



MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE

Liberté
Égalité
Fraternité

International and European Affairs

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SUMMARY

1. Presentation of French Technological Risk Prevention Plan (PPRT)
2. Conception of one PPRT
3. The PPRT implementation
4. Tools to facilitate the implementation of the PPRT

Presentation of the PPRT

The law of the 30th July 2003 creates the Technological risk prevention plan (called « PPRT » in French), a specific land-use plan for the technological risk

→ The PPRT are only provided for the facilities classified **as upper class according to the European Seveso directive.**

(Note : The upper class defines the facilities with a high amount of hazardous material which can generate a high level of risk)

Presentation of the PPRT

Objectives of the PPRT :

- Provide a protection for the current and future population around the industrial site
- Enable to ensure the compatibility of the industrial activities with the presence of population, the local development projects and the interests of local residents

Some numbers about France :

~ 600 upper class Seveso facilities → 390 PPRT

Today, 98% of the PPRT are approved and have started to be implemented

Conception of the PPRT : 3 steps

1. Technical studies

Characterization of the hazards : on the basis of **the hazard assessment study** realized by the industry operators

Characterization of the stakes

2. Development of the PPRT Strategy


Consultation with all the stakeholders (industry operator, public entities, representatives of the local residents, etc)

3. Conception of the plan, establishment of the regulation

1st step : technical studies

Characterization of the hazards : 7 levels of hazards depending on the intensity and the probability

Niveau maximal d'intensité de l'effet toxique, thermique ou de surpression sur les personnes, en un point donné	Très grave			Grave			Significatif			Indirect
	>D	5E à D	<5E	>D	5E à D	<5E	>D	5E à D	<5E	Tous
Niveau d'aléa	TF+	TF	F+	F	M+	M	Fai			


 PPRt de La Rochelle (PICOTY/SDLP)
 Carte d'aléa des effets de surpression



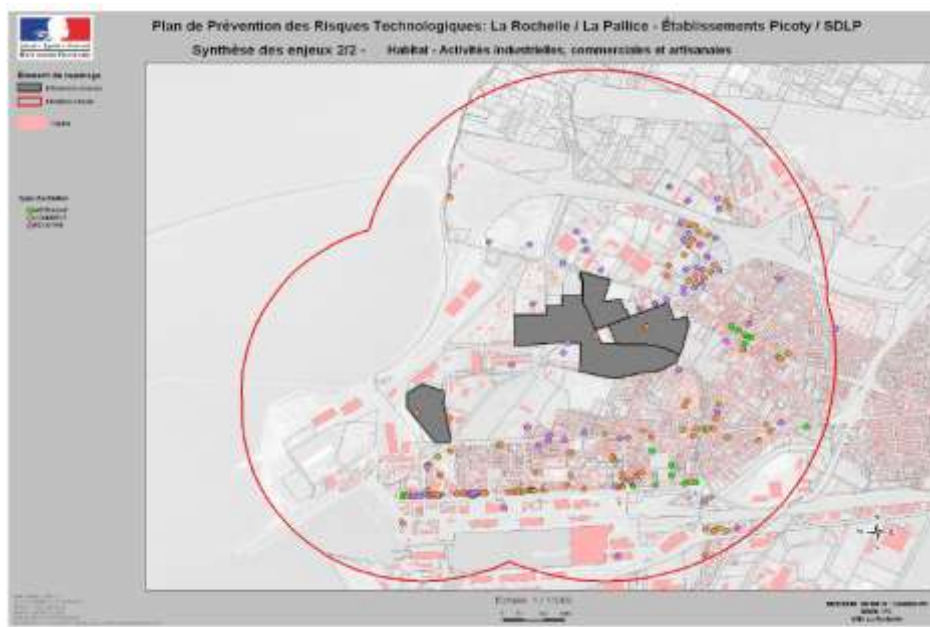
➤ Hazards effects

Map of the effects of overpressure in La Rochelle from « very hard+ » to « low »

1st step : technical studies

Characterization of the stakes :

Infrastructure present in the region : habitations and commercial properties, public buildings, transport infrastructures, outdoor public spaces, public utilities (electricity, gas supplies,...)



Map of the stakes in the perimeter of the PPRT

2nd step : development of the PPRT strategy

- The intersection of the map of hazards and stakes enables to draw a preliminary risk map of zones and areas which may be subject to regulation → **the rough area zoning map**.
- Supplementary investigations can be led (vulnerability assessment) in order to specify the constitution of the strategy of the PPRT
- Finally, the PPRT regulations set out specific measures for each zone defined by the regulatory zoning map

2nd step : development of the PPRT strategy

The principles of the regulation :

	Hazard : Very hard	Hazard : Hard	Hazard : Average
Future urban development :	Very strict control of the projects Principle of strict prohibition	Strict control of the projects Or requirement to constructive so that it resists to the technological risk Principle of prohibition	Requirement to construct so that it resists to the technological risk Or prohibition of some projects Principle of permission with requirements
Current land-use :	Real-estate measures : expropriation	Real-estate measures : relinquishment = possibility of the owner to ask the city to acquire their properties (against money) Or Requirement to protect the buildings	Requirement to protect the buildings

2nd step : development of the PPRT strategy

➤ Results of the rough area zoning map :

- X expropriations
- Y relinquishments
- Z housing with works of strenghtening

Have to be prescribed in
the regulation of the PPRT

Consequences :

- Number of people impacted
- Estimated cost of real-estate measures

If necessary, further research led by the industrial operators to find a way to limit the risks at its source (additional measure of risk reduction)

Financed by operators / French State / local authorities

2nd step : development of the PPRT strategy

The development of the strategy of the PPRT needs :

- Many meetings of **information** of representative of the industrial facilities, the city council, the land-use planners and the local residents in the **Local Comity of Information and Consultation**.
- Meetings of **cooperation** about the draft of the PPRT between representatives of the industrial facilities, the city council and the land-use planners that have to **give their opinions** on the draft before its approval

3rd Step : approval of the PPRT

- Before the approval of the PPRT, a public inquiry is conducted

- The PPRT consists in a **document of regulations** (which describes all the measures of the PPRT) and the **regulatory zoning map**.

- The PPRT is **added to all the other urban planning plans** that could exist on a given territory
 - All new project must be analyzed by taking into account the rules of urban planning plans **and** the rules of the PPRT.

Implementation of the PPRT

The real-estate measures :

~ 350 houses and ~ 300 activities concerned

The total cost is estimated at 400 M€

About 30 % of the real-estate measures have been implemented

The prescription of works regarding the strengthening of houses :

~ 16 000 houses concerned

~ 2200 houses have received a diagnostic of the vulnerability of their buildings

~ 1500 houses have done the works of strengthening

Tools for the people living in the perimeter of a PPRT

- Local Comities of Information and Consultation → to be informed of the risks
- Publication of Handbooks for the housing professionals who help the owners of houses to do the works of strenghtening
- Trainings for the housing professionals (3 days : one for each technological effect)