

Regulation

Order dated 7 February 2012 relating to the general technical regulations applicable to INB - EN

Translation for guidance of document ITER_D_7GJHSE

Attachement : translation for guidance of codes quoted in the order, links to ministerial orders quotes in this order and decisions following application of order 7 february 2012

The order 7th February 2012 shall come into force on 1 July 2013 except for 2 dispositions that shall come into force on 1 July 2012 (Article 4.3.2 and Article 4.4.3 II). In addition, for existing INB (which is not the case of the ITER INB), some dispositions shall come into force later. The purpose of this order is, in particular, to up-date, in light of the new legal framework set by the TSN Law, three orders relating to basic nuclear installations:-

Order of 10 August 1984 relating to the quality of design, construction, operation and decommissioning of nuclear installations (so called quality order);- Order of 26 November 1999 setting general technical stipulations concerning limits and modalities of the samples and releases subject to authorization, carried out by the INB; and- Order of 31 December 1999 setting the general technical regulatory controls intended to prevent and limit external nuisances and risks resulting from the operating of INB. These orders shall be repealed as from 1 July 2013.

Approval Process			
	Name	Action	Affiliation
Signatory	Sobrier T.	12 Jul 2017:signed	IO/DG/SQD
Co-signatories			
Reviewers			
Approver			
Document Security: Internal Use RO: Sobrier Thomas			
Read Access	LG: Q084 Trainee, GG: MAC Members and Experts, LG: EXT: Quality (Veritas), LG: Deputy Head of Dept - SD, GG: Safety, GG: IO DDGs (and Senior Advisors), GG: DA Heads, Co-ordinators and Management, AD: ITER, AD: External Collaborators, AD: IO_Director-General, AD: External Management Advisory Board, A...		

<i>Change Log</i>			
Order dated 7 February 2012 relating to the general technical regulations applicable to INB - EN (7M2YKF)			
<i>Version</i>	<i>Latest Status</i>	<i>Issue Date</i>	<i>Description of Change</i>
v1.0	Signed	09 Mar 2012	
v1.1	Signed	09 Nov 2012	translation slightly modified
v1.2	Signed	21 Nov 2012	translation slightly updated
v1.3	Signed	12 Dec 2012	translation slightly modified
v1.4	Signed	15 Jan 2013	translationslightly modified
v1.5	Signed	15 Jul 2013	amended by order 26 June 2013
v1.6	Signed	24 Sep 2013	typo updated
v1.7	Signed	12 Jul 2017	Modification page 16/26, article 5.1 sentence added : "and 12 December 2005 And the Decree of 30 December 2015 on nuclear pressure equipment."

TRANSLATION FOR GUIDANCE

Decrees, Orders, Circulars

GENERAL TEXTS

MINISTRY FOR ECOLOGY, SUSTAINABLE DEVELOPMENT, TRANSPORT AND HOUSING

Order of 7 February 2012 establishing the general rules for basic nuclear installations

Ref: DEVP1202101

Public concerned: operators of basic nuclear installations mentioned under Article L. 593-2 of the Environmental Code.

Subject: definition of the general rules applicable to all basic nuclear installations pursuant to Article L. 593-4 of the Environmental Code.

Date of effect: 1st July 2013, except for two provisions that become effective on 1st July 2012; furthermore, for existing installations, certain provisions apply as of 1st January 2014, 1st July 2014, or from the date of the first safety reassessment or the first major modification to the installation after 1st July 2015.

Explanatory note: this Order constitutes an update as regards the new legislative framework established by Act No. 2006-686 of 13 June 2006 relating to nuclear transparency and safety and the three interministerial Orders relating to basic nuclear installations (the Order of 10 August 1984 relating to the quality of the design, the construction and the operation of basic nuclear installations, the Order of 26 November 1999 establishing the general technical requirements relevant to the restrictions, and the terms and conditions of intake and discharge subject to authorization, and executed by the basic nuclear installations, the Order of 31 December 1999 establishing the general technical regulations intended for preventing and limiting nuisances and external risks arising from basic nuclear installation operations).

It also contains provisions from the work of harmonization carried out by the Association of European Nuclear Safety Authorities, as well as from the practice of nuclear activity control. It also transposes certain Community provisions to basic nuclear installations.

Safety management, public information, controlling risks of accident, controlling the impact on health and the environment, waste management and emergency situations are dealt with.

The Order contains the fundamental requirements applicable to basic nuclear installations in the aforementioned fields. These fundamental requirements shall be completed and specified subsequently through technical regulatory decisions taken by the Nuclear Safety Authority.

The new provisions provided for under this Order comprise the surveillance of external interveners by BNI operators, the extension of quality principles to all activities that contribute to the protection of the interests provided for by the law, the consideration of the accumulation of situations to illustrate nuclear safety, the application of certain regulations that relate to installations classified for the protection of the environment to basic nuclear installations.

References: Article L. 593-1 et al of the Environmental Code.

The Ministry for Ecology, Sustainable Development, Transport and Housing, the Ministry for the Economy, Finance and Industry and the Ministry attached to the Ministry for the Economy, Finance and Industry responsible for Industry, Energy and the Digital Economy,

By virtue of Directive No. 96/82/EC from the European Council of 9 December 1996 with regards to managing dangers related to major accidents involving dangerous substances;

By virtue of Directive No. 2000/60/EC from the European Parliament and Council of 23 October 2000 establishing a framework for water-related Community Policy;

By virtue of (EC) Regulation No. 166/2006 from the European Parliament and Council of 18 January 2006 relating to the creation of a European register for pollutant discharge and transfer;

By virtue of Directive No. 2006/11/EC from the European Parliament and Council of 15 February 2006 relating to the pollution caused by certain dangerous substances discharged into the aquatic environment of the Community;

By virtue of Directive No. 2009/71/EURATOM from the European Council of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations;

By virtue of the Directive No. 2011/70/Euratom from the European Council of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste; By virtue of the Commercial Code; By virtue of the Defence Code; By virtue of the Environmental Code, in particular Title IX of Book V; By virtue of the Public Health Code, in particular Chapter III of Title III of Book III of the first part; By virtue of the Transport Code, in particular Chapter II of Title V of Book II of the first part; By virtue of the Labour Code, in particular Title IV of Book IV of the fourth part; By virtue of Act No. 2006-739 of 28 June 2006 establishing a programme relating to sustainable management of radioactive material and waste;

By virtue of amended Decree No. 2005-1158 of 13 September 2005 relating to specific intervention plans for certain permanent facilities and installations and applied pursuant to Article 15 of Act No. 2004-811 of 13 August 2004 relating to the modernization of Civil Protection;

By virtue of amended Decree No. 2007-1557 of 2 November 2007 relating to basic nuclear installations and to the monitoring of radioactive substance transportation in terms of nuclear safety; By virtue of the amended Ministerial Order of 20 April 1994 relating to the classification, packaging and labelling of substances; By virtue of the Ministerial Order of 23 January 1997 relating to the limits of noise emitted into the environment by installations classified for the protection of the environment;

By virtue of the amended Ministerial Order of 2 February 1998 relating to water intake and consumption and to emissions of any kind produced by installations classified for the protection of the environment and subject to authorization;

By virtue of the Ministerial Order of 10 November 1999 relating to monitoring pressurized water reactors' main primary circuit and main secondary circuits operating;

By virtue of the Ministerial Order of 10 May 2000 relating to the prevention of major accidents involving dangerous substances or preparations that are present in certain categories of installations classified for the protection of the environment;

By virtue of the Ministerial Order of 20 June 2002 relating to boilers present in a new or modified installation, with power capacity exceeding 20 MWth; By virtue of the Ministerial Order of 30 July 2003 relating to boilers present in existing installations, with power capacity exceeding 20 MWth; By virtue of the Ministerial Order of 13 December 2004 relating to cooling installations using water dispersion in an air flow subject to authorization pursuant to Section No. 2921;

By virtue of the Ministerial Order of 29 September 2005 relating to the assessment and consideration of occurrence probability, kinetics and effect intensity as well as of the gravity of the consequences of potential accidents as established in the surveys on the dangers of classified installations subject to authorization;

By virtue of the Ministerial Order of 12 December 2005 relating to nuclear pressure equipment; By virtue of the Ministerial Order of 31 January 2008 relating to recording and the annual declaration of polluting emissions and waste; By virtue of the Ministerial Order of 23 July 2010 relating to boilers present in combustion installations, with heat rating exceeding or equal to 20 MWth, that have been authorized or modified since 1st November 2010; By virtue of the Ministerial Order of 26 April 2011 relating to implementing best techniques available provided for under Article R. 512-8 of the Environment Code;

By virtue of the opinion of the Higher Council for the Prevention of Technological Risks of 17 January 2012;

By virtue of the opinion of the Nuclear Safety Authority of 24 January 2012,

Decree:

TITLE I:

GENERAL PROVISIONS

Art. 1.1. – The present Ministerial Order establishes the general rules relating to the design, construction, operation, final shutdown, dismantling, maintenance and surveillance of basic nuclear installations in order to protect the interests mentioned under Article L. 593-1 of the Environmental Code.

Their application is based on an approach that is proportionate to the risks or inconveniences that the installation may present. It takes into consideration all technical aspects as well as relevant organizational and human factors.

Art. 1.2. – The operator ensures that the provisions retained for exercising the activities mentioned under Article 1.1:

- are appropriate for reaching, given the state of environmental knowledge, practices and vulnerability, a level of risks and inconveniences, mentioned under Article L. 593-1 of the Environmental Code, that is as low as possible under economically acceptable conditions;

- comply with the principles listed under Article L. 1333-1 of the Public Health Code;
- take advantage of the best techniques available;
- are compatible with the protection requirements established pursuant to Chapters II and III of Title III of Book III of the first part of the Defence Code;
- comply with the other regulatory provisions applicable.

The operator complies with the provisions retained in the documents making up the dossier mentioned under Articles 8, 20, 37 and 43 of the aforementioned Decree of 2 November 2007, in their applicable versions.

Art. 1.3. – For the purpose of the present Ministerial Order, the following definitions are used:

- *protection-important activity*: activity important for protecting the interests mentioned under Article L. 593-1 of the Environmental Code (public safety, health and sanitation, the protection of nature and of the environment), i.e. activity that falls under the technical or organizational provisions mentioned under the second paragraph of Article L. 593-1 of the Environmental Code or that is liable to affect them;
- *internal aggression, external aggression*: any incident or any situation originating respectively inside or outside the basic nuclear installation and liable to, directly or indirectly, lead to damage to protection-important components or call into question compliance with defined requirements;
- *authorization Decree*: Decree authorizing the creation, or the final shutdown and dismantling, or the final shutdown and initiation of the surveillance phase of a basic nuclear installation pursuant to Articles 593-7, L. 593-14, L. 593-25 or L. 593-30 of the Environmental Code;
- *internal fault*: malfunction, breakdown or damage of an installation component or components present within the installation, including that resulting from inappropriate human action;
- *nuclear safety demonstration*: all components contained in or used in the preliminary safety report and in the safety reports and mentioned under Articles 8, 20, 37 and 43 of the aforementioned Decree of 2 November 2007, and participating in the demonstration mentioned under the second paragraph of Article L. 593-7 of the Environmental Code, which justify that the risks of radiological or non-radiological accident, and the intensity of their consequences are, given the state of environmental knowledge, practices and vulnerability, as low as possible under economically acceptable conditions;
- *discrepancy*: non-compliance with a defined requirement, or with a requirement established by the operator's integrated management system, liable to affect the provisions mentioned under the second paragraph of Article L. 593-7 of the Environmental Code;
- *effluent*: any fluid, liquid or gas product produced by the installation liable to be directly or indirectly discharged into the receiving environment;
- *radioactive effluent*: any effluent whose radioactive nature, origin or characteristics justify the implementation of provisions for protecting persons and the environment from risks or inconveniences related to ionizing radiation;
- *protection-important component*: component important for protecting the interests mentioned under Article L. 593-1 of the Environmental Code (public safety, health and sanitation, the protection of nature and of the environment), i.e. structure, equipment, system (programmed or not), material, component or software that is present in the basic nuclear installation or that is under the responsibility of the operator and that implements a function required for the demonstration mentioned under the second paragraph of Article L. 593-1 of the Environmental Code or that ensures that this function is implemented;
- *emission*: direct or indirect introduction, from point or diffuse sources of the installation, of substances, vibrations, heat or noise into the air, water or ground;
- *trigger (initiating) event*: any internal fault, or internal or external aggression liable to directly or indirectly generate an incident or accident situation;
- *significant event*: discrepancy of specific importance, pursuant to the criteria specified by the Nuclear Safety Authority;
- *defined requirement*: requirement assigned to a protection-important component so that it may perform the function, with the characteristics expected, provided for in the demonstration mentioned under the second paragraph of Article L. 593-7 of the Environmental Code, or assigned to a protection-important activity so that it may fulfil its objectives as regards this demonstration;
- *establishment*: all the areas placed under the control of the operator located on a same site;
- *operator*: any natural or legal person who operates a basic nuclear installation, whether this person's situation is regular or not, or who has submitted an application for authorization to create provided for under Article L. 5937 of the Environmental Code with a view to operating such an installation;
- *organizational and human factors*: factors that influence human performance, such as skills, work environment, the characteristics of tasks, and the organization;
- *degraded-mode operating*: operational functioning outside of normal operational functioning; its acceptability for a limited period with regards to the interests mentioned under Article L. 593-1 of the Environmental Code is demonstrated pursuant to the second paragraph of Article L. 593-7 of the same Code;
- *normal operating*: operational functioning of the installation comprising all common operational states and operations of the installation, including maintenance and scheduled shutdown situations, with or without radioactive material; also, any situation defined as normal operating in the demonstration mentioned under the second paragraph of Article L. 593-

7 of the Environmental Code falls under this definition;

- *incident or accident*: any event that is not expected during normal or degraded-mode operating conditions, and liable to deteriorate the protection of the interests provided for under Article L. 593-1 of the Environmental Code; the potential or real consequences of an accident are more serious than those of an incident;
- *external intervener*: any natural or legal person other than the operator and his employees who carry out operations or who supply goods or services;
- who participate in a protection-important activity or a protection-important component; – or who participate in an action provided for by the Ministerial Order hereof and related to such an activity, service providers and subcontractors, experimenters and users are in particular concerned;
- *radioactive materials, nuclear fuel and spent fuel*: as defined under Article L. 542-1-1 of the Environmental Code;
- *internal transport*: transport of dangerous goods inside the perimeter of a basic nuclear installation outside the buildings and storage yards, as well as any operation contributing to its safety, including inside the buildings and storage yards;
- *planned discharge*: effluent discharge that is channelled towards a monitored outfall, for which duration is time-limited and which requires special conditions in order to be undertaken;
- *diffuse discharge*: effluent discharge that is not channelled towards a monitored outfall;
- *emergency situation*: emergency radiological situation as defined under Article R. 1333-76 of the Public Health Code, or any other situation that is liable to seriously affect the interests mentioned under Article L. 593-1 of the Environmental Code and which would require immediate intervention by the operator;
- *dangerous substance*: substance, preparation or mixture, which satisfies criteria relating to physical dangers, dangers for health or dangers for the environment, as defined under the aforementioned amended Ministerial Order of 20 April 1994;
- *nuclear safety*: as defined under the second paragraph of Article L. 591-1 of the Environmental Code;
- *area with a potential production of nuclear waste*: area where the waste produced is contaminated or activated or is liable to be so.

TITLE II

ORGANIZATION AND RESPONSIBILITY

CHAPTER I

Technical capacities

Art. 2.1.1. – I. – The operator has, either internally or through third-party agreements, the technical capacities required for ensuring the control of the activities mentioned under Article 1.1.

II. – Furthermore, the operator has the required technical competencies available, either internally or through his subsidiaries or through companies which he controls, pursuant to Articles L. 233-1 and L. 233-3 of the Commercial Code, to understand and to sustainably acquire the basis of these activities.

III. – The operator has the appropriate technical capacities available internally for making decisions and for implementing conservatory measures, knowingly and within adapted time-frames, that are related to the exercise of his responsibility mentioned under Article L. 593-6 of the Environmental Code.

Art. 2.1.2. – I. – In the notice mentioned under II of Article 8 of the aforementioned Decree of 2 November 2007, the operator specifies the technical competencies required for applying Article 2.1.1 as well as the capacities he has available for this, by distinguishing between those that he has available internally, those that are available via his subsidiaries or companies that he controls as mentioned under II of Article 2.1.1 and those available through agreements mentioned under I of this same Article.

II. – Any modification to the technical capacities available to the operator, and presented in the aforementioned explanatory note, is subject to the provisions established under VII of Title III and, if relevant, under Article 31 of the aforementioned Decree of 2 November 2007.

CHAPTER II

Surveillance of external interveners **Art. 2.2.1.** – The operator informs all

external interveners of the provisions required for implementing the Ministerial Order hereof. **Art. 2.2.2.** – I. – The operator surveys external interveners to ensure that:

they apply his policy mentioned under Article 2.3.1, which was transmitted to them pursuant to Article 2.3.2; the operations they carry out, or the goods or services that they provide, comply with the defined requirements;

they comply with the provisions mentioned under Article 2.2.1. This surveillance is proportional to the level of importance, for the demonstration mentioned under the second

paragraph of Article L. 593-7 of the Environmental Code, for the activities carried out. It is documented under the conditions established by Article 2.5.6. It is undertaken by individuals with the appropriate skills and qualifications.

II. – Notwithstanding, bodies and laboratories that are independent of the operator, that are accredited, approved, delegated, appointed, acknowledged or notified by the administration, are not subject to this surveillance when they carry out technical monitoring or compliance assessments pursuant to legislation. The operator ensures the validity of the accreditation, the approval, the delegation, the appointment, the acknowledgement or the notification of the body that he calls upon to carry out the activities concerned as well as the expiry date of these aforementioned. The contracts that bind the operator and the body for these activities are specific contracts.

Art. 2.2.3. – I. – The surveillance of protection-important activities that are carried out by an external intervener must be undertaken by the operator, who cannot entrust it to a service provider. Notwithstanding, in specific cases, he may be supported for this surveillance, providing he retains the expertise required to ensure control. He ensures that the bodies that support him have the skills, the independence and the impartiality required to provide the given services.

II. – The operator transmits the list of supporting bodies that he uses to the Nuclear Safety Authority, if so requested, and specifies the reasons for this support as well as the way he implements the obligations defined under I.

Art. 2.2.4. – The operator presents the procedures implemented for surveying external interveners in the General Operating Rules mentioned under 2° of II of Article 20 of the aforementioned Decree of 2 November 2007, in the General Surveillance and Maintenance Rules mentioned under 10° of II of Article 37 of the same Decree, in the General Maintenance Rules mentioned under 10° of II of Article 43 of the same Decree, or, if the installation has not yet been commissioned, in the notice mentioned under II of Article 8 of the same Decree. He stipulates notably the principles and organization of this surveillance as well as the resources dedicated to it.

CHAPTER III

Policy on protecting the interests mentioned under Article L. 593-1 of the Environmental Code

Art. 2.3.1. – I. – The operator drafts and undertakes to implement a policy for protecting the interests mentioned under Article L. 593-1 of the Environmental Code, in which he explicitly states:

- the priority given to protecting the aforementioned interests, firstly by preventing accidents and by limiting their consequences pursuant to nuclear safety, in relation to the economic or industrial benefits acquired through operating his installation or in relation to the progress in research activities related to this operating;
- ongoing research for improving the provisions implemented for protecting these interests. This policy defines the objectives, specifies the operator's strategy for attaining them and the resources that he undertakes to commit.

II. – The operator formalizes this policy and his commitment to implement it in a document that he makes available to the Nuclear Safety Authority and to staff representative bodies.

Art. 2.3.2. – The operator ensures that the policy defined under Article 2.3.1 is circulated, known, understood and applied by all staff required to implement it, including staff of external interveners.

Art. 2.3.3. – The operator assesses the policy defined under Article 2.3.1, as well as the effectiveness of its implementation any time there is a significant change in his organization and, in any case, at least every five (5) years. This assessment takes the results of management system reviews mentioned under Article 2.4.2 into account.

The operator analyses the results of this assessment and, if required, reviews his policy and its implementation. He makes these results available to the Nuclear Safety Authority and to staff representative bodies.

CHAPTER IV

Integrated management system

Art. 2.4.1. – I. – The operator defines and implements an integrated management system that ensures that the requirements relating to protecting the interests mentioned under Article L. 593-1 of the Environmental Code are systematically taken into account in any decision concerning the installation. The purpose of this system is in particular to ensure compliance with the legislative and regulatory requirements, the Decree of authorization and the prescriptions and decisions established by the Nuclear Safety Authority, as well as with the policy mentioned under Article 2.3.1.

II. – The integrated management system specifies the provisions implemented in terms of organization and resources of any kind to attain the objectives mentioned under I; it is based on written documents and covers all the activities mentioned under Article 1.1.

III. – The integrated management system contains in particular provisions that enable the operator to:

- determine protection-important components and activities and their defined requirements;
- ensure that the requirements defined and the provisions of Articles 2.5.3 and 2.5.4 are complied with;
- identify and to deal with any significant discrepancy or event;
- to collect and to exploit feedback;
- to define appropriate effectiveness and performance indicators for the objectives he seeks to attain.

Art. 2.4.2. – The operator implements an organization and resources that are appropriate for defining his integrated management system, for implementing, maintaining and assessing it and for improving its effectiveness. He periodically carries out a review of his integrated management system to assess its performance, to identify any possible improvements and to programme the implementation of improvements retained.

CHAPTER V

Protection-important components and activities Art. 2.5.1. – I. – The operator identifies the protection-important components, the related defined requirements and keeps the list updated.

II. – The protection-important components are qualified proportionally to the issues at stake, in particular to ensure the capacity of the aforementioned components to fulfil the functions assigned to them in relation to the demands and the environmental conditions associated with the situations for which these components are required. Study, development, testing, monitoring and maintenance provisions ensure the durability of this qualification for as long as necessary.

III. – The operator presents the qualification approach in the dossiers mentioned under Articles 8, 20, 37 and 43 of the aforementioned Decree of 2 November 2007. He lists the main information related to actually attaining this qualification in the dossier mentioned under Article 20 or 43 of the same Decree. He keeps the documents attesting the qualification of the protection-important components until the basic nuclear installation has been downgraded.

Art. 2.5.2. – I. – The operator identifies the protection-important activities, the related defined requirements and keeps the list updated.

II. – The protection-important activities are carried out in accordance with procedures and using means for meeting *a priori* the requirements defined for these activities and for the protection-important components concerned, and to ensure them *a posteriori*. The organization implemented provides, in particular, for activity-adapted preventive and corrective actions so that any identified discrepancy may be managed.

Art. 2.5.3. – Each protection-important activity undergoes technical monitoring, to ensure that:

- the activity is carried out in compliance with the requirements defined for the activity and, if necessary, for the protection-important components concerned;
- appropriate corrective and preventive actions have been defined and implemented.

Parties carrying out technical monitoring for a protection-important activity are distinct from the parties who accomplish the activities.

Art. 2.5.4. – I. – The operator schedules and implements appropriate actions for spot checking the provisions taken pursuant to Articles 2.5.2 and 2.5.3, as well as actions for periodically assessing their appropriateness and effectiveness.

Parties carrying out these checking and assessment actions are distinct from the parties who carry out the technical monitoring on or who accomplish the protection-important activities. They report directly to a person who is responsible for these agents.

II. – When protection-important activities or their technical monitoring are carried out by external interveners, these checking and assessment actions are considered as a surveillance action on the external interveners in question, and the provisions under Article 2.2.3 apply.

Art. 2.5.5. – Protection-important activities, their technical monitoring and the checking and assessment actions are carried out by individuals with the appropriate skills and qualifications. As such, the operator makes the necessary provisions for training in order to maintain these skills and qualifications for his staff and, whenever necessary, to develop them, and ensures that external interveners make analog provisions for their own staff who carry out the aforementioned operations.

Art. 2.5.6. – Protection-important activities, their technical monitoring and the checking and assessment actions are documented and are traced to demonstrate *a priori* and to check *a posteriori* that they comply with defined requirements.. The documents and corresponding recordings are kept updated, are easily accessible and legible, protected, kept under appropriate conditions and archived for an appropriate and justified period of time.

Art. 2.5.7. – In the dossier attached to the application for authorization to create a basic nuclear installation, the operator identifies, among the activities undertaken prior to the date of filing the application, those activities that are considered as protection-important activities. He provides proof that these activities were carried out in compliance with the present title.

CHAPTER VI

Managing discrepancies

Art. 2.6.1. – The operator makes the necessary provisions for detecting any discrepancy relating to his installation or to associated internal transportation operations. He makes the necessary provisions to enable external interveners to detect any discrepancy that concerns them and to inform him of these, within the shortest possible time.

Art. 2.6.2. – The operator assesses discrepancies individually, as quickly as possible, to determine:

- its importance as regards the protection of interests mentioned under Article L. 593-1 of the Environmental Code, and, if relevant, if it is a significant event;
- if it fails to meet the legislative and regulatory requirements applicable or the prescriptions and decisions established by the Nuclear Safety Authority that concern it;
- if conservatory measures need to be implemented immediately.

Art. 2.6.3. – I. – The operator ensures discrepancies are managed within a time-frame adapted to the issues concerned, in particular by:

- determining its technical, human and organizational causes;
- defining the appropriate remedial, preventive and corrective actions;
- implementing the defined actions;
- assessing the effectiveness of implemented actions. Treatment may be limited to defining and implementing remedial actions for discrepancies whereminor importance as regards the protection of interests mentioned under Article L; 593-1 of the Environmental Code has been proved.

II. – The operator keeps the list of discrepancies and their progress status updated.

III. – Discrepancy management is deemed a protection-important activity.

IV. – When the discrepancy or its persistence is considered as a failure pursuant to the third paragraph of Article 2.6.2, the operator takes the necessary steps immediately to restore a situation which complies to these requirements, prescriptions. Without prejudice to the provisions of Article 2.6.4, if the operator considers that he cannot restore a compliant situation quickly, he informs the Nuclear Safety Authority.

Art. 2.6.4. – I. – The operator declares all significant events to the Nuclear Safety Authority as quickly as possible. The declaration comprises in particular:

- the characterization of the significant event;
- the description of the event and its chronology;
- its real and potential consequences as regards protecting the interests mentioned under Article L. 593-1 of the Environmental Code;
- the measures already implemented or planned for managing the event either provisionally or permanently.

II. – A significant event declaration is regarded as satisfying the declaration obligation for the Nuclear Safety Authority as established under other legislative and regulatory texts when this declaration is made in accordance with the most restrictive provisions, in particular in term of deadlines, defined by these texts. The declarations provided for under Article L. 591-5 of the Environmental Code, under Article R. 1333-109 of the Public Health Code and under Article R. 4451-99 of the Labour Code are particularly concerned.

The declaration made to the Nuclear Safety Authority does not dispense declarations to the other authorities or to recipients provided for under these texts.

Art. 2.6.5. – I. – The operator undertakes an in-depth analysis for each significant event. As such, he draws up and transmits a report to the Nuclear Safety Authority within two (2) months following the declaration of the event, which contains in particular the following elements:

- the detailed chronology of the significant event;
- the description of the technical and organizational provisions that enabled him to detect the event;
- the description of the technical and organizational provisions made immediately after the event was detected, in particular the remedial actions;
- the analysis of the technical, human and organizational causes of the event;
- an analysis of the real and potential consequences as regards protecting the interests mentioned under Article L. 593-1 of the Environmental Code;
- the knowledge acquired, as well as the preventive, corrective and remedial actions decided and the schedule for

implementing them.

II. – The operator ensures that the preventive, corrective and remedial actions decided are effectively implemented. If it is impossible to fulfil any of these actions within the time-frames mentioned in the aforementioned report, the operator transmits an update of this report containing in particular the new deadlines to the Nuclear Safety Authority.

CHAPTER VII

Continuous improvement

Art. 2.7.1. – In addition to individually managing each discrepancy, the operator periodically reviews the discrepancies in order to assess the cumulated effect of as-yet-uncorrected discrepancies on the installation and to identify and analyse the recurrence propensity for similar types of discrepancies.

Art. 2.7.2. – The operator takes all appropriate actions, including as regards external interveners, to systematically collect and analyse information that is likely to help him improve the protection of the interests mentioned under Article L. 593-1 of the Environmental Code, regardless if this information is from the feedback of activities mentioned under Article 1.1 on his own installation, or from other similar and non-similar installations in France and abroad, or from research and development.

Art. 2.7.3. – Based on the informational analyses concluded pursuant to Articles 2.7.1 and 2.7.2, the operator:
identifies the appropriate remedial, preventive and corrective actions;
classifies them according to the improvement expected, and consequently schedules their implementation;
implements them in compliance with the modification procedures defined under Chapters VII and VIII of Title III of the aforementioned Decree of 2 November 2007.

CHAPTER VIII

Public information procedures

Art. 2.8.1. – The operator defines the procedures so that any individual may:
access the information which the operator has made public or which has been made public pursuant to legislative or regulatory provisions that are to it;
request the transmission of the information mentioned under Article L. 125-10 of the Environmental Code.
These procedures are published on a website chosen by the operator; they are periodically updated and transmitted to the Local Information Commission for information.

Art. 2.8.2. – The operator publishes the report mentioned under Article L. 125-15 of the Environmental Code on a website of his choice.

TITLE III

NUCLEAR SAFETY DEMONSTRATION

Art. 3.1. – I. – The operator applies the Defence in Depth principle, which consists in a set of successive lines of defence implemented by the operator, and which are adequately independent for:
preventing incidents;
detecting the incidence of such incidents and implementing actions which, firstly, prevent an accident from occurring and, secondly, which re-establish a normal operating situation or, failing this, which enable the installation to recover and maintain a safe status;
controlling the accidents that could not be prevented or, failing this, preventing them from worsening, by recovering control of the installation so that it may be brought back to a safe status and maintained as such;
managing accident situations that could not be controlled, by limiting the consequences in particular for humans and for the environment.

II. – Implementation of the Defence in Depth principle is based in particular on:
the choice of an appropriate site, taking into consideration in particular natural or industrial risks which have a decisive influence on the installation;
identifying the functions required for the nuclear safety demonstration;
a vigilant approach to design, which integrates scaling margins and which applies, whenever necessary, appropriate redundancy, diversification and physical separation of protection-important components that fulfil functions required for the nuclear safety demonstration, so that a high level of reliability can be achieved and, as such, ensure the functions mentioned under the previous paragraph;

the quality of the activities mentioned under Article 1.1;
preparation for managing any possible incident or accident situations.

Art. 3.2. – I. – The nuclear safety demonstration is carried out based on a vigilant determinist approach. This approach incorporates technical, organizational and human aspects, and takes into account all possible permanent and transitional statuses for the installation.

II. – In addition to managing unique trigger (initiating) events that are postulated, the nuclear safety demonstration manages plausible situations relating to the accumulation of initiating events, which are selected based on justified criteria in particular the analyses and assessments mentioned under Articles 2.7.2 and 3.3.

Art. 3.3. – The nuclear safety demonstration also comprises, except if the operator proves that it is not relevant, probabilistic analyses of accidents and their consequences. These analyses may be carried out in accordance with the methods applied to the installations mentioned under L. 512-2 of the Environmental Code, unless stated otherwise by the Nuclear Safety Authority. They integrate technical, organizational and human aspects.

Art. 3.4. – I. – The nuclear safety demonstration presents the way in which the following functions are ensured:
controlling nuclear chain reactions;
evacuating the heat rating produced by radioactive substances and by nuclear reactions;
containing radioactive substances;
protecting humans and the environment from ionizing radiation.

II. – As regards controlling nuclear chain reactions, the operator demonstrates that the provisions made are adequate for preventing criticality risks whenever this latter is not sought.

III. – Radioactive substance containment is ensured by interposing one or several successive and adequately-independent barriers between these substances and humans and the environment and, if necessary, by implementing a dynamic containment system. The number and effectiveness of these systems are adapted to the significance and the impact of potential radioactive discharge, including effects generated by incident or accident.

Art. 3.5. – Internal aggressions to be taken into account in the nuclear safety demonstration comprise: –
projectile emissions, notably those induced by defects of rotating materials; – pressure equipment defects; –
collisions and load drops; – explosions; – fires; – emissions of dangerous substances; – floods originating within the perimeter of the basic nuclear installation; – electromagnetic interferences; – malicious acts; – any other internal aggression that the operator identifies or, if relevant, that the Nuclear Safety Authority deems
should be taken into consideration;
– plausible accumulations of the aggressions above.

Art. 3.6. – External aggressions to be taken into account in the nuclear safety demonstration comprise: –
risks induced by industrial activities and by communication circuits, including explosion, emissions of dangerous substances and aircraft dropping;
– seism;
– lightning and associated electromagnetic interferences;
– extreme meteorological or climatic conditions; – fires;
– floods originating outside the perimeter of the basic nuclear installation, including their dynamic effect; – malicious acts;
– any other external aggression that the operator identifies or, if relevant, that the Nuclear Safety Authority deems should be taken into consideration;
– plausible accumulations of the aggressions above.

Art. 3.7. – I. – The nuclear safety demonstration comprises an assessment of potential radiological and non-radiological consequences related to incidents and accidents envisaged. For each scenario, this assessment comprises:

a presentation of the underlying assumptions for discharge and for exposure scenarios; the underlying assumptions for discharge must be reasonably pessimistic and the exposure scenarios must be based on realistic parameters without, however, taking into account possible actions for protecting populations that may be implemented by the public authorities;

an estimation of the effective doses and of the intensity of non-radiological phenomena to which humans and the environment are liable to be exposed during the short or medium terms, by distinguishing the different age groups wherever necessary, and by taking into account the different transfer channels for dangerous substances; the estimation shall include equivalent thyroid doses in the event of radioactive substance discharge that requires the estimation to do so;

an estimation of the extent of areas liable to be affected;

for incidents or accidents that lead to consequences outside the site, the development kinetics of the dangerous phenomena and of the propagation of their effects.

II. – Dangerous non-radiological phenomena intensity is defined in relation to reference values expressed in the form of toxic effects, overload effects, thermal effects and effects related to the impact of projectiles on persons and structure. The reference values to be used are those specified under Appendix II of the Ministerial Order of 29 September 2005.

III. – Dangerous radiological phenomena intensity is defined in relation to reference values expressed in the form of the levels of intervention of public authorities in emergency radiological situations, as defined by the Nuclear Safety Authority pursuant to Article R. 1333-80 of the Public Health Code.

Art. 3.8. – I. – The nuclear safety demonstration is based on:

updated and referenced data; the demonstration specifically takes into account the information available mentioned under Article 2.7.2;

appropriate, explicit and proven methods, which integrate assumptions and rules adapted to the uncertainties and to the sphere of knowledge of the phenomena involved;

qualified calculation and modelling tools adapted to the specific areas of use.

II. – The operator specifies and justifies his criteria for validating the methods, for qualifying the calculation and modelling tools and for appraising the results of studies carried out to demonstrate nuclear safety.

Art. 3.9. – The nuclear safety demonstration must prove that accidents liable to lead to significant discharge of dangerous substances or to dangerous effects outside the site with kinetics that impede implementing the necessary measures of protection for populations in time are physically impossible or, if this physical impossibility cannot be proven, that the measures implemented in or for the installation result, with a high degree of confidence, in these accidents being highly unlikely to occur.

Art. 3.10. – The operator keeps himself well informed of any modification made or planned for the vicinity of his installation that is liable to modify the type, the significance or the probability of an external aggression. If necessary, he updates the nuclear safety demonstration for his installation pursuant to appropriate regulatory procedures.

TITLE IV

MANAGING NUISANCES AND THE IMPACT ON HEALTH AND ON THE ENVIRONMENT

Art. 4.1. – I. – The inconveniencies mentioned under Article 1.2 include, firstly, the impacts from the installation on health and on the environment due to water intake and discharge, and secondly, the nuisances the installation may produce, in particular through the dispersion of pathogenic micro-organisms, noise and vibrations, smells and dust scattering.

II. – As regards the aforementioned inconveniencies, the best techniques available mentioned under Article 1.2 are those defined by the Ministerial Order of 26 April 2011 in its version mentioned under Appendix I.

III. – Whenever possible, the operator makes provisions to offset these inconveniencies if they could not be avoided or if they could not be limited sufficiently.

CHAPTER I

Water intake and effluent discharge into the air and into water

Section 1

General provisions

Art. 4.1.1. – I. – The operator takes all measures required, from the design phase onwards, to limit effluent discharge from the installation.

II. – The operator takes all steps required to prevent unplanned flows and discharge into the environment.

Art. 4.1.2. – I. – Water emission, intake and effluent discharge threshold and ceiling values for the installation are established on the base of the best techniques available under technical and economical acceptable conditions, taking installation characteristics, its geographical position and local environmental conditions into account.

II. – Effluent discharge cannot exceed the limits established under Articles 27, 31, 32, 34 and under 14° of Article 33 of the aforementioned Ministerial Order of 2 February 1998, in its version mentioned under Appendix I, unless otherwise stated by decision from the Nuclear Safety Authority pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007, on the basis of justifications provided by the operator as regards the optimal nature of the limits proposed and the acceptability of their impacts, and following opinion from the Departmental Council mentioned under Article R. 1416-1 of the Public Health Code.

Art. 4.1.3. – I. – Intake and discharge structures and installations in watercourses do not hinder the ecological continuity mentioned under 7° of Article L. 211-1 of the Environmental Code. In watercourses or parts of watercourses and canals, for which the list is established pursuant to Article L. 432-6 of the Environmental Code, these structures must include systems that ensure that migratory fish may circulate.

II. – The operator maintains intake and discharge structures and installations, as well as any occupied land, in good condition, at his own expense. If any repair work is necessary, the operator first informs the service responsible for the policy of the environment in question.

III. – Discharge structures and installations are designed, equipped and operated in such a way as to ensure appropriate effluent diffusion to the receiving medium.

Art. 4.1.4. – Any transfer of liquid effluents or of water intake taken from the environment of another basic nuclear installation or of another installation, controlled by another operator, is subject to an agreement signed beforehand between the operator of the basic nuclear installation and the operator of the other installation. This agreement establishes the characteristics and the quantities of effluent or of water transferred. It also reiterates the monitoring and surveillance obligations which both operators must adhere to. This agreement and any amendment within are transmitted to the Nuclear Safety Authority before being implemented.

Art. 4.1.5. – On a site comprising one or several basic nuclear installations and using solvents under the responsibility of a same operator, if the quantities of solvents consumed annually, for all the installations, exceed 1 ton, the operator implements a solvent management plan, which in particular stipulates the solvent inflows and outflows for his installation. If this annual solvent consumption exceeds 30 tons, the operator transmits the solvent management plan to the Nuclear Safety Authority annually and informs the Authority of any action he undertakes to reduce solvent consumption.

Section 2

Water intake and consumption

Art. 4.1.6. – I. – Water intake structures and installations as well as structures for connecting to the public drinking water distribution network and for groundwater drilling are designed, constructed, operated and dismantled in such a way as to limit water consumption and privilege recycling, and to prevent and limit any pollution of the water supply.

These structures and installations are equipped with systems for preventing contamination of the intake environment, notably during backflow phenomena and for preventing network operation disturbances if connected to the public drinking water distribution network.

II. – During groundwater drilling, it is prohibited to initiate connection between distinct water layers, unless otherwise provided for under a Nuclear Safety Authority dispensation established pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007 and following opinion from the Departmental Council mentioned under Article R. 1416-1 of the Public Health Code.

Art. 4.1.7. – Open-loop cooling with fresh water from the immediate environment is prohibited, unless otherwise explicitly stated in the authorization Decree. To benefit from this dispensation, the operator justifies the acceptability of this practice and, in particular, in relation to the thermal impact of emissions into the environment.

Section 3

Effluent collection and processing

Art. 4.1.8. – Effluents, dusts or aerosols are, as much as possible, collected as close to the source as possible, channelled and, if necessary, treated. Effluent collection, treatment and discharge conditions are such that they do not lead to any risk of ignition or explosion or to the production, due to the mixture of effluents, of polluting substances that are not mentioned in the installation's impact study.

Art. 4.1.9. – If rainwater run-off from roofing, storage bays, traffic lanes, parking bays and any other impermeable surfaces is liable to provoke pollution through surface wash-off or if the receiving medium is particularly sensitive, a rainwater collection network is established and connected to one or several containment basins capable of collecting the first volumes of rainwater.

Art. 4.1.10. – Radioactive effluents are collected separately based on their type and their activity. A control is carried out so they may be characterized.

Liquid radioactive effluents are stored separately based on their type and their level of activity. Gaseous radioactive effluents, other than those collected by ventilation, are stored so they may be characterized.

To limit the radiological impact from discharged radioactive effluents, the operator takes into account, in his effluent management, the likelihood of reducing the activity of radioactive effluents by radioactive decay before they are discharged into the receiving medium.

Section 4

Effluent discharge

Art. 4.1.11. – I. – It is prohibited to discharge, into surface water or into marine environments, the substances mentioned in the table appended under Article R. 211-11-1 of the Environmental Code, unless a decision from the Nuclear Safety Authority pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007, and following opinion from the Departmental Council mentioned under Article R. 1416-1 of the Public Health Code, establishes the limits for this discharge on the basis of justifications provided by the operator as regards the optimal nature of the discharge and the acceptability of its impacts. The aforementioned limits are reassessed periodically. The operator includes elements specifically for this reassessment in the reassessment report mentioned under Article L.593-19 of the Environmental Code.

II. – The liquid effluents discharged do not cause any visible coloration or iridescence and, outside the mixing area, are not detrimental to the reproduction of animal species and do not induce any lethal effect on the receiving water.

Art. 4.1.12. – I. – Discharge into the earth and into groundwater is prohibited, except for seepage of rainwater pursuant to the conditions defined under Articles 4.1.9 and 4.1.14 and reinjection of pumped water, into their original layer, during certain civil engineering works.

II. – As regards the substances that are not mentioned in the table appended under Article R. 211-11-1 of the Environmental Code or under Appendix II of the aforementioned Ministerial Order of 2 February 1998, in its version mentioned under Appendix I, the Nuclear Safety Authority may establish contrary provisions pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007, on the basis of justifications provided by the operator in relation to the optimal nature of the discharge and the acceptability of its impacts, and following opinion from the Departmental Council mentioned under Article R. 1416-1 of the Public Health Code.

Art. 4.1.13. – It is prohibited to dilute effluents prior to their assessment, in an attempt to comply with discharge limits. Notwithstanding, once assessed, effluents may be mixed if this helps reduce their environmental impact at emission points.

Art. 4.1.14. – Rainwater collected under the conditions mentioned under Article 4.1.9 can only be discharged following quality control and, if required, appropriate treatment.

CHAPTER II

Surveillance

Art. 4.2.1. – To ensure compliance with the prescriptions taken pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007 and, with the elements of the impact study provided for under 6° of I of Article 8 of the aforementioned Decree, the operator defines and implements surveillance for water intake and consumption, for emissions and for the environment that is liable to be affected by the installation.

Art. 4.2.2. – I. – Emission surveillance mentioned under Article 4.2.1 includes surveillance of effluent discharge, for:

- quantifying the flow rate and the volume of the effluents discharged or transferred;
- quantifying the discharge of both radioactive and non-radioactive substances, which are mentioned in the impact study provided for under 6° of I of Article 8 of the aforementioned Decree of 2 November 2007;
- ensuring that all ceiling values applicable are complied with;
- checking, in the effluents, for the existence of substances that are present in the installation but whose emission is not provided for in the impact study;
- detecting installation malfunctions by using alarms that are retransmitted under conditions that enable immediate interruption of any planned noncompliant discharge and, for permanent discharge, the suspension of any operation liable to generate them.

II. – Unless otherwise specifically provided for by a Nuclear Safety Authority decision established pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007 following opinion from the Departmental Council mentioned under Article R. 1416-1 of the Public Health Code, emission surveillance complies:

with the requirements defined under Articles 59 and 60 of the aforementioned Ministerial Order of 2 February 1998 in its version mentioned under Appendix I, when effluent discharge exceeds the flow rates mentioned by these Articles;

as regards boilers present in combustion installations, with heat rating exceeding or equal to 20 MWth, depending on the case, with Articles 11 and 20 of the aforementioned amended Ministerial Order of 20 June 2002, with Articles 15 and 21 of the aforementioned Ministerial Order of 30 July 2003, or with Articles 9 and 16 of the aforementioned Ministerial Order of 23 July 2010, in their versions mentioned under Appendix I;

as regards noise and vibrations, with Article 5 of the aforementioned Ministerial Order of 23 January 1997 in its version mentioned under Appendix I;

as regards cooling installations using water dispersion in an air flow, with Article 8 of the aforementioned Ministerial Order of 13 December 2004 in its version mentioned under Appendix I.

Art. 4.2.3. – I. – Environmental surveillance mentioned under Article 4.17 is used for:

enhancing the knowledge of the radiological and radio-ecological conditions of the installation environment and of any changes to it;

contributing to checking that the impact of the installation on public health and on the environment, in particular food products, complies with the impact study established under 6° of I of Article 8 of the aforementioned Decree of 2 November 2007;

detecting any abnormal rise in radioactivity as early as possible;

ensuring that the installation is free from malfunction by, among other actions, monitoring groundwater layers.

II. – The provisions implemented by the operator for surveying the environment:

include taking measurements, related to parameters and radioactive and/or non-radioactive substances, regulated under the provisions established pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007, in the various environment compartments (air, water, soil) and in the biotopes and in the food chain;

are at least equivalent to those defined under Articles 63 to 66 of the aforementioned Ministerial Order of 2 February 1998 in its version mentioned under Appendix I, unless otherwise specifically provided for by a Nuclear Safety Authority decision established pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007 following opinion from the Departmental Council mentioned under Article R. 1416-1 of the Public Health Code;

include checking in the environment for substances present in the installation whose emission is not provided for in the impact study established under 6° of I of Article 8 of the aforementioned Decree of 2 November 2007.

III. – The operator informs the Nuclear Safety Authority, the French Radiation Protection and Nuclear Safety Institute (IRSN) and the Prefect of any abnormal increase in environmental radioactivity levels as quickly as possible.

Art. 4.2.4. – I. – The operator is capable of carrying out sampling and measurements for the surveillances mentioned under Article 4.2.1, both inside and outside the establishment, within the shortest time possible.

II. – The aforementioned measurements undergo a measurement uncertainty assessment. The operator ensures that the performance of his means of measurement is appropriate enough for the related objectives.

III. – Within the framework of environmental surveillance, environmental radioactivity measurements are carried out by authorized laboratories pursuant to the provisions under Article R. 1333-11-1 of the Public Health Code, or by the French Radiation Protection and Nuclear Safety Institute (IRSN). The operator transmits the results for circulation throughout the national environmental radioactivity measurement network, in compliance with 1° of II of Article R 1333-11 of the same Code.

IV. – At least once per year, the operator takes part in an intercomparison campaign with a third-party body mentioned under Article 9.2 related to all or some of the measurements and analyses required for assessing radioactive effluent discharge.

Every year, the operator requests that a third-party body mentioned under Article 9.2 carries out a check on the measurements and analyses required for assessing non-radioactive effluent discharge.

CHAPTER III

Preventing pollution and nuisances

Art. 4.3.1. – I. – The texts mentioned under Appendix II apply to the equipment and installations mentioned under the first paragraph of Article L. 593-3 of the Environmental Code. Notwithstanding, the

operator may implement different provisions, which are specified in the documents making up the dossier mentioned under Articles 8, 20, 37 and 43 of the aforementioned Decree of 2 November 2007, if he proves that they can ensure at least an equivalent level of protection for the interests mentioned under Article L. 593-1 of the Environmental Code.

II. – When a modification, considered as within the scope of Article 26 of the aforementioned Decree of 2 November 2007, applies to this equipment or these installations, the operator analyses this modification in relation to the provisions provided for under I and includes the conclusions of this analysis in the modification declaration dossier.

Art. 4.3.2. – I. – If the operator has, within his basic nuclear installation, at least one of the chemical substances or preparations mentioned under Appendix I of the aforementioned amended Ministerial Order of 10 May 2000 in its version mentioned under Appendix I, he must periodically declare the list and the quantities of substances and of preparations mentioned under this Appendix and held within his basic nuclear installation or liable to be held within it to the Nuclear Safety Authority.

II. – From the moment the total of the substances or the preparations liable to be present in the establishment meets the condition mentioned under Article R. 511-10 of the Environmental Code, then the elements of the nuclear safety demonstration related to the non-radiological risks are reassessed at least once every five (5) years and, if relevant, updated and transmitted to the Nuclear Safety Authority.

Art. 4.3.3. – I. – Radioactive or dangerous substance storage or warehousing is prohibited outside areas that are designated and equipped for this purpose so that dispersion may be prevented.

Container storage and warehousing areas and loading and unloading bays, used by tankers and vehicles transporting travelling tonnage, that are liable to contain significant quantities of radioactive or dangerous substances, are equipped with retention capacities.

II. – Components liable to be in contact with radioactive or dangerous substances are adequately impermeable and resist any physical and chemical action of these substances. This applies in particular to:

storage or warehouse containers, the ground areas of specific zones and bays and retention capacities as mentioned under I;

transportation feeders, which must also contain draining systems;

recipient-related draining systems, retention capacities or feeders as aforementioned.

Art. 4.3.4. – Open-air burning is prohibited.

Art. 4.3.5. – All basic nuclear installations must comply with the noise limitation provisions established under Article 3 of the aforementioned Ministerial Order of 23 January 1997 in its version mentioned under Appendix I, unless otherwise stated by decision from the Nuclear Safety Authority pursuant to 3° of IV of Article 18 of the aforementioned Decree of 2 November 2007, with regard to particular characteristics for the installation or for its environment, and following opinion from the Departmental Council mentioned under Article R. 1416-1 of the Public Health Code.

These provisions do not apply when instruments that contribute to nuclear safety are implemented exceptionally. They also exclude permanent noises produced by structures located on watercourses.

Compliance with the provisions relating to noise levels is assessed on the periphery of the establishment.

CHAPTER IV

Supervisory authority information

Art. 4.4.1. – In the event of accidental pollution generated within the perimeter of the basic nuclear installation, the operator immediately transmits any useful information to the Nuclear Safety Authority, the Prefect of Police and, if necessary, the Maritime Prefect, which enables measures to be established for protecting the interests mentioned under Article L. 593-1 of the Environmental Code, which are threatened by this pollution.

Art. 4.4.2. – Amended by the Order dated 26 June 2013 - art. 1

I. – The operator keeps a register updated for the monitoring and surveillance operations performed pursuant to Article 4.2.1, which he transmits to the Nuclear Safety Authority in electronic format in accordance with the terms and conditions that the Authority stipulates. This register comprises in particular an account of the radioactive and non-radioactive substances or families of substances discharged, and regulated in the decisions taken by the Nuclear Safety Authority pursuant to 2° of IV of Article 18 of the aforementioned Decree of 2 November 2007.

II. – The operator transmits quarterly a synthesis of this register to the Nuclear Safety Authority, to the Regional Health and Welfare Office and to the department in charge of the water policy. This synthesis comprises notably a recapitulation of the analyses and measurements presented in the registers, the operator analysis of possible

abnormalities and/or values exceeding ceilings recorded as well as his own assessment of the management of operations accomplished.

Art. 4.4.3. – I. – Based on the schedule for the activities and the operations that are liable to cause effluent discharge, the operator defines a quantitative forecast every year for the water intake and consumption and for the effluent discharge that he intends to undertake. This forecast is transmitted to the Nuclear Safety Authority and to the Local Information Commission at the latest by 31 January each year.

II. – In accordance with the terms and conditions established by the Nuclear Safety Authority, the operator declares water intake and emissions for his installation every year in the French National Register of Emissions mentioned under Article 1 of the aforementioned Ministerial Order of 31 January 2008.

Art. 4.4.4. – Every year the operator draws up a report presenting the impact of his installation for the previous calendar year. This report specifies water intake, effluent discharge, environmental surveillance and any nuisances caused. As such, it comprises:

a synthesis of the register mentioned under I of Article 4.4.2, which includes a summary of the analyses and measurements presented in the registers, the operator analysis of possible abnormalities or excess values observed as well as his own assessment of the management of operations accomplished;

elements for assessing the coherence of the discharge along with the forecast mentioned under I of Article 4.4.3;

an estimation, based on the amount of discharge, of the doses of ionizing radiation received during the previous year from the installation by reference groups pursuant to Appendix 13-7 of the Public Health Code and in accordance with the terms and conditions established under Article R. 1333-10 of the same Code.

The operator transmits the report at the latest on 30 June of the following year to the Nuclear Safety Authority, to the Regional Directorate for the Environment, Urban Planning and Housing, to the Regional Health and Welfare Office, to the department in charge of the water policy and to the Local Information Commission. It may be incorporated in the report provided for under Article L 125-15 of the Environmental Code.

TITLE V

PRESSURE EQUIPMENT SPECIALLY DESIGNED FOR BASIC NUCLEAR INSTALLATIONS

Art. 5.1. – The provisions relating to nuclear pressure equipment specially designed for basic nuclear installations are established by the aforementioned Ministerial Orders of 10 November 1999 and 12 December 2005 and the Decree of 30 December 2015 on nuclear pressure equipment.

TITLE VI

WASTE MANAGEMENT

Art. 6.1. – I. – The operator is responsible for managing the waste produced by his installation, pursuant to the provisions defined under the Environmental Code, in particular under Title IV of Book V, and must take into account the available disposal pathways or those being studied.

II. – The operator makes all necessary provisions, from the design phase onwards, to reduce the production and noxiousness of waste produced in his installation, in particular at its source.

III. – As regards waste management, the best techniques available mentioned under Article 1.2 are those defined by the aforementioned Ministerial Order of 26 April 2011 in its version mentioned under Appendix I.

Art. 6.2. – I. – The operator implements waste sorting at its source or, failing this, as close as possible to the production of the waste. He ensures that incompatible waste categories and/or materials are not mixed together.

II. – The operator is responsible for characterizing the waste produced by his installation, for packaging or for conditioning the dangerous waste and the waste from areas with a potential production of nuclear waste, and for affixing appropriate labelling on the packaging or on the containers.

III. – The operator organizes the treatment and the transport of the waste produced by his installation in compliance with the waste management plans and the objectives applicable established by the Environmental Code. He organizes the treatment and the transport of the waste from areas with a potential production of nuclear waste in compliance with the French National Plan of Management of Radioactive Materials and Waste and with the Decree provided for under Article L. 542-1-2 of the same Code.

Art. 6.3. – The operator draws up a waste zoning map detailing the areas with a potential production of nuclear waste within his installation.

He establishes and implements technical and organizational provisions based on the waste zoning map, to comply

with the provisions established under III of Article 6.2.

He defines the list and the characteristics of the storage areas for the waste produced by his installation. He defines a storage duration that is specifically adapted to the type of waste and to the characteristics of these storage areas.

Art. 6.4. – The waste management study provided for under 3° of II of Article 20 of the aforementioned Decree of 2 November 2007 includes in particular an analysis of the waste produced or to be produced in the installation, as well as the waste zoning map, the provisions retained by the operator pour managing waste, and the list of storage areas mentioned under Article 6.3.

Art. 6.5. – The operator ensures that the management of the waste produced in his installation is traced.

He keeps an accurate record of the waste produced and stored in the installation, specifying the type, the characteristics, the location, the waste producer, the identified disposal pathways and the quantities present and evacuated.

Art. 6.6. – Every year the operator draws up a management report for his waste for the previous calendar year. He transmits it to the Nuclear Safety Authority at the latest by 30 June of the following year.

Art. 6.7. – During the conditioning of waste from the areas with a potential production of nuclear waste, the operator records the packages of waste produced and complies with the conditions established for their subsequent management.

Conditioning of waste intended for radioactive waste storage centres that include acceptance specifications provided for under Article L. 542-12 of the Environmental Code is implemented in compliance with these specifications.

Conditioning of waste intended for radioactive waste storage centres that are currently being studied provided for under Articles 3 and 4 of the aforementioned Act of 28 June 2006 and that do not include acceptance specifications is subordinate to the agreement of the Nuclear Safety Authority.

Art. 6.8. – When waste is conditioned based on procedures that are incompatible with admission to the storage centres that the waste study intends the specific waste for, the operator reconditions the waste as quickly as possible.

If this reconditioning requires studies to be carried out beforehand, the operator presents a report of the studies made, a status report of studies pending conclusion and a provisional schedule for reconditioning the waste based on aperiodicity established by the Nuclear Safety Authority. This information is also included in the reassessment report mentioned under Article L. 593-19 of the Environmental Code, for the installation where the waste is stored.

TITLE VII

PREPARING AND MANAGING EMERGENCY SITUATIONS

Art. 7.1. – The operator implements an organization, material and human resources and autogenous intervention methods for emergency situations, to:

- ensure the best possible control of the situation, notably in the event of a combination of radiological and non-radiological dangers;
- prevent, delay or limit the consequences outside the site.

Art. 7.2. – In an emergency situation, the operator of a basic nuclear installation:

alerts the Prefect, the Nuclear Safety Authority and external bodies and departments that are to be informed pursuant to the internal emergency plan mentioned under 4° of II of Article 20 of the aforementioned Decree of 2 November 2007;

cooperates with them, keeps them regularly informed of the changes in the situation and of its real or potential consequences outside the site, and proposes possible actions for protecting the population to the Prefect;

alerts and protects persons present inside his establishment and provides aid to victims;

implements the emergency actions, in particular alert actions, which he is responsible for as regards the neighbouring populations located outside his establishment, pursuant to 5° of Article 5 of the aforementioned Decree of 13 September 2005;

transmits the technical information necessary for managing the situation to the technical support appointed by the Nuclear Safety Authority;

- provides the Prefect and the Nuclear Safety Authority with the information required for protecting and informing the population;
- informs the Local Information Commission and the competent Occupational Committee for Health, Safety and Working Conditions as quickly as possible.

Art. 7.3. – I. – The operator implements a permanent organization in his installation comprising the assignment of staff who are capable of assessing the gravity of a situation and who have the power to trigger the internal emergency plan provided for under 4° of II of Article 20 of the aforementioned Decree of 2 November 2007, and to rapidly launch appropriate actions. A sufficient number of qualified and trained staff must be available at all times to

implement these actions.

II. – The operator has emergency situation management premises on-site or in the vicinity for managing the situation and for protecting staff involved in the emergency situation. These premises are separate from the general installation command centres and designed to be available and accessible at all times, including during emergency situations.

III. – The operator implements and makes the material resources required for managing emergency situations and for protecting staff permanently available. If these resources become unexpectedly unavailable, the operator takes all measures to re-establish a normal situation as quickly as possible and, pending this, implements adapted compensatory measures.

Art. 7.4. – I. – The internal emergency plan, provided for under 4° of II of Article 20 of the aforementioned Decree of 2 November 2007, is formalized in an operational document intended for managing emergency situations. Based on the conclusions of the sizing study of the internal emergency plan provided for under Article 10 of the aforementioned Decree, it specifies in particular the means and the procedures for implementing emergency

actions for which the operator is responsible, pursuant if applicable to Article 5 of the aforementioned Decree of 13 September 2005, and reiterates those for which external departments and bodies are responsible, as well as their coordination throughout all the phases of the situation. It defines the operator's responsibilities and decision-making powers.

II. – The internal emergency plan takes into consideration, if relevant, the organization defined within the framework of the plans provided for under Articles R. 1332-19, R. 1332-23 and R. 1332-32 of the Defence Code.

III. – The internal emergency plan may be accepted as an internal operation plan, pursuant to Article R. 512-29 of the Environmental Code, for a neighbouring installation under the responsibility of the same operator.

IV. – The operator is responsible for triggering and implementing the internal emergency plan. He decides when it should be lifted after having consulted the Nuclear Safety Authority.

Art. 7.5. – I. – The operator establishes agreements, with external departments and bodies for providing the resources required for managing crises, which permit coordination and, if relevant, make available or mutualize resources in the event of an emergency situation.

II. – The operator makes all provisions, for example through agreements, to be quickly informed, in so far as possible, of any event that could be considered as an external aggression and that is accounted for in the nuclear safety demonstration.

III. – The operator concludes an agreement with the operators of other installations of the site with whom resources are to be mutualized for emergency situations so that the obligations mentioned under Articles 7.2 and 7.3 may be implemented.

Art. 7.6. – I. – The internal emergency plan is tested during drills, where the number is proportional to the diversity of emergency situations identified in the plan and to the number of employees involved in managing these situations. In any event, at least one drill is carried out each year. Certain drills must include the external services that the operator uses so that the agreements mentioned under Article 7.5 may be specifically tested.

II. – The drills and the real emergency situations are systematically subject to, respectively, assessment or experience feedback. The internal emergency plan is updated and modified, if required, based on the knowledge gained.

III. – At appropriate intervals that must not exceed three (3) years, on the basis notably of the knowledge gained from the drills and from real situations, the operator checks that the provisions of his internal emergency plan are still relevant and, if necessary, updates them.

TITLE VIII

SPECIAL PROVISIONS

CHAPTER I

Nuclear power reactors

Art. 8.1.1. – The effectiveness of the nuclear power reactor containment system is in particular monitored:
prior to commissioning, through initial reception testing;
after commissioning and until final shutdown, through periodical testing scheduled so that results, which date from less than thirty (30) months, are presented in the reassessment report provided for under Article L. 593-19 of the Environmental Code;
following final shutdown, pursuant to the conditions established by the authorization Decree or by prescriptions decreed by the Nuclear Safety Authority for applying the Decree.

Art. 8.1.2. – For all basic nuclear installations comprising one or several nuclear power reactors, the probabilistic analyses mentioned under Article 3.3 include probabilistic safety studies related to the risk of nuclear fuel damage and to the risk of abnormal discharge of radioactive substances.

Art. 8.1.3. – Article 4.3.1 does not apply to the cooling towers of the cooling circuits of pressurized water reactors' secondary circuits for which the operator specifies provisions for preventing, monitoring and fighting risks of legionnaire's disease in the installation impact study.

CHAPTER II

Internal transportation operations of dangerous goods

Art. 8.2.1. – The internal transportation operations of dangerous goods are carried out, taking into account:
– constraints related to the co-activity induced by the circulation of vehicles;

– the characteristics of the traffic lanes used and their environment; – operational conditions for the transportation; – organizational and human factors.

Art. 8.2.2. – The internal transportation operations of dangerous goods must comply with the regulatory requirements applicable to the transportation of dangerous goods on public thoroughfares or with the requirements established in the General Operating Rules mentioned under 2° of II of Article 20 of the aforementioned Decree of 2 November 2007, in the General Surveillance and Maintenance Rules mentioned under 10° of II of Article 37 of the same Decree, or in the General Maintenance Rules mentioned under 10° of II of Article 43 of the same Decree.

CHAPTER III

Dismantling installations

Art. 8.3.1. – I. – The operator of an installation mentioned under one of the Articles L. 593-34, L. 593-35 or L. 593-36 of the Environmental Code, transmits a dismantling plan that complies with the definition under 10° of I of Article 8 of the aforementioned Decree of 2 November 2007 to the Nuclear Safety Authority, upon request, or in any case when a reassessment report provided for under Article L. 593-19 of the same Code is transmitted for the first time.

II. – The dismantling plan provided for under 10° of I of Article 8 of the aforementioned Decree of 2 November 2007, or under I of the Article hereof, is updated:

during installation commissioning;

upon modification of the authorization Decree;

if necessary, during the modifications provided for under Article 26 of the aforementioned Decree of 2 November 2007;

each time a reassessment report provided for under Article L. 593-19 of the Environmental Code is transmitted.

III. – The dismantling plan justifies the time-frame envisaged, as short as possible, between final installation operation shutdown and installation dismantling.

Art. 8.3.2. – The final state attained at the end of dismantling must be such that it prevents risks or inconveniences that the site may present for the interests mentioned under Article L. 593-1 of the Environmental Code, in particular given plans for reusing the site or the buildings and the best clean-up and dismantling techniques and methods available under economically acceptable conditions.

Art. 8.3.3. – The implementation of the clean-up and dismantling techniques and methods takes into account organizational and human factors to determine the conditions for activities to be carried out safely and effectively and to prevent risks of inappropriate actions.

Art. 8.3.4. – In order to prepare for dismantling, the operator maintains knowledge of the installation and technical and financial capacities so that dismantling operations may be carried out fully, whilst ensuring that the interests mentioned under Article L. 593-1 of the Environmental Code are protected.

CHAPTER IV

Warehousing radioactive substances

Art. 8.4.1. – The Chapter hereof applies to basic nuclear installations intended for warehousing radioactive substances, and for radioactive substance warehousing centres located within basic nuclear installations, regardless whether the substances stored come from the basic nuclear installation or not. It applies in particular to radioactive waste warehousing centres and to spent fuel warehousing centres.

Art. 8.4.2. – I. – The operator defines a substance warehousing duration that is specifically adapted to the type of substances and to the characteristics of the warehousing centre.

II. – The operator takes all steps required to know the location of the different substances warehoused as well as their characteristics, including information on their origin and their producers or owners.

III. – The operator defines the acceptance specifications for warehousing the radioactive substances. Prior to delivery of any substance to his installation, he ensures that these specifications are complied with.

IV. – The installation is designed and operated in such a way that an appropriate surveillance of the substances warehoused may be undertaken and that these substances may be recovered at any time.

Art. 8.4.3. – When the substances warehoused are waste or spent fuel:

if they have not been produced by the operator, their producer is clearly identified and the share of the obligations between the operator and the producer is clearly established and formalized;

the operator makes all provisions, for when a disposal pathway is available, to evacuate these substances by taking into account likely radiation protection and transportation constraints as well as technico-commercial conditions.

CHAPTER V

Storing radioactive waste

Art. 8.5.1. – In compliance with the objectives provided for under Article L. 542-1 of the Environmental Code, the choice of the geological environment and the design and construction of a radioactive waste storage centre, its operation and its switch-over to the surveillance phase are decreed in such a way that the protection of the interests mentioned under Article L. 593-1 of the Environmental Code is ensured passively with regards to the risks presented by the radioactive or toxic substances contained in the radioactive waste once the surveillance phase has been initiated. This protection should not require any intervention beyond the limited surveillance period, which is determined according to the radioactive waste stored and the type of storage. The operator proves that the design retained meets these objectives, and demonstrates its technical feasibility.

TITLE IX

MISCELLANEOUS, TRANSITIONAL AND FINAL PROVISIONS

Art. 9.1. – The documents mentioned under Articles 8, 29, 30, 37 and 43 of the aforementioned Decree of 2 November 2007, filed with the Ministry responsible for Nuclear Safety as a support for an application for authorization or for modification, are filed in one (1) original copy.

The operator then transmits additional original copies upon request from the review department or from the Prefect responsible for local consultations and public enquiries when so required, pursuant to procedures that he specifies. A Nuclear Safety Authority decision specifies the procedures for submitting the dossiers intended for it.

Art. 9.2. – The Nuclear Safety Authority can request that monitoring, sampling, analyses and expertise activities performed to check that the provisions of the present Ministerial Order or the absence of impact on the interests mentioned under Article L. 593-1 of the Environmental Code are complied with, are undertaken by a third party organization, selected by the operator among the organisations offering sufficient guarantees of quality and of independence. The Nuclear Safety Authority can establish the levels of quality and of independence required.

The organization selected is bound by professional confidentiality.

Expenses incurred by these monitoring or expertise operations are at the expense of the operator.

Art. 9.3. – For the basic nuclear installations that are judiciously authorized at the date of publication of the present Ministerial Order the dispensations, agreed under Articles 48 and 7 bis of the amended Ministerial Order of 31 December 1999 establishing the general technical regulations intended for preventing and limiting nuisances and external risks arising from basic nuclear installation operations, remain valid.

Art. 9.4. – Amended by the Order dated 26 June 2013 - art. 1

I. – The Ministerial Order hereof becomes effective on 1st July 2013, subject to the provisions under II to VII of the Article hereof.

II. – The provisions of Article 4.3.2 and of II of Article 4.4.3 become effective on 1st July 2012.

III. – For the basic nuclear installations that are judiciously authorized at the date of publication of the present Ministerial Order, the provisions under II of Article 2.6.5 only apply to reports transmitted after 1st July 2013.

IV. – For the basic nuclear installations that are judiciously authorized at the date of publication of the present Ministerial Order, the provisions under Article 2.2.3 only apply from 1st January 2014.

V. – For the basic nuclear installations that are judiciously authorized at the date of publication of the present Ministerial Order, the provisions under II of Article 2.1.1, of I of Article 2.1.2 and of II of Article 3.2 only apply from 1st July 2014.

VI. – For the basic nuclear installations that are judiciously authorized at the date of publication of the present Ministerial Order, the provisions under II and III of Article 2.5.1, of Articles 3.3, 3.7, 3.9 and of I of Article 4.3.1 only apply from the first due date subsequent to 1st July 2015 among the following: the transmission of the reassessment report provided for under Article L. 593-19 of the Environmental Code, the application for authorization pursuant to Articles 31 or 37 of the aforementioned Decree of 2 November 2007.

Notwithstanding, Article 4.3.1 is applicable from 1st July 2013 to the equipment and installations mentioned under the first paragraph of Article L. 593-3 of the Environmental Code that are within the scope of application of Article 47-2 of the amended Ministerial Order of 31 December 1999 that establishes the general technical regulations aimed at preventing and limiting nuisances and external risks resulting from basic nuclear installation operating.

VII. – Article 4.1.7 does not apply to basic nuclear installations, at the date of publication of the Ministerial Order hereof, which are regularly authorized to use open-loop cooling with fresh water.

VIII.- As regards basic nuclear facilities duly authorised at the date of publication of this order, the limits pertaining to

effluent discharge from the facility resulting from the application of Section II of Article 4.1.2 shall apply, if provisions drawn up prior to 1 July 2013 applicable to the facility and concerning the same parameters stipulate compliance with different limits, only as from the date of transmission by the French Nuclear Safety Authority to the minister in charge of nuclear safety, of the report mentioned in the second paragraph of Article L. 593-19 of the French Environment Code pertaining to the first safety review submitted after 1 July 2015, subject to the conditions specified in said Section II of said article.

IX.- The temperature limit for the effluent discharged by a basic nuclear facility resulting from the application of the provisions of Section II of Article 4.1.2 will come into force on 1 January 2016.

As regards basic nuclear facilities duly authorised at the date of publication of this order, this limit shall be applicable, if a provision drawn up prior to 1 July 2013 applicable to the facility stipulates compliance with a maximum temperature for the discharged effluents, or limit temperature values at the discharge point or downstream of said discharge point, or a maximum heating in the receiving water body caused by said discharge, only as from transmission by the French Nuclear Safety Authority to the minister in charge of nuclear safety of the report mentioned in the second paragraph of Article L. 593-19 of the French Environment Code pertaining to the first safety review submitted after 1 July 2015, subject to the conditions set out in said Section II of said article.

Art. 9.5. – In the event of any specific difficulties to implement the Ministerial Order hereof, the Nuclear Safety Authority may, by decision, grant a dispensation for the provisions concerned, following opinion from the Council mentioned under Article D. 510-1 of the Environmental Code and assent from the Ministry responsible for Nuclear Safety.

Art. 9.6. – As of 1st July 2013, the following are repealed: – the Ministerial Order of 10 August 1984 relating to the quality of the design, of construction and of the operation of basic nuclear installations;

the Ministerial Order of 26 November 1999 establishing the general technical requirements relevant to the restrictions, and the terms and conditions of intake and discharge subject to authorization, and executed by the basic nuclear installations;

the amended Ministerial Order of 31 December 1999 establishing the general technical regulations intended for preventing and limiting nuisances and external risks arising from basic nuclear installation operations.

Art. 9.7. – The Director-General of the Prevention of Risks is in charge of implementing the Ministerial Order hereof, which shall be published in the Journal Officiel de la République française (*Official Journal of the Republic of France*).

Drawn up on 7 February 2012.

*The Minister for Ecology,
Sustainable
Development, Transport
and Housing,*

NATHALIE KOSCIUSKO-MORIZET

The Minister for the Economy, Finance and Industry, FRANÇOIS BAROIN

*The Minister attached to
the Ministry for the
Economy, Finance and
Industry, responsible for
Industry, Energy and the
Digital Economy,*

ERIC BESSON

A P P E N D I C E S

A P P E N D I X I

The Ministerial Order of 23 January 1997 relating to the limits of noise emitted into the environment by installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof;

The Ministerial Order of 2 February 1998 relating to water intake and consumption and to emissions of any kind produced by installations classified for the protection of the environment and subject to authorization, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 10 May 2000 relating to the prevention of major accidents involving dangerous substances or preparations that are present in certain categories of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 20 June 2002 relating to boilers present in a new or modified installation, with power capacity exceeding 20 MWth, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 July 2003 relating to boilers present in existing combustion installations, with power capacity exceeding 20 MWth, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 13 December 2004 relating to cooling installations using water dispersion in an air flow subject to authorization pursuant to Section No. 2921, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 July 2010 relating to boilers present in combustion installations, with heat rating exceeding or equal to 20 MWth, that have been authorized or modified since 1st November 2010, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 26 April 2011 relating to implementing the best techniques available provided for under Article R. 512-8 of the Environmental Code, in its version in effect at the date of publication of the Ministerial Order hereof.

A P P E N D I X I I

The Ministerial Order of 13 July 1998 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1111 (highly toxic [storage or use of substances and preparations]), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 13 July 1998 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1131 (toxic [storage or use of substances and preparations]), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 20 February 1978 relating to the tanks used for storing liquefied ammonia that is pressurized at the most to four (4) bars, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 16 July 1997 relating to cooling installations using ammonia as a refrigerant, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 19 November 2009 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1136 (storage and use of ammonia), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 17 December 2008 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1138, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 October 2007 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1150 (storage or use of or use based on specific toxic substances), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 10 April 2000 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1156: nitrogen oxides other than nitrous oxide (their use and storage), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 29 October 2007 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1158 (storage or use of diphenylmethane-diisocyanate), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 December 1998 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1172: dangerous for the environment, A – highly toxic for aquatic organisms (storage and use of substances), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 December 1998 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1173: dangerous for the environment, B – toxic for aquatic organisms (storage and use of substances), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 2 April 2002 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1185, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 10 November 2008 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1212 (storage and use of organic peroxides), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 6 November 2007 relating to the prevention of risks presented by the warehouses and workshops using organic peroxides, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 10 March 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1220: use and storage of oxygen, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 August 2005 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1412 of the nomenclature of installations classified, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 12 February 1998 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1416: storage or use of hydrogen, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 10 March 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1418: storage or use of acetylene, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 22 June 1998 relating to buried tanks storing flammable liquid and their related equipment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 18 April 2008 relating to buried tanks storing flammable liquid and their related equipment subject to authorization or to declaration pursuant to Section No. 1432 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 22 December 2008 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1432 (storage of flammable liquids in manufactured tanks), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 3 October 2010 relating to the storage in above-ground manufactured tanks of flammable liquids used in a storage system subject to authorization pursuant to Section No. 1432 of the legislation of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 20 April 2005 relating to the general prescriptions applicable to installations classified

subject to declaration pursuant to Section No. 1433 (installations for mixing or for using flammable liquids), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 19 December 2008 establishing the general rules and technical prescriptions applicable to service stations subject to authorization pursuant to Section No. 1434 (flammable liquid filling or distribution installations), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 19 December 2008 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 1434 (flammable liquid filling or distribution installations), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 15 April 2010 establishing the general rules and technical prescriptions applicable to service stations subject to authorization pursuant to Section No. 1435 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 15 April 2010 relating to the general prescriptions applicable to service stations falling under the registration system pursuant to Section No. 1435 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 15 April 2010 relating to the general prescriptions applicable to service stations subject to declaration pursuant to Section No. 1435 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 5 August 2002 relating to the prevention of losses in covered warehouses subject to authorization pursuant to Section No. 1510, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 15 April 2010 relating to the general prescriptions applicable to covered warehouses falling under the registration system pursuant to Section No. 1510 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 December 2008 relating to the general prescriptions applicable to covered warehouses falling under the declaration system pursuant to Section No. 1510 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 September 2008 relating to the general prescriptions applicable to paper and cardboard warehouses falling under the declaration system pursuant to Section No. 1530 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 6 September 2000 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1611, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 26 July 2001 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 1630, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 14 January 2011 relating to the general prescriptions applicable to installations falling under the registration system pursuant to Section No. 2340 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 14 January 2011 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 2340, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 June 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2515: grinding, crushing, screening, bagging, spraying, cleaning, sifting, mixing stones, pebbles, minerals and other natural or artificial mineral products, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 June 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2516: transit station for non-bagged powdery mineral products such as cement, plaster, lime, filled sand, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 June 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2560: metals and alloys (mechanical work), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 21 June 2004 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 2564 relating to surface cleaning, degreasing and stripping (metals, plastic materials, etc.) using processes that use organohalogen liquids or organic solvents, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 June 2006 relating to surface treatment installations subject to authorization pursuant to Section No. 2565 of the nomenclature for installations classified, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 June 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2565: metals and plastic materials (treatment) for degreasing, stripping, converting, polishing, metalizing, etc., using electrolytics, chemicals or halogen liquids, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 June 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2575: abrasives (use of materials) such as sand, corundum, metallic shot, etc., on any material for engraving, etching, stripping and graining, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 14 January 2000 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2661 (transformation of polymers [plastic materials, rubber, elastomers, resins and synthetic adhesives]), in its version in effect at the date of publication of the Ministerial Order hereof

The Ministerial Order of 14 January 2000 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2662 (storage of polymers [plastic materials, rubber, elastomers, resins and synthetic adhesives]), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 15 April 2010 relating to the general prescriptions applicable to storage of polymers (plastic materials, rubber, elastomers, resins and synthetic adhesives) falling under the registration system pursuant to Section No. 2662 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 15 April 2010 relating to the general prescriptions applicable to storage of storage of tyres and products where at least 50% of the total unit mass comprises polymers (plastic materials, rubber, elastomers, resins and synthetic adhesives) falling under the registration system pursuant to Section No. 2663 of the nomenclature of installations classified for the protection of the environment, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 14 January 2000 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2663 (storage of tyres and products where at least 50% of the total unit mass comprises polymers [plastic materials, rubber, elastomers, resins and synthetic adhesives]), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 July 2010 relating to boilers present in combustion installations, with heat rating exceeding or equal to 20 MWth, that have been authorized or modified since 1st November 2010, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 30 July 2003 relating to boilers present in existing combustion installations, with power capacity exceeding 20 MWth, in its version in effect at the date of publication of the Ministerial Order hereof. The Ministerial Order of 20 June 2002 relating to boilers present in a new or modified installation, with power capacity exceeding 20 MWth, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 25 July 1997 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2910: combustion, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 13 December 2004 relating to cooling installations using water dispersion in an air flow subject to authorization pursuant to Section No. 2921, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 13 December 2004 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2921 (cooling installations using water dispersion in an air flow), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 29 May 2000 relating to the general prescriptions applicable to installations classified for the protection of the environment subject to declaration pursuant to Section No. 2925: accumulators (charging workshops), in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 2 May 2002 relating to the general prescriptions applicable to installations classified subject to declaration pursuant to Section No. 2940, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 11 September 2003 regulating Decree No. 96-102 of 2 February 1996 and establishing the general prescriptions applicable to probing, drilling, the creation of shafts or underground structures subject to declaration pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Section 1.1.1.0 of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 11 September 2003 regulating Decree No. 96-102 of 2 February 1996 and establishing the general prescriptions applicable to intake subject to declaration pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Sections 1.1.2.0, 1.2.1.0, 1.2.2.0 or 1.3.1.0 of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 11 September 2003 regulating Decree No. 96-102 of 2 February 1996 and establishing the general prescriptions applicable to intake subject to authorization pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Sections 1.1.2.0, 1.2.1.0, 1.2.2.0 or 1.3.1.0 of the nomenclature

appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 28 November 2007 establishing the general prescriptions applicable to installations, structures, work or activities subject to declaration pursuant to Articles L. 214-1 to L. 214-6 of the Environmental Code and falling under Section 3.1.2.0 (2°) of the nomenclature appended to the table under Article R. 214-1 of the Environmental Code, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 13 February 2002 establishing the general prescriptions applicable to installations, structures, work or activities subject to declaration pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Section 3.1.3.0 (2°) of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 13 February 2002 establishing the general prescriptions applicable to consolidation, treatment or protection of banks subject to declaration pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Section 3.1.4.0 (2°) of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof. The Ministerial Order of 30 May 2008 establishing the general prescriptions applicable to watercourse or canal maintenance operations subject to authorization or to declaration pursuant to Articles L. 214-1 to L. 214-6 of the Environmental Code and falling under Section 3.2.1.0 of the nomenclature appended to the table under Article R. 214-1 of the Environmental Code, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 13 February 2002 establishing the general prescriptions applicable to installations, structures or backfills subject to declaration pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Section 3.2.2.0 (2°) of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 27 August 1999 regulating Decree No. 96-102 of 2 February 1996 and establishing the general prescriptions applicable to operations for creating ponds or water bodies subject to declaration pursuant to Article 10 of Act No. 92-3 of 3 January 1992 relating to water and falling under Sections 2.7.0 (1°, *b*) and 2.7.0 (2°, *b*) of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 29 August 1999 regulating Decree No. 96-102 of 2 February 1996 and establishing the general prescriptions applicable to water body draining operations subject to declaration pursuant to Articles L. 214-1 and L. 214-3 of the Environmental Code and falling under Section 3.2.4.0 (2°) of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 29 February 2008 establishing the prescriptions relating to the security and safety of hydraulic structures, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 February 2001 establishing the general prescriptions applicable to port development and other structures erected in contact with the aquatic environment subject to declaration pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Section 4.1.2.0 (2°) of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.

The Ministerial Order of 23 February 2001 establishing the general prescriptions applicable to dredging work and related dumping subject to declaration pursuant to Articles L. 214-1 to L. 214-3 of the Environmental Code and falling under Section 4.1.3.0 (2°, *a*, II), 2°, *b*, II and 3°, *b*) of the nomenclature appended to amended Decree No. 93-743 of 29 March 1993, in its version in effect at the date of publication of the Ministerial Order hereof.