EU Legislation on Titanium Dioxide

Orsolya CSORBA
European Commission
DG Environment
Titanium dioxide (TiO2)

- **Titanium dioxide pigment**: white powder with high opacity and brilliant whiteness. Valuable pigment and opacifier for a broad range of applications in paints, plastic goods, inks and paper, etc.

- **Produced by two chemical processes**: sulphate or the chlorine process

- **Waste from production**: solid waste, strong acid waste, weak acid waste, neutralised waste, treatment waste and dust
Titanium Dioxide legislation

- **3 directives**
  - 78/176/EEC – waste from the titanium dioxide industry
  - 82/883/EEC – on procedures to monitor the environment concerned by the waste from titanium dioxide industry
  - 92/112/EEC – on procedures to harmonise the programmes for the reduction of waste caused by the TiO2 industry
Objective of Directives

- Prevention of waste
- Progressive reduction and eventual elimination of negative environmental impacts of waste from TiO2 industry
- Waste arising from the 2 production processes in the TiO2 industry: Chlorine and sulphate process
Water

- MS shall prohibit the disposal of certain waste:
  - Solid and strong acid waste from both processes
  - Treatment waste from the sulphate process

- MS shall insure that industry meets set out limit values when waste is discharged into water referring to:
  - Weak acid waste and neutralised waste from both processes and also treatment waste from chlorine process
Air

- MS shall prohibit the emission of acid droplets from the sulphate process.
- MS shall ensure that each industry establishment meets set out limit values referring to: dust, SOx, chlorine.
MS shall prohibit disposal of waste from the TiO2 industry unless prior authorisation granted by MS concerned, subject to specific conditions.

Authorisation given for limited period only, that can be renewed.
New industrial establishments need prior authorisation from MS
MS shall monitor the compliance with the limit values.

MS shall monitor waste disposal from the TiO2 industry into water, air and land according to provisions (Annex to the directive 82/883/EEC) - Mandatory and optional monitoring with a certain frequency.

MS appoint a competent authority to carry out the monitoring.

Reporting by MS to the COM every 3 years.
Simplification of the directives

- 1 simplified directive with deleted obsolete provisions
- Proposal for Commission adoption this year
Contact details

Orsolya Csorba
European Commission
DG Environment
Avenue de Beaulieu 5
1160 Brussels
Tel: 0032 2953148
E-mail: Orsolya.Csorba@cec.eu.int