

Chemical products

Certain chemical products have harmful effects on human health and the environment. These effects on human health can also concern workers involved in their production or use, as well as the final consumer. In more general terms, the whole population can be exposed via the emission of such substances into the environment.

So as to better understand and control risks linked to the use of these chemical products, several regulations, primarily of Community origin, offer a framework to their uses in France. Some are European rules adopted at EU level and directly applicable, others are directives, transposed into French law in order to be applicable, and others still are purely national. These measures are supplemented by other, non-regulatory actions.

Implementation of European regulatory tools

A general framework: REACH

The REACH regulation, which came into force on June 1st 2007 in Europe, will, over the next decade assemble a large body of information on the properties of chemical substances produced or imported in quantities in excess of 1 ton per year. This complex regulation, with major constraints on industrialists, is a fundamental tool for the public powers and civil society to improve the long term wellbeing of the population in terms of health and the environment.

The implementation of REACH entails three real challenges:

1. Making up for the lack of knowledge on the environmental and health risks of chemical substances. The new REACH regulation will amass information on the risks of almost 100,000 substances over a period of a decade in Europe. The effects of REACH in terms of improved knowledge and health, wellbeing and the global environment will therefore be felt over that same period, even though certain REACH procedures will allow shorter term restrictive measures to be taken for the most harmful substances.
2. Entrusting the responsibility of assessment and management of the risks of substances to producing and importing companies and no longer to the administrative authorities. This is a "reversal of the burden of proof". The administration will commit its time to assessing priority substances which may present the highest risks and to defining risk management measures.
3. Promoting an innovation and substitution policy concerning the most dangerous substances.

As part of the implementation of this regulation, the French Health and Safety Agency for the Environment and the Workplace (Afsset¹) has been given the responsibility by the French authorities to lead different tasks within the field of their expertise: recommendations for priority substances for assessment, authorisation and restriction; preparation of dossiers entrusted to France, etc. Further to the adoption of REACH, Afsset's resources were substantially increased to allow the French authorities to play their role to the full in the implementation of this regulation.

¹ www.afsset.fr

Other European regulations

Apart from REACH, other regulations apply specifically to certain substances and categories of chemical products, such as:

- Persistent organic pollutants: these substances, called POPs, are characterised by their toxicity, their resistance to degradation and their capacity to accumulate in living organisms and be transported over long distances; their restriction and elimination are the subject of two international legal instruments: the Stockholm Convention² and the POPs Protocol of the Geneva Convention, whose obligations are implemented in the EU through a specific European regulation;
- Phytopharmaceutical products (pesticides used to protect vegetables) and biocides (which are used to destroy or repel pests): in these two areas, the use of active substances is only authorised if they have been the subject of a favourable risk assessment;
- Mercury: completing measures banning the use of mercury in thermometers and other products, the recent European regulation prohibiting the export and requiring the secure storage of mercury is contributing to reducing the supply of mercury available worldwide and indirectly protecting human health and the environment from its effects;
- Cosmetics, gas with an impact on the ozone layer, etc.

Another major regulatory measure concerns the classification, labelling and packaging of chemical products: European regulation 1272/2008 EC, referred to as 'CLP'. It came into force on January 20th 2009, and its provisions are entirely applicable as of December 1st 2010 for substances and June 1st 2015 for mixtures. This European regulation is based on provisions of the "General Harmonised System" (GHS) promoted by the United Nations Economic and Social Council (ECOSOC) in July 2003.

Finally, in the area of technological risks linked to chemical products (pollution, accidents), specific regulations are in place (Directive 96/61/EC of 24/09/1996, referred to as the IPPC, which is currently being amended, Directive 96/82/EC of 09/12/96, referred to as Seveso, replacing the 1982 Directive, etc.). Regular exercises have taken place within the framework of accident prevention, and monitoring and callout units are in place to deal with crisis situations.

National initiatives

The National Health and Environment Plan

Replacing the original plan (2004-2008), the second National Health and Environment Plan (PNSE 2) was drawn up in 2009. One of its major actions in respect of chemical products is to reduce rejects of worrisome substances, and in particular benzene, mercury, arsenic, polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), dioxins, chlorinated solvents and medical residue, and also to reduce exposure to all these substances. This action will be carried out through the modification of several specific regulations, in particular certain rulings relating to classified environmental protection facilities (ICPE).

² www.pops.int

Reduction in chemical products in agricultural

Apart from the Community regulation in this area, the French State recently ramped up its commitment in a plan called 'Ecophyto 2018', seeking to reduce the use of phytopharmaceutical products. The State's aim is to generalise sustainable and productive agricultural practices. One of its two objectives is to remove phytopharmaceutical products containing the forty most worrisome substances in terms of their substitutability and danger to man by the end of 2010, taking authorised active substances at European level into account; thirty of these substances had already been withdrawn by the end of 2008. The second objective is to reduce the number of phytopharmaceutical products containing worrisome substances, for which there are no substitution products or practices which are technically and economically viable, by 50% by 2012. Generally, the objective is to reduce by half the use of phytopharmaceutical products and biocides within the next decade, i.e. by 2018, by accelerating the dissemination of alternative methods on condition that they can be developed and by facilitating the authorisation procedures for market launch for natural and non-worrisome preparations. A reinforced framework mechanism for phytopharmaceutical product applicators is also being put in place. The *National Research and Safety Institute* on the prevention of work-related accidents and work-related diseases (INRS) has published a prevention brochure to improve product application.

Better understanding the impacts of chemical products on health and the environment

The Environment Grenelle identified the importance of the threat of chemical products and sought to improve its knowledge and research in this area by launching a national application-based toxicology and eco-toxicology cluster. Inaugurated in Picardie in 2009, this cluster's remit is to assess the risks linked to chemical substances, but also to electromagnetic waves and nanotechnologies. As part of the REACH regulation, it also destined to become the national reference centre on chemical substance assessment methodology replacing tests on animals.

The French authorities have increased the financial resources of Ineris. The latter develops environmental monitoring work studies in the field of chemical products.

The National Research Agency (ANR) has also increased its budget dedicated to calls for projects in the field of chemical product risk management. Afsset also has a call for research projects in progress, to finance studies concerning health risks linked to chemical products in particular.

Awareness raising in the professional environment

Several agencies and institutes have been asked to accompany enterprises or personnel using chemical products to use them better and provide them with information on regulations. As a result, Afsset created a website³ in 2008 targeting all professionals and actors involved in prevention wishing to commit to a substitution approach for carcinogenic, mutagenic or repro-toxic products (CMR) in their establishments. Afsset has also put together a good practice guide on nano-materials and safety at work⁴. Also, the INRS regularly publishes brochures on the prevention of risks linked to chemical products in the professional setting.

³ www.substitution-cmr.fr

⁴ <http://www.afsset.fr/upload/bibliotheque/258113599692706655310496991596/afsset-nanomateriaux-2-avis-rapport-annexes-vdef.pdf>

Awareness raising amongst the population

So as to encourage the population to reduce the use of dangerous chemical products in the products they buy, the Grenelle 1 Law specifies *"submitting construction and furnishing products as well as wall and floor coverings, paints and varnishes, and all products intending or resulting in the emission of substances into the atmosphere to compulsory labelling as of January 1st 2012, and in particular concerning emissions and volatile pollutant contents, and in these products to ban categories 1 and 2 carcinogenic, mutagenic or repro-toxic classified substances (CMR1 and CMR2) according to the European regulation⁵.*

Also, information campaigns, organised by the INPES, are planned for the public, and in particular to inform them of the new classification and labelling system for hazardous products (CLP).

Reinforcing the framework for the application of these products (pesticides and herbicides in particular) also aims at heightened professionalisation in this field.

Promoting innovation

Certain State agencies, such as Oseo⁶, are designed to encourage innovation and development of new processes by small and medium sized companies. Oseo is involved in supporting national and regional policies. This agency finances and accompanies SMEs in the most decisive phases of their existence: support to innovation, financing investment and operating cycles in partnership with banks and to guarantee bank loans and equity raising. Oseo proposes solutions which are adapted to the needs of these dynamic companies when the market can only partially satisfy their needs.

International cooperation

France is also committed at international level to the reduction of risks linked to the use of chemical products. In particular, the Grenelle 1 Law specifies that the State *"will participate in the development of and support new international agreements relating to the registration, assessment and authorisation of chemical substances, as well as restrictions which apply to these substances, in line with regulation (EC) No. 1907/2006 of the European Parliament and the Council, of December 18th 2006, concerning the registration, assessment and authorisation of chemical substances, as well as the restrictions which apply to them (REACH)"⁷.*

⁵ G1 Article 40

⁶ www.oseo.fr

⁷ G1 article 38

General conclusion

With the Environment Grenelle, the French State has engaged with all actors to develop and integrate its sustainable development policy.

In the field of chemical products, France has referred to the European regulatory framework and REACH in particular. In parallel, the Environment Grenelle and a determined policy have led to national progress in the health and environment fields, the reinforcement of research and support structures and reduced use of phytopharmaceutical products in agriculture.