# ODA PESTI(IDE QUARTERLU 

## NEWS in brif

## PAGE 1

-FQPA—Don't Let Sleeping Dogs Lie

PAGE 2
-..........FQPA Brochure to be

## Distributed

- Custom Pesticide/Fertilizer

Registration

- Public Applicators To Pay RETAKE Fees
-What a Great Response!!
PAGE 3
-DEQ Proposed Changes May Impact Fertilizers
- Yes, I Read the Label, But What Does It Say?
- Methyl Bromide Phaseout Delayed


## PAGE 4

-Pesticide Certification \& Licensing-Q \& A
-Website Additions for Pesticides Division
PAGE 5
-EPA Seeks Public Comment on 12 Organophosphates

- Phosphide Fumigants Under EPA Review
-ODA CIVIL Penalties
PAGE 6
$\bullet$ Licensing for Pest \& Dry Rot Inspectors?
-Cancelled SLNs
-Have You Heard of PARC?


## PAGE 7

-Recertification Courses

## PAGE 8

-ACCIDENT ALERT!!

## FQPA—Don't Let Sleeping Dogs Lie

We haven't been hearing much about the Food Quality Protection Act of 1996 (FQPA) lately, but that doesn't mean FQPA hasn't affected you or won't in the very near future! Last spring, numerous national, regional and state coalitions unified to make it very clear to Washington DC that the process under which the U.S. EPA was implementing FQPA needed to be scrutinized. That strong message to the Administration resulted in Vice President Al Gore sending a memo to USDA and EPA officials, calling for these agencies to work together in implementing FQPA and using "reliable" -"scientifically sound" data.

VP Gore called for four basic principles:

1. Use sound science in protecting the public health
2. Ensure that the process be "transparent" to affected constituencies
3. Provide for a reasonable transition for agriculture
4. Consult with the public and other agencies for information

As a result, the Tolerance Reassessment Advisory Committee was formed to:

1. Provide input on policy options \& FQPA implementation strategy
2. Focus on organophosphates and carbamates
3. Use a tiered release of preliminary risk assessments

So, what does all this really mean? What is "reliable" data? How are "big gaps" in data requirements for actual pesticide use, residues, actual exposure (residential, water, aggregate), etc. being handled, and how does this lack of "reliable" information affect tolerance reassessments and loss of label uses? These are questions that should be asked. The challenges are numerous.

Since last spring, there has been a declining voice being heard by EPA and involved parties regarding the processes of implementing FQPA. So what can you do? Do you think that just one person can't make a difference?... Think again!

* Don't be afraid to let EPA hear your voice. But just stick to the facts -Avoid "testimonials". For example: Provide residue information if you have any; describe your real uses of products and the lack of alternatives or why they don't work; explain the IPM practices, resistance management, and use limitations or restrictions that you use.
( Make sure you understand the risk assessments. This is that "transparency" that VP Gore talked about. The process has to be understood to accurately assess the outcome.
* Support your Land Grant University's pesticide crop profile projects and other minor crop use pesticide research efforts. Oregon State University staff are working hard to provide these profiles to EPA. Your input is valuable.
\& Most of all, GET INVOLVED with your industry associations. The voice of many is heard more clearly!
Sometimes sleeping dogs will jump up unexpectedly and inflict a vicious bite. With public awareness, involvement and input, EPA will keep moving forward with risk assessments and maybe the bite won't hurt so bad, or it may be avoided altogether!


## FQPA Brochure to be Distributed

EPA will distribute a brochure on the benefits and risks of pesticides to grocers in early 1999. The Food Quality Protection Act of 1996 requires EPA to make publicly available benefit and risk information for pesticides to large grocery stores. A database is planned for the an internet site referenced on the brochure. There will be an internet version which will include the brochure's text, the active ingredients registered for many foods, and the maximum residue level for each chemical.

The brochure was to be distributed by August 1998, however, the information provided in several drafts of the publication was criticized by representatives of environmental groups as not having enough human health risk information. Industry officials have also criticized the brochure as being alarmist.

ODA has not seen a copy of the brochure. We are anxious to see the final product.

## Public Applicators To Pay RETAKE Fees

Through some bit of historic bureaucratic oversight, Public Pesticide Applicators have not been charged certification examination retake fees. Sorry, the loophole has been discovered and all new public applicator licenses issued will have a $\$ 5.00$ fee for each exam taken more than once. This is the same charge that has been in effect for commercial applicators. The passing exam will remain without charge, so the moral to this story... Pass your exams on the first try!!

## What a Great Response!!

## by Janet Fults

I know we asked for it, but there was no way to know what a wonderful response to the pesticide applicator survey we would receive. I would like to personally thank each one of you who took the time to complete the questions, and most importantly, wrote in your opinions and ideas. In fact, if you still haven't sent your survey in, please do so quickly even though the "return by date" was February 1. It is evident that pesticide applicators are concerned about this program. The results of the survey will take a while to process and we hope to publish the highlights (and maybe some lowlights!) of it in this newsletter. Be watching for the changes in the way we do business!! Thank you again.

## State Registration Not Required for Custom Pesticide/Fertilizer Mixes

As of January 1, 1999, custom mixes of fertilizers containing pesticide products will not be required to be registered with ODA. Previously, custom blends containing a pesticide product blended to a customer's specifications (usually with a fertilizer), were registered with ODA. Due to the fact that the "labels" which accompanied these blends were extremely deficient in worker, health and environment protection issues, it was decided that it would be better to provide the complete EPA registered label of the pesticide involved than to have inadequate information provided to the user. Requirements of facilities conducting custom blends for their customers are:

1. The blend is delivered to the end user along with a complete label of the pesticide(s) used in the mix and a statement specifying the composition of the mixture.
2. The blend is prepared to the order of the customer and is not held in inventory, packaged, marketed or otherwise advertised by the blender.
3. The blend is to be used on the customer's property (including leased or rented property) .
4. The pesticide(s) used in the blend bears end-use labeling directions which do not prohibit use of the product in such a blend.
5. The blend is prepared from registered pesticide products
6. Blends involving Restricted Use Pesticide (RUP) products may only be sold and/or distributed to licensed pesticide applicators in accordance with the pesticide label.
7. Dealers conducting blending services must maintain records of all RUP product sales and distribution to end users as required by state and federal law.
Applying this blended material in a manner consistent with the pesticide label is the responsibility of the applicator. It is very important for the pesticide applicator to fully understand the blending and ultimate application rate of the material being custom mixed to prevent any over-rate applications or other label violations.

If you have any questions or need further information, feel free to contact: Janet Fults, Pesticide Registration/ Certification, Program Manager, Ph: (503) 986-4652, fax (503) 986-4735, jfults@ oda.state.or.us

## DEQ Proposed Changes May Impact Fertilizers in Oregon

An administrative rule change was proposed by The Oregon Department of Environmental Quality (DEQ) on December 24, 1998 which will require zinc-containing fertilizers made from Toxicity Characteristic (TC) hazardous wastes and zinc-containing fertilizers made from KO61 hazardous waste emission control dust to meet Phase IV Land Disposal Restriction (LDR) standards before they are applied to land.

Zinc containing TC hazardous waste derived fertilizers will need to meet the lower Phase IV concentrations levels for toxic, non-nutritive constituents, then previously required and, for the first time, the land disposal restriction constituent concentration levels on 12 non-nutritive metal constituents will be imposed on KO61 derived fertilizers that are applied to Oregon land. Manufacturers marketing fertilizers containing KO61 baghouse dust or TC hazardous waste-derived zinc regardless of their location, must ensure that those fertilizers meet the Phase IV, LDR standards before being applied to Oregon land.

DEQ believes that it is appropriate to apply the land disposal restriction standards to characteristic hazardous wastes and KO61 when they are converted into fertilizer. Applying the LDR standards to such fertilizers before they are applied to land will ensure that they must meet the same standards as other characteristic hazardous wastes that are made into fertilizers. This rule levels the playing field for all wastes. A public hearing on these proposed rule changes is scheduled for:

February 18, 1999
1:00 pm to $5: 00 \mathrm{pm}$
Department of Environmental Quality
Rm 3A (Third floor), 811 SW 6th Ave
Portland, OR 97204
Deadline for written comments: 5:00pm February 22, 1999.

A copy of the proposed rule is available by calling (503) 229-6534 or by contacting Gary Calaba at calaba.gary.j@deq.state.or.us.

Oregon Department of Agriculture Pesticides Division
635 Capitol Street NE Salem OR 97301-2532
PH: (503) 986-4635, FAX: (503) 986-4735
Website: http://www.oda.state.or.us/pesticide/ pesticideinfo.html

## Yes, I Read the Label, But What Does It Say?

Reading a label and understanding what it is trying to say can be two different things. This section is dedicated to questions that ODA has been asked, and since no question is a dumb question, the answers may be helpful to everyone.

Q: The pest I want to control, shoot moth, is not on the label of a product I have, but I know it will be effective. The site is ornamental trees which is on the label.

A:The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) section 2 (ee) allows "...applying a pesticide against any target pest not specified on the labeling if the application is to the crop, animal, or site specified on the labeling"... and the application to such pest is not prohibited. Thus if the site of ornamental trees is on the label it would be a lawful application to apply to this site even if shoot moth is not on the label.

Some other exceptions of "To Use Any Registered Pesticide in a Manner Inconsistent With Its Labeling" under FIFRA section 2 (ee) would Include: (1) applying a pesticide at any dosage, concentration, or frequency less than that specified on the labeling unless the labeling specifically prohibits deviation from the specified dosage, concentration, or frequency (some termiticides state on the label a specified dosage and prohibits using less than that dosage) (2) employing any method of application not prohibited by the labeling unless the labeling specifically states that the product may be applied only by the methods specified on the labeling (chemigation must be on the pesticide label) (3) mixing a pesticide or pesticides with a fertilizer when such mixture is not prohibited by the labeling.

## Methyl Bromide Phaseout Delayed

The methyl bromide phase out in the United States has changed!! The U.S. will no longer be phasing out this pesticide in 2001. Due to recent legislative actions by the U.S. Congress, the methyl bromide phase out in the U.S. has been changed to the following:

Methyl bromide production and importation will be reduced from 1991 levels as follows:

- $25 \%$ reduction in 1999
- $50 \%$ reduction in 2001
- $75 \%$ reduction in 2003
- $100 \%$ reduction in 2005
- Preshipment and quarantine uses exempt.
- Critical ag uses allocated after 2005.

For more information contact:
http://www.epa.gov/ozone/mbr/harmoniz.html

## Pesticide Certification \& LicensingSome Questions \& Answers

It's that time of year again... the beginning of a new year, and with it, the typical increase in phone traffic to the Pesticides Division, much of it relating to pesticide consultant and applicator licensing, certification, and recertification. Now that we have a newsletter, we can share with you some of the questions that are asked. Of course we'll include the answers just to be sure you get your money's worth!

Q: Why haven't I received my license renewal form? It's well into January, and I haven't received it yet.

A: License application renewal forms are typically sent out mid-November to early December. There could be a number of reasons why a licensee didn't receive a renewal, however the most common is that the licensee had a change of address and did not advise us of the new address. Another reason may be that the licensee listed the employer's address as the address of record, then changed employers and didn't notify us of the change. It is VERY important that you keep your address current with us if you wish to continue receiving our correspondence (such as license renewals and credit hour reports)! If you don't accumulate the required number of credit hours due to a miscalculation and miss our annual notification that you're short of hours, you may find yourself retesting in order to renew your license.

Q: I just tested and qualified for licensing as a commercial pesticide applicator in October, 1998; my license shows my certification expires at the end of 2002. I understood the certification period is 5 years; shouldn't my certification end in 2003?

A: Not in this case. Our policy regarding certification and licensing: Individuals who qualify for a license between January 1 and November 16 of a year are considered certified for that year (in this case 1998). The first partial year of certification is considered the first year. Individuals who qualify for licensing during the last 45 days of the year (November 17 - December 31) are considered certified as of the qualifying date, and will be licensed as of January 1 of the following year. Certification of those individuals expires five full years after January 1. If an individual who qualifies for licensing during the last 45 days of a year wishes to be licensed for the remainder of that year, he/she
must advise the Department of that fact at the time of application and pay the licensing fee for that period. Licensing fees are determined on an annual basis and are not pro-rated for partial years.

Q: I see in an upcoming recertification course announcement that credit hours are specified as " 8 credit hours anticipated". Does this mean I will get 8 credit hours toward recertification of my applicator license?

A: Possibly. This is the sponsor's estimate of credit hours they feel the program will be assigned. What this really means is that the publicity on the program was prepared before the program was reviewed by ODA. If it is important that you get a specific number of credit hours before a certain date, check the ODA web site at : http://www.oda.state.or.us/ Pesticide/PesticideINFO.html for ODA's credit hour assignment to confirm ODA's assignment. The credit hour assignments listed there for specific programs are the actual credit hours you will receive for attending.

Q: I've tried looking up recertification programs on your web site, but it keeps coming back "No records found for the search just completed, try again! ". What's wrong?

A: Possibly several things; you may have entered information in the search page for which there is no match, or the system may be down. Click on the "Instructions" link, review the information there, and try again. If it still doesn't respond, give us a call at 503-986-4635 \& let us know. We'll check it out \& contact our computer support folks if it still isn't working.

Q: I had an employee test almost a week ago; we've gone into your web site to find his scores, but we keep getting the "No Records Found" message. Why does it take so long to get the answer sheets graded?

A: Examination answer sheets are normally graded within 2 business days of when we receive them. Examinations administered at the more-distant locations from Salem (i.e. - Ontario, Klamath Falls) may take 2-3 days to arrive at ODA in Salem via US Mail. Once a batch is processed, the scores are immediately available via the web page.

These are a few of the questions we receive regarding pesticide applicator certification, recertification and licensing. Please feel free to contact the Pesticides Division at 503-986-4635 if you have other questions, or wish to have a specific issue clarified.

## More Website Additions for Pesticides Division

It keeps growing! The most recent addition to the ODA Pesticides Division webpage is the ability to access PICOL... the Pesticide Information Center On Line. This service is capable of searching pesticide products registered in Oregon and/ or Washington. Just hit PICOL on our website and ask. PLEASE USE THIS SERVICE AS A GUIDE ONLY. ALWAYS DOUBLE CHECK THE ACTUAL PESTICIDE LABEL PRIOR TO USE OR RECOMMENDATION. Keep watching for more changes and additions. < http://www.oda.state.or.us/Pesticide/PesticideINFO.html >.

## EPA Seeks Public Comment on Preliminary Risk Assessments for 12 Organophosphates

The EPA Office of Pesticide Programs (OPP) is seeking public comment on its preliminary risk assessments for 12 organophosphate pesticides. Both human health and ecological preliminary risk assessments were made available as follows:

January 8, 1999: Acephate, disulfoton, methamidophos, oxydemeton-methyl, and pirimiphos-methyl. Comments are requested by March 9, 1999.

January 15, 1999: azinphos-methyl, chlorethoxyfos, ethyl parathion, methidathion, phosmet, propetamphos, and tetrachlorvinphos. Comments are requested by March 16, 1999. Copies of all of the 28 organophosphate preliminary risk assessments that have been released are available on EPA's website at:
http://www.epa.gov/pesticides/op/ or by contacting EPA at (703) 305-5805.

## Phosphide Fumigants Under EPA Review

EPA is seeking public input on how to reduce risks associated with aluminum phosphide and magnesium phosphide, two pesticide fumigants primarily used to control insects and rodents in facilities where agricultural food commodities are stored. Phosphine gas is highly toxic and known to pose hazards to human health, particularly at high concentrations for short periods of exposure.

The Agency has proposed a broad range of preventive measures to reduce these hazards. The proposed measures are presented for public comment in EPA's draft reregistration Eligibility Decision (RED) for aluminum and magnesium phosphide. Proposed measures include a strategy for notifying neighboring residents and other potentially affected individuals in advance of a fumigation; the establishment of buffer zones; more stringent monitoring requirements; and several additional measures aimed at protecting workers who are involved in operations using aluminum or magnesium phosphide.

Serious consideration must be given to these proposed changes and the direct effect such changes may have on fumigations conducted in Oregon, especially on commodities treated for overseas shipment. Public comment closes in March 1999. A copy of the RED is available by contacting EPA at (703) 305-5805 or on EPA's internet site at: http://www.epa.gov.REDs .

## ODA CIVIL Penalties Issued July 1998 to Present

1. Party Cited: Halstead's Arboriculture, Portland, OR Violation: ORS 634.372(9) Employ an unlicensed pesticide applicator.
Fine: $\$ 220$
Disposition: Not contested, fine paid and final order issued.
2. Party Cited: Jeremiah F. Sanson, Portland, OR. Violation: Unlicensed applicator conducting pesticide applications for an operator.
Fine: \$220
Disposition: Not contested, final order issued, collection action initiated.
3. Party Cited: Harney County Farm Supply, Burns, OR
Violation: ORS 634.372(2) distribute a pesticide inconsistent with its label. Sale of restricted use pesticides to an unlicensed individual. 5 counts. Fine: $\$ 2,405.00$ (\$481 X 5)
Disposition: Hearing requested. Pending settlement.
4. Party Cited: West Flying Service, Echo, Oregon. Violation: ORS 634.372(4) Faulty, careless or negligent pesticide application.
Fine: $\$ 888$
Disposition: Hearing requested.
5. Party Cited: Craig J. Rhiley

Violation: ORS 634.372(4) Faulty, careless or negligent pesticide application.
Fine: $\$ 407$
Disposition: Hearing requested.
6. Party Cited: Killers Store \#11

Violation: ORS 634.372(9) No pesticide operator license.
Fine: \$300
Disposition: Issued.
7. Party Cited: Beck's Spray Service

Violation: ORS 634.372(2) Apply or use a pesticide inconsistent with its labeling.
Fine: $\$ 407$
Disposition: Not contested, final order issued. Fine paid.
8. Party Cited: Gregory M. Beck

Violation: ORS 634.372(2) Apply or use a pesticide inconsistent with its labeling.
Fine: \$407
Disposition: Fine reduced to zero dollars. Violation remains as issued. Not contested. Final order issued.
9. Party Cited: Oregon Exterminating, Inc.

Violation: ORS 634.372(5) Refuse to prepare and maintain records. ORS 634.372(9) Unlicensed applicator conducting pesticide applications.
Fine/Action: Pesticide Operator license suspension, 180 days.
Disposition: Issued

## Does ODA Require Licensing for Pest \& Dry Rot Inspectors?

No. The Oregon Revised Statutes 634, which governs what pesticide authority ODA Pesticides Division can exercise, does not address pest \& dry rot inspectors (or home inspectors) who do not apply pesticides. However, it is clear that a significant number of "inspectors" are using the pesticide operator and applicator license to be able to sign Wood Destroying Organism (WDO) reports for real estate transactions. It has been stated to ODA, that VA and FHA transactions require the signature of a pesticide operator on the WDO report. This has created a purpose for a pesticide license in which ODA had no intent. This license necessity by outside entities is confusing for everyone and costly to those caught in the middle. Those who must license as a pesticide operator are required to maintain specific insurance coverage minimums for pesticide applications that they will never conduct! This additional insurance coverage along with the annual license fee is a burden to these inspection companies. Very importantly though, these inspectors, who may not have any vested interest in pesticide products, are licensed to purchase and use Restricted Use Pesticides. Presently, ODA does not have a resolution to this situation. The statutes are limited to pesticide application issues and does not presently allow the creation of a category of pesticide license for "inspections only". If there is enough interest in this industry to tackle this issue, I would like to meet with you and discuss the options, possibilities and limitations. If interested please contact Janet Fults, 503-986-4652.

## Have You Heard of PARC?

If not, you should know who they are. In Oregon, pesticide health issues are addressed by many different agencies throughout the state, in different arenas, in different ways. Thus PARC; The Pesticide Analytical and Response Center. PARC is a consortium of state agencies and interested parties to address adverse health claims allegedly due to pesticide exposure, to identify pesticide trends, and target preventive measures necessary to minimize pesticide exposure potential. PARC addresses not only human health claims, but those affecting animals and the environment. The member agencies are:

Oregon Health Division
Oregon Department of Agriculture
Oregon Department of Environmental Quality
Oregon OSHA
Oregon Department of Forestry
Oregon Department of Fish \& Wildlife
State Fire Marshal's Office-Community Right-To-Know
Oregon Poison Control-OHSU
Consultants: OSU Dept. of Environmental and Molecular Toxicology
Oregon Health Sciences Univ.-Center for Research on Occupational and Environmental Toxicology (CROET)
PARC simplifies notification of the vast expanse of pesticide regulatory agencies with one phone call. By calling PARC first, the most appropriate agency, or agencies, will be notified of the pesticide complaint being reported.

Pesticide Analytical and Response Center (503) 731-4025.

## Recently Cancelled Special Local Need Labels

Many Special Local Need, 24(c), registrations have been cancelled for 1999. Some products have been replaced with new SLNs or the site or use incorporated in a Section 3 label (primary product label). Whatever the reason, it is important for you to be aware of these cancellations to adjust your uses accordingly.

| Dow AgroSciences | Transline | $\# 62719-73$ | OR-950023 | Forest Sites |
| :--- | :--- | :--- | :--- | ---: |
| Dupont | Karmex DF | $\# 352-508$ | OR-940009 | Peppermint |
| Griffin Corp | Direx DF | $\# 352-508-1812$ | OR-940009 | Peppermint |
| Dupont | Karmex DF | $\# 352-508$ | OR-930015 | Hybrid Poplars |
| Dupont | Sinbar | $\# 352-317$ | OR-920003 | Alfalfa |
| Dupont | Karmex DF | $\# 352-508$ | OR-930020 | Grass Seed |
| Griffin | Direx DF | $\# 352-508-1812$ | OR-930020 | Grass Seed |
| Gowan | Cryolite Bait | $\# 10163-225$ | OR-950008 | Cranberries |
| Gowan | Cryolite Bait | $\# 10163-225$ | OR-960031 | Ornamentals |
| Novartis | Dual 8E | $\# 100-597$ | OR-930022 | Meadowfoam |
| Wilbur Ellis | Dimethoate 267 | $\# 2749-41-2935$ | OR-850043 | Cherries |
| Wilbur Ellis | Dimethoate 267 | $\# 2749-41-2935$ | OR-850044 | Grass Seed |
| Wilbur Ellis | Dimethoate 267 | $\# 2749-41-2935$ | OR-850042 | Lentils |
| Wilbur Ellis | Dimethoate 267 | $\# 2749-41-2935$ | OR-850046 | Orn./Nursery |
| Wilbur Ellis | Dimethoate 267 | $\# 2749-41-2935$ | OR-850045 | Wheat |
| Wilbur Ellis | Mancozeb/TBZ | None | OR-940024 | Potato |


| Upcoming Pesticide Recertification Courses available through April 30, 1999: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Location | Course Title C | Credits | Contact | Phone |
| 02/17/99 | McMinnville | ES Hazelnut Pest Management Course - PM | 3 | Steve Morgan | 5037252300 |
| 02/17/99 | Mt. Angel | WOOC Annual Grower Meeting | 2 | E F Ross | 5033787349 |
| 02/17/99 | Weiser, ID | FSC Grower Meeting | 3 | Boyd Peterson | 2085492835 |
| 02/17/99 | Enterprise | WCGG Pesticide Seminar | 4 | Stu Coleman | 5034263116 |
| 02/17/99 | Hermiston | BP Magnicide H Safety \& Application Seminar | 3 | Dale Carpenter | 2089224910 |
| 02/17/99 | Hood River | WTFRC Meetings-AM | 1 | Muriel Ing | 5413861008 |
| 02/17/99 | Susanville, CA | Lassen Co. Pest Training- AM | 2 | Craig Hemphill | 5302518110 |
| 02/17/99 | Susanville, CA | Lassen Co. Pest Training- PM | 2 | Craig Hemphill | 5302518110 |
| 02/17/99 | Susanville, CA | Lassen Co Pest Training-AM | 3 | Craig Hemphill | 5302518110 |
| 02/17/99 | Hood River | WTFRC Meetings-PM | 1 | Muriel Ing | 5413861008 |
| 02/17/99 | Eugene | ES PNW Weed Control Shortcourse-PM | 4 | Ross Penhallegon | 8008728980 |
| 02/17/99 | Madras | Cenex HS Red Wheat Production Program | 1 | Patty Abell | 5414752222 |
| 02/18/99 | Christmas Valley | ES Private Applicator CORE Training | 5 | Marni Porath | 5419476054 |
| 02/18/99 | Hermiston | ES Private Applicator Training | 4 | Jeffrey McMorran | 5415678321 |
| 02/18/99 | Ontario | TVCC Private Applicator Training | 4 | Michael Woodhead | 5038896493 |
| 02/18/99 | Medford | UAP Pacific Turf, Nsy \& Landscape Meeting | 2 | Roxanne R. Bourgeois | 5417790121 |
| 02/18/99 | Richland, WA | WSU Potato IPM Workshop | 3 | Eric Sorensen | 5095453511 |
| 02/18/99 | Madras | BP Magnicide H Safety \& Application Seminar | 3 | Dale Carpenter | 2089224910 |
| 02/18/99 | Hood River | WTFRC Meetings-AM | 4 | Muriel Ing | 5413861008 |
| 02/18/99 | Albany | LBCC Ag Chemicals Course | 3 | Ted Hake | 5412588210 |
| 02/19/99 | Forest Grove | Pacific Harvest Fir Tree Meeting | 2 | Leslie Waber | 5033694289 |
| 02/19/99 | Wasco | MCGG Grower Meeting | 3 | Bruce Olsen | 5414425781 |
| 02/19/99 | Moses Lake, WA | WSU Potato IPM Workshop | 3 | Eric Sorensen | 5095453511 |
| 02/19/99 | Salem | Helena Turf \& Orn Meeting-AM | 3 | Stan Rogers | 5037694573 |
| 02/19/99 | Salem | Helena Turf \& Orn Meeting-PM |  | Stan Rogers | 5037694573 |
| 02/19/99 | Hood River | WTFRC Meetings-AM | 2 | Muriel Ing | 5413861008 |
| 02/20/99 | Ft. Lauderdale, FL | SAF Diseases of Ornamentals Conference T | TBA | Nancy Lawler | 7038368700 |
| 02/20/99 | Salem | WVTFGA Annual Meeting | 1 | Bob Stebbins | 5417548039 |
| 02/22/99 | Medford | ES Pear Disease Management Workshop (Spanish) | 2 | Phil Vanbuskirk | 5417767381 |
| 02/22/99 | Danville, IL | Lauhoff GMP's/Food Indust | 15 | Wanda Maxfield | 2174439767 |
| 02/22/99 | Ontario | Simplot Grower Recert Meeting-Small Grains | 4 | Vince Gaona | 5038892353 |
| 02/22/99 | Salem | CCC Ag Chem Course-Insecticide | 2 | D Craig Anderson | 5033995139 |
| 02/23/99 | Pendleton | ES Private Applicator CORE Training | 4 | Mary Corp | 5412785403 |
| 02/23/99 | Ontario | TVCC Noxious Weed Shortcourse | 7 | Fred Negus | 5418896493 X260 |
| 02/24/99 | Ontario | TVCC Noxious Weed Shortcourse | 7 | Fred Negus | 5418896493 X260 |
| 02/25/99 | Chico, CA | Pesticide Applicator Professional Assoc. Seminar-AM | 3 | Cecilia Worden | 9164349646 |
| 02/25/99 | Chico, CA | Pesticide Applicator Professional Assoc. Seminar-PM | 3 | Cecilia Worden | 9164349646 |
| 02/25/99 | Albany | LBCC Ag Chemicals Course | 3 | Ted Hake | 5412588210 |
| 02/26/99 | North Powder | WFS Grower Meeting | 3 | Chad Shelton | 5098385007 |
| 02/27/99 | Portland | PNWCTA Shortcourse-Pesticides | 2 | Melissa Berends | 5033643346 |
| 03/01/99 | Salem | CCC Ag Chemicals Course -Disease | 2 | D Craig Anderson | 5033995139 |
| 03/02/99 | Eugene | EFC Pesticide Core Training | 4 | Elene Fairchild | 5416888210 |
| 03/02/99 | Weiser, ID | Simplot Grower Meeting | 3 | Ron Strain | 2085492143 |
| 03/02/99 | Bend | ES Central OR Pest Management Conf-AM | 4 | Myron Shenk | 5417376274 |
| 03/02/99 | Bend | ES Central OR Pest Management Conf-PM | 4 | Myron Shenk | 5417376274 |
| 03/04/99 | Albany | LBCC Ag Chemicals Course | 3 | Ted Hake | 5412588210 |
| 03/09/99 | Tulelake, CA | Siskiyou Co. Scouting Certification Course-Alfalfa | 4 | Greg Herman | 5306675310 |
| 03/10/99 | Tulelake, CA | Siskiyou Co. Scouting Certification Course-Onions | 4 | Greg Herman | 5306675310 |
| 03/11/99 | Tulelake, CA | Siskiyou Co. Scouting Certification Course-Potatoes | 4 | Greg Herman | 5306675310 |
| 03/11/99 | Stockton, CA | Pesticide Applicator Professional Assoc. Seminar-AM | 3 | Cecilia Worden | 9164349646 |
| 03/11/99 | Stockton, CA | Pesticide Applicator Professional Assoc. Seminar-PM | 3 | Cecilia Worden | 9164349646 |
| 03/16/99 | Tulelake, CA | Siskiyou Co. Scouting Certification Course-Sugar Beets | 4 | Greg Herman | 5306675310 |
| 03/16/99 | Corvallis | ES Non Crop Veg Mgmt Conf-AM | 4 | Myron Shenk | 5417376274 |
| 03/16/99 | Corvallis | ES Non Crop Veg Mgmt Conf-General Session-PM | 2 | Myron Shenk | 5417376274 |
| 03/16/99 | Corvallis | ES Non Crop Veg Mgmt Conf-Weed ID-PM | 1 | Myron Shenk | 5417376274 |
| 03/16/99 | Corvallis | ES Non Crop Veg Mgmt Conf-Recordkeeping-PM | 1 | Myron Shenk | 5417376274 |
| 03/16/99 | Corvallis | ES NonCrop Veg Mgmf-Forest Weeds-PM | 1 | Myron Shenk | 5417376274 |
| 03/16/99 | Corvallis | ES NonCrop Veg Mgmt Conf-Weed Biology-PM | , | Myron Shenk | 5417376274 |
| 03/17/99 | Corvallis | ES Non Crop Veg Mgmt-AM | 4 | Myron Shenk | 5417376274 |
| 03/17/99 | Corvallis | ES Non Crop Veg Mgmt- Landscape-PM | 1 | Myron Shenk | 5417376274 |
| 03/17/99 | Corvallis | ES Non Crop Veg Mgmt Conf-Surfactant-PM | 1 | Myron Shenk | 5417376274 |
| 03/17/99 | Corvallis | ES Non Crop Veg Mgmt Conf-Prod Updates-PM | 1 | Myron Shenk | 5417376274 |
| 03/17/99 | Corvallis | ES Non Crop Veg Mgmt Conf- Non Chem-PM | , | Myron Shenk | 5417376274 |
| 03/17/99 | Corvallis | ES Non Crop Veg Mgmt Conf- Noxious Weed Update-PM | 1 | Myron Shenk | 5417376274 |
| 03/17/99 | Tulelake | Siskiyou Co Scout Cert Course-Small Grains | 4 | Greg Herman | 5306675310 |
| 03/22/99 | Danville | Lauhoff GMP's/Food Indust | 15 | Wanda Maxfield | 2174439767 |
| 03/25/99 | Portland | OROSHA PPE Training 203 | 3 | Tomas Schwabe | 5033783272 |
| 03/29/99 | Gresham | MHCC Pest ID \& Control I | 15 | Erric Ross | 5036677402 |
| 03/30/99 | Klamath Falls | B P Magnacide H Training | 3 | Dave Blodget | 8057635137 |
| 03/30/99 | Medford | OR-OSHA PPE Training 203 | 3 | Tomas Schwabe | 5033783272 |
| 04/13/99 | Salem | OR-OSHA PPE Training 203 | 3 | Tomas Schwabe | 5033783272 |
| 04/26/99 | Danville, IL | Lauhoff GMP's/Food Indust | 15 | Wanda Maxfield | 2174439767 |

## ACCIDENT ALERT!!

## by Garnet Cooke, OR-OSHA Compliance Officer

## Lime sulfur reacts to form deadly hydrogen sulfide gas:

An orchard worker was sent to a bulk chemical distributor to obtain a load of NPK 5-10-10 fertilizer. Two 325 gallon poly tanks, owned by the bulk distributor, were placed on the back of the worker's flatbed truck. The orchard worker held the hose in the tank while an employee from the distributor began to fill the tanks. It was noted that approximately 30 gallons of lime sulfur was in the bottom of the tank being filled.

The orchard worker stated that "This doesn't smell right" and was having difficulty breathing. As the chemical company worker jumped up on the truck to hold the hose, he realized that the orchard worker was unconscious. The orchard worker was admitted into the hospital intensive care unit with respiratory failure, life-threatening metabolic acidosis, coma, and blood in his urine.

## Cause of the accident:

The cause of the accident was found to be hydrogen sulfide poisoning, from mixing the lime sulfur with a fertilizer containing phosphate. At lower concentrations, hydrogen sulfide is detectable as the strong odor of rotten eggs. Higher levels produce olfactory fatigue so that the odor becomes less noticeable. Brief exposure to hydrogen sulfide at high concentrations can cause conjunctivitis and keratitis. Higher concentrations can cause unconsciousness, and respiratory
paralysis. At high enough concentrations, one breath of hydrogen sulfide can kill. The "immediate danger to life or health level" is 100 parts per million. The estimated level at the time of the accident, based on the symptoms experienced, was between 600 to 1,000 parts per million.

Pesticide labels of lime-sulfur products do not clearly make the user aware of this hazard. To prevent similar incidents from occurring:

* Never place lime sulfur in a container that has not been cleaned (ideally, lime sulfur tanks should be dedicated)
* Ensure that all employees receive hazard communication training
* Never allow untrained employees to assist with mixing/loading lime sulfur
* Never reuse a lime sulfur container unless it has been cleaned according to manufacturer's specifications
* Always have an adequate emergency plan in place
* Label all lime-sulfur tanks with the following sticker available at your local fertilizer dealer.


