Challenges in Regulation

Non-EPA Registered Products used as Pesticides

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SFIREG / POM Working Committee
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Washington D.C.
Challenges in Regulation

The fine line: When is it distribution?
How blatant does the advertising have to be?
Proving constructive knowledge?

• EPA Registered Pesticide and people choose not to use registered pesticide and instead use same a.i. in unregistered substance.
• Sulfur Dioxide Gas
• Using a Sulfur Pots
• Devices that product Carbon Monoxide
• Devices that produce pesticides (CO)
• Pesticide used as a warning agent (WA)
Dry Ice CO2 Production for Rodent Control

- November 2016 email from EPA Region 10
- Several cities and/or school districts who have engaged in “pilot” programs using dry ice in this manner.
- There are no registrations or registration applications pending for dry ice to be used as a rodent control pesticide.

Application of unregistered dry ice to control rats is an unlawful distribution of an unregistered pesticide pursuant to FIFRA § 12(a)(1)(A).
Dry Ice CO2 Production for Rodent Control

- City, schools district or other person responsible for making the applications could be charged under FIFRA § 14(a)(1) as a distributor.

- Companies who supply the dry ice:
  - represent the dry ice product as effective for rat control purposes or
  - they have constructive knowledge
  - Firms could also be charged for distribution and sale of an unregistered pesticide.
  - Charge - Section 7 of FIFRA if the facility producing the dry ice being sold for pesticidal purposes is not an EPA registered establishment.
EPA Settles with Hydrofarm, Inc. for Selling Unregistered Pesticides

Release Date: 04/03/2013
Contact Information: David Yogi, 415/972–3350, yogi.david@epa.gov

Company to Pay $316,000 in Fines

SAN FRANCISCO – The U.S. Environmental Protection Agency today announced a settlement with Hydrofarm, Inc. for selling two unregistered pesticides in violation of federal pesticide law. As part of the settlement, the Petaluma, Calif.-based Hydrofarm, Inc., one of the nation’s largest distributors of agricultural and hydroponic supplies, has agreed to pay $316,000 in fines and has stopped selling both products.

.... sold sulfur to control mildew through vaporization in greenhouses without any instructions or precautionary language to minimize risks to individuals from exposure to the product.

EPA has not yet evaluated the human health risks associated with the use of vaporized sulfur in greenhouses.
Amazon

Showing 1 - 16 of 105 Results

**Grower's Edge Vaporizer Commercial Grade**
- $99.95 **$82.51**
- In stock. Processing takes an additional 4 to 5 days.
- More Buying Choices
  - $76.43 new (7 offers)

**Wilmod Sulfur Burner**
- $88.09
- Only 3 left in stock - order soon.
- More Buying Choices
  - $88.09 new (8 offers)

**NGW Greenhouse Vaporizer**
- $88.49
- Only 10 left in stock - order soon.
- More Buying Choices
  - $88.49 new (9 offers)

**5 lb Sulfur powder (Brimstone) by Duda Diesel**
- $19.00 **$13.50**
- In Stock
- More Buying Choices
  - $13.50 new (2 offers)

**SULFUR PRILLS 4LB**
- $50.00
- In stock. Processing takes an additional 4 to 5 days.
- More Buying Choices
  - $13.00 new (6 offers)

**Sulfur Vaporizer**
- $88.12
- In Stock
- More Buying Choices
  - $88.12 new (5 offers)

**Gro1 Hydroponic Grow Plant Fungus and Pest Preventative**
- $81.00
- Only 9 left in stock - order soon.
- More Buying Choices
  - $81.00 new (3 offers)

**Wilmod Sulfur Burner & Sulfur Prill 4lb Combo**
- $129.49
- Only 5 left in stock - order soon.
- More Buying Choices
  - $129.49 new (5 offers)

**Sulfur Powder, 3 lb by Sulfur Powder**
- $19.09 **$9.50**
- In Stock
- More Buying Choices
  - $9.50 new (2 offers)
Go on Youtube to watch how to generate gas
ODA first became aware of the situation when someone asked if the REI was still 24 hrs if you burned the sulfur (vs. spraying)?

And did we know that people burn sulfur every night?

And how do they get around the 24 hr. REI?

From state university - How come they get to burn sulfur in the federal greenhouses.

Do we know that the rose industry in CA does this?
ODA contacted EPA via SLITS 2009
Could this application method be allowed under 2ee?
No PR notice such as the one for chemigation.

**EPA**

- such an application could potentially increase worker safety risks.

- If the 2ee claim was submitted as an amendment, I would require an occupational exposure assessment before approving such an amendment.

- However, EPA does not have a way of preventing a company from issuing a 2ee claim.
Vermont contacted EPA via SLITS 2012

Possible 2ee?

- EPA- growers should not use sulfur in heating pots
- Use has not been assessed by EPA’s Health Effects Division
- Grower could be exposing his workers to unacceptable inhalation risks.
- Registrant should pursue registration of this new application method.
Open for Discussion

• OK to use sulfur fertilizer this way – just not an already registered pesticide?

• Is it OK to use an EPA registered pesticide this way because there is no legal way to prevent a 2ee?

• Solutions? Should EPA develop a PR notice similar to the one they developed for chemigation?
  • What about the sulfur fertilizer used this way? How can sulfur fertilizer be covered by a PR notice?

Bottomline: What about the workers?
Using non-EPA registered products as a pesticide, when there can be an EPA registered product available.

Sulfur Dioxide – Sanitizing Wine Barrels and Corks

Used in wineries for both pesticidal and non-pesticidal uses.

Non-pesticidal uses include:
- Preventing oxidation in the winemaking process
- Inhibiting the growth of wild yeast for better control of the fermenting process
Common to see the one registered pesticide sold right next to various companies unregistered sulfur dioxide
If the concentration of SO2 in the fumigation area exceeds 2.0 PPM then all persons working in the area must wear a NIOSH approved self-contained breathing apparatus or a supplied-air respirator.
Not uncommon to see application equipment next to unregistered Sulfur Dioxide canister.
Using Sulfur Dioxide (no PPE)
Is there a problem?
OR-OSHA found a handler treating six barrels at a time. After spraying the inside of the barrel and re-corking, he would have to escape outside to get air.
No directions on non-registered Sulfur Dioxide.

PEL 5 ppm (OSHA).

At 2 ppm full face mask (EPA label),

OR-OSHA Found 100 ppm outside on loading dock.

Level- Immediately dangerous to health.
Section 1 - Product and Company Identification

Product Name: Sulfur Dioxide
Chemical Formula: SO₂
CAS Number: 007446-09-5
Other Designations: Sulfurous acid anhydride, sulfurous anhydride, sulfurous oxide.
General Use: Chemical feedstock, food preservative, fumigating pesticide.
Manufacturer: 

Telephone: 409-727-1471
Fax: 409-727-5803
Emergency Contact: CHEMTREC 800-424-9300

Section 2 - Hazards Identification
**SO₂ Barrel Gassing Unit**

Prepare barrels for storage quickly and easily by controlling the bacteria and mold. The SO₂ Barrel Gassing Unit is designed to put measured amounts of SO₂ into empty barrels prior to storage.

**Ordering Information**

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*Shown with SO₂ Wrench and SO₂ Hose*

**Pure SO₂ Dispenser**

SO₂ dispensers allow accurate measurement of pure liquid SO₂ additions to wine. These 316L stainless steel pressure vessel dispensers have a fill valve, liquid valve, and a gas/vent valve.

The dispensers also have a recessed graduated cylinder for easy viewing of the SO₂ level and a bottom drain port for easy cleaning.

**Available in two sizes:**
- 1000 gram dispenses in 10 gram increments
- 5000 gram dispenses in 50 gram increments
- Replacement parts available

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Unregulated Devices
Pure exhaust (2.5% carbon monoxide, CO) is captured off a gas engine that drives a compressor, cooled, pressurized, and injected into the burrow of a burrowing rodent. The air in the burrow is purged very rapidly. The rodent is engulfed almost immediately in a high concentration of CO gas and overcome before it has a chance to escape or block the burrow.

A T-bar hand piece with a ball valve is on the end of each 3/8” air hose. Closed burrows are probed. When the tip of the probe breaks into the burrow, it literally falls into the burrow and is very easy to detect or feel.

An internal combustion engine is used to generate carbon monoxide and then pressurize it to 110 PSI. Using multiple probes, burrows are detected and carbon monoxide is injected into the burrow system.
Devices: If a product consists of an object or article that incorporates a substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest, the entire product is considered to be a pesticide and is subject to registration under FIFRA section 3.

EPA
If they have an engine creating the exhaust gas, this would be considered a device which does not require registration.

If they are only using the engine then they are not obligated to do anything under FIFRA.

The manufacturer of the engine, if they advertised it as a pesticide device, would need to:
  - Register their establishment,
  - Report amounts produced annually and,
  - Appropriately label the product as a device (display EPA Est. No. and no false and misleading claims).

John Scott – Colorado will comment
Chloropicrin used as warning agent – Not as a pesticide

- Chloropicrin is used in structural applications of sulfuryl fluoride before the sulfuryl fluoride is applied,
  - Chloropicrin is used **solely to serve as warning agent** to ensure the structure is free of people before beginning the sulfuryl fluoride fumigation
  - Therefore, **not considered a pesticidal use** by EPA.
Chloropicrin used as warning agent – Not as a pesticide

- Sulfuryl flouride labels specify that chloropicrin can only be used by a certified applicator, or someone under their supervision.

- There are directions associated with using the chloropicrin for these applications in the sulfuryl fluoride labels, including PPE.
Thank you