



Federal Ministry
of Food, Agriculture and
Consumer Protection

The Dioxin Case 2010/2011 in Germany

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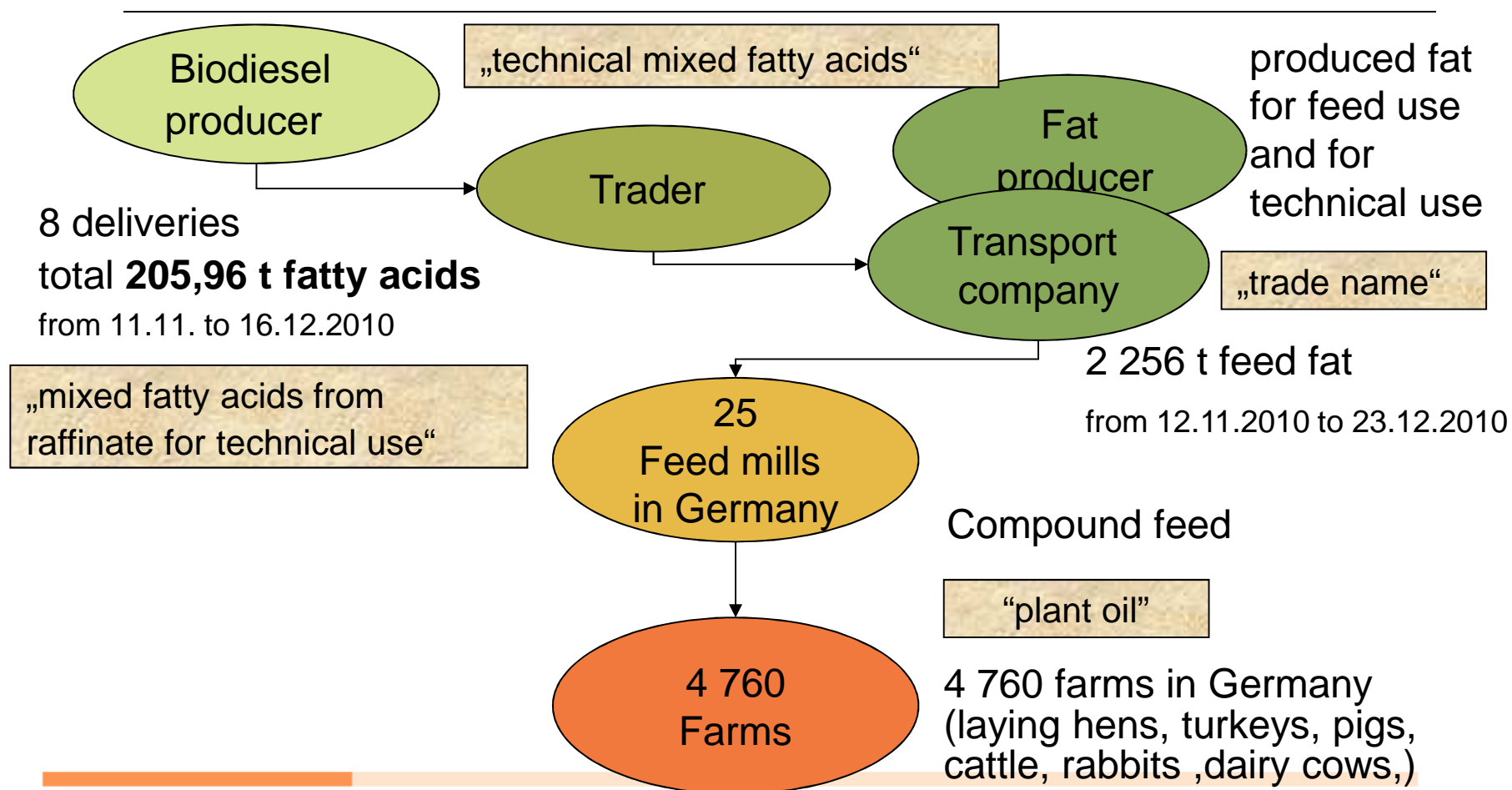
Chile, June 2013

Dioxin case in Germany 2010/2011

Detection of the contamination

- Analytical result of self-control from a compound feed producer: 1.56 ng PCDD/F – WHO TEQ/kg compound feed
- Compound feed was produced using feed fat from a feed fat producer in Germany
- Source: contaminated fat mixture produced from fatty acids
- Analytical result on 21.12.2010
Information of the regional authority on 22.12.2010

Dioxin case in Germany 2010/2011



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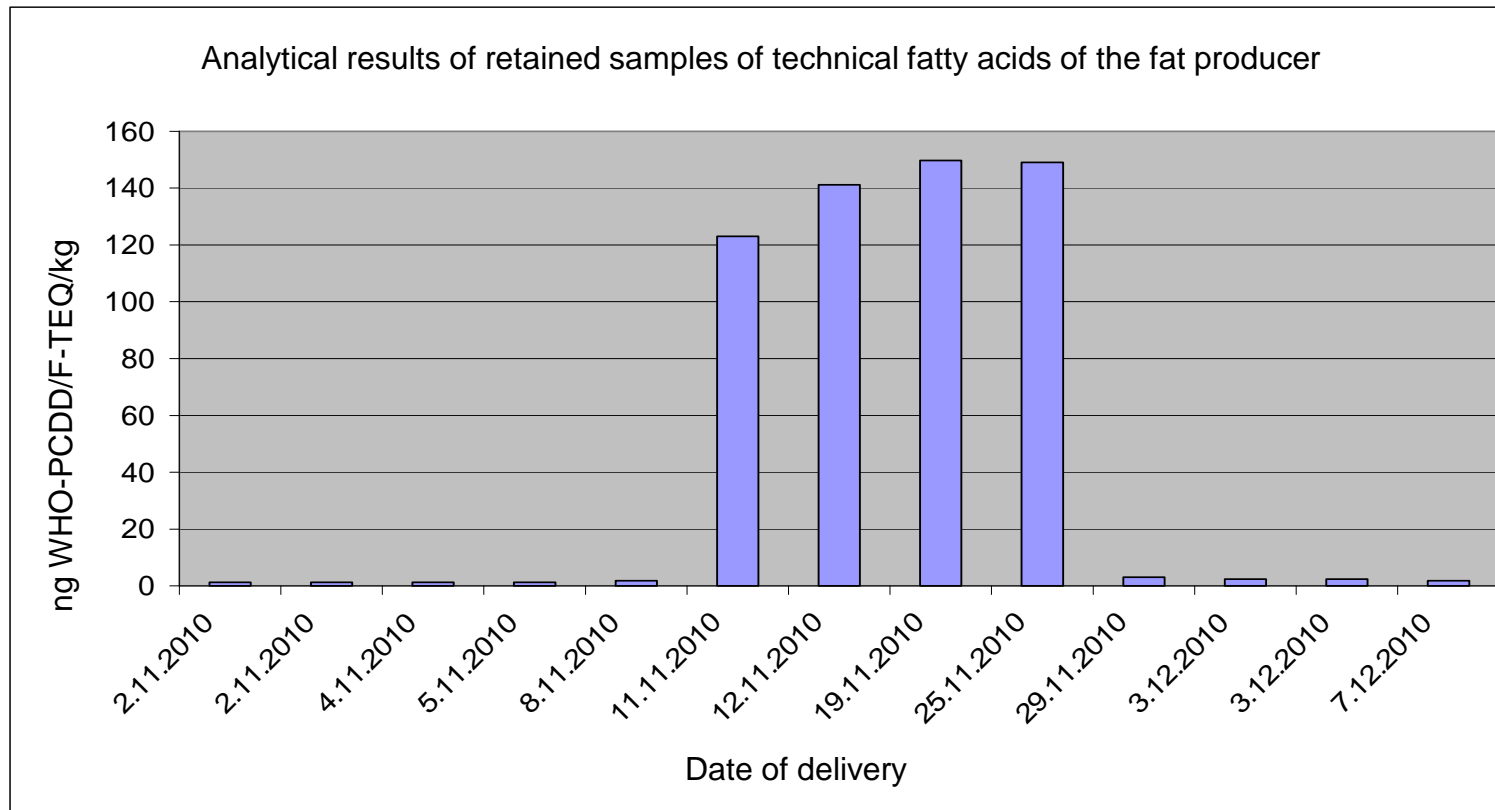
The **source of dioxins** in fatty acids from the biodiesel production could be:

- ✚ contaminated raw materials
(used cooking oils and category III materials)
- ✚ contaminated filter materials or other technical processing aids.

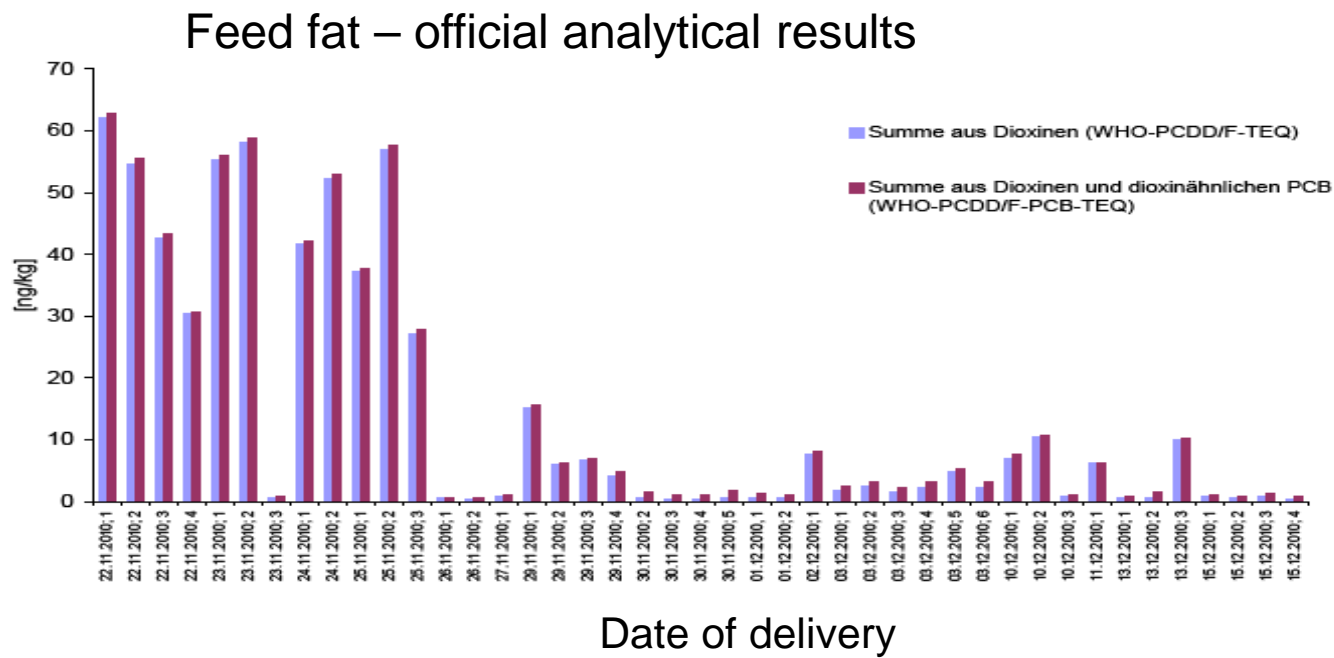
It is known that during the production process of biodiesel dioxins and other organic substances are concentrated in the oil and heavy metals in the glycerol fraction.

Experts assume that the congener pattern changes during the distillation process. This needs further investigations.

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Compound feed – official analytical results of random samples

Compound feed for	Analytical results	Number of samples above the maximum level of 0,75 ng WHO-PCDD/F- TEQ/kg
Poultry	23	0
Pigs	41	0
Cattles	4	0
Rabbits	5	0
Total	73*	0

* Analytical results in the range of 0.039 (+/- 0.008) to 0.418+/- 0.12)

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Food – official analytical results

Food	Number of samples	Number of samples above the maximum level
Eggs and egg products	230	35
Meat from laying hens	20	5
Pork	507	10
Other food	150	0
Total	917	50

Measures of the competent authorities



From 4 760 blocked farms
4 468 were located
in Lower Saxony.

In Lower Saxony

- 40% of the feed production
- 1/3 of the egg production
- 1/3 of the pig production
of Germany.

Measures of the competent authorities

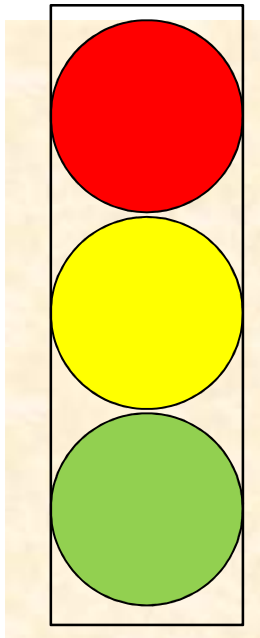
Measures before raising of restrictions on blocked farms

- ✗ Analysis of retained samples of feed and feed fats
- ✗ Analysis of meat, eggs or milk from animals fed with contaminated feed
- ✗ Tracing back of feed fats to compound feed and to farms
- ✗ Calculation of the dioxin content of the daily ration containing contaminated feed batches already consumed
- ✗ Combination of these information for each farm
- ✗ Decision on the basis of a farm specific risk assessments



Measures of the competent authorities

Risk assessment of the competent authorities



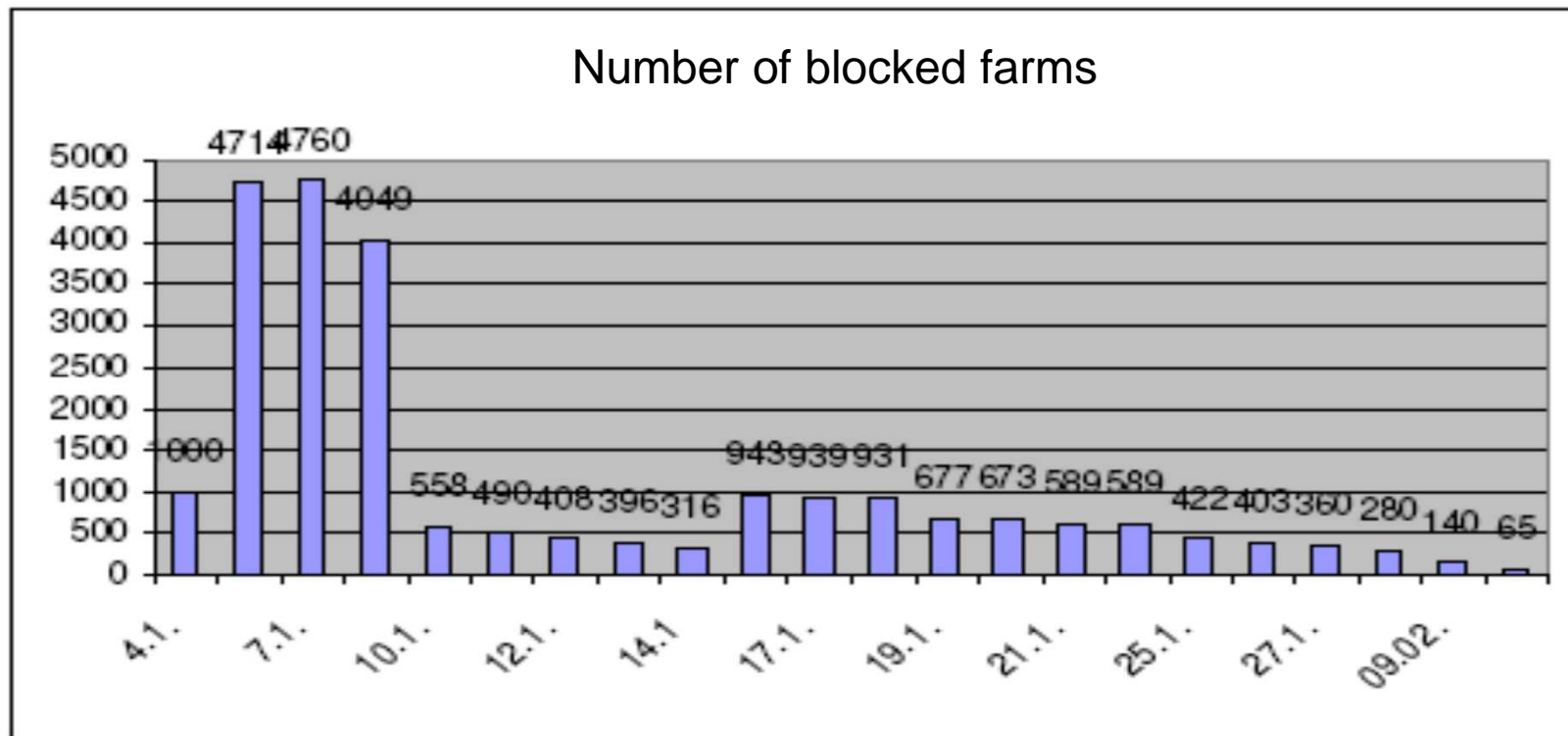
Real analytical result of feed fat ; dioxin content in the compound feed $> 0,5 \text{ ng /kg}$ → unsafe feed

No analytical result of feed fat ; worst case = $61,6 \text{ ng/kg}$; calculated dioxin content $> 0,5 \text{ ng /kg}$ → unsafe feed

No analytical result of feed fat ; worst case = $61,6 \text{ ng/kg}$; calculated dioxin content $< 0,5 \text{ ng /kg}$ → safe feed

$0,5 \text{ ng/kg}$ = action limit = safety margin

Measures of the competent authorities



Conclusions

**New Regulation (EC) 225/2012
and new national provisions**

Germany has analysed the situation and developed an **action plan** in order to strengthening consumer protection in the feed chain:

1. **Approval** of feed fat producers
2. **Separation** of feed production from other activities of the establishments
3. **Analysis of risky feed** before using
4. **Notification of results** of unsafe feed **from the laboratories** to the authorities
5. Establishment of a **binding list for feed materials**
6. Implementation of **financial guarantees** against the risks of liability
7. Revision of the penalties
8. Establishment of a **dioxin-monitoring** and an early-warning system
9. Strengthening of the **quality of food and feed control**
10. Improvement of the **information of the consumers**