



EUROPEAN COMMISSION

Brussels, **XXX**
[...] (2012) **XXX** draft

COMMISSION IMPLEMENTING DECISION

of **XXX**

**on the request from the Czech Republic for a derogation pursuant to Article 3(4) and (5)
of Directive 98/70/EC as amended by Directive 2009/30/EC**

(Only the Czech text is authentic)

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on the request from the Czech Republic for a derogation pursuant to Article 3(4) and (5) of Directive 98/70/EC as amended by Directive 2009/30/EC

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 98/70/EC, Directive, of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel and amending Council Directive 93/12/EEC,¹ as amended by Directive 2009/30/EC, amending Directive, of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC, and in particular Article 3(4) and (5) thereof,

Whereas:

- (1) The Czech Republic notified, by letter to the Commission registered on 2 May 2011, a request for derogation to permit the placing on the market during the summer period of petrol containing ethanol from biofuel with a maximum vapour pressure of 60 kPa and in addition the permitted vapour pressure waiver specified in Annex III of Directive 98/70/EC ('the Directive') until the end of 2013, with the possibility of a prolongation. A supporting report was submitted on 24 September 2011 in addition to the notification letter.
- (2) According to Article 3(4) of the Directive, Member States in which the derogation referred to in the first subparagraph of Article 3(4) is not applied may, subject to paragraph 5, permit the placing on the market during the summer period of petrol containing ethanol with a maximum vapour pressure of 60 kPa and in addition the permitted vapour pressure waiver specified in Annex III, on condition that the ethanol used is a biofuel.
- (3) Under Article 3(5) of the Directive, a Member State that wishes to apply either of the derogations provided for in paragraph 4 must notify the Commission and provide all relevant information. The Commission is to assess the desirability and duration of the derogation, taking account of both:

¹ OJ L 350, 28.12.1998, p.58-68.

- (a) the avoidance of socioeconomic problems resulting from higher vapour pressure, including time-limited technical adaptation needs; and
 - (b) the environmental or health consequences of the higher vapour pressure and, in particular, the impact on compliance with EU legislation on air quality, both in the Member State concerned and in other Member States.
- (4) Further, under Article 3(5), the Commission is to assess the desirability and duration of the derogation requested. If the assessment, taking into account relevant target values, shows that the derogation will result in a lack of compliance with EU legislation on air quality or air pollution, including the relevant limit values and emissions ceilings, the request is to be rejected.
- (5) The Directive 2009/30/EC must have been transposed into national law by 31 December 2010 and effectively entered into force on that date in the Member States. Failure to respect the vapour pressure requirements of the Directive after this date will constitute an infringement of EU law unless derogation is in place.
- (6) The assessment of the notification has been conducted in accordance with the Directive and in conformity with the general recommendations for assessment set out in the public Commission document ‘Guidance note on notifications of exemptions from the vapour pressure requirements for petrol pursuant to Article 3(4) of Directive 98/70/EC relating to the quality of petrol and diesel fuels’.
- (7) The Commission noted that certain essential and relevant information were missing in the initial notification, so further elements were requested to the Czech Republic on 24 September 2011. A response was received on Brussels, 27 September 2011; consequently the six months period in which the Commission has to complete its review started on that date.
- (8) The assessment of the notification is to be conducted in accordance with information supplied by the Member State on the basis of common evaluation criteria and certain socioeconomic and environmental criteria.
- (9) In order for the Commission to assess whether the conditions for derogation are met, the Member State requesting a derogation must supply sufficient, relevant and precise figures and facts regarding the requested quantities and years so that the Commission can evaluate and compare the conditions before and after a possible derogation. In particular, the following information must be provided:
- the forecast quantity of petrol to be supplied to retail outlets in the Member State concerned and for which a derogation is sought, during each year for which the derogation is sought, as well as the proportion this represents of the Member State’s total production of petrol, during each calendar year for which the derogation is sought,
 - the quantity of petrol supplied to retail outlets in the Member State in the last calendar year which cannot currently meet the maximum vapour pressure limit and, if applicable, the percentage bioethanol content of that petrol,
 - the quantity of petrol exported in the last calendar year from the Member State concerned and the average vapour pressure of that petrol,

- the forecast quantity of petrol to be supplied to retail outlets in the Member State, together with the percentage bioethanol content if applicable, which would not meet the maximum vapour pressure limit, during each calendar year for which the derogation is sought.
- (10) Besides the data previous provided by the Czech Republic on the quantity of petrol supplied in the last two calendar years (2008 and 2009), both total supplies and supplies containing bio-ethanol, together with figures on exports have been submitted. Also, data on forecast quantities have been submitted concerning the time period for which the derogation is requested. However, no data have been submitted on the percentage biofuel content of the petrol. Data was submitted, from the official CZSO on imports of petrol for May – September period from 2009-2010; detailed information on imports by recipient is not officially available in the Czech Republic, because it constitutes individual data of a commercially confidential nature.
- (11) For assessing the socioeconomic problems, i.e. the social, financial and economic impacts of implementing the maximum vapour pressure of 60 kPa, the Member State requesting derogation has to provide information about the impact on petrol producers and/or petrol suppliers of not having the derogation. This should include:
- a short description of the technical and market-based difficulties of complying with the maximum vapour pressure of 60 kPa and the corresponding percentage of Member State petrol to be supplied to retail outlets, including, if applicable, information on the expected penetration of bioethanol as a constituent of petrol as defined by the Directive,
 - the options available to make the necessary technical adaptations to existing infrastructure and installations for petrol production and supply, the time needed to make such adaptations in order to comply with the maximum vapour pressure of 60 kPa, and the corresponding percentages of Member State petrol to be supplied to retail outlets, together with an assessment of the possibility of importing fuel of the necessary quality given that the EU is a net exporter of petrol,
 - a short description of the implications for the economic operation of the refinery and supply infrastructure, including impacts on employment associated with implementing the above technical adaptations, and
 - The potential disruption to petrol production and supply associated with implementing the above technical adaptations, whereby the possibility of mitigating such disruption by importing petrol of the requisite quality should be taken into account.
- (12) In order to assess the technical and market-based difficulties of complying with the maximum vapour pressure, the Commission needs to be in possession of all the relevant pertinent information.
- (13) The Czech Republic has submitted information indicating that domestic refineries, given the technology with which their production units are currently equipped, cannot make the necessary adjustments to the composition of the base petrol or utilise unused petrol components in a profitable way. The production of petrol complying with EU

legislation and national provisions and standards, and with an oxygen content not exceeding 0.9% (m/m) and a vapour pressure not exceeding 52 kPa, is not possible unless alkylate imports are increased, but this raises economic and logistical problems. This situation is judged by the Czech Republic to represent a substantial competitive disadvantage relative to foreign refineries in neighbouring countries. Further, adjustments to blend petrol with bio-ethanol also require increased imports of other additives, such as MTBE and ETBE or alkylate. According to the Czech Republic, it is not possible at present to adjust the way in which types of petrol are blended, e.g. by replacing alkylate by a combination of MTBE, reformulate petrol and prime petrol, because of the limited oxygen content in petrol before adding bio-ethanol.

- (14) Further, concerning distribution within its territory, the Czech Republic states that almost half of domestic production is supplied to the market by the main national distribution company, ČEPRO, to whose storage facilities the petrol is transported. The distributor, which transports, stores and sells motor fuels, also stores petrol for emergency purposes, including military use. Long-term storage of petrol containing ethanol may incur problems of increased corrosion and water separation. Czech national legislation specifies that petrol containing bio-ethanol must not be kept as part of emergency stocks kept in distribution stores. When petrol is removed from stocks for free circulation via ČEPRO terminals, biofuel (bio-ethanol) is added to such petrol in accordance with the legislation in force.
- (15) The Czech Republic argues that for technical and organisational reasons the main national distributor is not able to keep the management and replacement of emergency stocks separate from that of stocks for commercial distribution, so the petrol supplied to the distribution network by the distributor from domestic refineries and from all importers must correspond to national fuel standard requirements.
- (16) The notification from the Czech Republic only describes the technical and market-based difficulties in general and summary terms. The documentation submitted on the technical and market-based difficulties is insufficient to allow a full and completed assessment of whether the notification satisfies the general rules in this respect. The Commission therefore cannot fully assess the complete situation, and thus has reason to object to the notification on this point.
- (17) In order to assess the options available to make the necessary technical adaptations to existing infrastructure and installations for petrol production and supply, including an assessment of the possibility of importing fuel of the necessary quality given that the EU is a net exporter of petrol, the Commission takes into account the information submitted by the Czech Republic.
- (18) The Czech Republic produces the majority of petrol consumed in its territory. It has indicated that an additional investment in an alkylation process at its refineries would enable the production of suitable gasoline blends.
- (19) The Czech Republic has indicated that new plant facilities for alkylate production, to ensure a domestic capacity to produce quantities in line with market demand, would take at least 4 years to construct and a substantial investment. Such an investment is considered by the Czech Republic to be difficult in the present economic situation.

- (20) As regards the importing of petrol in the necessary quantities to meet domestic demand, the Czech Republic has not submitted any options or solutions. It mentions only that approximately 30 to 33 % of current petrol consumption is imported per year and that this petrol is mixed with domestic products within the distribution, transportation and storage chain. From the available information in the notification, the Commission fails to find any reasonable option for the import of petrol and therefore has reason to object to the notification on this point.
- (21) Further, concerning the time needed to make technical adaptations in order to comply with the maximum vapour pressure of 60 kPa and the corresponding percentages of Member State petrol to be supplied to retail outlets, the Czech Republic has not submitted any information other than that the construction of an alkylate plant facility would take about four years to complete. No other alternatives or measures are presented. The Commission considers that the information on these points is inadequate and insufficient. The Commission therefore has reason to object to the notification on these points.
- (22) The Czech Republic should also describe the implications for the economic operation of refinery and supply infrastructure, including the impact on employment of implementing the technical adaptations. The Czech Republic has clearly not considered this point adequately, as it confines itself to a simple estimation of the investment costs of constructing an alkylate producing plant. The Commission therefore has reason to object to the notification on this point.
- (23) Concerning alternative production options, it is unclear if the Czech Republic has fully investigated the option to fully remove butane from the gasoline pool and optimise operations in other refinery processes to minimise the volatility of other gasoline blending components. Regarding the option of removing the butane currently blended into summer gasoline, which would reduce the RVP by around 8 kPa and thereby allow for the inclusion of ethanol, this option has not been sufficiently described and analysed. Another possible solution (replacing the use of MTBE for ETBE) to convert existing MTBE plants to produce ETBE. ETBE has a lower RVP than MTBE whilst retaining the benefits of high octane. No other alternatives or measures are presented. The Commission considers that the information on these points is not insufficient. The Commission therefore has reason to object to the notification on these points.
- (24) No indication has been provided regarding the time methodology that the Czech Republic would use to place on the market during the summer period of petrol containing ethanol from biofuel with a maximum vapour pressure of 60 kPa. The Commission therefore has reason to object to the notification on these points.
- (25) Lastly, concerning the description of the socioeconomic problems, the Commission notes that the Czech Republic has not provided any information regarding the potential supply disruption that might ensue and any mitigating actions that could be taken. The Commission is therefore unable to assess if the socioeconomic problems associated with potential supply disruption are appropriately addressed. It therefore has reason to object to the notification on this point.
- (26) In order to assess the second criterion — compliance with EU air quality and pollution legislation, Member States are asked to provide realistic and reliable predictions of their emissions of non-methane volatile organic compounds (NMVOCs) and state how

these predictions compare with the emission ceiling stipulated in Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants² (the NEC-D). These predictions:

- have to be consistent with the methodologies permitted by Directive 2001/81/EC for the reporting of emissions and emission projections to the Commission, and
 - have to include an assessment of the proposed derogation for national NMVOC emissions by assessing the changes in emissions in all relevant emitting sectors. As a minimum, this has to cover: (1) the storage of petrol at terminals and its distribution to service stations; (2) the storage of petrol at service stations; (3) the fuelling of motor vehicles, including accidental spills; (4) evaporative losses for motor vehicles at rest; and (5) evaporative emissions from vehicles in use, so-called ‘running losses’.
- (27) The Czech authorities have supplied estimates of the potential increase in NMVOC emissions as a result of blending ethanol with petrol. For 2010, NMVOC emissions are projected to be up to 170 kt. In the Czech Republic’s NEC-D for 2010, the amount was set at 220 kt. The general approach of the Czech authorities for estimating NMVOC emissions from petrol is based on experimental calculations indicating a maximum increase in NMVOC emissions of 14% relative to standard petrol, obtained with an 8% bioethanol blend. This approach is applied to emissions from storage, distribution and stationary vehicles. Concerning emissions from vehicles in use, the Czech authorities refer to an article published in *Environmental Research* in 2008, and arrive at a conclusion based on expectations that the use of bioethanol in petrol will lead to reduced emissions of NMVOC. In view of the Czech infrastructure for petrol production, emissions of NMVOC may not actually occur during the production of automobile petrol, since ethanol is added subsequently to the final product.
- (28) The authorities also refer to the strict measures governing petrol storage at terminals and its distribution to service stations. Compared to the limit of 35 g/m³ set in Annex II of European Parliament and Council Directive 94/63/EC of 20 December 1994 (the VOC Directive)³ on the control of volatile organic compound emissions resulting from the storage of petrol and its distribution from terminals to service stations, a much stricter emission limit is fixed, at 150 mg/m³, for an average mass concentration of petrol vapours. The technical requirements for filling fuel tanks with fuels are specified by Czech Regulation No 355/2002 Coll. amended by Regulation No 509/2002 Coll., under which all dispensers must be equipped with a mechanism for vapour recuperation and the total amount of vapours recuperated must be in the range of 95 – 115% from the total volume of petrol pumped into the fuel tank of the car.
- (29) For calculating emissions from the automobile petrol product chain in the Czech Republic, from production to consumption, the Czech authorities have submitted information and conclusions. Though based on estimations and expected outcomes, these conclusions are scientifically acceptable although none of the calculations used

² OJ L 309, 27.11.2001, p. 22–30.

³ OJ L 365, 31.12.1994, pp. 24–33.

are based on the methodologies permitted under Directive 2001/81. The 2010 NMVOC emission projections provided indicate an amount of up to 170 kt whereas the Czech NEC-D limit for 2010 is 220 kt. However, it is unclear if these emission projections include the impacts of the vapour pressure derogation. While noting the lack of methodological consistency and substantive evidence in the submitted information, the Commission nevertheless accepts, following examination of the Czech reports submitted to the Commission for the NEC-D and the emissions data available for the year 2007, that the increased emissions will not exceed the applicable emission ceiling.

- (30) Further, concerning the ozone criteria, the Commission has to assess whether the Member State has fulfilled its duties under Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe⁴ (Directive 2008/50) to ensure compliance as far as possible with the target value for ozone. In addition, the emissions of ozone precursors in one Member State can contribute to elevated levels of ozone in other Member States. Accordingly, the following information should be provided in the notification:
- The impact of the derogation on ozone concentrations in the Member State requesting derogation compared with the case where no derogation is implemented. Changes in ozone concentration should as a minimum be expressed in a form that enables a simple comparison with the ozone target value in Directive 2008/50/EC. This information usually takes the form of the results of recognised air quality models.
 - The impact of the derogation on ozone concentrations in other Member States.
 - Under Articles 17(1) and (2) of Directive 2008/50/EC, Member States must take all necessary measures not entailing disproportionate costs to ensure that the target value for ozone is attained by 1 January 2010. Where the target value is exceeded, Member States must draw up a programme in accordance with Article 6 of Directive 2001/81/EC and, if appropriate, implement an air quality plan to attain the target value, except where this is not achievable without entailing disproportionate costs. In its notification, the Member State requesting a derogation must explain:
 - (a) How the proposed derogation is compatible with the obligations regarding attainment of the ozone target value.
 - (b) Whether the proposed derogation appears in any air quality plan or programme prepared under Directives 2008/50/EC or 2001/81/EC.
 - (c) Whether it envisages additional measures to reduce VOC emissions that would outweigh any increase in emissions following implementation of the derogation.
- (31) The evaluation of information submitted by the Czech Republic regarding an improvement in the monitoring data from the period 2007-2009 relative to 2006-2008, by the consultant AMEC Environment & Infrastructure, indicates, that according to

⁴ OJ L 152, 11.6.2008, pp. 1–44.

the Czech Republic a reduction in the number of locations where exceedances have been recorded (20 v. 38 stations) and an increase in the area where no exceedances were recorded (53% v. 6.2%).

- (32) This information details how an estimate of a relative change in ozone concentration following the introduction of the vapour pressure waiver has been modelled using the CAMx model and estimates of anthropogenic emissions changes using a model based on the EMEP emission inventory. Emissions of NMVOCs from the SNAP 5 source sector category (Extraction and distribution of fossil fuels and geothermal energy) were assumed to increase by 14%. The results show that the impact of the waiver is estimated to lead to an increase in ozone concentrations in the order of thousands of a microgram per m³.
- (33) The supplementary information provided in September 2011 confirms that the modelling does not take into account any potential increase in NMVOC evaporative emissions from vehicles.
- (34) The notification specifically points out that reducing ozone levels and precursor emissions is a priority in the Czech Republic and those measures are being taken to address this. These include Stage II PVR, which has been in place since 2002, and an emission limit stricter than that under the VOC Directive for emissions from petrol vapour recovery units at terminals. The Czech authorities refer to the relevant Czech air quality legislation in force.
- (35) The Commission finds that no quantitative information has been provided on the potential impact of the derogation on ozone levels in the Czech Republic or neighbouring countries and no method to determine this impact has been identified. Accordingly, the Commission has no evidence to consider.
- (36) For assessing the benzene criteria, Member States have to submit evidence that the air quality limit value for benzene in Directive 2008/50/EC has been attained by 1 January 2010, although this deadline may be extended by 5 years subject to certain conditions defined in Directive 2008/50/EC. Notifications by Member States must therefore include the following:
 - Information regarding any exceeding of the limit value (or limit value plus margin of tolerance) for benzene in air in recent years. This should be based on assessments and reports made under Directive 2008/50/EC (or earlier legislation).
 - Quantification of the expected increase in benzene concentrations at locations where such concentrations may be elevated compared to general background levels and where there may be a greater risk of the limit value being exceeded, together with a short description of the methodology used for this purpose. Locations should include those in the vicinity of service stations or other major sources of benzene emissions such as petrol manufacturing and storage installations.
 - An assessment of the impact of the derogation on compliance with the air quality limits value for benzene in 2010.

- Where there is a risk of non-compliance with the limit value in 2010, any additional measures to offset the additional emissions due to the derogation and to ensure compliance.
- (37) The Czech authorities have submitted statistical information on benzene concentrations in 2008 and indicated that the methodology used for quantification was gas chromatography with flame ionisation detection. They also state that the air pollution limit value plus margin of tolerance was thus not exceeded. To support their claims the Czech Republic provided a paper ‘Air Quality and Ethanol in Gasoline’, presented by Gary Z. Whitten in 2004 at the 9th annual conference on ethanol,⁵ which indicates that the incorporation of 10% bioethanol into petrol has a positive effect on reducing emissions of benzene from the use of vehicles by up to 25%.
- (38) They further assume that the derogation will not have any major impact on the air pollution limit for benzene, as the limit is exceeded in only one problematic area because of the character of industrial production there, not because of the transport burden.
- (39) The Commission finds from the European Environmental Agency central data repository of the Annual Air Quality Report 2010 from the Czech Republic submitted by Czech Republic on 30 September 2011, that the Czech authorities are in violation of individual exceedance of limit values and limit values plus margin of tolerance (MOT) (96/62/EC Article 11 (1) (a) (i) and (ii), 1999/30/EC Annexes I, II, IV and V and 2000/69/EC Annexes I and II, 2008/50/EC Articles 13, 16 and 22 for 2010,. It therefore has reason to object to the notification from the Czech Republic on this point.
- (40) The Commission finds that the Czech authorities have not submitted any quantitative information on the potential impact of the derogation on benzene levels within the Czech Republic. The Commission therefore finds that the submitted information is insufficient to provide a basis for assessment. It therefore has reason to object to the notification from the Czech Republic on this point.
- (41) Considering the lack of necessary elements for a correct assessment of the socio-economic criteria's, and the environment problem indicated in point 39, the Commission has reasons to object to the notification of the Czech Republic to a request for a waiver for vapour pressure.

HAS ADOPTED THIS DECISION:

Article 1

The Commission rejects the notification of the Czech Republic to permit the placing on the market during the summer period of petrol containing bio-ethanol with a maximum vapour pressure exceeding 60kPa until 2013.

⁵ Whitten, Gary Z., Air Quality and Ethanol in Gasoline, Proceedings of the 9th Annual National Ethanol Conference, USA 2004

Article 2

This Decision is addressed to the Czech Republic.

Done at Brussels,

*For the Commission
Connie Hedegaard
Member of the Commission*