



Old POP's and obsoletes,
sure a big problem,
but what about the new POP's?

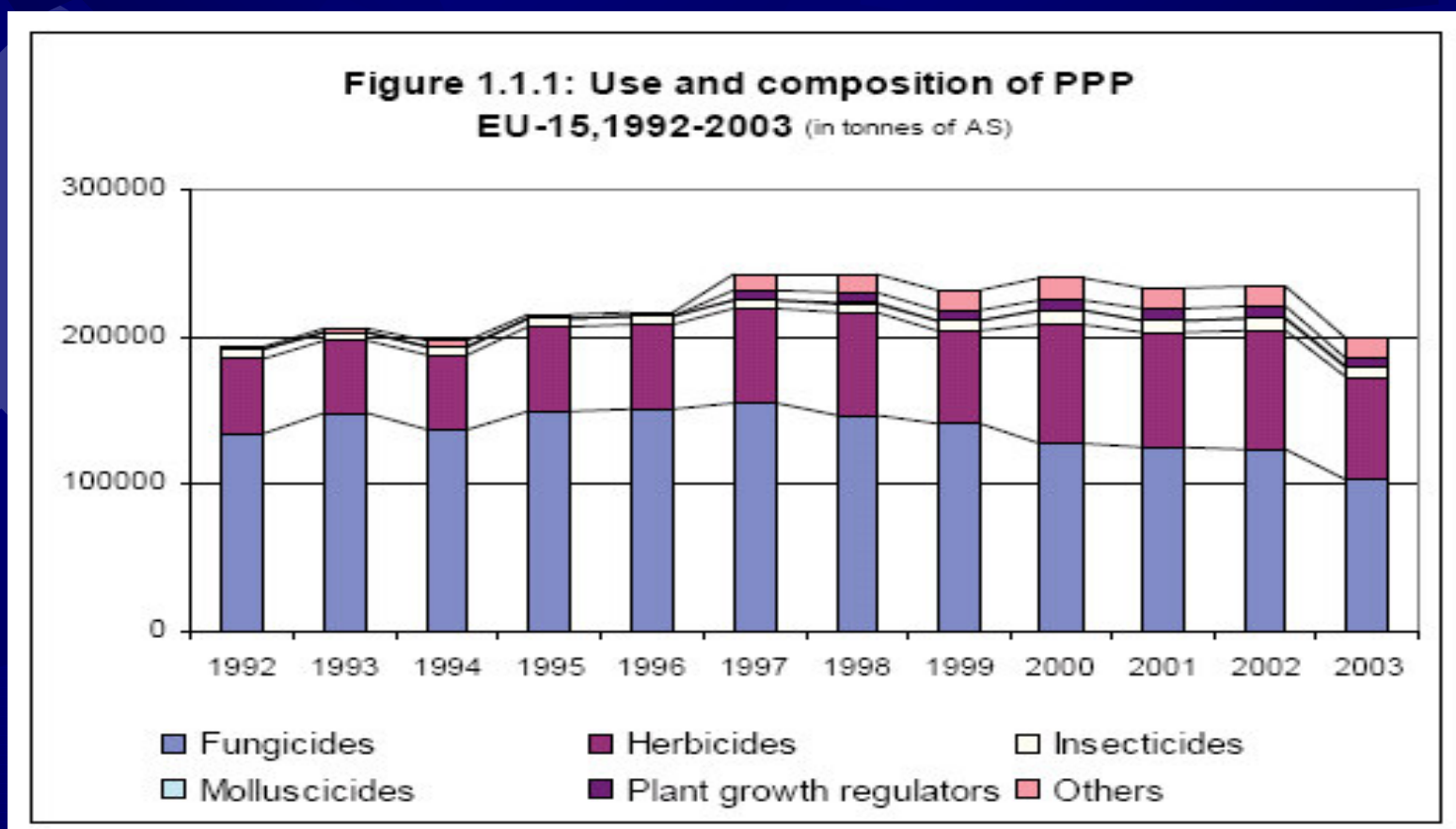
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EU programme of harmonisation.

- ✱ Start 1991, >900 existing active substances
- ✱ On this moment >500 withdrawn
- ✱ First stage evaluation 1991-2006:
90 substances (86 notifiers)
- ✱ Second stage evaluation 2002-2007:
143 substances (63 notifiers)
- ✱ Third stage evaluation 2003-2008/9:
426 substances (163 notifiers)
- ✱ Fourth stage evaluation 2004-?:
ca. 200 substances (100 notifiers)

Use stable, frequency rising



POP's still on the market!

(PSD assessment)

Insecticides

Substance	Status	Approved in UK	Criteria failed
bifenthrin	list 3	y	PBT/ vPvB + Endocrine?
esfenvalerate	AI	y	PBT
flufenoxuron	list 3	n	C2/ PBT
lufenuron	list 3	n	PBT/ vPvB

deltamethrin	AI	y	Endocrine?
dimethoate	AI	y	Endocrine?

Fungicides

bitertanol	list 3	y	R2+ Endocrine?
carbendazim	AI	y	M2/ R2 + Endocrine?
dinocap	AI	n	R2
fenarimol	AI	y	R2 + Endocrine?
flusilazole	AI	y	R2 + Endocrine?
procymidone	AI	n	R2 + Endocrine?
quinoxifen	AI	y	vPvB

And a lot of other 'bad actors'

Insecticides

abamectin	List 3	y	ADI ≤ 0.001
acrinathrin	list 3	n	ADI ≤ 0.001 AOEL ≤ 0.001 ARfD ≤ 0.01
Deltamethrin #	AI	y	ARfD ≤ 0.01
Dimethoate #	AI	y	ADI ≤ 0.001 ARfD ≤ 0.01
ethprophos	AI	y	2 PBT ADI ≤ 0.001 AOEL ≤ 0.001 ARfD ≤ 0.01
etofenprox	list 3	n	2 PBT
etoxazole	AI	n	2 PBT
fenamiphos	AI	n	ADI ≤ 0.001 AOEL ≤ 0.001 ARfD ≤ 0.01
fenbutatin oxide	list 3	n	2 PBT
fenpyroximate	list 3	y	ARfD ≤ 0.01
fipronil	AI	n	2 PBT ADI ≤ 0.001 AOEL ≤ 0.001 ARfD ≤ 0.01
formetanate	AI	n	ARfD ≤ 0.01
fosthiazate	AI	y	2 PBT ARfD ≤ 0.01
imidacloprid	list 3	y	2 PBT
lambda cyhalothrin	AI	y	2 PBT ARfD ≤ 0.01
oxamyl	AI	y	ADI ≤ 0.001 AOEL ≤ 0.001 ARfD ≤ 0.01
pirimicarb	AI	y	2 PBT
pirimiphos-methyl	AI	y	ADI below 0.01 mg/kg
propargite	list 3	n	2 PBT
spinosad	AI	y	2 PBT
tau fluvalinate	list 3	y	ARfD ≤ 0.01
tefluthrin	list 3	y	ARfD ≤ 0.01

More 'baddies' on fungicides

Fungicides

bromuconazole #	list 3	y	2 PBT
chloropicrin	list 3	y	ADI \leq 0.001 ARfD \leq 0.01
chlorothalonil	AI	y	2 PBT
cyproconazole #	list 3	y	2 PBT
cyprodinil	AI	y	2 PBT
dimoxystrobin	AI	y	ARfD \leq 0.01
epoxiconazole #	list 3	y	2 PBT
famoxadone	AI	y	2 PBT
fenbuconazole #	list 3	y	2 PBT
fluquinconazole #	list 3	y	ADI \leq 0.001 AOEL \leq 0.001
metconazole #	AI	y	2 PBT ARfD \leq 0.01
propiconazole #	AI	y	2 PBT
silthiofam	AI	y	2 PBT
tetraconazole #	list 3	y	ARfD \leq 0.01
triazoxide	list 3	y	ADI \leq 0.001

Worse case are the herbicides

Herbicides

acetochlor	list 3	n	2 PBT
aclonifen	list 3	n	2 PBT
amidosulfuron	list 3	y	2 PBT
amitrole	AI	y	2 PBT ADI ≤ 0.001 AOEL ≤ 0.001
chlorotoluron	AI	y	2 PBT
chlorsulfuron	list 3	n	2 PBT
diflufenican	list 3	y	2 PBT
diquat	AI	y	2 PBT AOEL ≤ 0.001
flufenacet	AI	y	2 PBT
fluometuron	list 3	n	2 PBT
isoproturon	AI	y	2 PBT
lenacil	list 3	y	2 PBT
mecoprop	AI	n	2 PBT
mesosulfuron	AI	y	2 PBT
metazachlor	list 3	y	2 PBT
metribuzin #	AI	y	2 PBT
metsulfuron methyl	AI	y	2 PBT
nicosulfuron	AI	y	2 PBT



EU doesn't respect PBT criteria

Swedish comments on quinoxifen related to the draft assessment report in the context of possible inclusion of the substance in Annex I of Council Dir. 91/414/EEC

Sweden does not support an inclusion of quinoxifen in Annex I to Directive 91/414/EEC.

According to the data provided in the list of endpoints, the substance is clearly a PBT-substance (Persistent, Bioaccumulative and Toxic).

As indicated by the SCP, it may also have the potential for long-range transport.

Persistency and high potential for bioaccumulation are properties which significantly increase the risk for long-term environmental effects. The data which have been submitted in order to address the concerns raised (e.g., soil accumulation study, litter bag study) does not change our view that quinoxifen poses unacceptably high environmental risks.

It is noted that the potential for long-range transport to some extent has been addressed in the Review Report (rev. 6, June 2002), however, it is very important that also the slow degradation in soil and water/sediment systems, as well as the high potential for bioaccumulation is recognized in the Review Report.

Most of the pesticides will be sprayed in the field, but where will left-overs of pesticides go?



Not the “mercury” regulation
anymore at least



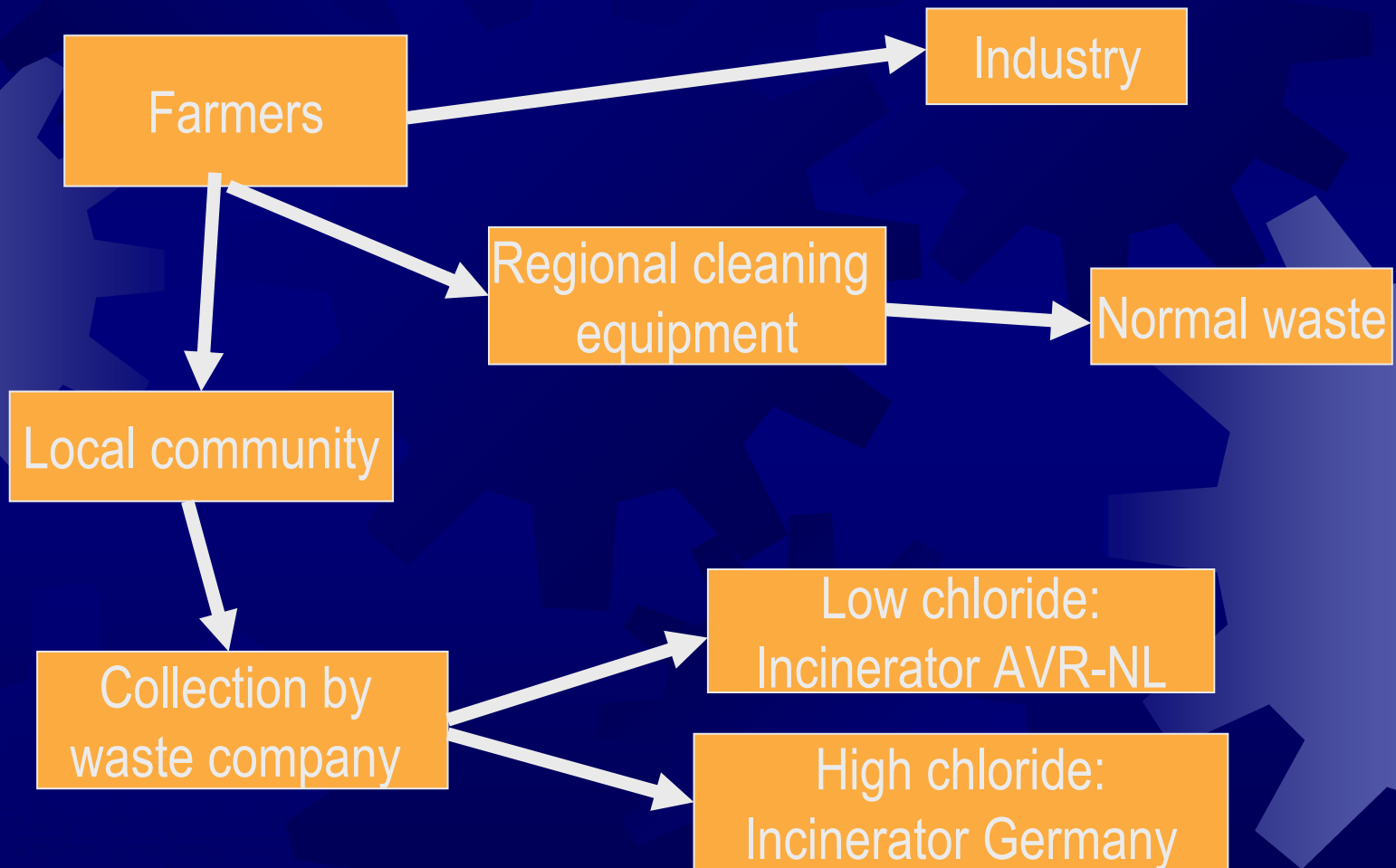
Looks fine, but lot of hidden
pollution



Intensive spraying continues as well
as exposure to the public and the
environment



System for left-overs and unused stocks





Outcome system left-overs

- ✱ Yearly use for 30-40.000 kg (part of this are the bags).
- ✱ Collected $\ll 0,1\%$ of the use
- ✱ Free delivery for farmers
- ✱ Probably most of it cleaned and sprayed on the land (no registration)
- ✱ No control on the system



Stakeholder's opinion


- ✱ Problem nicely solved, left-over almost non-existent anymore
- ✱ Not urgent
- ✱ No attention
- ✱ No control or enforcement
- ✱ Not an issue

Efficiency of waste management?



ROTARY FURNACE:

- Heating 1100-1200 C
- Low on oxygen
- Double burning
- Electro filter for gases
- Gas washing
- Dioxin filter
- Conc. < 0,1 ng TEQ/Nm³



Discussion: Focus for reducing risks of new POP's?

- ✱ No big priority for left-overs; more fact-finding could be done what actually happens in the field
- ✱ No priority for waste management because it is a minor stream and drying up
- ✱ Best focus is EU-harmonisation and realising strict cut-off criteria
- ✱ Good focus is farm management, implementing integrated management & lobby on National Action Plans.

