuchi passed away June 9, 2005 after a yearlong battle with ALS (Lou Gehrigs Disease). Dennis was Logistics Manager for Louis Dreyfus Company and later CLD Pacific Grain, LLC in Portland, OR. Born in Tulelake, CA on June 11, 1943, Dennis was 2 days short of his 62nd birthday at the time of his passing. Dennis was a longtime friend and golfing companion and will be missed by those who had the privilege to make his acquaintance. Dennis is survived by his wife Diane and daughter Christie.

### Congratulations

John Mueller has been named president of Fumigation Service & Supply. John replaces brother Dave who will remain with the company.

If you have an event that you would like to see featured or a topic to suggest, send the particulars to [jsmiley@degeschamerica.com](mailto:jsmiley@degeschamerica.com)