DIRECTIVE 2003/105/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
of 16 December 2003  

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the European Economic and Social Committee (2),

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty in the light of the joint text approved by the Conciliation Committee on 22 October 2003 (3),

Whereas:

(1) Directive 96/82/EC (4) aims at the prevention of major accidents which involve dangerous substances and the limitation of their consequences for man and the environment, with a view to ensuring high levels of protection throughout the Community in a consistent and effective manner.

(2) In the light of recent industrial accidents and studies on carcinogens and substances dangerous for the environment, with a view to ensuring high levels of protection throughout the Community in a consistent and effective manner.

(3) The cyanide spill that polluted the Danube following the accident at Baia Mare in Romania in January 2000 has demonstrated that certain storage and processing activities in mining, especially tailings disposal facilities, including tailing ponds or dams, have potential to produce very serious consequences. The Commission communications on the safe operation of mining activities and on the sixth environment action programme of the European Community have therefore highlighted the need for an extension of the scope of Directive 96/82/EC. In its resolution of 5 July 2001 (5) on the Commission Communication on the safe operation of mining activities, the European Parliament also welcomed the extension of the scope of that Directive to cover risks arising from storage and processing activities in mining.

(4) The proposal for a directive on the management of waste from the extractive industries may be a relevant framework for measures relating to those waste management facilities which present an accident risk but which are not covered by the present Directive.

(5) The ‘fireworks accident’ at Enschede in the Netherlands in May 2000 has demonstrated the major accident potential arising from storage and manufacture of pyrotechnic and explosive substances. The definition of such substances in Directive 96/82/EC should therefore be clarified and simplified.

(6) The explosion at a fertiliser plant in Toulouse in September 2001 has raised awareness of the accident potential arising from the storage of ammonium nitrate and ammonium nitrate-based fertilisers, in particular of material rejected during the manufacturing process or returned to the manufacturer (off-specs). The existing categories of ammonium nitrate and ammonium nitrate-based fertilisers in Directive 96/82/EC should therefore be reviewed with a view to include ‘off-specs’ material.

(7) Directive 96/82/EC should not be applied to sites of end-users where ammonium nitrate and ammonium nitrate-based fertilisers, which on delivery conformed to the specification in that Directive but subsequently have become degraded or contaminated, are temporarily present prior to removal for reprocessing or destruction.

(8) Studies carried out by the Commission in close cooperation with the Member States support extending the list of carcinogens with appropriate qualifying quantities and significantly lowering the qualifying quantities assigned to substances dangerous for the environment in Directive 96/82/EC.

(9) For establishments which subsequently fall within the scope of Directive 96/82/EC, it has been shown necessary to introduce minimum periods for notifications and the establishment of major accident prevention policies, safety reports and emergency plans.

(10) The experience and knowledge of relevant staff in the establishment can greatly assist in the drawing up of emergency plans, and all staff in an establishment and persons likely to be affected should be appropriately informed on safety measures and actions.
The adoption of Council Decision 2001/792/EC, Euratom of 23 October 2001 establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions highlights the need to facilitate reinforced cooperation in civil protection assistance interventions.

It is useful, in order to facilitate land-use planning, to draw up guidelines defining a database to be used for assessing the compatibility between the establishments covered by Directive 96/82/EC and the areas described in Article 12(1) of that Directive.

There should be an obligation on Member States to supply the Commission with minimum information concerning the establishments covered by Directive 96/82/EC.

It is appropriate at the same time to clarify certain passages in Directive 96/82/EC.

The measures provided for in this Directive have been the subject of a public consultation process involving interested parties.

Directive 96/82/EC should therefore be amended accordingly.

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Directive 96/82/EC is hereby amended as follows:

1. Article 4 is amended as follows:
   (a) Points (e) and (f) are replaced by the following:
       "(e) the exploitation (exploration, extraction and processing) of minerals in mines, quarries, or by means of boreholes, with the exception of chemical and thermal processing operations and storage related to those operations which involve dangerous substances, as defined in Annex I;
        (f) the offshore exploration and exploitation of minerals, including hydrocarbons;"
   (b) The following indent shall be added:
       "(g) waste land-fill sites, with the exception of operational tailings disposal facilities, including tailing ponds or dams, containing dangerous substances as defined in Annex I, in particular when used in connection with the chemical and thermal processing of minerals;"

2. Article 6 is amended as follows:
   (a) The following indent is added in paragraph 1:
       "— for establishments which subsequently fall within the scope of this Directive, without delay, but at all events within one year after the date on which this Directive applies to the establishment concerned, as laid down in the first subparagraph of Article 2(1)."
   (b) The following indent is inserted after the first indent of Article 6(4):
       "— modification of an establishment or an installation which could have significant repercussions on major accident hazards, or;"

3. The following paragraph is inserted in Article 7:
   ‘1a. For establishments which subsequently fall within the scope of this Directive, the document referred to in paragraph 1 shall be drawn up without delay, but at all events within three months after the date on which this Directive applies to the establishment concerned, as laid down in the first subparagraph of Article 2(1).’

4. Article 8(2)(b) is replaced by the following:
   ‘(b) provision is made for cooperation in informing the public and in supplying information to the authority responsible for the preparation of external emergency plans.’

5. Article 9 is amended as follows:
   (a) The first subparagraph of paragraph 2 is replaced by the following:
       "2. The safety report shall contain at least the data and information listed in Annex II. It shall name the relevant organisations involved in the drawing up of the report. It shall also contain an updated inventory of the dangerous substances present in the establishment;"
   (b) The following indent is inserted between the third and fourth indents of paragraph 3:
       "— for establishments which subsequently fall within the scope of this Directive, without delay, but at all events within one year after the date on which this Directive applies to the establishment concerned, as laid down in the first subparagraph of Article 2(1)."
   (c) In paragraph 4, the reference to ‘the second, third, and fourth indents’ becomes ‘the second, third, fourth and fifth indents’ respectively.
   (d) The following point is added to Article 9(6):
       "(d) The Commission is invited to review by 31 December 2006 in close cooperation with the Member States, the existing “Guidance on the Preparation of a Safety Report”.”

6. Article 11 is amended as follows:
   (a) The following indent is added to points (a) and (b) of paragraph 1:
       "— for establishments which subsequently fall within the scope of this Directive, without delay, but at all events within one year after the date on which this Directive applies to the establishment concerned, as laid down in the first subparagraph of Article 2(1)."

(b) Paragraph 3 is replaced by the following:

‘3. Without prejudice to the obligations of the competent authorities, Member States shall ensure that the internal emergency plans provided for in this Directive are drawn up in consultation with the personnel working inside the establishment, including long-term relevant subcontracted personnel, and that the public is consulted on external emergency plans when they are established or updated.’

(c) The following paragraph is inserted:

‘4a. With regard to external emergency plans, Member States should take into account the need to facilitate enhanced cooperation in civil protection assistance in major emergencies.’

7. Article 12 is amended as follows:

(a) The second subparagraph of paragraph 1 is replaced by the following:

‘Member States shall ensure that their land-use and/or other relevant policies and the procedures for implementing those policies take account of the need, in the long term, to maintain appropriate distances between establishments covered by this Directive and residential areas, buildings and areas of public use, major transport routes as far as possible, recreational areas and areas of particular natural sensitivity or interest and, in the case of existing establishments, of the need for additional technical measures in accordance with Article 5 so as not to increase the risks to people.’

(b) The following paragraph is inserted:

‘1a. The Commission is invited by 31 December 2006, in close cooperation with the Member States, to draw up guidelines defining a technical database including risk data and risk scenarios, to be used for assessing the compatibility between the establishments covered by this Directive and the areas described in paragraph 1. The definition of this database shall as far as possible take account of the evaluations made by the competent authorities, the information obtained from operators and all other relevant information such as the socioeconomic benefits of development and the mitigating effects of emergency plans.’

8. Article 13 is amended as follows:

(a) The first subparagraph of paragraph 1 is replaced by the following:

‘1. Member States shall ensure that information on safety measures and on the requisite behaviour in the event of an accident is supplied regularly and in the most appropriate form, without their having to request it, to all persons and all establishments serving the public (such as schools and hospitals) liable to be affected by a major accident originating in an establishment covered by Article 9.’

(b) Paragraph 6 is replaced by the following:

‘6. In the case of establishments subject to the provisions of Article 9, Member States shall ensure that the inventory of dangerous substances provided for in Article 9(2) is made available to the public subject to the provisions of paragraph 4 of this Article and Article 20.’

9. The following paragraph is inserted in Article 19:

‘1a. For establishments covered by this Directive, Member States shall supply the Commission with at least the following information:

(a) the name or trade name of the operator and the full address of the establishment concerned; and

(b) the activity or activities of the establishment.

The Commission shall set up and keep up to date a database containing the information supplied by the Member States. Access to the database shall be reserved to persons authorised by the Commission or the competent authorities of the Member States.’

10. Annex I is amended as set out in the Annex.

11. In Annex II, point IV part B is replaced by the following:

‘B. Assessment of the extent and severity of the consequences of identified major accidents including maps, images or, as appropriate, equivalent descriptions, showing areas which are liable to be affected by such accidents arising from the establishment, subject to the provisions of Articles 13(4) and 20.’

12. In Annex III, point (c) is amended as follows:

(a) point (i) is replaced by the following:

‘(i) organisation and personnel — the roles and responsibilities of personnel involved in the management of major hazards at all levels in the organisation. The identification of training needs of such personnel and the provision of the training so identified. The involvement of employees and of subcontracted personnel working in the establishment.’

(b) point (v) is replaced by the following:

‘(v) Planning for emergencies — adoption and implementation of procedures to identify foreseeable emergencies by systematic analysis, to prepare, test and review emergency plans to respond to such emergencies and to provide specific training for the staff concerned. Such training shall be given to all personnel working in the establishment, including relevant subcontracted personnel.’
Article 2

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 1 July 2005. They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 3

This Directive shall enter into force on the day of its publication in the Official Journal of the European Union.

Article 4

This Directive is addressed to the Member States.

Done at Brussels, 16 December 2003.

For the European Parliament
The President
P. COX

For the Council
The President
G. ALEMANNO
ANNEX

Annex I to Directive 96/82/EC is hereby amended as follows:

1. The following points are added to the introduction:

‘6. For the purposes of this Directive, a gas is any substance that has an absolute vapour pressure equal to or greater than 101,3 kPa at a temperature of 20 °C.

7. For the purposes of this Directive, a liquid is any substance that is not defined as a gas and that is not in the solid state at a temperature of 20 °C and at a standard pressure of 101,3 kPa.’

2. In the table in Part 1:

(a) the entries relating to ‘Ammonium nitrate’ are replaced by the following:

<table>
<thead>
<tr>
<th>Substance (see note)</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>5 000</td>
<td>10 000</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>1 250</td>
<td>5 000</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>350</td>
<td>2 500</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>10</td>
<td>50</td>
</tr>
</tbody>
</table>

(b) the following entries are inserted after the entries relating to ‘Ammonium nitrate’:

<table>
<thead>
<tr>
<th>Substance (see note)</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium nitrate</td>
<td>5 000</td>
<td>10 000</td>
</tr>
<tr>
<td>Potassium nitrate</td>
<td>1 250</td>
<td>5 000</td>
</tr>
</tbody>
</table>

(c) the entry relating to ‘The following CARCINOGENS’ is replaced by the following:

<table>
<thead>
<tr>
<th>CARCINOGENS</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Aminobiphenyl</td>
<td>0,5</td>
<td>2</td>
</tr>
<tr>
<td>Benzotrichloride</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzidine and/or salts, Bis (chloromethyl) ether, Chloromethyl methyl ether, 1,2-Dibromoethane, Diethyl sulphate, Dimethyl sulphate, Dimethylcarbamoyl chloride, 1,2-Dibromo-3-chloropropane, 1,2-Dimethylhydrazine, Dimethylphosphoric triamide, Hydrazine, 2- Naphthylamine and/or salts, 4-Nitrodiphenyl, and 1,3 Propanesultone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(d) the entry relating to ‘Automotive petrol and other petroleum spirits’ is replaced by the following:

<table>
<thead>
<tr>
<th>Petroleum products:</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) gasolines and naphthas,</td>
<td>2 500</td>
<td>25 000</td>
</tr>
<tr>
<td>(b) kerosenes (including jet fuels),</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) gas oils (including diesel fuels, home heating oils and gas oil blending streams)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(e) (i) Notes 1 and 2 are replaced by the following:

‘1. Ammonium nitrate (5 000/10 000): fertilisers capable of self-sustaining decomposition

This applies to ammonium nitrate-based compound/composite fertilisers (compound/composite fertilisers containing ammonium nitrate with phosphate and/or potash) in which the nitrogen content as a result of ammonium nitrate is

— between 15,75 % (1) and 24,5 % (2) by weight, and either with not more than 0,4 % total combustible/organic materials or which fulfil the requirements of Annex II of Directive 80/876/EEC,

— 15,75 % (1) by weight or less and unrestricted combustible materials,

and which are capable of self-sustaining decomposition according to the UN Trough Test (see United Nations Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria, Part III, subsection 38.2).
2. Ammonium nitrate (1 250/5 000): fertiliser grade

This applies to straight ammonium nitrate-based fertilisers and to ammonium nitrate-based compound/composite fertilisers in which the nitrogen content as a result of ammonium nitrate is
— more than 24.5 % by weight, except for mixtures of ammonium nitrate with dolomite, limestone and/or calcium carbonate with a purity of at least 90 %,
— more than 15.75 % by weight for mixtures of ammonium nitrate and ammonium sulphate,
— more than 28 % \( ^{(*)} \) by weight for mixtures of ammonium nitrate with dolomite, limestone and/or calcium carbonate with a purity of at least 90 %,
and which fulfil the requirements of Annex II of Directive 80/876/EEC.

3. Ammonium nitrate (350/2500): technical grade

This applies to:
— ammonium nitrate and preparations of ammonium nitrate in which the nitrogen content as a result of the ammonium nitrate is
  — between 24.5 % and 28 % by weight, and which contain not more than 0.4 % combustible substances,
  — more than 28 % by weight, and which contain not more than 0.2 % combustible substances,
— aqueous ammonium nitrate solutions in which the concentration of ammonium nitrate is more than 80 % by weight.

4. Ammonium nitrate (10/50): “off-specs” material and fertilisers not fulfilling the detonation test

This applies to:
— material rejected during the manufacturing process and to ammonium nitrate and preparations of ammonium nitrate, straight ammonium nitrate-based fertilisers and ammonium nitrate-based compound/composite fertilisers referred to in notes 2 and 3, that are being or have been returned from the final user to a manufacturer, temporary storage or reprocessing plant for reworking, recycling or treatment for safe use, because they no longer comply with the specifications of Notes 2 and 3;
— fertilisers referred to in note 1, first indent, and Note 2 which do not fulfil the requirements of Annex II of Directive 80/876/EEC.

5. Potassium nitrate (5 000/10 000): composite potassium-nitrate based fertilisers composed of potassium nitrate in prilled/granular form.

6. Potassium nitrate (1 250/5 000): composite potassium-nitrate based fertilisers composed of potassium nitrate in crystalline form.

(ii) the note relating to polychlorodibenzofurans and polychlorodibenzoxyins becomes note 7.

(iii) the following footnotes appear below the table entitled ‘International Toxic Equivalent Factors (ITEF) for the congeners of concern (NATO/CCMS)’:

\( ^{(1)} \) 15.75 % nitrogen content by weight as a result of ammonium nitrate corresponds to 45 % ammonium nitrate.

\( ^{(2)} \) 24.5 % nitrogen content by weight as a result of ammonium nitrate corresponds to 70 % ammonium nitrate.

\( ^{(3)} \) 15.75 % nitrogen content by weight as a result of ammonium nitrate corresponds to 45 % ammonium nitrate.

\( ^{(4)} \) 28 % nitrogen content by weight as a result of ammonium nitrate corresponds to 80 % ammonium nitrate.

3. In Part 2:

(a) entries 4 and 5 are replaced by the following:

<table>
<thead>
<tr>
<th>Entry</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. EXPLOSIVE (see note 2) where the substance, preparation or article falls under UN/ADR Division 1.4</td>
<td>50</td>
</tr>
<tr>
<td>5. EXPLOSIVE (see note 2) where the substance, preparation or article falls under any of: UN/ADR Divisions 1.1, 1.2, 1.3, 1.5 or 1.6 or risk phrase R2 or R3</td>
<td>10</td>
</tr>
</tbody>
</table>
(b) entry 9 is replaced by the following:

<table>
<thead>
<tr>
<th>9. DANGEROUS FOR THE ENVIRONMENT risk phrases:</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) R50: “Very toxic to aquatic organisms” (including R50/53)</td>
</tr>
<tr>
<td>ii) R51/53: “Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment”</td>
</tr>
</tbody>
</table>

(c) In the notes:

(i) Note 1 is replaced by the following:

1. Substances and preparations are classified according to the following Directives and their current adaptation to technical progress:


In the case of substances and preparations which are not classified as dangerous according to either of the above directives, for example waste, but which nevertheless are present, or are likely to be present, in an establishment and which possess or are likely to possess, under the conditions found at the establishment, equivalent properties in terms of major-accident potential, the procedures for provisional classification shall be followed in accordance with the relevant article of the appropriate Directive.

In the case of substances and preparations with properties giving rise to more than one classification, for the purposes of this Directive the lowest qualifying quantities shall apply. However, for the application of the rule in Note 4, the qualifying quantity used shall always be the one corresponding to the classification concerned.

For the purposes of this Directive, the Commission shall establish and keep up to date a list of substances which have been classified into the above categories by a harmonised Decision in accordance with Directive 67/548/EEC.

(ii) Note 2 is replaced by the following:

2. An “explosive” means:

   — a substance or preparation which creates the risk of an explosion by shock, friction, fire or other sources of ignition (risk phrase R2),

   — a substance or preparation which creates extreme risks of explosion by shock, friction, fire or other sources of ignition (risk phrase R3), or


Included in this definition are pyrotechnics, which for the purposes of this Directive are defined as substances (or mixtures of substances) designated to produce heat, light, sound, gas or smoke or a combination of such effects through self-sustained exothermic chemical reactions. Where a substance or preparation is classified by both UN/ADR and risk phase R2 or R3, the UN/ADR classification shall take precedence over assignment of risk phrases.

Substances and articles of Class 1 are classified in any of the divisions 1.1 to 1.6 in accordance with the UN/ADR classification scheme. The divisions concerned are:

Division 1.1: “Substances and articles which have a mass explosion hazard (a mass explosion is an explosion which affects almost the entire load virtually instantaneously).”

Division 1.2: “Substances and articles which have a projection hazard but not a mass explosion hazard.”
Division 1.3: "Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard:
(a) combustion of which gives rise to considerable radiant heat; or
(b) which burn one after another, producing minor blast or projection effects or both."

Division 1.4: "Substances and articles which present only a slight risk in the event of ignition or initiation during carriage. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of virtually the entire contents of the package."

Division 1.5: "Very insensitive substances having a mass explosion hazard which are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of carriage. As a minimum requirement they shall not explode in the external fire test."

Division 1.6: "Extremely insensitive articles which do not have a mass explosion hazard. The articles contain only extremely insensitive detonating substances and demonstrate a negligible probability of accidental initiation or propagation. The risk is limited to the explosion of a single article."

Included in this definition are also explosive or pyrotechnic substances or preparations contained in articles. In the case of articles containing explosive or pyrotechnic substances or preparations, if the quantity of the substance or preparation contained is known, that quantity shall be considered for the purposes of this Directive. If the quantity is not known, then, for the purposes of this Directive, the whole article shall be treated as explosive."

(iii) in note 3(b)(1), the second indent shall be replaced by the following:

"— substances and preparations which have a flash point lower than 55 °C and which remain liquid under pressure, where particular processing conditions, such as high pressure or high temperature, may create major-accident hazards;"

(iv) note 3(c)(2) is replaced by the following:

"2. gases which are flammable in contact with air at ambient temperature and pressure (risk phrase R12, second indent), which are in a gaseous or supercritical state, and"

(v) note 3(c)3 is replaced by the following:

"3. flammable and highly flammable liquid substances and preparations maintained at a temperature above their boiling point."

(vi) note 4 is replaced by the following:

"4. In the case of an establishment where no individual substance or preparation is present in a quantity above or equal to the relevant qualifying quantities, the following rule shall be applied to determine whether the establishment is covered by the relevant requirements of this Directive. This Directive shall apply if the sum
\[ \frac{q_x}{Q_x} + \frac{q_y}{Q_y} + \frac{q_z}{Q_z} + \frac{q_a}{Q_a} + \frac{q_b}{Q_b} + \ldots \] is greater than or equal to 1,

where \( q_x \) = the quantity of dangerous substance \( x \) (or category of dangerous substances) falling within Parts 1 or 2 of this Annex,

and \( Q_x \) = the relevant qualifying quantity for substance or category \( x \) from column 3 of Parts 1 or 2.

This Directive shall apply, with the exception of Articles 9, 11 and 13, if the sum
\[ \frac{q_x}{Q_x} + \frac{q_y}{Q_y} + \frac{q_z}{Q_z} + \frac{q_a}{Q_a} + \frac{q_b}{Q_b} + \ldots \] is greater than or equal to 1,

where \( q_x \) = the quantity of dangerous substance \( x \) (or category of dangerous substances) falling within Parts 1 or 2 of this Annex,

and \( Q_x \) = the relevant qualifying quantity for substance or category \( x \) from column 2 of Parts 1 or 2.

This rule shall be used to assess the overall hazards associated with toxicity, flammability, and eco-toxicity. It must therefore be applied three times:

(a) for the addition of substances and preparations named in Part 1 and classified as toxic or very toxic, together with substances and preparations falling into categories 1 or 2;
(b) for the addition of substances and preparations named in Part 1 and classified as oxidising, explosive, flammable, highly flammable, or extremely flammable, together with substances and preparations falling into categories 3, 4, 5, 6, 7a, 7b or 8;

(c) for the addition of substances and preparations named in Part 1 and classified as dangerous for the environment (R50 (including R50/53) or R51/53), together with substances and preparations falling into categories 9(i) or 9(ii);

The relevant provisions of this Directive apply if any of the sums obtained by (a), (b) or (c) is greater than or equal to 1.'