

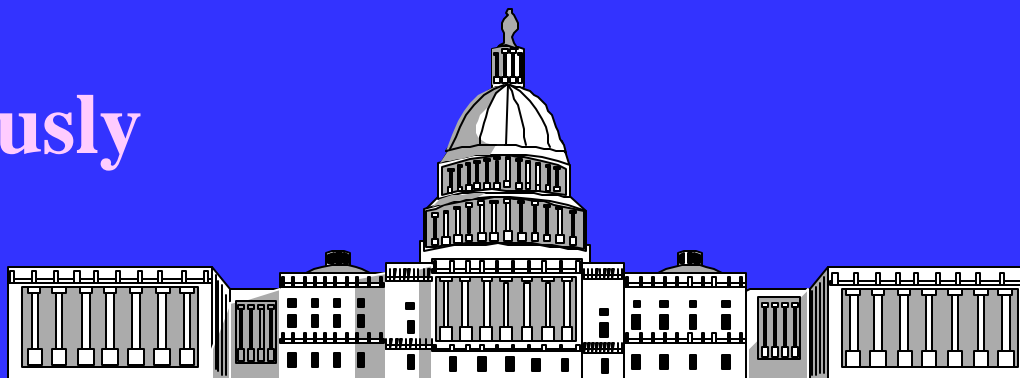


FOOD QUALITY PROTECTION ACT

Review of 1999

FQPA

* passed unanimously
by Congress,
August 1996



* amends

FIFRA (registration/ use)

FFDCA (tolerances)

EPA: Should we register a new product or new use?

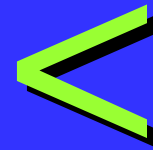
Exposure

residue testing
diet studies
worker exposure
modeling

Acceptable Intake

animal testing
safety factors
modeling

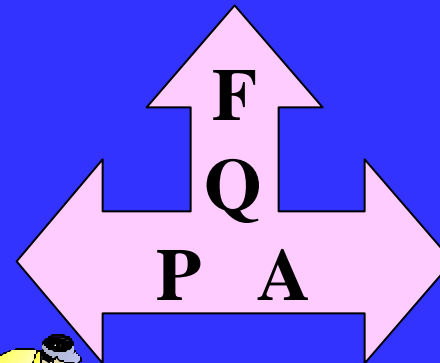
“Theoretical Max Exposure”
Worst case max amount
of pesticide that
an adult might be exposed to



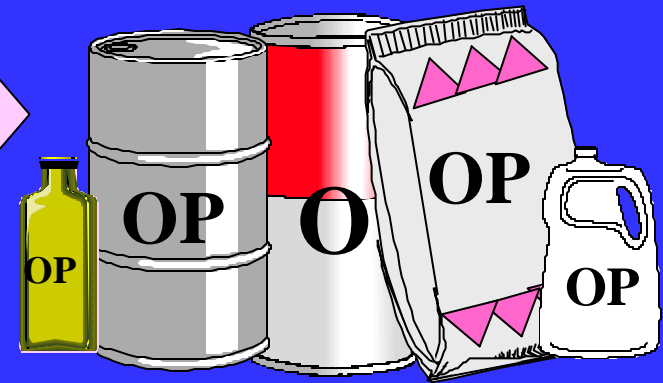
“Reference Dose”
How much pesticide
can an average adult
eat each day,
and still be safe

If so, issue a “registration” under FIFRA

Add Safety Factor for Children



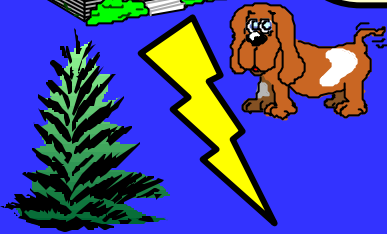
Consider
Aggregate Exposure



Group Pesticides with a
Common Mechanism



Exposure

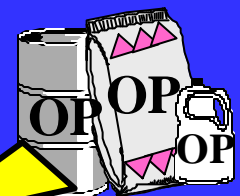
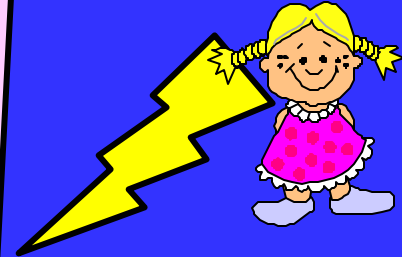


residue testing
diet studies
worker exposure
modeling

“Theoretical Max
Exposure”

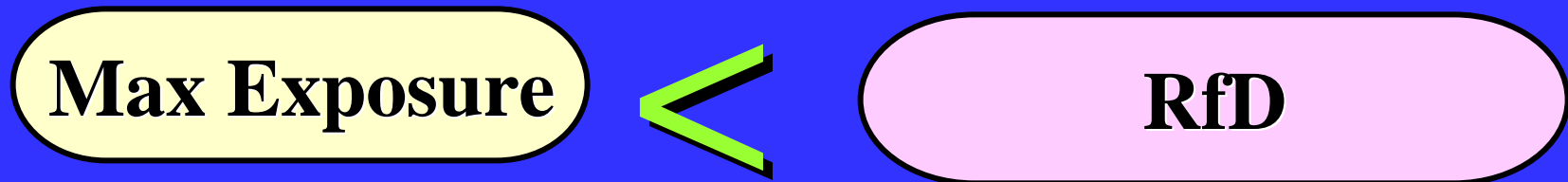
Acceptable Intake

animal testing
modeling
safety factors



“Reference Dose”

IF:



Approve the registration or use under FIFRA

BUT:

Max Exposure



RfD

DO NOT approve the registration or use

or

**DROP current uses or other pesticides until
max exposure < than estimated safe dose**

EPA's original schedule for reviewing tolerances

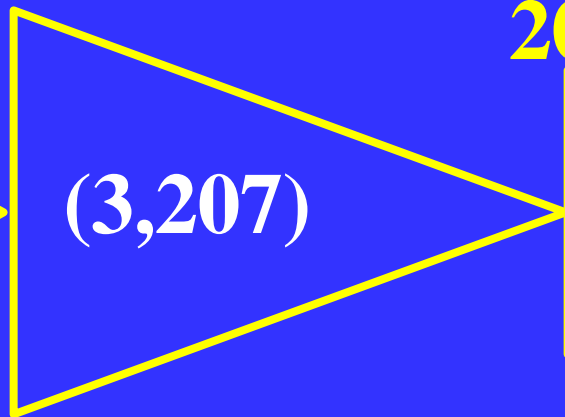
“worst first”
(n = 9,721)



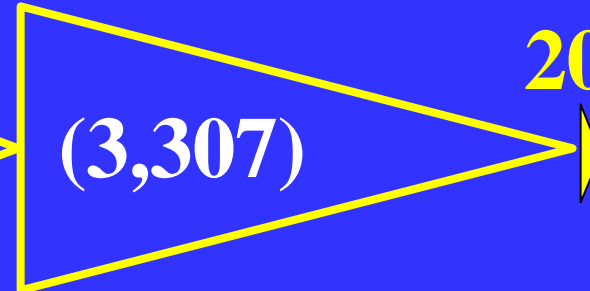
**Aug 3,
1996**



**Aug 3,
1999**



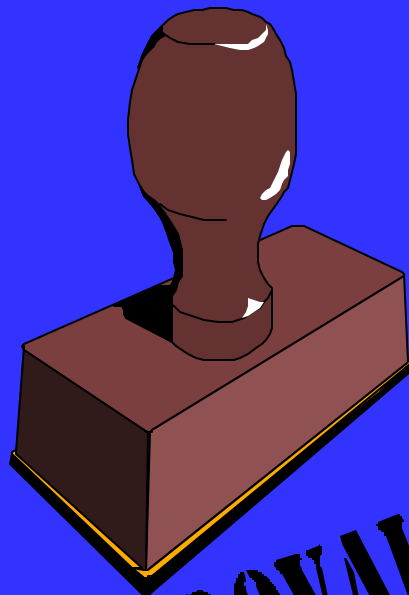
2002



2006



How does EPA conduct an OP risk assessment under FQPA??

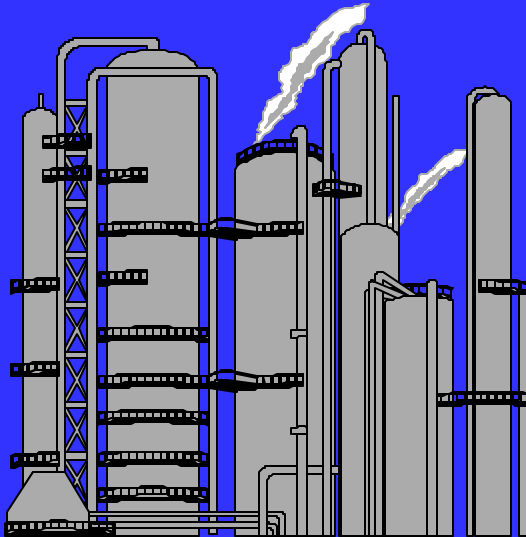


First - EPA does a preliminary RA

- hazards
 - cancer, enzyme change, wt loss, etc
- dose-response
 - amt of pesticide that causes the hazard
- exposure
- risk characterization

APPROVAL

Phase 1



RA goes to:
registrant & USDA



Purpose:
review for errors

Time:
30 days



Phase 2

RA goes:
back to EPA



Purpose:

- review registrant, USDA comments

Time:

up to 30 days



Phase 3



RA goes to:
the public
(Fed Register notice)

Purpose:
collect public comments
and data

Time:
60 days

JULY

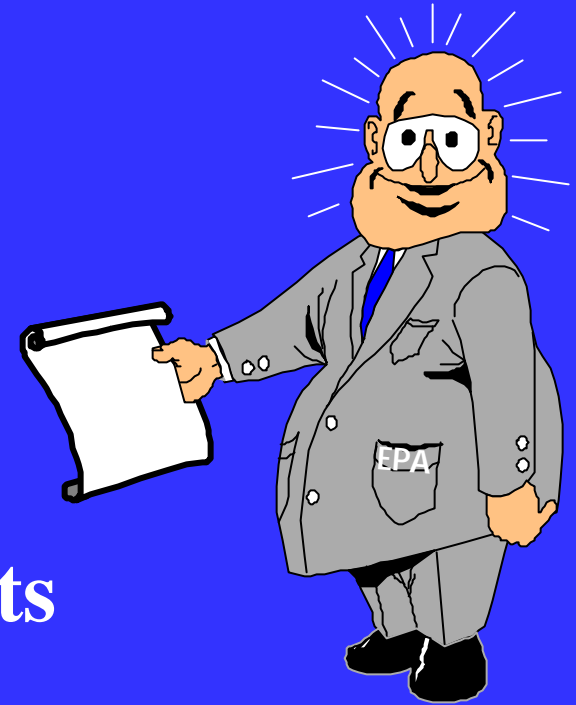
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST

				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Phase 4

**RA goes:
back to EPA**



Purpose:

- review public comments
- revise RA and share via public meetings



**Time:
90 days**

JUNE						
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JULY						
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST						
				1	2	3
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Phase 5

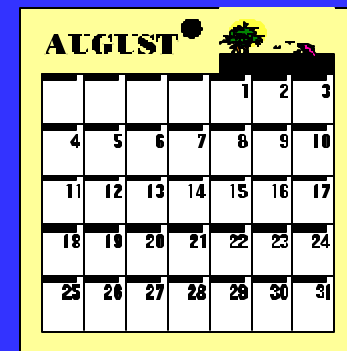
RA goes to:
the public



Purpose:

- solicit risk management alternatives
and strategies to solve problems
identified in the RA

Time:
60 days



Phase 6

RA goes:
back to EPA



Purpose:

- based on public comments,
develop risk management
strategies used to make decisions
about the product



Time:

up to 60 days

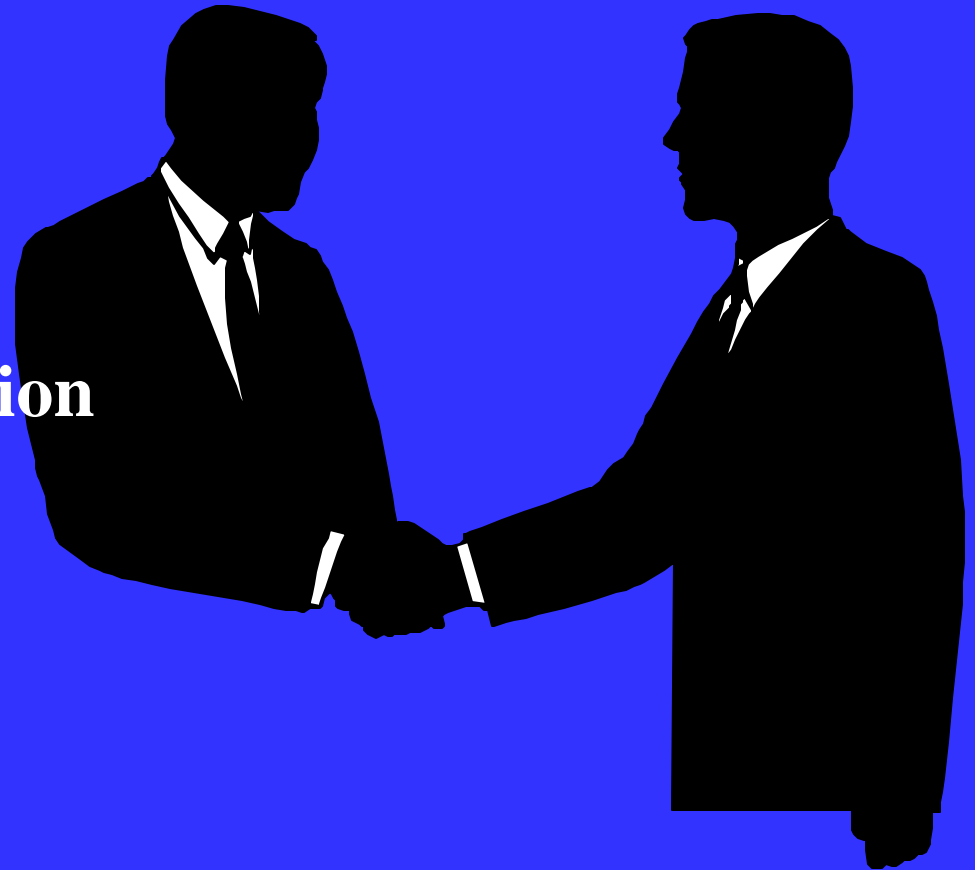
JULY						
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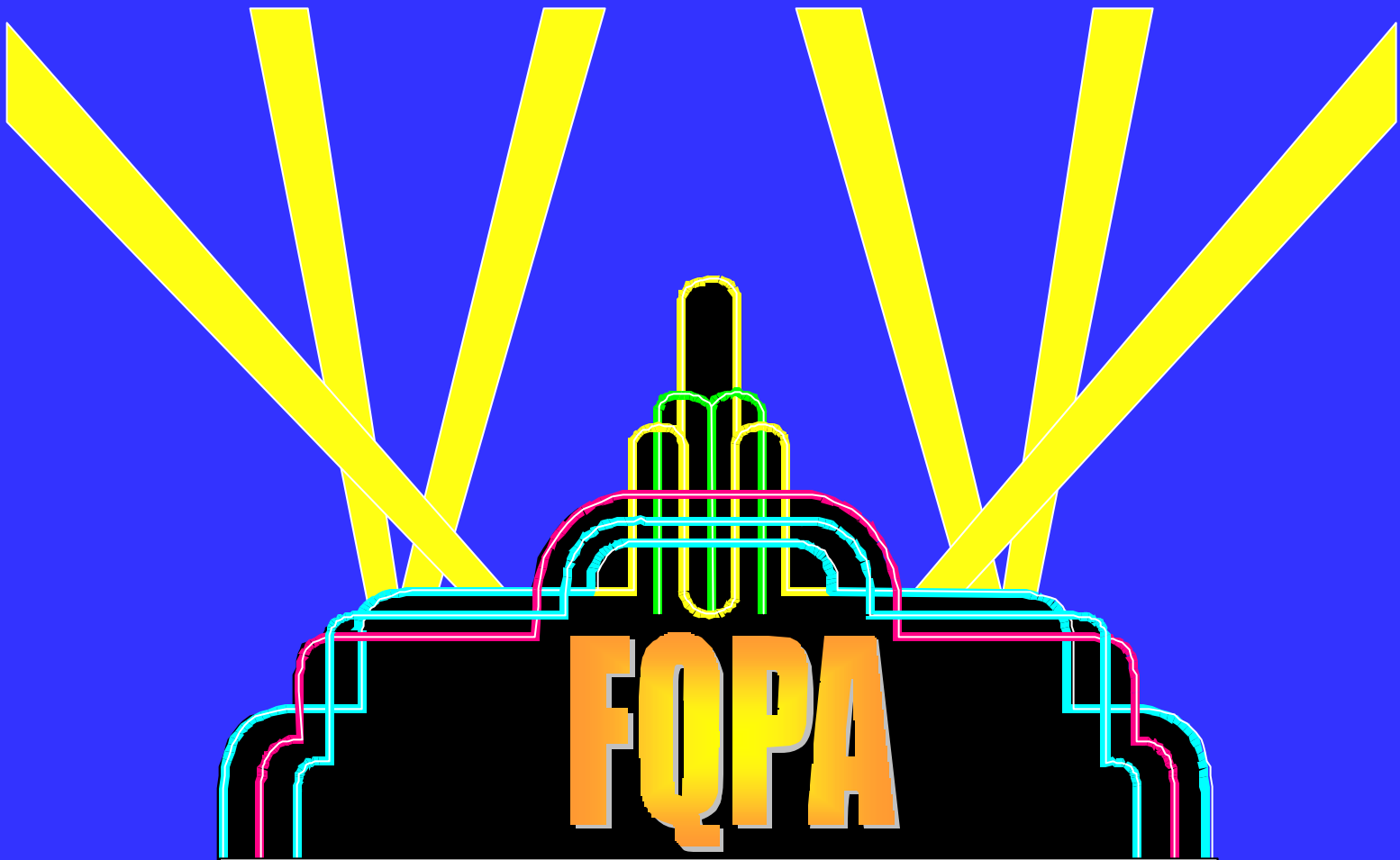
AUGUST						
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4	5	6	7	8	9	10
11	12	13	14	15	16	17
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But some deals are being made in the “back room”

- registrants and EPA cutting deals
on revocations, especially minor crops

- circumvents
stakeholder input,
public comment,
discussion of risk mitigation





Opening August 1999!



**First
Deadline:
August 3rd, 1999**

- **48 pesticides reviewed
(33 of these had food uses)**

EPA met its legal requirement

- Needed to review 3,207 tolerances
- Completed 3,290 (34%)



EPA did not meet its internal goal

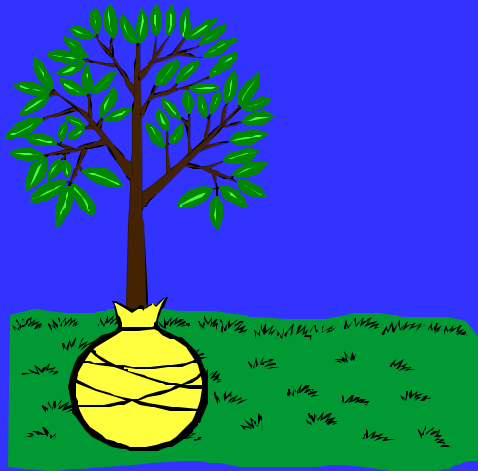
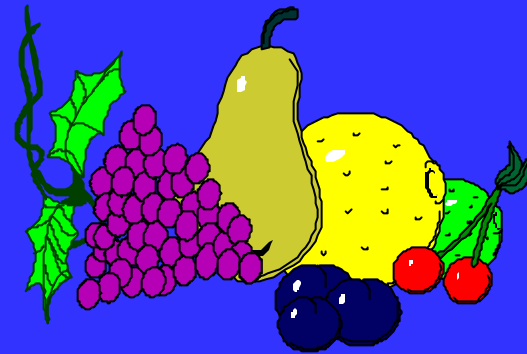
- Planned to do all “worst-first” tolerances
- Completed only 2,178 (39%) of the “worst-first”
28% of OPs, 31% of carbamates, 29% B2s
- 1,493 (68%) were revocations of old products

August 10, 1999

methyl parathion (Methyl Parathion, Penncap M)

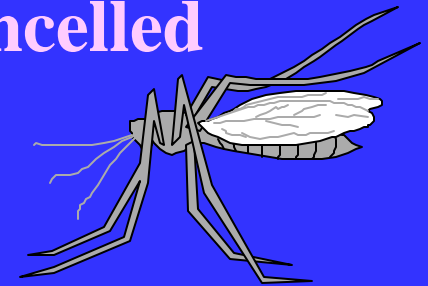
Many **food uses** cancelled

- ALL fruit, most veg, some field



Some **non-food uses** cancelled

- ornamentals, nursery stock,
grass seed, mosquitoes

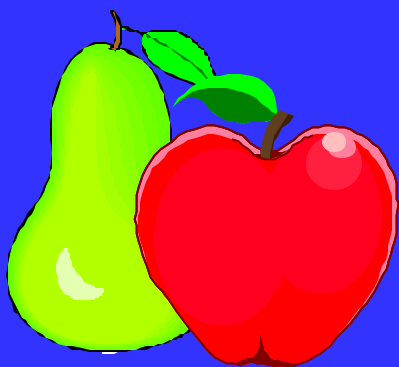


Increases in **Worker Protection**

- re-entry increased from 2 to 4-5 days
- requires closed cabs / cockpits



August 2, 1999
Azinphos-methyl (Guthion)

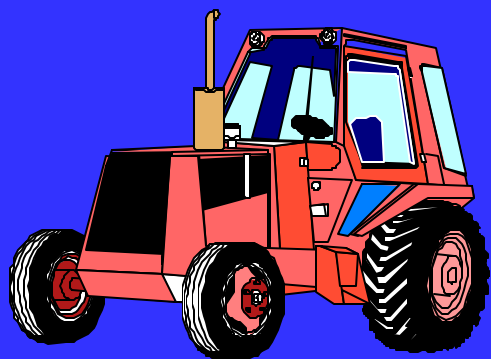
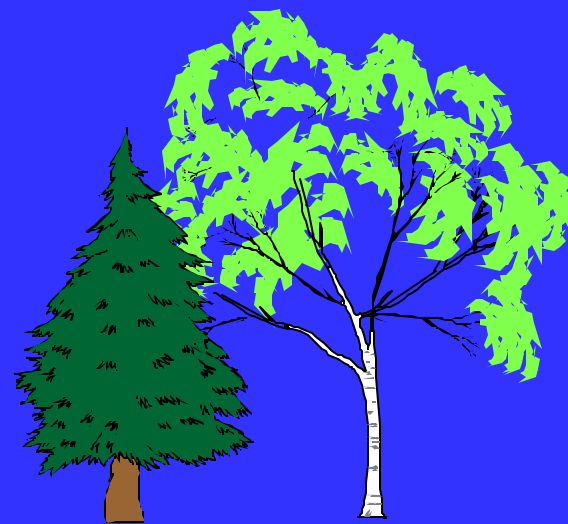


Pome fruit uses reduced

- max use rates
- increased pre-harvest intervals
- lower tolerances

Some non-food uses cancelled

- ornamentals, Xmas / forest/ shade tree



Increases in Worker Protection

- re-entry increased significantly
- requires closed cabs / cockpits
(no hand-held application)

Status of Soil Insecticides

<http://www.epa.gov/oppsrrd1/op/>

carbofuran (Furadan)	Some revocations (not corn)
chlorethoxyfos (Fortress)	Phase 5 complete
chlorpyrifos (Lorsban)	Phase 3 complete
cyfluthrin (Aztec)	n/a, Group 2
ethoprop (Mocap)	Phase 5 complete
fipronil (Regent)	n/a
fonophos (Dyfonate)	Voluntary cancellation
phorate (Thimet)	Phase 5 complete
tebupirimiphos (Aztec)	n/a
tefluthrin (Force)	n/a
terbufos (Counter)	Phase 5 complete

Too Much!

Not Enough!

Aug
3rd

EPA

