

FQPA – ORGANOPHOSPHATE TIMELINE

Glenn Morin and Robin Spitko
New England Fruit Consultants, Montague, MA

Revised Cumulative Risk Assessment

FQPA requires that EPA, when setting pesticide tolerances, take into account “available evidence concerning the cumulative effects of such residues and other substances that have a common mechanism of toxicity.”

Historically, the potential health risk associated with exposure had focused on *single pathways of exposure*, i.e. through food, water or residential use for *individual chemicals*, not on the potential for individuals to be exposed to *multiple pesticides* by *all pathways concurrently*.

On June 18, 2002, the EPA held a technical briefing on the Revised Cumulative Risk Assessment for the organophosphate pesticides (OP) in Alexandria, VA. Preliminary results from the assessment, which reviews more than 1,000 pesticide food tolerances, indicate that the regulatory actions already taken by the EPA during the past six years have substantially reduced the risk posed by these pesticides and will meet the tough standards set forth in the FQPA.

Highlights of the Revised CRA include:

- There will be no wholesale cancellation of OPs as a result of this assessment;
- OPs in drinking water are not a major source of cumulative exposure;
- Residential use is not of great concern given the cancellation of chlorpyrifos and diazinon for these purposes;
- A few questions concerning dietary exposure remain that **may** require further mitigation but these are specific product/commodity combinations that should not greatly affect tree fruits.

Cumulative risk assessment has not been finalized. The public comment period just ended in September and several OP individual risk assessments have not been completed and therefore have not been incorporated into the cumulative assessment. The CRA document should be finalized by the end of this year.

Finalization of Azinphosmethyl IRED

On August 2, 2002, EPA announced the finalization of the Interim Registration Eligibility Decision (IRED) for azinphosmethyl (AZM). This document outlines the regulatory actions the Agency will take to restrict the future use of AZM based on their review of the compound as mandated by the FQPA. The basic provisions of the IRED were first made public in October 2001 and although there were some minor revisions in the final document, the tree fruit crops were minimally affected.

Highlights of the azinphosmethyl IRED include:

- Time-limited registration (cancelled 12/05 unless submitted data indicate registration should be continued):
 - almonds, **apples**, blueberries, Brussels sprouts, **cherries**, nursery stock, parsley, **pears**, pistachios, and walnuts;
- Phased-out (cancelled 8/05 and cannot be used after 12/05):
 - cotton, cranberries, **nectarines**, **peaches**, potatoes, southern pine seed orchards, and caneberries;
- Cancelled (no more sales after 9/1/02 but existing stocks can be used):
 - alfalfa, beans, birdsfoot trefoil, broccoli, cabbage, cauliflower, citrus, celery, clover, cucumbers, eggplant, filberts, grapes, melons, onions, pecans, peppers, **plums**, quince, spinach, strawberries, and tomatoes.

The exact conditions under which AZM use on apples will be allowed during the next four years are currently unknown as EPA has yet to finalize the label. However, it is **very likely** the label will include the following:

1. A reduction in the total amount of product allowed per acre / per season;
2. A 14-day restricted-entry interval for most activities except possibly fire blight shoot removal;
3. An extended pre-harvest interval for PYO operations;
4. More restrictive language regarding spray drift management (see reducing spray drift handout).

It is our understanding that the registrants of azinphosmethyl are fully committed to the product and will continue to work with EPA with respect to the crops that have either a time-limited registration or are scheduled to be phased-out. The registrants are currently conducting numerous studies requested by EPA to generate data in support of the continued use of AZM beyond 2005.

Candidates for Reregistration

EPA plans to make risk management decisions for many of the candidate pesticides listed below during the fiscal years 2002 and 2003. Any uncompleted FY 2002 candidate pesticides will have become 2003 candidates as of October 1, 2002, when the new fiscal year began. These decisions will be made through either the reregistration or tolerance assessment programs and will take the form of either REDs, IREDs or TREDs.

FY 2002

endosulfan (7/02)
thiophanate-methyl
ziram
dimethoate
fenbutatin oxide (5/02)
fenarimol

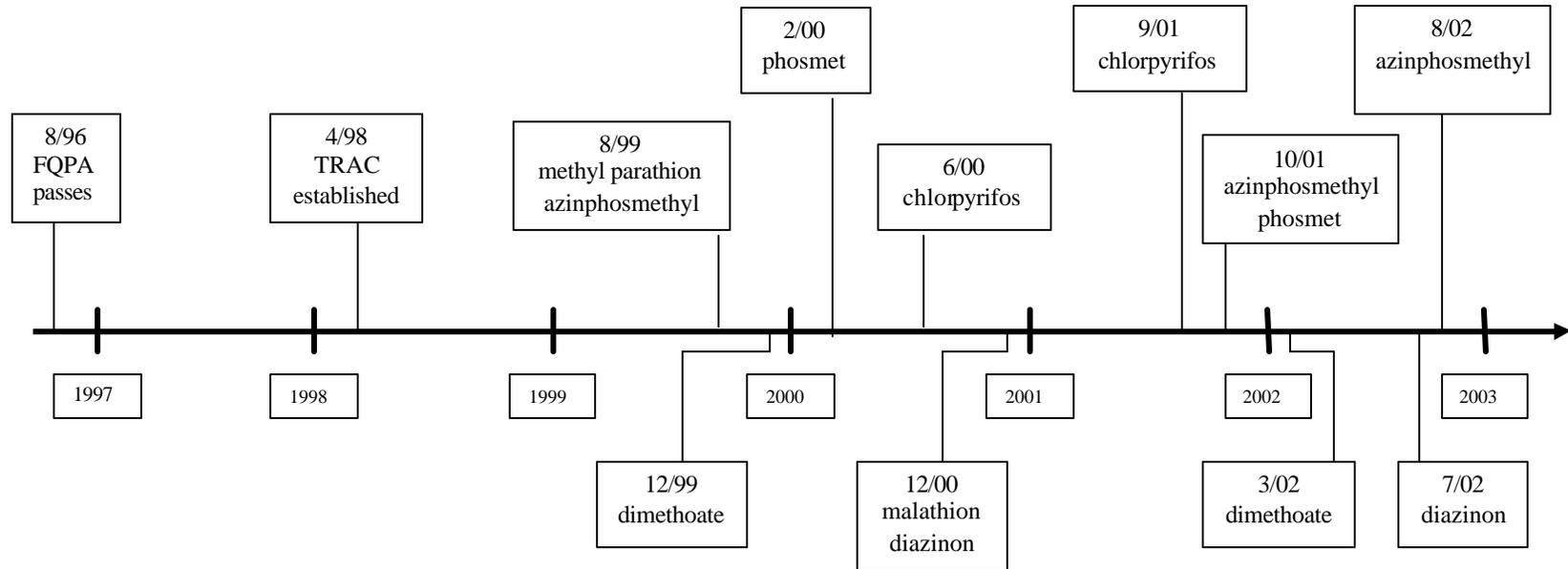
FY 2003

fenvalerate
formetanate HCL
permethrin
thiram
malathion
carbaryl
esfenvalerate

The slide presentation for this talk can be viewed at:

<http://www.massfruitgrowers.org/nefrmtg/proc--2002-03/a04pp/>

Food Quality Protection Act/ Organophosphate Timeline of Events 1996 – 2002



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- 8/1996 – **Food Quality Protection Act (FQPA)** passes. EPA must systematically reassess tolerances for all active ingredients registered at the time in accordance with more stringent safety standards including special protection for children.
- 4/1998 – **Tolerance Reassessment Advisory Committee (TRAC)** established.
- 8/1999 – **Methyl parathion:** Revised risk assessment released. Primary concern was acute dietary risk to children. EPA accepted registrant's voluntary cancellation for apples, peaches, pears, nectarines, cherries, plums, and others effective 12/99.
- 8/1999 – **Azinphosmethyl:** Revised risk assessment released. EPA concluded unacceptable dietary risk to children, unacceptable ecological risk (deleted uses on cotton, sugarcane, ornamentals, Christmas trees, shade trees, and forest trees) and of concern for risk to agricultural workers.
- 12/1999 – **Dimethoate:** Revised risk assessment released. Dietary issues **not** a concern. EPA cited problems with ecological risks and worker exposure.
- 2/2000 – **Phosmet:** Revised risk assessment released. Acute dietary risk **not** an issue. Primary concern was for post-application workers who may contact residues.
- 6/2000 – **Chlorpyrifos:** Revised risk assessment released. EPA identified both dietary and non-dietary risks especially to children. Registrant signs MOA to voluntarily cancel post-bloom uses on apples (except DWB trunk sprays) as well as most residential uses and most outdoor non-residential uses effective 12/00.
- 12/2000 – **Diazinon:** Revised risk assessment released. Dietary of minor concern. Major issues were drinking water contamination from residential use, ecological risks (bird kills), and worker exposure. EPA accepts voluntary termination of all indoor uses and a 4-year phase-out of lawn and garden uses (combined total approx. 75% of total use) and cancellation of agricultural crop uses yet to be determined.
- 12/2000 – **Malathion:** Revised risk assessment released. Dietary **not** a concern. Some residential problems as well as post-application exposure to workers and ecological concerns (fish and aquatic invertebrates).
- 9/2001 – **Chlorpyrifos:** IRED released. Dietary exposure below level of concern. Risk mitigation centered around agricultural workers, i.e. increased PPE, engineering controls, etc.
- 10/2001 – **Azinphosmethyl:** IRED released. EPA proposes 3-tier regulatory process including cancellation of 28 crop uses, phase-out of 7 crop uses, and 4-year, time-limited registration for 8 crop uses. Restrictions concerning REI, PHI, and total

amount of product allowed, amongst others, are proposed. Registrant did not agree and negotiation/litigation resulted.

- 10/2001 – **Phosmet:** IRED released. EPA proposed 5-year, time-limited registrations for apples, apricots, nectarines, peaches, pears, and plums. Proposed REI increase from 1 to 3 days for all of above crops. PHI remained the same for all. Continued registration for 33 other crops. Registrant agrees to terms and signs off. New label to become effective 6/30/02.
- 3/2002 – **Dimethoate:** EPA published cancellation order for all indoor uses, certain agricultural uses (housefly treatments on farm structures, farm animals and manure piles), and certain outdoor non-agricultural uses.
- 7/2002 – **Diazinon:** IRED released. Tolerances remain the same for apples, apricots, cherries, nectarines, peaches, pears, and plums. Limited to one application per season (wooly aphid only on apples). REI increases from 1 to 4 days. Cancellation of all granular registrations, and cancellation of foliar uses on all vegetable crops.
- 8/2002 – **Azinphosmethyl:** IRED finalized. Similar to proposed IRED released 10/2001.