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## Directive 2012/18/EC – Seveso III

### Questions & Answers

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## 1. INTRODUCTION

This document includes answers to the questions that have been put to the European Commission by the national authorities of the Member States. They concern technical issues, which arose in the implementation of Directive 2012/18/EC<sup>1</sup> (aka Seveso-III Directive) and its predecessors.

The answers are the result of discussions between the European Commission services and the representatives of Member States in the Seveso Expert Group (SEG)<sup>2</sup> and, prior to creation of the latter in 2011, in the Committee of Competent Authorities<sup>3</sup>. They aim at facilitating a harmonised implementation throughout the European Union. The answers cover only general aspects and do not deal with specific situations of individual Member States or economic operators.

It should be noted that questions raising purely legal aspects are answered by the Commission services without prior consultation of the Member States. These so-called Frequently Asked Questions (FAQ) are available online<sup>4</sup>.

The answers provided in this document do not represent an official position of the Commission and cannot be invoked as such in the context of legal proceedings. Final judgements concerning the interpretation of the Directive can only be made by the European Court of Justice.

## 2. ARTICLE 2 – SCOPE

### 2.1. General scope questions

Ref.	Issue
029	<p><i>Question:</i> How does the Seveso-III-Directive relate to <b>ILO Convention No. 174</b>, especially concerning pipelines and nuclear installations?</p> <p><i>Answer:</i> Member States who have fully ratified the ILO convention no 174 will be expected to implement measures in accordance with this Convention. In areas which are not covered by the Seveso-III-Directive, e.g. pipelines, it is assumed that Member States are extending the scope of the Seveso-III-Directive in their</p>

<sup>1</sup> Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC, OJ L 197, 24.7.2012

<sup>2</sup> Commission Expert Group E02612 as included in the 'Register of Commission Expert Groups and Other Similar Entities'  
(<http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2612>)

<sup>3</sup> Committee of Competent Authorities established under the directive on the control of major-accident hazards involving dangerous substances (Seveso Directive 2012/18/EU) (aka CCA), Committee C14000 as included in the Comitology Register  
(<http://ec.europa.eu/transparency/regcomitology/index.cfm>)

<sup>4</sup> <http://ec.europa.eu/environment/seveso/legislation.htm>

**Comment [AKi1]:** The introduction was extended to provide a better and more formal clarification on the nature of the document. This is also to further clarify the distinction to the FAQ.

**Comment [AKi2]:** For the time being the numbering of the questions has been maintained from the previous version to facilitate the comparison. It has to be decided later on how to number the questions.

	national laws or taking appropriate separate initiatives.
037	<p><b>Question:</b> Should the content of the <b>fuel tanks of aircraft currently on the ground</b> be taken into account when assessing whether the Seveso-III-Directive applies to a given airport?</p> <p><b>Answer:</b> No. The scope of the Seveso-III-Directive does not include aviation safety. As the aircrafts are on-ground only for a limited time, the content of their fuel tanks should not be taken into account for deciding whether the airport establishment is covered by the Seveso-III-Directive. This does not mean that airports are generally excluded from the scope of the Directive. Quantities of dangerous substances (including kerosene) in storage facilities or in the distribution network at airports should still be taken into account.</p> <p><b>Concluded at:</b> CCA-18</p>

## 2.2. Exclusions from the scope

Ref.	Issue
005	<p><b>Question:</b> With reference to Article 2(2)(b) relating to the <b>exclusion of hazards created by ionizing radiation</b>, does the Seveso-III-Directive apply to nuclear materials which are also toxic?</p> <p><b>Answer:</b> The exclusion of "hazards created by ionising radiation originating from substances" is an acknowledgement of the existing comprehensive arrangements within the Member States for dealing with nuclear materials. Given this situation, it is not necessary to apply the Seveso-III-Directive to 'toxic' nuclear materials at the same time as nuclear legislation, as this would be unnecessary duplication and could cause confusion. However, dangerous substances which do not pose a hazard created by ionizing radiation are covered by the Seveso-III-Directive, even if they are within a nuclear establishment.</p>
027	<p><b>Question:</b> What if establishments come <b>under the scope of the Seveso-III-Directive only for a short period of time</b>, e.g. under 6 months?</p> <p><b>Answer:</b> The Seveso-III-Directive does not contain any provisions to exclude short-time exceedance of the relevant thresholds. Therefore, it can be applicable even for a short time period once qualifying quantities are exceeded.</p> <p>In turn, establishments that for a short period of time fall outside the scope of the Seveso-III-Directive due to reduced quantities present may wish to comply with the Seveso-III-Directive also during this period in order to avoid having to re-submit notifications and safety reports.</p>
035	<p><b>Question:</b> In Article 2(2)(c), what does "<b>outside the establishments covered by this Directive</b>" mean?</p> <p><b>Example:</b> Can the operator of a warehouse that stores 20 tonnes of very toxic substances, claim that 15 tonnes are storage in the transport chain (often called "transit storage") and hence exclude this quantity in "transit storage" when</p>

	<p>calculating the threshold?</p> <p><u>Answer:</u> The warehouse is to be considered as an establishment in the sense of article 3(1). Its purpose is to store dangerous substances. 20 tonnes of very toxic substances are present on a continuous basis. Exclusion 2(2)(c) refers to the necessary intermediate storage in the transport chain outside establishments, not to the storage in warehouses specifically designed and used for the storage of dangerous substances on a regular basis.</p> <p><u>Concluded at:</u> CCA-16 &amp; CCA-17</p>
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### 3. ARTICLE 3 – DEFINITIONS

#### 3.1. Dangerous substance

Ref.	Issue
001	<p><u>Question:</u> <b>Are solvents covered by the Seveso-III-Directive?</b></p> <p><u>Background:</u> The definition for dangerous substance given in Article 3(10) of the Directive includes “... and present as a raw material, product, by-product, residue or intermediate...” A company claims that solvents involved in a chemical process would be excluded because they were not covered by the above list.</p> <p><u>Answer:</u> Yes. Solvents are covered by the Seveso-III-Directive. The text “...raw material, product, by-product, residue or intermediate, etc.” is intended as a comprehensive list covering all cases of chemicals present at an establishment. This intent is made more clear in recital (12) of the Seveso-III- Directive, as given below:</p> <p style="padding-left: 40px;">”(...) Where dangerous substances are present in establishments above certain quantities the operator should provide the competent authority with sufficient information to enable it to identify the establishment, the dangerous substances present and the potential dangers (...)”.</p> <p><u>Note:</u> There may be some cases which, although there could be a theoretical argument to suggest that they could fit within the scope of the Seveso-III-Directive, are clearly not intended to be covered e.g. asbestos used in building materials for the construction of buildings.</p>
002	<p><u>Question:</u> Does the Seveso-III-Directive apply to the <b>demolition of a building or means of transport containing asbestos?</b></p> <p><u>Example:</u> A building or a railway carriage in which asbestos was used as construction material (e.g. asbestos board).</p> <p><u>Answer:</u> No; the agreed interpretation of “dangerous substances” notes that there may be some cases which, although there could be a theoretical argument to suggest that they could fit within the scope of the Directive, are clearly not intended to be covered e.g. asbestos used in building materials for the construction</p>

	<p>of buildings.</p> <p>A building in demolition would not normally come under the Seveso-III-Directive, nor would a railway carriage in demolition. Similarly, the removal of asbestos board used in buildings or means of transport is not within the scope of the Seveso-III-Directive.</p> <p>However, a site whose activity was the demolition of railway carriages containing toxic materials could do so; in general the materials concerned would be treated in the same way as waste.</p> <p><u>Answer: No. Asbestos typically has no classification that would be covered by Annex I to the Seveso-III-Directive.</u></p>
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**Comment [AKi3]:** The current answer seems to be overly complicated and at least partially unclear. Hence we would like to suggest a simpler version conveying the same message.

#### 4. ARTICLE 7 – NOTIFICATION

Ref.	Issue
030	<p><u>Question:</u> Under Article 7(4)(a), would 10% be considered a “<b>significant increase</b>” in the quantity of dangerous substance, requiring notification?</p> <p><u>Answer:</u> This will depend on the particular circumstances. 10% may well be a reasonable figure for many cases. However, where there is already a very large quantity of dangerous substances present, 10% could potentially exceed ‘5% of the qualifying quantity laid down in column 3 of Annex I’ which is one of the criteria for notification of a major accident. At least in these cases, less than 10% may be considered ‘significant’.</p>
031	<p><u>Question:</u> Under Article 7(4)(a) what is a “<b>change in the nature</b>” of a substance, requiring notification? Another substance or a substance having another classification?</p> <p><u>Answer:</u> Clearly a substance with another classification would be a change. However, a change from one substance to another which has similar physical and chemical properties, and has the same classification, might in some circumstances not require a new notification when the information provided under Article 7(1)(d) (i.e. “<i>sufficient to identify the ... category of substances involved</i>”) remains valid.</p>

#### 5. ARTICLE 13 – LAND-USE PLANNING

Ref.	Issue
038	<p><u>Question:</u> In Article 13(2)(a), what are “<b>buildings and areas of public use</b>”? Is it possible to indicate threshold values?</p> <p><u>Answer:</u> “Buildings and areas of public use” are public or private buildings or areas, where it can be reasonably anticipated that the public will be present on a</p>

	<p>non-permanent basis (e.g. supermarkets, public service buildings, amusement parks, sport stadiums or important transport interchanges) and/or where it may be difficult to organise people in the event of an emergency (e.g. schools, hospitals, kindergarten and houses for the elderly). Administrative buildings are also included, with the exception of those that only receive visitors on occasion (e.g. business partners), and where the visitors are then considered to be under the supervision of the person being visited, in the sense that this person can direct them in the correct behaviour in the case of an alert.</p> <p><u>Concluded at:</u> CCA-25</p>
034	<p><u>Question:</u> In Article 13(2)(a), what are “<b>major transport routes</b>”?</p> <p><u>Answer:</u> The classification as a “major route” depends on the individual situation because the distribution of traffic density may vary widely. Transport routes with traffic frequencies below the following values may not be considered as major transport routes:</p> <ul style="list-style-type: none"> <li>• roads with less than 10 000 passenger vehicles per 24 hours</li> <li>• railroads with less than 50 passenger trains per 24 hours.</li> </ul> <p>Transport routes with traffic frequencies above the following values shall in any case be considered as major transport routes:</p> <ul style="list-style-type: none"> <li>• motorways (speed limit &gt; 100 km/h) with more than 200 000 vehicles per 24 hours or 7000 vehicles per peak hour</li> <li>• other roads (speed limit ≤ 100 km/h) with more than 100 000 vehicles per hour or more than 4000 vehicles per peak hour</li> <li>• railroads with more than 250 trains per 24 hours or more than 60 trains per peak hour (both directions together)</li> </ul> <p>Airports would have to be assessed individually.</p> <p><u>Concluded at:</u> CCA-15</p>

## 6. ARTICLE 19 – PROHIBITION OF USE

Ref.	Issue
028	<p><u>Question:</u> Under what circumstances should a prohibition of use be issued and what is meant by “<b>seriously deficient</b>”? In particular, would a prohibition of use be appropriate if the failure is a matter of form (e.g. <u>no notification</u>, <u>untimely or unintentional non-notification</u>) rather than strictly a matter of safety?</p> <p><u>Answer:</u> The circumstances justifying prohibition of use, rather than other sanctions, are essentially a matter for Member States’ judgement, in the light of their individual procedures. –The text of the Seveso-III-Directive states ‘SHALL prohibit’ with respect to serious deficiencies (e.g. failure to take necessary actions specified in the inspection report), but ‘MAY prohibit’ if the operator has not submitted the notification, reports or other information required by this Directive</p>

**Comment [AKi4]:** It may legally be problematic to suggest that a missing notification was no safety issue. Hence the additional qualification.

	within the specified period. In the second case, the intent is to allow Member States to use a range of measures as appropriate to ensure compliance, but to retain the possibility of prohibition for cases of blatant disregard of the obligations to submit notification, reports, or other information under the Seveso-III-Directive.
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## 7. ANNEX I – DANGEROUS SUBSTANCES

### 7.1. Horizontal issues

#### 7.1.1. Labelling of dangerous substances

Ref.	Issue
003	<p><b>Question:</b> Does the Seveso-III-Directive apply to <b>substances which are labelled as toxic but not classified as toxic</b> (e.g. carcinogens, mutagens, teratogens)?</p> <p><b>Answer:</b> No, it is the classification under CLP-Regulation (EC) No 1272/2008<sup>5</sup> (as last amended) which matters - unless of course the substances are named in Part 2 of Annex I.</p>

#### 7.1.2. Physical state of dangerous substances

Ref.	Issue
004	<p><b>Question:</b> Are <b>powders</b> covered by the Seveso-III-Directive?</p> <p><b>Answer:</b> Annex I of the Seveso-III-Directive does not distinguish between physical characteristics of the substances covered except where clearly stated. Therefore, powders are covered by the Directive in so far as they are a powder of a named substance under Part 2 of Annex 1 or are classified according to the categories listed in Part 1 of Annex 1.</p>
023	<p><b>Question:</b> If a named <b>gaseous substance is kept as a liquid above its boiling point</b>, which thresholds apply to it: those given in Annex I Part 2, or those of an extremely flammable liquid (Annex I Part 1 Cat. P5a)?</p> <p><b>Answer:</b> The thresholds to be used are those of Annex I Part 2. The substance is still the same substance, and Annex I states explicitly that the thresholds of Part 2 take precedence over those of Part 1. This does not apply however to the substances listed in Part 2 which include a reference to Note 21 to Annex I, for which the lowest qualifying quantities shall apply.</p>

<sup>5</sup> Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, OJ L 353, 31.12.2008,



### 7.1.3. Specific substances

Ref.	Issue
017	<p><b>Question:</b> Does the Seveso-III-Directive apply to <b>phosphorus</b>?</p> <p><b>Answer:</b> Yes. White phosphorus is classified within the category H2 (Acute Toxic) in Part 1 of Annex I.</p>
022	<p><b>Question:</b> Does the Seveso-III-Directive cover <b>waste</b>?</p> <p><b>Answer:</b> Yes. Note 5 to Annex I of the Seveso-III-Directive makes reference to the CLP-Regulation (EC) No 1272/2008<sup>5</sup> and mentions waste explicitly. Therefore, waste is treated on the basis of its properties as a mixture. It is the obligation of an operator to define the classification of this mixture. –If the classification cannot be carried out by the procedures under the CLP-Regulation, other relevant sources of information may be used, e.g. information concerning the origin of the waste, practical experience, testing, transport classification or classification according to the European waste legislation.</p> <p><b>See also:</b> the question on <b>contaminated soil</b> in chapter 7.3.4</p>
025	<p><b>Question:</b> Should the <b>explosive or pyrotechnic substances or mixtures contained in articles be treated as having the same classification as the article itself</b>?</p> <p><b>Answer:</b> Yes. For substances, mixtures or articles classified under UN/ADR as HD1.1, 1.2, 1.3, 1.4, 1.5 and 1.6, the answer is yes, provided that the substance/mixture remains packaged with the article in the same configuration as when the classification was made.</p> <p>An explosive/pyrotechnic substance or mixture may have a different classification depending on whether it is:</p> <ol style="list-style-type: none"> <li>(1) not part of any article and therefore consists only of the pure substance or mixture</li> <li>(2) part of an individual pyrotechnic article</li> <li>(3) part of a package of such articles packaged in accordance with the applicable transport or storage norms (Note that there also may be different packaging arrangements for the same pyrotechnic article and their classifications may differ accordingly.)</li> </ol> <p>Moreover, the article classification only applies to the explosive and pyrotechnic substance or mixture when it is part of that article. In particular, if the packaging has changed or been removed since the article was originally classified, the classification must be re-evaluated or re-tested under the new conditions.</p> <p>The coverage under the Seveso-III-Directive is determined by the classification of the article that applies to the condition in which the article is normally held on site. It should also be noted that only substances/mixtures belonging to articles classified under UN/ADR as HD1.4 fall under category P1b of Annex I to the Seveso-III-Directive. This category does not cover substances or mixtures outside</p>

the UNADR classified packaging.  <u>Concluded at:</u> CCA-25
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## 7.2. Issues related to Annex I Part 2 – Named dangerous substances

### 7.2.1. General questions

Ref.	Issue
006	<p><u>Question:</u> For Annex I Part 2 <b>substances which have no entry in column 2</b>, does this mean that Articles 7 and 10 are applied only once the value in column 3 is reached, or are Articles 7 and 10 applicable as soon as there is any of the substance present?</p> <p><u>Answer:</u> The first interpretation is correct: Articles 7 and 10 apply together when the column 3 threshold is reached.</p>

### 7.2.2. Questions on a specific named substance

Ref.	Issue
019	<p><u>Question:</u> For entry 5&amp;6: In the Notes 17 and 18, <b>potassium nitrate</b> is defined as “composite potassium-nitrate based fertilisers” without any further limits in terms of hazard potential or without referring to certain types of fertilisers defined in Regulation (EC) No 2003/2003<sup>6</sup>. Does this mean that all composite potassium-nitrate based fertilisers come into the named group even if the fertiliser does not have any dangerous properties?</p> <p><u>Answer:</u> No. The named group only applies to those composite potassium-nitrate based fertilisers which have the same hazardous properties as pure potassium nitrate, regarding the physical conditions listed in notes 17 and 18 (prilled/granular or crystalline form).</p>
016	<p><u>Question:</u> In entry 11: Is <b>nickel metal</b> covered by “nickel compounds in inhalable powder form (nickel monoxide, nickel dioxide, nickel sulphide, trinickel disulphide, dinickel trioxide)”? Are the compounds named in brackets intended to be examples, or an exhaustive list?</p> <p><u>Answer:</u> Nickel metal is not covered. The list is exhaustive.</p>
018	<p><u>Question:</u> Does entry 18 “liquefied extremely flammable gases (including LPG) and natural gas” cover <b>town gas</b>?</p> <p><u>Answer:</u> No. Unless it is liquefied, town gas should be treated as an extremely</p>

<sup>6</sup> Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers, OJ L 304, 21.11.2003

	flammable gas (Annex I Part 1 Category P2).
010b	<p><b>Question:</b> For entry 33: Does an establishment holding in total more than 2 tons of <b>named carcinogens</b> but less than 2 tons of each individual substance become an upper-tier establishment?</p> <p><b>Answer:</b> Yes. The named carcinogens are listed as one item in Annex I Part 2. Therefore, they should also be considered as one item.</p>

### 7.2.3. Petroleum products & alternative fuels – general questions

Ref.	Issue
014	<p><b>Question:</b> Can <b>pentane</b> be considered as petroleum product?</p> <p><b>Answer:</b> No. <u>In general terms petroleum products listed in entry 34 of Annex I Part 2 are distillates of crude oil and consist of a mixture of hydrocarbons. Where individual chemicals were separated from crude oil, those would have to be considered in accordance with their specific hazards and the respective entries in Annex I Part 1 or part 2.</u></p>
015	<p><b>Question:</b> If the final use of a <b>substance is to be added to automotive petrol</b> in small percentages, does that mean that the substance should be regarded as being assimilated to the category “petroleum products”?</p> <p><b>Answer:</b> No. The substance must be classified on the basis of its intrinsic properties; its final use is not relevant.</p>
039	<p><b>Question:</b> <b>Which substances and mixtures qualify as 'alternative fuels'</b> in point (e) of entry 34 in Part 2 of Annex 1 to the Seveso-III-Directive which says that alternative fuels need to serve the same purpose as petroleum products and have similar properties as regards to flammability and environmental hazards. What does that mean in practice?</p> <p><b>Answer:</b> To qualify as 'alternative fuel' a substance must be destined for use as fuel and show similar hazard properties like the petroleum products in (a)-(d) of entry 34. Substances that have a higher flammability or are more hazardous for the environment than the petroleum products in (a)-(d) cannot qualify as alternative fuel. Typically the petroleum products listed in entry 34 are classified as "flammable liquid" and/or as "hazardous to the environment chronic 2". This also suggests that an alternative fuel must be liquid since gases and solids would have different properties as regards to flammability. The entry includes mixtures based on such alternative fuels with any of the petroleum products in (a)-(d), unless the mixture can still be considered to be a petroleum product.</p> <p>Fuels that consist of substances named in part 2 of Annex I (e.g. methanol) and mixtures thereof (if remaining within the concentration limits set according to the properties of methanol under the CLP-Regulation<sup>5</sup>) cannot qualify as alternative fuel because where a substance can qualify for more than one specific named substance entry, the one with the lowest thresholds shall apply.</p>

**Comment [AKi5]:** The simple "no" was not very informative. Hence the proposal to add a justification so that the answer can be applied more generally also for other chemicals than pentane.

**Comment [AKi6]:** New Q&A, as discussed at SEG-3 and agreed in writing thereafter.

<p>Although not excluding other non-petroleum fuels, the entry 'alternative fuels' was initially introduced to not discriminate fuels from sustainable and renewable sources compared to petroleum products.</p> <p><u>Concluded at:</u> SEG-4</p> <p><u>See also:</u> the question on <b>bio-fuels containing ethanol</b> in section 7.2.4</p>
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7.2.4. Petroleum products & alternative fuels - mixtures

Ref.	Issue
013	<p><u>Question:</u> How shall <b>fuel additives</b> which contain substantial amounts of solvent naphtha, diesel or similar substances be regarded?</p> <p><u>Example:</u> Usually such fuel additives are preparations of solvents with substances like ethylene-vinyl acetate copolymer or blends of solvents with various other hydrocarbon components classified Aquatic Chronic 2, with a proportion of normally more than 60 % of solvent. Shall the preparation be classified Aquatic Chronic 2 because of the solvent or diesel amount or can it be grouped into “petroleum products”?</p> <p><u>Answer:</u> Tables 4.1.1 and 4.1.2 of Annex I of the CLP-Regulation<sup>5</sup> contain percentage thresholds for mixtures, which indicate if a mixture is “dangerous for the environment”. Table 4.1.2 indicates that if the mixture contains <math>\geq 2,5</math> % of (an)other Chronic 1 substance(s) the whole mixture is classified Chronic 2; the same applies if the Chronic 2 content is <math>\geq 25</math> %. In the case of a mixture as described in the question both fractions could be have a Chronic 2 (or even Chronic 1) phrase., so in principle the whole preparation would need this classification. But as the legislator’s intent was to create a special group of named substances being aware that this means an increased threshold it is justified to apply this reasoning also to the question of concern. If, therefore, a mixture as described would be classified by its content of a petroleum product, it shall be regarded as a petroleum product altogether (thus having no chronic 1phrase). Only if the qualifying fraction of the non-petroleum product exceeds 25 %, the whole mixture shall be grouped into category E.</p> <p><u>Concluded at:</u> CCA-15</p>
036	<p><u>Question:</u> How shall <b>bio-fuel blends with more than 5 % ethanol</b> be treated?</p> <p><u>Background:</u> Ethanol/petrol fuel blends (bio-fuels) with a content of up to 5 % of ethanol, intended to be used for automotive purposes fall already under the general exemption for petroleum products <u>and alternative fuels</u>.</p> <p><u>Answer:</u> The question refers to two different groups of substances:</p> <p>(1) Mixtures/blends of petrol (or diesel or other petroleum products, where “petroleum” refers to a certain originating substance produced from crude oil) with a content of up to 5% of ethanol:</p> <p>By setting high threshold levels for the named substance “petroleum</p>

**Comment [AKi7]:** This question needs to be updated in view of the new "alternative fuel" entry Seveso-III and in view of the recently agreed Q&A on alternative fuels.

Because of the "alternative fuel" entry one could theoretically simplify the whole answer. However some of the explanations provided quite useful and would be a shame losing them.

products and alternative fuels”, the Seveso-III-Directive grants a general exemption because the technology and safety systems for petrol and petroleum products are very much standardised and the legislator intended to avoid that small petrol stations are covered by the Seveso-III-Directive. In line with Directive 2003/30/EC<sup>7</sup> and Directive 98/70/EC<sup>8</sup> a mixture or blend of petrol with a content of up to 5 % of ethanol, intended to be used for automotive purposes, falls under this exemption.

- (2) Mixtures/blends with more than 5% of ethanol, and especially those where the component in majority is ethanol (bio-fuels)

In general, blends and other mixtures have to be treated equally according to their properties. The Seveso-III-Directive, referring to the CLP-Regulation (EC) No 1272/2008<sup>5</sup>, provides for appropriate procedures on how to determine flammability hazards and how to classify mixtures. However, blends of ethanol and petroleum products could be considered as alternative fuels if they fulfil the relevant criteria and would then also benefit from the general exemption.

Clearly, blends/mixture with high content of ethanol (as, for example the bio-fuel commonly known as E85 with a content of 76-86 % ethanol and 14-24 % petrol) cannot be regarded as a petroleum product, because of their composition. Under the current framework of Annex I, blends with a majority of ethanol may be regarded as a mixture of “normal” flammable liquids and should be classified according to the classification/testing methods and criteria described in Regulation 1272/2008. Since no classification of these mixtures according to Regulation 1272/2008 and no concentration limits are currently available, self-classification by the producers is necessary and depending on the flammability hazards of the mixture the thresholds of the relevant Seveso category of Annex I Part 1 category should apply.

Note: Currently, there is no consolidated classification of these mixtures across the industry. Tests performed by the Swedish Petroleum Institute, covering a variety of products and including both summer (85% ethanol) and winter (70% ethanol) quality resulted in classifying the mixtures as R11. Furthermore, the Material Safety Data Sheet of E85 provided by the US Dept. of Energy estimate the initial boiling point at 35.6 C, which justifies its classification as R11 and application of category P5c of Annex I Part 1 of the Seveso Directive with thresholds of 5000/50000 t.

Note: Note 19 to Annex I of the Seveso III Directive provides that “for the purpose of the implementation of this Directive, upgrade biogas may be classified under entry 18 of Part 2 of Annex I where it has been processed in accordance with applicable standards for purified and upgraded biogas ensuring a quality equivalent to that of natural gas, including the content of methane, and which has

**Comment [AKi8]:** This part of the reply is no longer correct because of the new “alternative fuel” entry in Seveso-III.

**Comment [AKi9]:** This part of the reply is no longer relevant in view of the alternative fuel entr

<sup>7</sup> Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport, OJ L 123, 17.5.2003

<sup>8</sup> Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC, OJ L 350, 28.12.1998,

~~a maximum of 1% Oxygen.~~

Concluded at: CCA-19

See also: the question on **alternative fuels** in chapter 7.2.4

**Comment [AKi10]:** This does not seem to be very closely related to the question and its added value in this context may not be high. This is about gas whereas the rest of the question is about liquid biofuels. In view of the new Q&A on alternative fuels which clearly says that gases cannot be alternative fuels, this note could cause confusion. It may, therefore, be better to delete this part.

### 7.3. Issues related to the notes to Annex I

#### 7.3.1. Note 2: mixtures

Ref.	Issue
020	<p><u>Question:</u> How should <b>solutions of methanol</b> be treated? Note 2 to Annex I states that "... mixtures shall be treated in the same way as pure substances provided they remain within concentration limits set according to their properties...". Since methanol has different concentration limits for its different properties, (acutely toxic, chronically toxic, and flammable), it is not clear which concentration limit applies.</p> <p><u>Answer:</u> The concentration limit, which is used only when determining if the Seveso-III-Directive applies, is 10%, the lower of the toxic concentration limits in accordance with the CLP-Regulation<sup>5</sup>. This means that solutions of methanol continue to be treated as methanol when the methanol concentration is 10% or more.</p>

#### 7.3.2. Note 3: 2% rule

Ref.	Issue
007	<p><u>Question:</u> Can the "2% rule" be applied to a substance in one location at an establishment when the same substance is present elsewhere at quantities greater than 2%?</p> <p><u>Background:</u> This question addresses the scope of the word 'only' in the note: "Dangerous substances present at an establishment only in quantities equal to or less than 2 %..."</p> <p><u>Answer:</u> Yes. The word 'only' is intended to refer to the quantities under consideration, not the total amount of substance. However, it is important to note that there is a second condition for the "2% rule" to be applied, i.e. that the substance in question cannot act as an initiator of a major accident elsewhere on the site.</p>

#### 7.3.3. Note 4: summation rule

Ref.	Issue
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008	<p><b>Question:</b> How to treat the case of a <b>substance which is classified for more than one hazard</b>, and is present in quantities greater than 2% of one of its qualifying thresholds but less than 2% of the other? Clearly, the summation rule must be applied for the classification for which the quantity exceeds 2%, but should it also be applied in the case when the quantity is less than 2% (assuming the condition that the substance cannot act as an initiator of a major accident elsewhere is satisfied)?</p> <p><b>Answer:</b> According to note 3 to Annex I, this question only arises if the substance in question is in a location such that it cannot act as an initiator of a major accident elsewhere on the site. Provided that condition is satisfied, the answer to the question is “no”. The substance’s presence should only count towards the summation rule for the classification for which its quantity exceeds 2% of the qualifying quantity. Of course, if the establishment comes under the Directive, then, when the safety report is being drawn up, the true hazard presented by the substance must be evaluated.</p>
010 a	<p><b>Question:</b> Does the summation rule apply when an <b>establishment has several Part 2 substances?</b></p> <p><b>Example:</b> A company holds quantities of both ethylene oxide and propylene oxide which are just below the qualifying quantities given in Part 2 for each substance (e.g. 4 tonnes of each). Is it correct that the summation rule does not apply because it does not mention Part 2 substances?</p> <p><b>Answer:</b> No. The fact that a substance is listed in Part 2 does not preclude its “classification” under Part 1 for the application of the summation rule. Ethylene oxide is in Part 2 and, reading Note 4 (a) to Annex I, propylene oxide is a “substance having the same classification from Part 2”. Therefore, the rule applies using the quantities set out in Part 2 for both substances when making the addition.</p>
010 c	<p><b>Question:</b> When applying the summation rule, <b>which thresholds should be taken for the Part 2 substances?</b> Those for each of the substances involved, or that for the hazard category in Part 1? Also, when a Part 2 substance is being added to Part 1 substances, how should the summation be carried out?</p> <p><b>Example:</b> An establishment holds:</p> <ul style="list-style-type: none"> <li>(1) x kg. of chlorine, which is classified both Acute Toxic 2 inhalation and Aquatic Acute 1 and is an Annex I Part 2 named substance, with a lower threshold of 10 tonnes; and</li> <li>(2) y kg. of unnamed Acute Toxic 2 substances; and</li> <li>(3) z kg. of unnamed “Section E1” substances.</li> </ul> <p>Which formula should be used for the lower-tier threshold:</p> <ul style="list-style-type: none"> <li>(1) <math>x/10000 + y/50000 &gt; 1</math> or <math>x/10000 + z/200000 &gt; 1</math></li> <li>(2) <math>(x + y)/50000 &gt; 1</math> or <math>(x+z/200000) &gt; 1</math></li> </ul>

	<p><u>Answer:</u> The thresholds to be used are those for the substance concerned, not for the category; and for categories in Section H and Section E it must be checked separately if the sum of fractions is equal or bigger than 1, in other words, formula (2). A similar calculation may of course have to be carried out for categories in Section P.</p>
011	<p><u>Question:</u> Should the <b>three subcategories in section O be considered together</b> for the application of the summation rule?</p> <p><u>Answer:</u> No. Substances with classifications falling under one of the three categories under O in Annex I Part 1 should be summed only among themselves. Since the hazards of these three subcategories are fundamentally distinct, there is no reason to sum the Section O categories together.</p>
012	<p><u>Question:</u> To what category do <b>polychlorodibenzofurans and polychlorodibenzodioxins</b> belong for the purposes of the summation rule?</p> <p><u>Answer:</u> To Section H - in that the risks of exposure are linked to short- or long-term toxic effects.</p>

7.3.4. Note 5: dangerous substances not covered by CLP<sup>5</sup>

Ref.	Issue
009	<p><u>Question:</u> How should <b>contaminated soil</b> be treated?</p> <p><u>Answer:</u> Note 5 to Annex I states that "<i>in the case of dangerous substances which are not covered by Regulation (EC) No 1272/2008<sup>5</sup>, including waste, (...) and which possess or are likely to possess (...) equivalent properties in terms of major-accident potential, these shall be provisionally assigned to the most analogous category or names dangerous substance falling within the scope of this Directive</i>". Therefore, where contaminated soil is stored or processed on a site, it should be treated on the basis of its properties as a mixture. However, contaminated soil which is in the ground does not bring an establishment under the Directive. If the classification cannot be carried out by this procedure (meaning the referenced Regulation in Note 5 to Annex I) other relevant sources of information may be used e.g. information concerning the origin of the waste, practical experience, testing, transport classification or classification according to the European waste legislation.</p> <p><u>See also:</u> the question on <b>waste</b> in chapter 7.1.3</p>

7.3.5. Notes 8-10: explosives

Ref.	Issue
024	<p><u>Question:</u> <b>Is it acceptable to use the net explosive content (NEC)</b> to determine whether the Seveso-III-Directive applies to pyrotechnic articles? If so, what tests</p>



	<p>and certifications are considered as acceptable proof of the net explosive content?</p> <p><b>Background:</b> Note 8 to Annex I provides that: “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.”</p> <p><b>Answer:</b> The net explosive content (NEC) should be used to calculate the thresholds for pyrotechnic articles and also in summing substances using the summation rule. The NEC has to be printed on the label of the pyrotechnic article according to Article 12(2) of Directive 2007/23/EC<sup>9</sup> which has to be applied by the Member States by 4 July 2010 for consumer fireworks and by 4 July 2013 for professional fireworks and all other pyrotechnic articles. However, some existing national authorisations for pyrotechnic articles may remain valid until 2017 on the territory of certain Member States. If the NEC is not known and cannot be sought from the manufacturer or cannot be checked, then the gross weight would be used. The use of a net content of a preparation for calculation of a threshold within the Seveso-III-Directive uniquely applies to explosive and pyrotechnic articles.</p> <p><b>Concluded at:</b> CCA-24</p>
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7.3.1. Notes 13-16: ammonium nitrate

Ref.	Issue
021	<p><b>Question:</b> Should the calculation of nitrogen content derived from ammonium nitrate also include all nitrate ions for which a molecular equivalent of ammonium ions are present in the mixture even if the ammonium ions and nitrate ions come from salts other than ammonium nitrate?</p> <p><b>Background:</b> In note 14 ammonium nitrate fertilisers are defined as “straight ammonium nitrate-based fertilisers and ammonium nitrate-based compound/composite fertilisers” based on “the nitrogen content as a result of ammonium nitrate”.</p> <p><b>Answer:</b> Yes. As established in UN ADR Special Provision 186, it is standard practice in determining the nitrogen content of ammonium nitrate fertilisers to count all nitrate ions for which a molecular equivalent of ammonium ions are present in the mixture. The chemical nature of the source of the ions for this calculation is not taken into consideration.</p> <p><b>Concluded at:</b> CCA-24</p>

<sup>9</sup> Directive 2007/23/EC of the European Parliament and of the Council of 23 May 2007 on the placing on the market of pyrotechnic articles, OJ L 154, 14.6.2007,

## 8. ANNEX II – SAFETY REPORT

Ref.	Issue
032	<p><b>Question:</b> Annex II, 4(a) states that a safety report should include a “...description of the major-accident scenarios and their probability or the conditions under which they occur...”. Does this mean that a company can choose whether or not to <b>indicate the probabilities of the scenarios</b>?</p> <p><b>Answer:</b> This provision was intended to cover in a flexible way the varying national approaches to the presentation of major-accident scenarios. In the absence of more specific national legislation, the Seveso-III-Directive itself does not mandate one approach in preference to the other.</p>
033	<p><b>Question:</b> Does the “2% rule” (Note 4 to Annex I) mean that a <b>Safety Report does not have to deal with such small isolated quantities</b> of hazardous substances?</p> <p><b>Answer:</b> No, the “2% rule” only applies to establishing the scope of the Seveso-III-Directive. Once an establishment comes within the scope, the Safety Report should cover all hazardous substances involved in the process or stored as such on site. However, it may be that for small isolated quantities which can neither cause a major accident themselves nor act as an initiator in a major-accident scenario elsewhere on site, a detailed risk analysis with major-accident scenarios is not required; still the safety report should mention the substances and explain why they do not present a major-accident hazard.</p>

## 9. ANNEX IV – EMERGENCY PLANS

Ref.	Issue
026	<p><b>Question:</b> What is meant by Annex IV(2)(d): Arrangements for providing <b>assistance with on-site mitigatory action</b>?</p> <p><b>Answer:</b> This could include arrangements for the provision of expertise or the supply of specific equipment to control releases, antidotes, protective clothing, etc.</p>