

PEP-TALK
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OHIO PESTICIDE CONTAINER RECYCLING UNDERWAY

Dealers and elevators in more than 30 counties have agreed to serve as collection sites for used pesticide containers this summer. Recycling uses these containers in an environmentally friendly way, keeping the containers off the farm and out of landfills.

County agents should have a listing from the Department of Agriculture of all the collection sites and times in Ohio. If you would like to set up a site in your county contact Larry Berger at the Ohio Department of Agriculture (ODA).

Ohio's recycling program started in 1992 with 3 pilot locations and has expanded to 60-70 sites. ODA received a \$79,000 federal grant to purchase a granulator for the state's use which has just arrived. ODA hopes to recycle 80,000 to 90,000 lbs of plastic with the new machine. The plastic will be made into pallets used to haul and store pesticides.

The collection process should be a little faster and easier with the new contractor, "Tri-Rinse" who will be making gray pallets from the plastic. Different colored containers do not need to be sorted to make gray plastic and small amounts of foil around the opening can remain on the container. As always, the key to successfully recycle pesticide containers is to make sure the containers are clean and empty.

The Ohio Department of Agriculture asks that these guidelines be followed:

- Triple rinse or pressure rinse containers before bringing them to the collection site. Add the rinse water to the spray tank. Containers must be empty, clean and dry.
- Make sure there is no pesticide residue on the inside or outside that could come off. Check the pour spout and threads. Do not include caps, as they are usually made of a different plastic than the container.
- Some pesticides are known to stain. Stained containers are accepted as long as there is no residue.
- Labels do not have to be removed.

CHEMICAL & LABEL UPDATE

The following information provides registration status of particular pesticides and should not be considered as pesticide recommendations by OSU Extension.

AQUATIC

EPA has received requests to delete certain uses for the following products.

Lo-V Ester Weed Killer--Universal Coop. Inc.--Delete uses in drainage ditch banks and aquatic uses.

Barrage--Helena-- Delete uses for aquatic non-food.

Weed Rhap LVG-D and LV-6D--Helena--Uses for aquatic non-food.

Drexel LV 6 Weed Killer-- Delete uses for aquatic weeds in lakes, ponds, drainage ditches, marshes.

Albaugh 2,4-D LV4 & LV6--Regulatory Consulting--Delete uses in drainage ditch banks and aquatic applications. (P & T Chem News, June 18, 1997)

FRUITS

Pelargonic acid--Mycogen Corp.--The tolerance exemption has been broadened to include all tree fruits for blossom thinning use and to include herbicide uses. See PEP-TALK Vol.2 I.7. (OPP Weekly, John Ward, USEPA, May 16, 1997)

FUNGICIDE

Fedlawer -- Bayer --
Tebuconazole--A time-limited tolerances for residues of tebuconazole in or on barley grain, barley hay, barley straw, wheat hay, wheat straw, pistachios, milk, and meat byproducts of cattle, goats, hogs, horses, poultry and sheep in connection with EPA's granting of emergency exemptions has been established. (Federal Register, June 20, 1997)

VEGETABLES

Bentazon-- A tolerance for residues of bentazon has been established for succulent peas in connection with EPA's granting an emergency exemption in Minnesota and Wisconsin. (Federal Register, June 20, 1997)

D1-Syston 68% & D1-Syston Technical Insecticide --Bayer--Delete use in spinach, sugar beets. (P & T Chem News, June 18, 1997)

Simbar
Terbacil--A time-limited tolerances for residues of this herbicide have been established on watermelons in connection with EPA's granting of emergency exemptions in Delaware, Maryland, and Virginia. (Federal Register, June 20, 1997)

MISCELLANEOUS

Agree Bt Insecticide--Novartis--The label was amended to remove the honeybee warning statement since the risk to honeybees was determined to be insignificant. (OPP Weekly, John Ward, USEPA, May 16, 1997)

Captan Garden Spray--Zeneca Ag.--Delete uses for soil and bench greenhouse treatment. (P & T Chem News, June 18, 1997)

Ecogen Inc.--EPA has approved an application to register the pesticide products Lepinox Bioinsecticide, used in the manufacturing of bioinsecticide end-use products for application to vegetables and cole crops, herbs, spices, ornamentals, and other crops. Lepinox G Bioinsecticide and Lepinox WDG Bioinsecticide for the control of lepidopterous pests. (Federal Register, June 23, 1997)

Notice of Receipt of Requests to Delete Uses in Chlorpyrifos Registrations-- Makhteshim-Agan of North America Inc., DowElanco--EPA has issued an amendment to a Federal Register notice of receipt of request by registrants to delete uses in Chlorpyrifos registrations. These EPA Registrations are: Pyrinex Technical, Dursban F Insecticide Chemical; Dursban R Insecticide Chemical; Dursban 30 SEC Insecticide Concentrate; Dursban HF Insecticidal Concentrate; Dursban W Insecticidal Chemical; XRM5222.

The deleted sites from each label are as follows: Pest Control Indoors (Indoor): Indoor broadcast use; total release foggers for indoor residential and nonresidential (except greenhouse) use; coating products intended for large indoor surface areas such as floors, walls, and ceilings inside residential dwellings, offices, schools, or health care institutions including, but not limited to, houses, apartments, nursing homes and patient rooms in hospitals. Pets and Domestic Animals (Indoor): Animal dips, sprays, shampoos, dusts. Aquatic Uses (Aquatic Food Crop) (Aquatic Non-Food): Any aquatic use, including mosquito larvicide. Pest Control Indoors or Outdoors (Domestic Indoor or Outdoor): Paint additives; application in sewer manholes. (Federal Register, June 27, 1997)

Notice of Requests to Voluntarily Cancel Certain Pesticide Registrations

EPA issued a notice of receipt of requests by registrants to voluntarily cancel the following pesticide registrations. Unless a request is withdrawn by December 24, 1997, orders will be issued canceling all of these registrations.

Tilt Fungicide
Dupont Lannate Insecticide and LV Insecticide
Expedite Broadleaf Herbicide 2-Way Ester
Zep-O-Mint
Linex 50 DF
Troysan 190
Riverside Mal Methyl 63 ULV and 44E
Dithon 63
Riverside Methyl Parathion 7.2
Metaspray 5E
Methy Parathion 1.5 Thiodan 3EC
Trinox 80% Soluble Powder Selective Insecticide
Oxy Methyl Parathion-Thiosulfan 1.5-1.5 EC
4.90% Strychnine Paste
Clean Crop Methyl Parathion 4-E and 7.5
Mitac WP
Carzol SP
Poly-Coat Beef and Dairy Cattle Duster contains Co-Ral
Pick - Mor
Methyl Parathion Liquid 4 Prod. #909
Methyl Parathion 6EC
Technical Methyl Parathion
Compound DRC-1339 Concentrate-Feedlots
Dibrom Fly & Mosquito Spray
Orthene 75 S Soluble Powder
Treflan 5
Pin Nip 7A -- Aerosol Sprout Inhibitor
Riverdale MCPA Technical Acid and Amine
(Federal Register, June 27, 1997)

NATIONAL PESTICIDE HOTLINE

The National Pesticide Hotline is now open seven days a week. This EPA and Oregon State University sponsored service supplies information on a wide variety of pesticide-related subjects. NPTN can also be contacted through the World Wide Web at <http://ace.orst.edu/info/nptn/>. The E-mail address is nptn@ace.orst.edu. Operating hours are 10 hours a day, 6:30 am to 4:30 pm Pacific Time. The telephone number is 1-800-858-7378; fax: 1-541-737-0761.

Information is available at no cost over the phone and Internet, and non-copyrighted materials can be mailed or faxed for a nominal fee. (EPA Press Advisory, June 13, 1997)

EPA PRIORITIZES PESTICIDE ACTIONS

The EPA asked pesticide registrants to indicate their top five conventional pesticide actions by the end of June 1997. Requested actions may include new applications, new uses, EUPs, amendments, and actions regarding inert ingredients. Note that biopesticides and anti microbials are not included in this request.

For conventional pesticides, EPA will set priorities in the following order:

- 1) Methyl bromide alternatives. The phase out date for methyl bromide is just around the corner.
 - 2) Reduced risk pesticides. For reduced-risk pesticides, registration will be relatively easy.
 - 3) Vulnerable crops. Crops at risk will be identified by USDA/EPA. No word on exactly how those crops will be picked, but the list will include crops that lose critical pesticides due to FQPA.
 - 4) Minor use pesticides. Many minor use registrations will also be affected by #3 above.
 - 5) Non-minor uses. If you want to register a pesticide, it would be wise to involve a minor crop.
 - 6) International policy issues. There may be some important international issues regarding FQPA because many U.S. pesticide tolerances may be reduced below international standards. This priority could quickly move to the top.
- (Georgia Pest Management Newsletter, May 1997)

PESTICIDE DATA PROGRAM 1995 SUMMARY

The 1995 annual summary for the USDA Pesticide Data Program (PDP) has been released. The PDP program was designed as a voluntary (not an enforcement) program to provide data on pesticide residues on fruits and vegetables. PDP samples are collected at locations as close to the point of consumption as possible. The PDP is USDA's means of meeting its obligations under the Food Quality Protection Act (FQPA) of 1996. The FQPA directed the Secretary of Agriculture to collect improved pesticide residue data on foods highly consumed by infants and children. Annual pesticide residue summaries have been published since 1991.

In addition to the PDP data, the Environmental Protection Agency (EPA) also receives usage data from USDA, and pesticide residue data from the Food and Drug Administration (FDA), States, and private sources. FDA enforces tolerances established by EPA in food. More than 10,000 samples are analyzed each year under this approach. FDA also conducts a Total Diet Study to analyze table-ready foods for pesticide residues.

1995 PDP Summary Focus

In 1995, there were 9 participating states: California, Colorado, Florida, Michigan, New York, North Carolina, Ohio, Texas, and Washington. The 12 commodities sampled and tested were apples, bananas, carrots, grapes, green beans, oranges, peaches, potatoes, spinach, canned and frozen sweet corn and sweet peas, and wheat. 7,524 samples were collected and tested (6,924 fruit and vegetable samples, and 600 wheat samples). Of the fruit and vegetable samples tested, 16.5% were imported, mainly bananas, grapes, and peaches.

Because of PDP's ability to measure minute levels of residues, 65% of fruit and vegetables were found to contain detectable residues, as did 79% of wheat samples. About 29 percent of the residue detections were due to post-harvest uses. Most of these residues, however, were found at levels far below established tolerances. To help illustrate how minuscule these levels are, 1 part per billion is comparable to 1 second in 32 years or 1 cent in \$10 million.

These results are consistent with past PDP findings and FDA monitoring and should not be of concern to the consumer. In general, residue levels on the same foods if cooked or processed are much lower, since cooking and processing breakdown the residues. This includes baby food. In 1993, FDA determined that the levels of pesticide residues in baby food and adult food eaten by children were well below tolerances established by EPA.

Spinach Samples

Spinach was included in PDP for the first time in 1995. About half of the reported presumptive violations for the program were with Spinach. Thirteen samples of spinach were taken from Ohio. It was the only leafy vegetable included in PDP that year. Thirty-four different pesticides were detected on spinach, 17 of which did not have tolerances; a total of 1,254 residues were detected. Of the 17 pesticides found which did not have tolerances for spinach, 5 chemicals (acephate, chlorpyrifos, dacthal, dicloran, and methamidophos) accounted for 80% of the residues.

The remaining 20% of pesticide residues without tolerances for spinach contain DDT, or its breakdown products DDD and DDE at maximum concentrations lower than the levels at which actions would be taken for these residues on spinach.

Spinach is safe to eat. Although a number of pesticide residues were detected for which there are no tolerances for spinach, these residues were found at very low levels. Furthermore, tolerances for these same pesticides are established at much higher levels on other fruits and vegetables. For example, the highest residues of methamidophos on spinach was 30 times lower than the pesticide's tolerance on cabbage of 1 (ppm).

USDA/PDP will continue to survey spinach and include it in its national survey for 1997. FDA will continue to monitor spinach as part of its enforcement program and EPA's Office of Pesticide Programs will take PDP data into account when making future reregistration decisions concerning the pesticides found on spinach. EPA and USDA will work with spinach growers to determine why detections are occurring (i.e., spray drift, crop rotation, labeling issues, misuse, background residues) and take appropriate action to correct any problems that might exist. (USDA PDP Report; John Ward USEPA, e-mail, June 20, 1997)

MISUSES OF PESTICIDES & EQUIPMENT IN DEVELOPING COUNTRIES

The United Nations Food and Agriculture Organization has warned that developing countries are causing environmental damages by using old approaches in pesticide applications. Many farmers from South America to Asia lack knowledge about effects of pesticides and correct application of pesticides. Theodor Friedrich of the FAO said that FAO encourages pesticide manufacturers and governments to use incentives to aid improvement in training programs and equipment quality.

Friedrich says that many farmers still believe high pressure, high volume and high doses give the best results. The main resource to aid the farmers in pesticide use are representatives from chemical companies. A few examples indicate what types of problems developing countries are facing.

Vietnam has no national legislation and no training required of applicators. In Pakistan, pesticides are wasted due to poor machinery. "High levels of pesticide residues are found on foods in India (and) even though India has national standards for spray equipment, many small manufacturers don't comply with them." (P & T Chem. News, June 4, 1997)

In Thailand, few farmers receive training, leaking sprayers are common in the Philippines and in Malaysia, lack of PPE and training causes poisoning among spray operators.

Use of more chemical than is needed is very common and along with that, the threat of pollution to groundwater. FAO is encouraging countries to improve pesticide application by using quality equipment and improving operator training. The organization is also supportive of a voluntary certification system for these nations. Two documents have been developed by FAO including "Guidelines for the Basic Requirements for Pesticide Application Equipment" and "Standards for Pesticide Application Equipment." The PAT office is in the process of getting information on how to receive copies of these documents. (P & T Chem. News, June 4, 1997)

CHILDREN'S TOY MAKER SETTLES WITH EPA

A settlement was reached last month when Hasbro, Inc. agreed to relabel children's toys that were made with an antimicrobial pesticide and to pay a \$120,000 civil penalty.

EPA determined that the nine toys in questions were pesticides because they were "a substance intended for preventing, destroying, repelling or mitigating a pest." (P & T Chem News, June 18, 1997) But the toys were not registered with EPA. Hasbro spokespersons said that the company believed that their claims were appropriate based on an EPA agreement with the manufacturer of the antimicrobial pesticide. In this agreement, examples of non-health claims that were acceptable were given and Hasbro based it's labeling on this agreement. However, EPA determined that the claims on the packaging were misleading to the consumer and implied that the antimicrobial protected children, when in fact, it only protected the toy.

While admitting no wrong, Hasbro agreed to send placards to retail stores clarifying that the pesticide only protects the toys and not children; to place stickers over claims on existing packaging regarding antibacterial protection; to produce new packaging; and to take out advertisements in magazines promoting children's safety issues. (P & T Chem News, June 18, 1997)

STUDY PLANNED FOR CHILDREN EXPOSED TO METHYL PARATHION

"The Agency for Toxic Substances and Disease Registry is proposing a multimillion dollar study to see whether children who were exposed to methyl parathion - which was illegally sprayed in homes, day care centers and other buildings - suffer memory loss, behavioral disorders or other adverse neurobehavioral outcomes." (P & T Chem News, June 18, 1997)

Although still in the design phase, EPA is expecting to spend \$1 million for the first year of the proposed three year project. There has been little research done on children exposed to the chemical but researchers found that for exposed adults who were exposed 10 to 20 years prior, higher-than-average memory lapses, personality alterations and other neurological dysfunctions occurred. This study will help determine the effects of chronic low-level exposure for organophosphates, especially in the infant and children population. Because of the lack of data regarding exposure of infants and children, this study has received a lot of interest. Information that is obtained through this research could help EPA set tolerances at appropriate levels.

500 children who have been exposed have already been identified and that number will grow as officials continue to investigate illegal sprayings in many parts of the country. If the project is approved, research would begin spring of 1998.

CONSUMERS BELIEVE

Results released on May 6, 1997 of a public opinion pole commissioned by the Agricultural Institute of Florida showed that two-thirds of consumers believe that domestically grown fruits and vegetables are less likely to be contaminated with pesticides or disease-bearing organisms than those grown in other countries and imported into the U.S. (Chemically Speaking, June 1997)

BUG WARS

Cuba says a plague of plant-destroying thrips first appeared in their country after a U.S. crop-dusting plane allegedly was seen spraying an unknown substance over the country. Cuban officials are accusing the U.S. of "biological aggression." U.S. officials are alleging the aircraft incident involved a Cuban commercial airliner. (Reuter, May 5, 1997 via Chemically Speaking, June 1997)

COCAINE AS AN INSECTICIDE???

Cocaine has been found to have surprising insecticidal effects at levels in which it occurs naturally in plants. Curious about observations that coca plants tend to be relatively pest free, researchers at Massachusetts General Hospital in

Boston decided to examine cocaine's effects on feeding in insects. Their experiments showed that insect larvae exposed to cocaine sprayed leaves display "marked behavioral abnormalities, including rearing, tremors, and walk-off activities." Their data show that cocaine's toxicity stems from its ability to block re-uptake of octopamine, a key insect neurotransmitter and hormone that regulates movement, behavior, and metabolism. Researchers point out that cocaine's effect on humans, which is caused by blockage of re-uptake of the neurotransmitter dopamine, is likely an unintended evolutionary side effect of its ability to block the amine re-uptake in insects. (Kansas Pesticide Newsletter (Vol. 17, No. 1), via Chemically Speaking, June 1997)

PSST...

EPA has reduced by 16 million hours the time and paperwork needed to comply with environmental regulations, the agency said in a report released June 3. The report, "Managing for Better Environmental Results," summarizes changes instituted at EPA in the two years since it began to "reinvent" environmental regulations as part of President Clinton's 1995 initiative. Administrator Carol Browner said in a news release, "We soon will eliminate another eight million hours," she noted, adding that the agency has meanwhile "strengthened the protection of public health and the environment for all Americans, especially children." (P & T Chem. News, June 4, 1997)

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