



Referral of the French health and environmental agency on inhibitors used in agriculture: presentation and discussions

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1. Key issues for French agriculture

Key issues : agriculture as contributor to air pollution but also an impacted sector

- **Public health issues** : sanitary impacts / premature death
- **Environmental issues** :
 - ozone (O₃) impacts agricultural returns up to 20 % depending on the crops;
 - others potential effects: eutrophication, acidification, etc.
- **Economic issues** : estimated cost between 70 to 100 billion euros per year for France (source: report of the Senate Inquiry Committee - July, 2015)
- **Air pollutants** related to agricultural practices:
 - ammoniac (NH₃ – 94 % of national emissions),
 - methane (CH₄),
 - particulate matters,
 - phytopharmaceutical products.
- **Origins of agricultural emissions**: livestock farming (buildings, storage and manure spreading) and cultural practices (soil preparation, harvesting, fertilisers applications)

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2. Main public policies in France

Main public policies in France

- European level :
 - **National Emissions Ceilings Directive (NECD):** 4 % less NH₃ [France] btw. 2005 and 2020, 13% less NH₃ btw. 2005 and 2030
 - **Industrial Emission Directive (IED)** - Best available techniques REFerence documents (BREF)
 - **Common Agricultural Policy** (investments, agri-environment measures, conditionality)
- National level :
 - **National framework « Plan de réduction des émissions de polluants atmosphériques »** (PREPA, May 2017) – in relation with French low carbon strategy
 - **Ministerial ruling « emergency mesures »**
 - **Agro-ecological project:** Energy plan (EMAA), Ecophyto2, self-diagnostic
- Regional level :
 - **Regional schemes climate – air – énergie (SRADDET)**

An national opportunity: the National framework « Plan de réduction des émissions de polluants atmosphériques » (PREPA)

- Ministerial decree: incorporated NECD goals and targets
- Ministerial ruling: specifies the practical means
- An annex: contains precise measurements

This framework is the result of:

- 2 years of scientific studies and consultations
- A public review phase

Main goals for agriculture : Structuring measures to decline in all axes via agricultural policies to achieve the objectives

An national opportunity: the PREPA

Reduction of NH₃ volatilization due to fertilizer application

- **To encourage their substitution by less emissive forms of mineral fertilizer and, by adapting the practices and methods of intake:**
 - **Authorization to use urea under certain conditions**, starting from the 2019-2020 campaign, to limit, from February to April, its volatilization → modalities to be defined in a national code of good agricultural practices;
 - **Study on the taxation of nitrogenous mineral fertilizers and its modulation according to their potential for volatilization**, including a comparison with EU countries (to be launched soon).
- **To take into account the constraints of work organization, European regulations, climatic hazards and agronomic imperatives**

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3. Referral on inhibitors used in agriculture

Referral of the French health and environmental agency on inhibitors used in agriculture

Use of inhibitors in France: context

- **The evaluation of the uses** of urease and nitrification inhibitors regarding risks to the environment and to human health **remains complex and poor**
 - In most countries there is a lack of specific rules for the monitoring of environmental contamination by these substances;
 - The identification of potential adverse effects on the health of living organisms and the environment remains fragmented.
 - If the French PREPA targets that period of the year (February to April), **the inhibitors' impacts must be studied taking into account a longer time scale**
 - At this stage **it was decided in France not to retain the possibility of using urease and nitrification inhibitors** (although they are mentioned in the Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions, April 2015)
- **Proposal to initiate a referral of the French health and environmental agency on inhibitors used in agriculture**

Referral of the French health and environmental agency on inhibitors used in agriculture

Contents of the French referral on inhibitors

- **To identify available information** on urease and nitrification inhibitors as to their effectiveness (agronomic efficacy; ammonia volatilization) and for the characterization of hazards to human health and the environment (in particular the existence of toxicological values of references).
- **To assess quantitatively and qualitatively the environmental and health risks** related to the exposure to inhibitors (based on available assessments).
- **To identify management measures for the protection of human health and the environment** that may be put in place during the use of inhibitors.

→ **First results coming soon (end of October 2018)**



Thank you for your attention