

ASN Resolution 2017-DC-0587 of 23rd March 2017 concerning the conditioning of radioactive waste and the conditions for acceptance of radioactive waste packages in disposal BNIs

The French nuclear safety authority (ASN)

Having regard to Council directive 2011/70/Euratom of 19th July 2011 establishing a community framework for the responsible and safe management of spent fuel and radioactive waste;

Having regard to the Environment Code, particularly chapter II of title IV of book V and its articles L.592-20 and L.593-4;

Having regard to the Public Health Code, particularly its articles L. 1333-1 and R. 1333-4;

Having regard to Programme Act 2006-739 of 28th June 2006 concerning the sustainable management of radioactive materials and waste, particularly its articles 3 and 4;

Having regard to the decree of 12th May 1981, as amended, authorising the Compagnie générale des matières nucléaires to create reprocessing plants in its La Hague establishment, for spent fuels from light water nuclear reactors. PLANT CALLED "UP 3-A";

Having regard to the decree of 12th May 1981, as amended, authorising the Compagnie générale des matières nucléaires to create reprocessing plants in its La Hague establishment, for spent fuels from light water nuclear reactors. PLANT CALLED "UP 2-800";

Having regard to the decree of 12th May 1981, as amended, authorising the Compagnie générale des matières nucléaires to create a reprocessing unit in its La Hague establishment, for liquid effluents and solid waste, called "STE3";

Having regard to decree 2007-1557 of 2nd November 2007 concerning basic nuclear installations and to the regulation of the transport of radioactive substances, in terms of nuclear safety;

Having regard to the order of 7th February 2012, as amended, setting out the general rules applicable to basic nuclear installations, particularly chapter V of title II and its articles 6.7 and 6.8;

Having regard to ASN resolution 2015-DC-0508 of 21st April 2015 concerning the study of waste management and the inventory of waste produced in BNIs;

Having regard to basic safety rule I.2 of 19th June 1984 (revision 1) concerning the safety objectives and design bases for surface facilities intended for long-term disposal of solid radioactive waste with short or intermediate half-life and low or intermediate specific activity;

Having regard to basic safety rule III.2.e of 29th May 1995 (revision 1) concerning the preconditions for approval of solid radioactive waste packages intended for surface disposal;

Having regard to the ASN safety guide of 12th February 2008 on the ultimate disposal of radioactive waste in deep geological formations;

Having regard to the IAEA's general safety requirements reference GSR Part 5 – predisposal management of radioactive waste;

Having regard to the 22nd April 2014 report from the WENRA association "waste and spent fuel storage safety reference levels";

Having regard to the 22nd December 2014 report from the WENRA association "radioactive waste disposal facilities safety reference levels";

Having regard to the results of the public consultation held from 17th August 2015 to 18th October 2015;

Having regard to the comments from the licensees of BNIs on the above-mentioned consultation;

Whereas article L.542-1-2 of the Environment Code states that a reduction in the quantity and harmfulness of radioactive waste must be sought, in particular by processing and packaging of these waste;

Whereas all producers of radioactive waste are liable for these substances, without prejudice to the liability of their holders, owing to their responsibility for nuclear activities;

Whereas the above-mentioned directive of 19th July 2011 states that the inter-dependence between the various steps in the production and management of radioactive waste must be taken into consideration; conditioning is one of these steps; it is therefore necessary to ensure the compatibility of the radioactive waste packages produced with the intended subsequent management conditions (any additional conditioning, transport, handling, storage and disposal operations in particular);

Whereas, in the waste management study mentioned in article 20 of the above-mentioned decree of 2nd November 2007, any producer of radioactive waste must identify the management solution it has adopted for each type of radioactive waste, taking account of the guidelines of the National radioactive materials and waste management plan and the decree setting out the requirements arising from this plan; prior to each step in this solution, it must check its compatibility with the subsequent steps; the nuclear licensee responsible for a step in this solution must also carry out this check; the obligations of each party must be specified;

Whereas the conditioning of radioactive waste may involve a succession of steps; these may be performed by different nuclear licensees; their performance shall be regulated to ensure that each of them is safe, on the one hand and to ensure overall optimisation in terms of nuclear safety and radiation protection, on the other, in the light of the prevailing technical and economic conditions;

Whereas the characteristics and the quality of the production of a radioactive waste package at an intermediate conditioning stage, for which no recovery of the content is planned, may have an

impact on the characteristics of the final radioactive waste package to be disposed of; in this respect, this resolution shall take account of such radioactive waste packages;

Whereas, for intermediate radioactive waste packages, the subsequent conditioning steps shall be envisaged as soon as possible, with a view to the production of final radioactive waste packages;

Whereas, in the case of successive conditioning operations and when the waste characteristics so warrant, confinement as close as possible to the waste must be sought as of the first conditioning steps;

Whereas the above-mentioned basic safety rules and the guide require that radioactive waste packages shall take part in the safety of the disposal facilities; radioactive waste packages shall be identified by the licensee of the disposal facility for which they are intended as elements important for protection as defined in the above-mentioned order of 7th February 2012; the persons in charge of the corresponding conditioning operations are outside contractors of this licensee as defined by the same order; the activities carried out by the licensee of this disposal facility concerning the approval, acceptance and monitoring of the conditioning activities shall be considered to be important for protection as defined by the same order; any person carrying out conditioning operations for waste intended for disposal shall thus enable the licensee of this disposal facility to carry out any monitoring actions it deems necessary;

Whereas the radioactive waste intended for a disposal BNI and covered by acceptance criteria shall only be conditioned in the form of final waste after approval by the licensee of said disposal facility; conditioning may nonetheless be carried out before this approval is obtained if justified by the advantages in terms of the protection of the interests mentioned in article L. 593-1 of the Environment Code; article 6.8 of the above-mentioned order of 7th February 2012 specifies the conditions for any possible modification of this conditioning which could subsequently prove necessary;

Whereas the design of a disposal BNI shall aim to allow the acceptance of waste already conditioned; pending the radioactive waste package acceptance criteria for this facility, the radioactive waste packages produced should have no characteristics ruling out their disposal and shall be compatible with the known and envisaged requirements for the disposal facility as at the date they are produced;

Whereas the licensee of a planned disposal BNI shall, as of the first design steps, notify ASN of the requirements it envisages for the acceptance of radioactive waste in its facility, as well as the waste producers and licensees of the conditioning BNIs concerned;

Whereas, pursuant to 4° of article L. 542-12 of the Environment Code, the National Radioactive Waste Management Agency (Andra) provides the competent administrative authorities with its opinion on the radioactive waste conditioning specifications,

Hereby issues the following resolution:

Article 1

For application of the above-mentioned decree of 2nd November 2007 and the order of 7th February 2012, the appendix to this resolution sets out requirements concerning the conditioning of radioactive waste and the conditions for acceptance of these waste. They apply to the basic nuclear installations in which the radioactive waste is conditioned in the form of intermediate or final radioactive waste packages, either stored or disposed of.

Article 2

The conditioning approval resolutions issued by ASN pursuant to the above-mentioned decrees of 12th May 1981 and the above-mentioned order of 7th February 2012 constitute approval for conditioning in accordance with the provisions of section 1 of chapter 4.1 of the appendix to this resolution.

Article 3

This resolution shall take effect on 1st July 2018 after its approval by order of the Minister responsible for nuclear safety and its publication in the Official Journal of the French Republic.

Article 4

The ASN director general is tasked with implementation of this resolution which, once approved, will be published in the ASN Official Bulletin.

Done in Montrouge, 23rd May 2017.

The ASN Commission*

Signed by

Pierre-Franck CHEVET

Sylvie CADET-MERCIER Philippe CHAUMET-RIFFAUD Margot TIRMARCHE

^{*}Commissioners present at the sitting

Appendix to ASN Resolution 2017-DC-0587 of 23rd March 2017, concerning the conditioning of radioactive waste and the conditions of acceptance of the radioactive waste packages in disposal BNIs

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TITRE 1 DEFINITIONS AND STRUCTURE OF THIS RESOLUTION

Article 1.1. The following definitions are used in the application of this resolution:

- Acceptance: document in which the licensee of a disposal BNI confirms its consent for disposal in its facility of a given package of radioactive waste;
- *Conditioning approval:* approval given by ASN pursuant to the third paragraph of article 6 of the above-mentioned order of 7th February 2012;
- Approval: document wherein the licensee of a disposal BNI with acceptance criteria for radioactive waste packages, gives generic consent to the provisions regarding the conditioning of radioactive waste in the form of a final radioactive waste package according to a given procedure;
- Radioactive waste package: this expression refers to both the package and the radioactive waste it contains;
- Final radioactive waste package: package of radioactive waste for which no subsequent conditioning operation is planned or envisaged prior to disposal in accordance with the chosen management solution. A final radioactive waste package may also be placed in an overpack in a disposal BNI;
- Intermediate radioactive waste package: radioactive waste package which, along with the waste it contains, is liable to form part of a final package;
- Conditioning of radioactive waste: the series of operations carried out to produce a package of radioactive waste, whether intermediate or final. These operations may in particular consist in placing in a container, immobilisation, physico-chemical processing or encapsulation of radioactive waste:
- *Licensee of a planned disposal BNI*: person tasked by law or by the plan mentioned in article L. 542-1-2 of the Environment Code with carrying out research and studies on this planned disposal BNI. This person may not yet be a BNI licensee as defined by article L. 593-6 of the Environment Code;
- Conditioning BNI: BNI, or part thereof, authorised to condition radioactive waste;
- *Disposal BNI:* BNI, or part thereof, authorised to dispose of radioactive waste as defined in article L. 542-1-1 of the Environment Code;
- *Planned disposal BNI:* disposal facility which is or has been the subject of research and studies pursuant to article L. 542-1-1-1 of the Environment Code, which is or will be subject to the BNI system and which has not yet received ASN approval regarding the radioactive waste package acceptance criteria;
- Radioactive waste package acceptance criteria: specifications stipulated in 4° of article L. 542-12 of the Environment Code established by the licensee of a disposal BNI;
- Overpack: container in which one or more final radioactive waste packages are placed by the licensee of a disposal BNI.

Article 1.2. The structure of this resolution is as follows:

- Title II presents the general requirements concerning radioactive waste packages and the conditioning and disposal activities for these packages;
- Title III concerns the requirements which apply after ASN approval of the radioactive waste package acceptance criteria defined by the licensee of the disposal BNI;
- Title IV concerns the requirements which apply before ASN approval of the radioactive waste package acceptance criteria defined by the licensee of the disposal BNI;
- Title V presents the requirements which apply after ASN approval of the radioactive waste package acceptance criteria defined by the licensee of the disposal BNI, to allow transition between titles III and IV of this resolution.

TITRE 2 GENERAL REQUIREMENTS

- **Article 2.1.** I. The licensee of a BNI which conditions radioactive waste conserves a trace of the identity of the producer of this waste.
- II. An agreement between the producer of this waste and the licensee of the conditioning BNI specifies their respective obligations in compliance with the applicable legislative and regulatory requirements.
- **Article 2.2.** The characteristics and physical, chemical, mechanical and radiological properties of a radioactive waste package:
 - allow its management in the BNI in which it is produced in compliance with the requirements for the protection of the interests mentioned in article L. 593-1 of the Environment Code,
 - are compatible with the conditions set out for its subsequent management, in particular its handling, transport, storage and disposal.
- Article 2.3. The radioactive waste conditioning operations allow the production of packages of final radioactive waste with appropriate physico-chemical stability and ensure the confinement of the hazardous radioactive substances they contain. These operations are appropriate to the nature and characteristics of the radioactive waste and the disposal facility for which they are intended and must in particular take account of the risks linked to the action of chemical and biological agents, to the heterogeneity of the waste distribution and to the production of heat in this package.
- **Article 2.4.** The radioactive waste is conditioned in the form of final radioactive waste packages as soon as possible after production, taking account of the technical and economic conditions.
- **Article 2.5.** The radioactive waste conditioning activities are activities important for protection as defined in the order of 7th February 2012 for the licensee of a conditioning BNI.
- **Article 2.6.** Monitoring of the radioactive waste conditioning activities is an activity important for protection as defined in the order of 7th February 2012 for the licensee of a conditioning BNI.

TITRE 3 REQUIREMENTS CONCERNING THE CONDITIONING OF RADIOACTIVE WASTE AFTER ASN APPROVAL OF THE RADIOACTIVE WASTE PACKAGE ACCEPTANCE CRITERIA

Chapitre 3.1 Radioactive waste package disposal acceptance criteria:

Section 1 General

Article 3.1.1 The radioactive waste package acceptance criteria define the criteria to be met by a final radioactive waste package if it is to be accepted in the facility for disposal; these criteria more particularly concern the radiological, physical, mechanical and chemical characteristics and properties of the package. These specifications are compatible with the demonstration mentioned in article L. 593-7 of the Environment Code for the disposal BNI during its operation and after its closure, taking account of:

- normal or degraded operating situations, as well as the incidents or accidents included in the nuclear safety case,
- the operating life of the disposal BNI, the duration of its surveillance and monitoring phase and, as applicable, its reversibility,
- the possible interactions between the waste package and the engineered components of the disposal facility.

These specifications are included in the facility's general operating rules (RGE).

Article 3.1.2 The licensee of a disposal BNI may exceptionally accept non-compliance with the acceptance criteria once it has ascertained that the characteristics and properties of the radioactive waste packages guarantee compliance with the safety case mentioned in article L. 593-7 of the Environment Code for this BNI. The procedures for issuing these waivers are specified in the RGE.

Section 2 Provisions concerning changes to the waste package acceptance criteria

Article 3.1.3 Without prejudice to application of the provisions of articles L. 593-14 and L. 593-15 of the Environment Code, when the licensee of a disposal BNI modifies the radioactive waste acceptance criteria for its facility, it notifies the licensees producing the final waste packages intended for it as rapidly as possible. It also defines a time for application of this modification which, as necessary, allows adaptation of the radioactive waste conditioning baseline requirements mentioned in chapter 3.2 of this appendix.

The licensee of a conditioning BNI assesses the impact of this modification on the demonstration mentioned in 3° of article 3.2.2, communicates the conclusions of this analysis to the disposal BNI licensee and, as necessary, submits a new approval application.

Chapitre 3.2 Radioactive waste conditioning baseline requirements

Section 1 General

Article 3.2.1 Prior to any radioactive waste conditioning operation, the licensee of a conditioning BNI producing intermediate or final radioactive waste packages draws up a conditioning baseline requirements.

These baseline requirements contain:

- the specifications for the conditioning of radioactive waste, taking account of:
 - the acceptance criteria for the conditioning process, which describe the physical, mechanical, chemical and radiological properties that must as applicable be met by

- the radioactive waste or the packages of radioactive waste accepted in the conditioning BNI, in order to guarantee the quality of the package produced, without prejudice to other criteria concerning the safety of the process which could be determined elsewhere,
- the radioactive waste packages manufacturing methods and in particular the important operations and parameters of the process guaranteeing the quality of this manufacturing,
- the characteristics of the radioactive waste packages produced, more particularly the aspects regarding their physico-chemical stability,
- a package qualification programme,
- the methods for characterisation, monitoring, inspection and testing, to verify compliance with the acceptance criteria of the conditioning process,
- a processes and waste packages inspection plan to demonstrate the conformity of each manufactured package with the applicable conditioning baseline requirements.

Article 3.2.2 The conditioning baseline requirements also contains the following information:

- 1° For the packages produced and which are to be stored as-is, demonstration of the conformity of the required characteristics of these waste packages with the acceptance criteria mentioned in article 8.4.2 of the above-mentioned order of 7th February for the storage for which they are intended;
- 2° For the produced packages to be transported, demonstration of the compatibility of the required characteristics of these waste packages with the envisaged modes of transport;
- 3° For final radioactive waste packages, demonstration that these packages meet the acceptance criteria of the disposal facility for which they are intended or are compliant with the exemption conditions mentioned in article 3.1.2;
- 4° For intermediate radioactive waste packages, demonstration that the conditioning operations performed do not prejudice any subsequent conditioning operations in order to produce final radioactive waste packages. When these subsequent operations are known and implemented in an existing conditioning BNI, this demonstration is provided by proving the compatibility of the packages produced with the specifications for the conditioning of this waste in this BNI, mentioned in article 3.2.1.

Article 3.2.3 The main points of the conditioning baseline requirements are included in the general operating rules of the conditioning BNI.

The conditioning baseline requirements are incorporated into the documentation of the integrated management system mentioned in article L. 593-6 of the Environment Code.

Section 2 Provisions concerning changes to the conditioning baseline requirements

Article 3.2.4 Without prejudice to application of the provisions of articles L. 593-14 and L. 593-15 of the Environment Code, when the licensee of a conditioning BNI producing final radioactive waste packages wishes to modify its conditioning baseline requirements, it first of all assesses the impact of this change on compliance with the approval conditions issued by the licensee of the disposal BNI for which these packages are intended. It communicates its conclusions to the licensee of the disposal BNI and, as necessary, submits a new approval application.

Chapitre 3.3 Approval of final radioactive waste packages by the licensee of a disposal BNI

Section 1 Procedure for approval by the licensee of the disposal BNI of the conditioning arrangements for the waste intended for it

Article 3.3.1 I. – The licensee of a disposal BNI defines and takes steps to approve the final radioactive waste packages intended for disposal in its facility.

II. – These steps more specifically concern:

- the content of the approval application file which contains at least the elements mentioned in articles 3.2.1 and 3.2.2 of this appendix,
- the procedures for managing deviations from the approval conditions,
- deviations from the approval conditions which may lead to suspension of this approval and the conditions of this suspension, notably how it can be lifted,
- monitoring actions to ensure compliance with the conditions of the approvals issued.
- III. These provisions are defined in the documentation of the integrated management system mentioned in article L. 593-6 of the Environment Code. The main provisions are contained in the general operating rules of the disposal BNI.
- Article 3.3.2 The monitoring actions mentioned in II of article 3.3.1 may include audits, a review of the conditioning BNI licensee internal documents, checks on the waste packages and, as applicable, sampling of or measurements on the waste prior to conditioning. These actions are proportionate to the scale of the risks presented by these waste packages for protection of the interests mentioned in article L. 593-1 of the Environment Code and justified as defined in article L. 1333-1 of the Public Health Code.
- **Article 3.3.3** The licensee of a disposal BNI issues an opinion on the acceptability of an approval application file no later than 3 months after the date on which it is received.
- **Article 3.3.4** The maximum time for processing a radioactive waste package approval application is set at 6 months following the date on which the acceptable file was received.

At the end of this period, the licensee of the disposal BNI must explain any failure to issue an opinion on this application. However, this time does not take account of periods spent waiting for any additional information requested.

Article 3.3.5 The licensee of a disposal BNI notifies ASN, within one month, of any suspension of approval and shall specify the reasons.

Section 2 Obligations of the licensee of a conditioning BNI which has obtained an approval

- **Article 3.3.6** The approval application implies acceptance of the monitoring actions carried out by the licensee of the disposal BNI on:
 - the licensees of the facilities participating in the conditioning operations contributing to the production of the radioactive waste packages covered by this approval,
 - the licensees of storage facilities in which the intermediate or final radioactive waste packages are stored.

Article 3.3.7 The licensee of a conditioning BNI producing final radioactive waste packages communicates the requirements allowing compliance with the conditions of the approval it has received to the licensees of the facilities carrying out preliminary conditioning steps, as well as to

the producers of the radioactive waste. It shall verify that they are correctly taken into consideration.

Article 3.3.8 When the licensee of a conditioning BNI finds that the radioactive waste packages it produces are not compliant with the approval it received or with the requirements of a conditioning BNI for which these packages are intended, it takes the necessary steps to ensure the compliance of the identified packages. If this is impossible and without prejudice to any notifications or authorisation applications that may prove necessary, it shall - jointly with the producers of the radioactive waste and, applicable, any other stakeholders involved in the management route - define alternative management methods or exemptions. The non-conforming packages are identified as such explicitly in the radioactive waste management report mentioned in article 6.6 of the above-mentioned order of 7th February 2012.

Section 3 Annual operating report for a disposal BNI

Article 3.3.9 In addition to the radioactive waste management report mentioned in article 6.6 of the above-mentioned order of 7th February 2012, the licensee of a disposal BNI draws up a report covering the previous calendar year period and shall send it to ASN before 30th June of each year. This report shall comprise:

- the list of approvals issued and in force,
- the list of approval applications currently being processed,
- the list of approvals suspended or which had been suspended during the previous year and the reasons for the suspensions,
- the list of exemptions to the acceptance criteria granted pursuant to article 3.1.2 and the justification of compliance with the demonstration mentioned in article L. 593-7 of the Environment Code,
- the report on the monitoring operations mentioned in article 3.3.2.

Chapitre 3.4 Acceptance of final waste packages by the licensee of a disposal BNI

Article 3.4.1 The licensee of a disposal BNI defines and implements the acceptance provisions for the waste packages intended for disposal in its facility.

Article 3.4.2 The waste package acceptance provisions include the procedures for inspection and management of the waste packages received in the disposal facility. They more particularly specify the conditions for the management of packages that would be non-compliant with the acceptance criteria.

TITRE 4 REQUIREMENTS CONCERNING THE CONDITIONING OF RADIOACTIVE WASTE BEFORE ASN APPROVAL OF THE RADIOACTIVE WASTE PACKAGE ACCEPTANCE CRITERIA

Chapitre 4.1 Provisions prior to the production of radioactive waste packages

Section 1 Conditioning baseline requirements - general

Article 4.1.1 I. – The provisions of articles 3.2.1 and 3.2.3 above apply to conditioning BNIs producing intermediate or final radioactive waste packages intended for disposal in a planned disposal BNI.

II. - The conditioning baseline requirements stipulated in article 3.2.1 also contain the following information:

- For final radioactive waste packages, demonstration of their compliance with the requirements defined by ASN and, as applicable, with the content of the documents produced by the licensee of the planned disposal BNI, pursuant to articles 4.2.1 or 4.2.2. This demonstration takes account of the behaviour of the packages produced during the storage phase prior to their disposal;
- For intermediate radioactive waste packages, the demonstration that the conditioning operations performed do not prejudice the possibility of carrying out the subsequent conditioning operations in order to produce final radioactive waste packages.

Section 2 Conditioning approval

Article 4.1.2 Pursuant to the third paragraph of article 6.7 of the order of 7th February 2012, conditioning approval must be issued by ASN to the licensee of a conditioning BNI before any production of intermediate or final radioactive waste packages. This approval does not relieve the licensee of the need to obtain subsequent authorisation in accordance with the provisions of chapter 3.3 of title 3 above.

Article 4.1.3 In order to obtain conditioning approval, the licensee of the conditioning BNI submits an application file to ASN, comprising the following in particular:

- the conditioning baseline requirements defined in article 4.1.1 above,
- acceptance of monitoring, by the licensee of the planned BNI, of the conditioning activities carried out by the BNI licensee applying for conditioning approval and, as necessary, the licensees taking part in the performance of operations contributing to the production of these radioactive waste packages, or storing them.

It transmits a copy of its application to Andra and to the licensee of the planned disposal BNI for which the packages are intended. They have a period of six months in which to notify ASN of their opinions.

In the form of a separate report, this application presents information which, if divulged, the licensee feels would compromise one of the interests mentioned in article L. 124-4 of the Environment Code.

Section 3 Radioactive waste packages production report

Article 4.1.4 On the occasion of the periodic safety reviews mentioned in article L. 593-18 of the Environment Code, the licensee of a conditioning BNI producing intermediate or final radioactive waste packages intended for disposal in a planned disposal BNI sends ASN a report on the production of radioactive waste packages and the management of any deviations detected.

It sends a copy of this report to the licensee of the planned disposal BNI for which the radioactive waste packages are intended and to Andra, which then have a period of six months in which to notify ASN of their opinions.

Article 4.1.5 The report mentioned in 4.1.4 is updated and transmitted in the same conditions no later than two years after transmission of the preliminary acceptance criteria by the licensee of the planned disposal BNI.

Section 4 Changes to the conditioning baseline requirements

Article 4.1.6 When the licensee of a conditioning BNI producing intermediate or final radioactive waste packages intended for disposal in a planned disposal BNI wishes to change its conditioning baseline requirements, it shall demonstrate that this does not compromise the conditioning approval issued by ASN.

If it is unable to do so, it must apply for a new conditioning approval.

It transmits the content of its demonstration to ASN, Andra and the licensee of the planned disposal BNI for which the radioactive waste packages are intended.

Section 5 Conditioning options for a new type of package

Article 4.1.7 When it envisages producing a new type of radioactive waste package intended for a planned disposal BNI, a conditioning BNI licensee may, prior to the conditioning approval application, ask ASN for its opinion on the options being envisaged for its project, by sending it a file, more specifically containing:

- the principles adopted for the design of the package,
- the main characteristics of the package,
- a demonstration of the suitability of these principles and characteristics for the type of waste, in particular with regard to the physico-chemical stability and the envisaged management solution (disposal facility and, as applicable, subsequent conditioning operations),
- an assessment of the impact of the production of this type of package on the interests mentioned in article L. 593-1 of the Environment Code.

Article 4.1.8 The conditioning approval application for the new types of packages subject to the opinion mentioned in article 4.1.7, specifies the additional studies performed and the demonstrations provided as well as any modifications made to the project, as applicable.

Chapitre 4.2 Requirements and preliminary acceptance criteria for final radioactive waste package

Article 4.2.1 At each important step in the performance of the design studies for its facility, the licensee of a planned disposal BNI draws up documents presenting the envisaged characteristics of its facility and the foreseeable package acceptance requirements. It sends them to ASN, to the waste producers and to the conditioning BNI licensees concerned.

The conditioning BNI licensees analyse the impact of these characteristics and requirements on their conditioning baseline requirements and approvals. If this analysis leads to them being called into question, they submit their conclusions to ASN, which consults Andra. ASN may notably decide to suspend all radioactive waste package production operations until a new conditioning approval is obtained.

Article 4.2.2 As soon as possible and no later than the submission of the creation authorisation application for its facility, the licensee of a planned disposal BNI shall draw up a preliminary version of the radioactive waste package acceptance criteria mentioned in article 3.1.1, referred to as the radioactive waste package preliminary acceptance criteria. It sends them to ASN, to the waste producers and to the conditioning BNI licensees concerned.

Article 4.2.3 The licensee of a planned disposal BNI carries out the monitoring measures mentioned in article 4.1.3 with regard to the production and storage of all radioactive packages intended for its disposal facility.

No later than 30th June of each year, it sends ASN a monitoring report covering the previous calendar year. This report more particularly presents any identified deviations from the conditions of the conditioning approvals.

TITRE 5 INTERIM PROVISIONS APPLICABLE AFTER ASN APPROVAL OF THE RADIOACTIVE WASTE PACKAGE ACCEPTANCE CRITERIA

- **Article 5.1.** After approval by ASN, the preliminary acceptance criteria for radioactive waste packages, possibly with modifications, constitute the acceptance criteria mentioned in article 3.1.1. This approval may only be given after the disposal facility creation authorisation.
- **Article 5.2.** When ASN approves the radioactive waste package acceptance criteria for a planned disposal BNI, it sets the expiry deadlines for the conditioning approvals mentioned in article 4.1.2 for radioactive waste packages intended for this facility. After these deadlines, the production of final waste packages intended for this facility is subject to the provisions of chapter 3.3 of title 3 above.
- **Article 5.3.** A conditioning BNI licensee submits an approval application as specified in chapter 3.3 of title 3, for the following packages:
 - for final radioactive waste packages which it wishes to continue to produce, within a maximum of two years after the approval mentioned in article 5.1,
 - for final radioactive waste packages which it no longer produces, within a maximum of ten years after the approval mentioned in article 5.1,

This approval application more particularly comprises a presentation of the storage conditions and the provisions for monitoring these radioactive waste packages, from production up to disposal.

Article 5.4. The licensee of a disposal BNI gives priority to examining the approval applications for the radioactive waste packages being produced, in particular those which are scheduled for shipment to the disposal BNI in the near future.