




# Standardizing Tolerances or Tolerating Standards ? Pesticides Residues in the European Community (1955- 1995)

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## Present situation: the “on going” recent history

- ✦ January 2009: New Pesticide Directive from European Parliament to be implemented 2011
- ✦ “EU pesticides ban will 'wipe out' carrot crop” – the Guardian January 4 2009



# Food Standards are agonistic

- ✦ “Food standards are agonistic” in that experts use them in strategic arguments and “multiple interests come into conflict in their construction.”

--Patrick Zylberman, “Making Food Safety and Issue: Internationalized Food Politics and French Public Health 1870s to the Present”, *Medical History*, 2004 January 1; 48(1): 1–28.




# Outline and Main Approach

- ★ Overview and brief history of pesticide residues post-WWII;
- ★ Describe emergence of concept of “tolerance levels” and ADIs Maximum Residue Limits (MRLs) as forms of standards
- ★ Challenges of protecting health versus facilitating trade
- ★ Focus on two ‘standard-makers’: European Community, World Health Organization and the Food and Agriculture Organization



# Methodology

- ★ Drawing upon archival material (reports, correspondence, news articles)
- ★ Case study approach to highlight inherent issues of standardizing food and agricultural products (pesticide residues) as set by the Codex Alimentarius (FAO/WHO) and the European Community's Scientific Committee for Food, Pesticide Committee



“In many respects the European Community (EC) is a microcosm of Codex.”

- W.H.B. Denner, “Harmonization and Control of Food Additives” *Food Control*, July 1990

- ★ Like Codex the EC embarked upon a programme of establishing common food standards to facilitate trade and protect consumer health throughout the Community.



# Two Main Phases

- 1) Defining Standards in the form of Tolerances (ADIs to MRLs)
- 2) Harmonization of Tolerances

# Defining the problem

- ✦ As early as the mid-1950s, international joint conferences on food additives; concern over pesticides early 1960s
- ✦ Initially, the focus was on harmonizing quality of produce to conform to the *UN/ECE Protocol on Fruits and Veggies* and reduce occurrence of pests like potato wart, fungus,
- ✦ the use of Plant Protection Products (herbicides, insecticides) was thus welcomed and widely used



# Defining the Problem (cont'd)

- ✦ But by the early 1960s, these products were becoming a problem in their own right
- ✦ Intentional (food additives) versus Unintentional (pesticide) residues found in food
- ✦ Examples such as dioxin, DDT
- ✦ Problem of “shape shifting” nature of pesticides – change in composition, change in concentration pre versus post harvesting



# Defining Tolerance

- ★ Codex pesticide group chaired by the Netherlands with representatives from EEC, ISO, Shell, International Fed of National Pesticide Manufacturers
- ★ Tolerance: “The concentration that is permitted in and on food.”
- ★ Distinguish between trade or import tolerance vs. acceptable consumer residue

# Types of “Tolerance”

- ✦ Temporary Tolerances: a) when derived from a temporary ADI and b) when derived from an ADI that could be exceeded when the pesticide is applied according to good agricultural practice.
- ✦ Gradual movement from ADI to MRL



# Harmonizing Tolerance

- ✦ International collaboration and meetings in 1967 and 1968 between the US, Germany, Belgium and Netherlands, all “seeking to develop routine procedures”
- ✦ European Community: pact of 1969
- ✦ 1971: West Germany banned DDT and thus began rumblings about moving to harmonize use of pesticides or ban



# Harmonizing Tolerance

- ✦ 1976: Directives on packaging and labelling of pesticides and idea of “EEC-acceptance” – a positive list of preapproved plant protection products
- ✦ Aimed particularly at DDT and Dioxin
- ✦ Optional directive; stalled for several years

# Seveso Disaster, ICMESA Chemical Plant July 1976

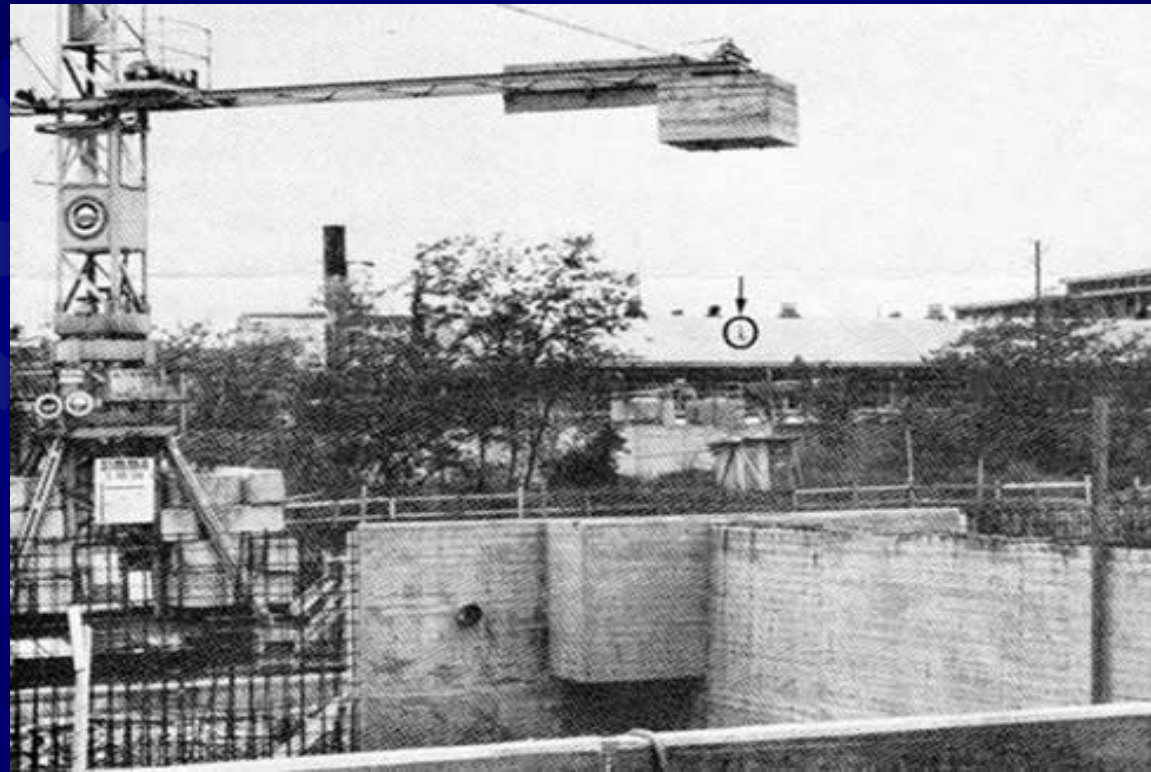


Photo courtesy of: Intl Disaster Institute, London



# Seveso Disaster 1976

- ✦ Explosion at Icmesa chemical factory releasing approx. 4 lbs of dioxin into the surrounding area, killing thousands of animals, forcing hundreds from their homes
- ✦ Reports of miscarriages, cysts, chloracne, birth defects



# Seveso I & Seveso II Directives

- ✦ Seveso I put forward in 1982 and brought into force in 1985 including pesticides and all other accidents – outlining responsibilities of member states
- ✦ Seveso II emerged in 1996 covering manufacturing of harmful substances, safety measures, prohibitions of use, land-use planning and inspections.



## EC Directives 1991, 2005 & 2009

- ★ 1991: Pesticide residue directive and launch of safety review of 1000+ active substances on the market
- ★ 2005: directive on MRLs and simplification of all other pesticide acts
- ★ 2009 directive: controversial move away from simply risk assessment to hazards analysis and calling for outright bans of certain chemicals which did not pass the review commenced in early 1990s