



# Opt-in for chemical activities

## With N2O

### 2008-2012

C

O



Ministère de l'écologie et du développement durable  
Direction de la prévention des pollutions et des risques  
Service de l'environnement industriel/ ECCP 8/9 March 2007



## WHICH ACTIVITES ?

- adipic acid (1 installation)
- nitric acid ( 15 installations)
- Glyoxalic acid and glyoxal ( 1 installation)



## • WHY CHOOSING OPT IN ?

- Ets gives incentive for better reductions than those already made
- Ets gives the same level of emission reduction as limit values should have given under IPPC
- But gives to the operator more flexibility to realise them within the 2008-2012 period, tacking into account stopping, renewal of equipments and difficulties met.



## MONITORING AND REPORTING

- a good practice guide for each activity  
(Bp x 30 –330 to 331)
- Adopted under AFNOR ( French agency for standardization)
- Provides detailed rules for quantification





- Continuous measurement for concentration of N<sub>2</sub>O in the flue gas
- Continuous measurement, mass balance or coefficient for quantifying the flow
- Global accuracy: 7% for adipic acid, 8 to 12 % for nitric acid, 7,5 % for glyoxalic acid



## ALLOCATION METHODS

Benchmarking at installation level :

Emission factor ( kg N<sub>2</sub>O/ton of product )  
X production forecasted for the  
installation

Compliance factor 0,91 applied for other  
industry sector in the NAP



## ALLOCATION METHODS

### How to determine benchmarks

- When no limit value exist at installation level: benchmark corresponds to what limit value would have been set under IPPC permit if applied to each installation
- When limit values already exist : benchmark is lower than limit values and situated half way between maximal and minimal performance. ( taking into account possible improvements and dysfunctions of abatement disposal)



## ALLOCATION METHODS

### How to determine benchmarks

- Using abatement rate in industrial conditions (overall equipment efficiency)
- Not using abatement in laboratory conditions
- Benchmark at EU level possible if situations are the same at the start





## POTENTIAL FOR GHG REDUCTIONS

- With existing measures : 2010 N<sub>2</sub>O chemicals emissions in France are 10,7 Mt eq Co<sub>2</sub>  
( 24,2 Mt eq CO<sub>2</sub> in 1990)
- With opt in : N<sub>2</sub>O chemicals emissions could be 5,2 Mt eq CO<sub>2</sub> : 5,5 Mt gains



THANK YOU

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