STRATEGIES AND POLICIES OF PARTIES AND SIGNATORIES TO THE CONVENTION FOR THE ABATEMENT OF AIR POLLUTION

2010 DRAFT QUESTIONNAIRE FOR PRIORITY COMPLIANCE REVIEW

Answer ALBANIA

I. 1985 SULPHUR PROTOCOL¹

- 1. The question in this section refers to the following Parties: Austria, Belarus, Belgium, Bulgaria, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Liechtenstein, Lithuania, Luxembourg, the Netherlands, Norway, the Russian Federation, Slovakia, Sweden, Switzerland and Ukraine.
- 2. Question 1: With reference to <u>article 6</u> of the Protocol, please provide details of your country's national programmes, policies and strategies that specifically address the reduction of sulphur emissions. If your country is a Party to the 1994 Sulphur Protocol² and/or the 1999 Gothenburg Protocol³, you may cross-refer to question 13 and/or 39.

The Republic of Albania has ratified the Convention of the United Nations Economic Commission for Europe (UNECE) on Long Range Trans-boundary Air Pollution – (CLRTAP) Official Journal: Year 2005, No 77, Page 2565; Date of publication: 28-10-2005.

In February 2009, the Assembly ratified the first two CLRTAP protocols on reducing respective emissions of SO2 and NOx:

Law No 10062, of 29.01.2009 , "On the adhering of the Republic of Albania to the Protocol "On
control of emissions of nitrogen oxides or their trans-boundary affluxes", of the 1979 Convention, "
On Long Range Trans-boundary Air Pollution"; Official Journal, 2009, No 9, page 221, date of
publication 09.02.2009.

□Law No 10063, of 29.01.2009, "On the adhering of the Republic of Albania to the Protocol "On reducing sulphur emissions or their trans-boundary affluxes, to at least 30 % of the 1979 Convention, "On Long Range Trans-boundary Air Pollution"; Official Journal, 2009, No 9, page 221, date of publication 09.02.2009.

Under the Balcan Project "On implementation and ratification of Pprotocol on Heavy Metals, Pprotocol on Persistent Organic Pollutants and Gothenburg Protocol" Albania has prepared

¹ 1985 Helsinki Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent.

² 1994 Oslo Protocol on further Reduction of Sulphur Emissions.

³ 1999 Gothenburg Protocol to abate Acidification, Eutrophication and Ground-level Ozone.

and submitted the first draft of the National Action Plan to the Secretariat of CLRTAP. This NAP will be approved by Government Order by the end of June 2011.

Actualy there is no any national programmes, policies and strategies that specifically address the reduction of sulphur emissions, but there are other national strategies that foresees measures for reduction of air pollution such as:

- National Strategy for Development and Integration (NSDI), 2007-2013, adopted in Decree of the Council of Ministers in March 2008.
- Environment Cross-cutting Strategy (ECS) adopted by Decree of the Council of Ministers No. 847, dated 29.11.2007 (*Official Journal* 174/2007, p. 5349, date of publication 22.12.2007)
- **The National Strategy of Energy**, adopted in DCM No. 424, dated 26.06 2003 (Date of adoption 26.06.2003, *Official Journal* 54, p. 2196);

Preparation of National Action Plan on Air Quality (NAPAQ) is foreseen in the NPISAA and is going to be approved by 2013

The air quality legislation includes:

- Law "On air protection of from pollution" No 8897, of 16.05.2002 ("RA Official Journal" No 26, June 2002, p. 825), amended by Law No 10266 of 15.04.2010, on amendments and addenda to Law No 8897 of 16.05.2002 "On protection of air from pollution", partially transpose the Council Directive 96/62/EC on ambient air quality assessment and management.
- DCM No 803, of 4.12.2003, "On the approval of air quality norms", (RA Official Journal" No 101, December, 2003, p. 4337).
- DCM No.435, "On the approval of Norms of Emissions in the Air in the Republic of Albania" of 12.09.2002, (Official Journal No 56, September 2002, p. 1579).
- DCM No. 453, Dated 23.6.2005, "On approval of the list of equipments, using ozone depleting substances, which are prohibited to be produced and imported, as well as the rules and procedures of ozone depleting substances substitution in existing equipments
- DCM No .248, dated .24.04.2003 "On approval of temporary norms of releases into the air and their implementation".
- **DCM No 147**, of 21.03.2007, "on the quality of petrol and diesel fuels", Partially transposition of the Directive 98/70/EC "on the quality of petrol and diesel fuels" (Official Journal L 350, 28/12/1998 P. 0058 0068, 31998L0070),
- **General Order No 6**, of 09.10.2007, "on gathering and maintaining data related to fuels' quality" in compliance to the requirements of Directive 98/70/EC
- Order of the Minister of Economy, Trade and Energy No 166, of 01.07.2004, "On quality control, sampling, quantity of sample, respective payments and documentation, as well as controls on respect of technical norms and conditions at oil, gas, and their byproducts'installations",
- The Guidelines of the Ministry of Public Works, Transport and Telecommunication (MoPWTT) and MoEFWA No 6527, of 24.12.2004 "On permitted values of atmospheric polluting elements in the environment resulting from gas emissions and noises caused by vehicles and the ways for controlling them", in effect since 8.6.2005 (Official Journal, 2005/Mars, No 9, p. 388) amended by Guidelines No.12, dated 15.6.2010 "on amendments and addenda to Guidelines No 6527, of 24.12.2004 "On permitted values of atmospheric polluting elements in the environment resulting

from gas emissions and noises caused by vehicles and the ways for controlling them"accompained by the Manual of Vechicels Control

The main purpose of this guideline is to define the permissible limits of air pollutants in the ambient air, discharged from gases by the use of vehicles and road traffic

Monitoring of atmospheric pollution from the release of gases resulting from motor vehicles in, is undertaken by entities that control the roads (General Road Directorate, municipalities, regions, etc.), when such actions are deemed necessary. This is done in cooperation with the REAs and specialised institutions, and through monitoring systems as determined in the Road Code of the Republic of Albania and the DCM No 1189, of 18.11.2009 "On procedures regarding the drafting and implementation of the national programme of environmental monitoring" Official Journal No 200, December 2009.

Evaluation of the technical condition of vehicles with regard to atmospheric pollution due to gaseous emissions and noises, is a component of the vehicle technical control system, defined by the Instruction of the Ministry of Public Works, Transport and Telecommunication No 3413, of 16.7.2003 "On the technical control of road vehicles". However the effectiveness of controls is unsatisfactory, and the government has transferred vehicle inspections to the private sector, and compulsory technical control of vehicles, including controls on gas emission are undertaken on the basis of the Concession Agreement, of 3.9.2009, between the Ministry of Public Works, Transport and Telecommunication and the Swiss "Societe Generale de Surveillance" SA, with exclusive rights to conducting such controls for 10 years.

On ratification of the Treaty establishing the Energy Community" determined that each Contracting Party shall implement by December 31, 2011, the Directive 1999/32/EC of the Council of 26 April 1999 regard "A reduction of the sulfur content in some liquid fuel "and amending Directive 93/12/EEC. Such an obligation is already implemented by CMD no. 147, date 21.03.2007 "On the quality of fuel, petrol and diesel", which defines the standards EN 228 (diesel unleaded) and EN 590 diesel have become compulsory

According to DCM No 147, of 21.03.2007, "the quality of petrol and diesel fuels", the sulphur content of fuels will to be gradually decreased over time.

- Starting on 1 January 2009, the content of sulphur in gasoil is decreased five times (from 50 mg/kg, to 10mg/kg).
- from 1 January 2009 to 31 December 2010, the content of sulphur in diesel fuels will decrease by almost six times (from 2000 mg/kg, to 350 mg/kg).
- from 1 January 2011, the content of sulphur in diesel fuels will decrease by 35 times (from 350 mg/kg to 10 mg/kg).

The quality of fuel is controlled by the Central Technical Inspectorate (CTI), in accordance with Law No 8450, of 24.02.1999, "On Processing, Shipping and Commercialising Oil, Natural Gas, and their by-products" amended with Law No 9218, of 8.4.2004, "On some amends to Law No8450, of 24.2.1999 "On Processing, Shipping and Trading Petrol, Natural Gas, and their byproducts", Official Journal, 2004, No 30, page 2509, date of publication 19.05.2004" and the Order of the Minister of

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Economy, Trade and Energy No 166, of 01.07.2004, "On quality control, sampling, quantity of sample, respective payments and documentation, as well as controls on respect of technical norms and conditions at oil, gas, and their by-products' installations ", the CTI extracts samples from each shipment of fuel products entering Albania by sea or land, to conduct quality analysis. Test results are documented. The same procedure is followed for domestically produced gasoil. The ICT conducts periodic controls and year-round surveys at all retail dispensers of gasoil, diesel, and liquid propane gas and at all wholesale storage sites for oil and gas products.

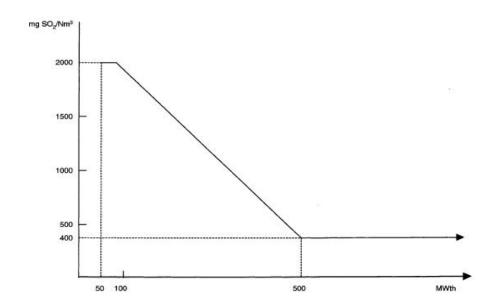
Regarding the use of fuels from stacionary sources, DCM 435/2003 defines that is not allowed the use of fuel with content of sulphur over 1%.

Emission Limit Values for SO_2 are defined in the annexes of the law on environmental permitting.

Annex 3. Emission Limit Values for SO_2 – Solid fuels

Part A

SO₂ emission limit values expressed in mg/Nm³ (O₂ content 6 %) to be applied by existing plants pursuant to Article 20(2):



NB. Where the emission limit values above cannot be met due to the characteristics of the fuel, a rate of desulphurisation of at least 60 % shall be achieved in the case of plants with a rated thermal input of less than or equal to 100 MWth, 75 % for plants greater than 100 MWth and less than or equal to 300 MWth and 90 % for plants greater than 300 MWth. For plants greater than 500 MWth, a desulphurisation rate of at least 94 % shall apply or of at least 92 % where a contract for the fitting of flue gas desulphurisation or lime injection equipment has been entered into, and work on its installation has commenced, before 1 January 2001.

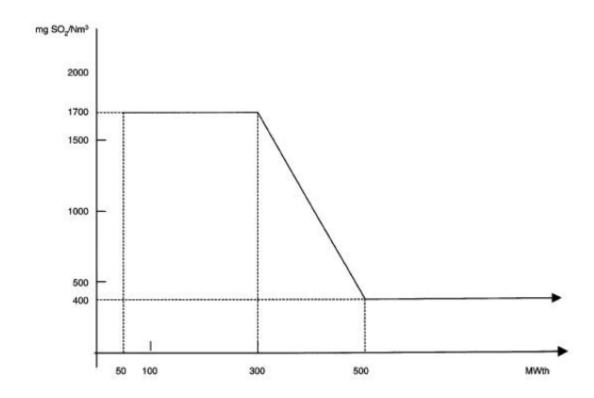
Part B SO_2 emission limit values expressed in mg/Nm^3 (O_2 content 6 %) to be applied by new plants pursuant to Article 20(1) with the exception of gas turbines.

Type of fuel	50 to 100 MWth		greater than 30 MWth
Biomass	200	200	200
general case	850	200	200

Where the emission limit values above cannot be met due to the characteristics of the fuel, installations shall achieve 300 mg/Nm³ SO₂, or a rate of desulphurisation of at least 92 % shall be achieved in the case of plants with a rated thermal input of less than or equal to 300 MWth and in the case of plants with a rated thermal input greater than 300 MWth a rate of desulphurisation of at least 95 % together with a maximum permissible emission limit value of 400 mg/Nm³ shall apply.

Annex 4. Emission Limit Values for SO₂ – Liquid fuels

Part A SO₂ emission limit values expressed in mg/Nm³ (O₂ content 3 %) to be applied by existing plants pursuant to Article 20(2):



Part B
SO₂ emission limit values expressed in mg/Nm³ (O₂ content 3 %) to be applied by new plants pursuant to Article 20(1) with the exception of gas turbines:

50 to 100 MWth	100 to 300 MWth	Greater than 300 MWth
850	400 to 200	200
	(linear decrease)	

Annex 5. Emission Limit Values for SO₂ – Gaseous fuels

Part A

SO₂ emission limit values expressed in mg/Nm³ (O₂ content 3 %) to be applied by existing plants pursuant to Article 20(2):

Type of Fuel	Limit values (mg/Nm³)
Gaseous fuels in general	35
Liquefied gas	5
Low calorific gases from gasification of refinery residues, coke oven gas, blast-furnace gas	800
Gas from gasification of coal	

Part B

SO₂ emission limit values expressed in mg/Nm³ (O₂ content 3 %) to be applied by new plants pursuant to Article 20(1):

Type of Fuel	Limit values (mg/Nm³)
Gaseous fuels in general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low calorific gases from blast-furnace	200

II. NITROGEN OXIDES PROTOCOL⁴

- 3. The questions in this section are based on the reporting obligation of Parties in accordance with <u>article 8</u> and enable Parties to provide information on the implementation of the obligations under articles 2, 4 and 7 of the Protocol.
- 4. They refer to the following Parties to the Protocol: Austria, Belarus, Belgium, Bulgaria, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Liechtenstein, Lithuania, Luxembourg, the Netherlands, Norway, the Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, the United

⁴ 1988 Sofia Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes.

Kingdom of Great Britain and Northern Ireland, the United States of America and the European Community.

5. Question 2: With reference to <u>article 7</u>, please provide up-to-date information on the national programmes, policies and strategies your country has developed to implement the obligations under the Protocol that serve as a means of controlling and reducing emissions of nitrogen oxides (NO_x) or their transboundary fluxes. If your country is a Party to the Gothenburg Protocol, you may cross-refer to question 39.

See the answer of Question 1

6. Question 3: With reference to <u>article 2, paragraph 2 (a)</u>, please specify the national NO_x emission standards applied to major stationary sources and/or major source categories in your country, taking into consideration the <u>technical annex</u> to the Protocol. For the purpose of this question, "major stationary source" means any stationary source, the construction or substantial modification of which commenced after 14 February 1993 and which has a thermal input of at least 50 MW_{th} . Please complete the table below.

Albania has established limit values for NOx emissions from the emissions of various activities (mainly industrial) in DCM no. 435, date 12.09.2002 "On approval of the emission norms in the Republic of Albania and the Decision no. 248. dated 24.04.2003 "On approval of temporary norms on air emissions and their implementation."

Law No.8897, dated 16.5.2002 "On air protection from pollution" does the classification of pollution sources, based on their termic capacity, as big sources (over 5MW) medium sources (0.2-5MW) and small (under 0.2MW) sources of pollution.

Annex 6 of the law "On environmental permitting" which is approved by the end of February 2011, establishes emission limit values for SO_2 and NOx - solid fuel / liquid and gases for large combustion plants.

Annex 6. Emission Limit Values for Oxides of Nitrogen (Measured as NO₂)

Part A

NOx emission limit values expressed in mg/Nm³ (O₂ content 6 % for solid fuels, 3 % for liquid and gaseous fuels) to be applied by existing plants pursuant to Article 20(2):

Type of fuel	Limit values (mg/Nm³)	
Solid Fuel (¹)(²):		
50 to 500 MWth	600	
Greater than 500 MWth	500	
From 1 January 2016		
50 to 500 MWth	600	
Greater than 500 MWth	200	
Liquid Fuel		
50 to 500 MWth	450	
Greater than 500 MWth	400	
Gaseous Fuel		
50 to 500 MWth	300	
Greater than 500 MWth	200	

Notes

- (1) Until 31 December 2015 plants of a rated thermal input greater than 500 MW, which from 2008 onwards do not operate more than 2 000 hours a year (rolling average over a period of five years), shall, in the case of plant licensed in accordance with Article 20(2), be subject to a limit value for nitrogen oxide emissions (measured as NO₂) of 600 mg/Nm³.
 - From 1 January 2016 such plants, which do not operate more than 1 500 hours a year (rolling average over a period of five years), shall be subject to a limit value for nitrogen oxide emissions (measured as NO₂) of 450 mg/Nm³.
- (2) Until 1 January 2018 in the case of plants that in the 12 month period ending on 1 January 2001 operated on, and continue to operate on, solid fuels whose volatile content is less than 10 %, 1 200 mg/Nm³ shall apply.

Part B

NOx emission limit values expressed in mg/Nm³ to be applied by new plants pursuant to Article 20(1) with the exception of gas turbines:

Solid fuels (O2 content 6%)

Type of fuel	50 to 100 MWth		greater MWth	than	300
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Biomass	400	300	200
General case	400	200	200

Liquid fuels (O2 content 3%)

50 to 100 MWth	100 to 300 MWth	greater than 300 MWth
400	200	200

Gaseous fuels (O2 content 3%)

Type of fuel	50 to 300 MWth	greater than 300 MWth
Natural gas (¹)	150	100
Other gases	200	200

Notes

 Natural gas is naturally occurring methane with not more than 20 % (by volume) of inerts and other constituents.

Gas turbines

NOx emission limit values expressed in mg/Nm³ (O₂ content 15 %) to be applied by a single gas turbine unit pursuant to Article 20(1) (the limit values apply only above 70 % load):

Type of fuel	Greater than 50 MWth (thermal input at
	ISO conditions)
Natural gas (¹)	50 (2)
Liquid fuels (3)	120
Gaseous fuels other than natural gas	120

Gas turbines for emergency use that operate less than 500 hours per year are excluded from these limit values. The operator of such plants is required to submit each year to the National Environment Agency a record of such used time.

Notes

- Natural gas is naturally occurring methane with not more than 20 % (by volume) of inerts and other constituents.
- (2) 75 mg/Nm³ in the following cases, where the efficiency of the gas turbine is determined at ISO base load conditions:
 - gas turbines, used in combined heat and power systems having an overall efficiency greater than 75 %;
 - gas turbines used in combined cycle plants having an annual average overall electrical efficiency greater than 55 %;
 - c) gas turbines for mechanical drives.

For single cycle gas turbines not falling into any of the above categories, but having an efficiency greater than 35 % – determined at ISO base load conditions – the emission limit value shall be $50*\eta/35$ where η is the gas turbine efficiency expressed as a percentage (and at ISO base load conditions).

(3) This emission limit value only applies to gas turbines firing light and middle distillates.

Table 1: Question 3

Major stationary sources or major source category ^{2/} for NOx	National emission standards ^{1/}	National legislation and comments (e.g. BAT ⁵ applied)
1. Public power, cogeneration and district		
heating plants:		
(a) Boilers		-Law "On environmental permitting" has fully transposed Directive on Large Combustion PlantsDCM no. 435 -BAT is not developed so far in
		the national language, for any specific
		industrial sector.
(b) Stationary combustion turbines and internal combustion engines		
2. Commercial, institutional and residential		
combustion plants:		
(a) Commercial boilers		
(b) Domestic heaters		
3. Industrial combustion plants and		
processes with combustion		
(a) Boilers and process heaters (no direct		
contact between flue gas and products)		

⁵ Best available technologies.

(b) Processes (direct contact); (e.g. calcinations processes in rotary kilns; production of cement, lime, etc.; glass production; metallurgical operation; pulp production)Production of glass	2500 mg/m3 1600 mg/m3	Decision no. 435
Cement production Lime production Magnetite production Fusion of iron metals and other alloys Superficial treatment of metals (intermediate pollution source) Steel production furnace with two hearts with oxygen intensification Steel production electrical circuit up to 20 tons Production of coke	1100 mg/m3 800 mg/m3 1800 mg/m3 1500 mg/m3 400 mg/m3 400 mg/m3 400 mg/m3 500 mg/m3	Use nitric acid for equipments working interaptedly (baths)
4. Non-combustion processes, e.g. nitric acid production 5. Extraction, processing and distribution of	For existing instalations, Decision no. 435 has the NOx value 1.6 kg/ton	
fossil fuels		
7. Waste treatment and disposal, e.g. incineration of municipal and industrial		
waste		
Plants with capacity 1t/h burnt waste Combustion of hazardous waste	80 mg/m3	
Combustion of nazardous waste Combustion of woods	500 mg/m3 500 mg/m3	
Crematorium	350 mg/m3	

^{1/} Specify the units and statistical treatment.

8. Question 4: With reference to article 2, paragraph 2 (c), please provide details of the pollution control measures for NO_x emissions introduced in your country for major stationary sources with a thermal input of at least $100 \, MW_{th}$, the construction of which commenced on or before 14 February 1993, taking into consideration the <u>technical annex</u> to the Protocol. Please complete the table below.

For the industrial energy sector fuel emissions norms [mg/m3] have been defined for solid matter, sulphur dioxide (SO2), nitrogen oxides (NO2), carbon oxide (CO), the C Σ of organic matter, the specific content of oxygen [%] during the combustion of fuel for production of electricity or thermal

^{2/} For the definition of major source category see article 1, paragraph 10.

energy production in technical plants with thermal capacity from 0.2 MW up to 60 000 MW for gas turbines (big or medium sources of pollution).

In Albania 95% of energy producing sources are hydro-power plants. MoEFWA has issued permits for four LCP, two of which are existing installations (one for 25 MW for steam production and the other over 50 MW). New LCP include one liquid fuel system with a rated thermal input of 90MW, which is under operation, and one biomass LCP with a rated thermal input of 140MW which has yet to be constructed.

LCP operators (and other operators in general) are obliged self-monitor to stay within the maximum permissible norms defined in the permits. LCP operators are obliged to report the results of self-monitoring to the Regional Environment Agencies (REAS), according to Article 15 of amended Law No. 9890 dated 20.03.2008 "On Environmental Protection". The Environmental Inspectorate is the responsible authority for controlling and assessing compliance with permit conditions.

The Law "On environmental permitting" will enter in force by 2013 and the operator should be obligated to prepare the Compliance Plans by 2013.

Table 2: Question 4

Major stationary source	Pollution control measures applied	Comments (national legislation, relevant plant characteristics e.g. age, utilization rate)
1. Public power, cogeneration and		
district heating plants:		
(a) Boilers		
(b) Stationary combustion turbines		
and internal combustion engines		
2. Commercial, institutional and		
residential combustion plants:		
(a) Commercial boilers		
(b) Domestic heaters		
3. Industrial combustion plants and		
processes with combustion		
(a) Boilers and process heaters (no		
direct contact between flue gas and		
products)		
(b) Processes (direct contact); (e.g.		
calcinations processes in rotary kilns;		
production of cement, lime, etc.; glass		
production; metallurgical operation;		
pulp production)		
4. Non-combustion processes, e.g.		
nitric acid production		
5. Extraction, processing and		
distribution of fossil fuels		
6. Waste treatment and disposal, e.g.		
incineration of municipal and		
industrial waste		

9. Question 5: With reference to <u>article 2, paragraph 2 (b)</u>, please specify the national NO_x emission standards applied to newly registered mobile sources in all major source categories, taking into consideration the <u>technical annex</u> to the Protocol and the relevant decisions taken within the framework of the Inland Transport Committee of the United Nations Economic Commission for Europe (UNECE). If your country is a Party to the Gothenburg Protocol, you may cross-refer to questions 51–56. Please complete the table below.

In the Republic of Albania, in relation to vehicle exhaust rates apply Guidance no. 6527, dated 24.12.2004 "On the permissible values of air pollutants in the environment from

emissions and noise caused by road vehicles, and modes of their control, as amended by Guidance No. 12, dated 06.15.2010 "On some changes in Guidelines nr.6527, dated 24.12.2004" On the permissible values of air pollutants in the environment from emissions and noise caused by road vehicles and modes of control".

Decision Nr.147, dated 21.3.2007 for quality of the fuel, gasoline and diesel, which states: In the territory of the Republic of Albania is only allowed to market unleaded gasoline, which in the nomenclature of goods, described in the code CN 27101141, 27101145, 27101149, 27101151 and 27101159 and that meets the requirements set out in Annex 1 attached to this decision.

Technical specifications are described in Handbook of Vehicle Control, which take in consideration Directive 2009/40 EC, dated 06.05.2009 " On roadworthiness tests for motor vehicles and their trailers, and partly comply with limit values described in the protocol. Limit values for motorcycles and mopeds are not provided.

Table 3: Question 5

Mobile source category	NO _x emission standards (unit: g/km		Date	National legislation
		or g/kWh)		
	Petrol	Diesel		
1. Road vehicles				
(a) Passenger cars:				
(b) Light commercial vehicles				
Class I				
Class II				
Class III				
(c) Heavy-duty vehicles (HDV)				
(d) Motorcycles and mopeds				
(e) Tractors (agricultural and				
forestry)				
2. Non-road engine applications:				
agricultural, mobile industrial and				
construction machinery				
≤ 18 kW				
$19 \le kW \le 37$				
$37 \le kW \le 75$				
$75 \le kW \le 130$				
$130 \le kW \le 560$				
3. Other mobile sources				
(a) Rail transport				
Self-propelled rail cars				
Locomotives				
130 < kW < 560				
> 560 kW				
> 2000 kW and > 5				
litres/cylinder				
(b) Ships and other marine craft				
Recreational craft				
Inland shipping				
(c) Aircraft				

10. Question 6: With reference to <u>article 4</u>, has your country made unleaded fuel sufficiently available, in particular cases as a minimum along main international transit routes, to facilitate the circulation of vehicles equipped with catalytic converters?

Yes	No) [

In Albania, according to DCM No.147, dated 21.3.2007 "On the quality of fuel, gasoline and diesel ", trade of diesel and gasoline fuel is permitted only for use in road vehicles and generators, that in the nomenclature of goods, is described in CN codes 27101141, 27101145, 27101149, 27101151, and 27101159 and fulfill the requirements of the Albanian standards S SH EN 590 and S SH EN 228 specified in annex 1 and 2 attached to this decision. Starting from 1 January 2009, all points of sale have to advertise, clear and visible to buyers the compliance of environmental indicators of diesel and gasoline with the above standards in force, or other standards equivalent with them, according to the table 8 below

Tab. 1. Permitted environmental parameters for gasoline fuel quality according to the standard S SH EN 228.

Standard S SH EN 220.	TT . •4	Limit value		
Parameters	Unit	minimum	maximum	
Testing octane number		95	_	
Motor octane number		85	_	
Vapor pressure in summer period	kPa	_	60.0	
Distillation:				
– pre-distilled quantity to 100°C	% v/v	46		
– pre-distilled quantity to 150°C	% v/v	75		
Hydrocarbons analysis:				
- olefines	% v/v	_	18	
– aromatic compounds	% v/v	_	35	
– benzene	% v/v	_	1,0	
Oxygen content	% m/m	_	2,7	
Oxigenates				
methanol (compulsory stablizer)	% v/v	_	3	
– ethanol (stabilizer can be added)	% v/v	_	5	
– iso-propyl alcohol	% v/v	_	10	
tertiary butyl alcohol	% v/v	_	7	
– isobutyl alcohol	% v/v	_	10	
- eters with five or more carbon atoms in a	% v/v	_	15	
molecule	% v/v	_	10	
– other oxygenates (1)				
Sulphur content	mg/kg	_	10 (1January 2009)	
Lead content	g/l	_	0.005	

other mono- alcohol with final boiling- point not higher than those specified in Albanian Standard S SH EN 228, in force or other standards, equivalent to it.

In table 9. Permitted environmental parameters for diesel fuel quality according to the standard S SH EN 590

Tab. 2

Parameters	Unit	Limit value
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		minimum	maximum
Cetane number		51	_
Density	Kg/m3	-	360
Policiklic Aromatic Hidrocarbons	%m/m	-	11
Total pollution	Mg/kg	-	24
Sulphur content	mg/kg	-	350 from (1 January 2009- 31.12.2010); 10 from 01.01.2011
Carbon waste (over 10% distillation waste)	%(m/m)	_	0.30
Ash content	%(m/m)		0.01

Testing of each parameter is done according to the methods of testing, where the diesel and gasoline testing is performed in accordance with the Albanian standard S SH EN 590 and S SH EN 228 or other standards, equivalent to it.

The above DCM determines that if after January 1, 2009 occured subjects which trade fuel with a quality which does not respect the requirements of this decision, the fuel will be sequestrate. Central Technical Inspectorate determines the destination of sequestrated fuel.

You may provide further details. However, if your country is a Party to the Heavy Metals Protocol, you should provide further details under question 37.

III. PROTOCOL ON VOLATILE ORGANIC COMPOUNDS⁶

- 11. The questions in this section are based on the reporting obligation of Parties in accordance with article 8 and enable Parties to provide information on the implementation of the obligations under articles 2.3(a)(i–iii), 2.3(b) and 7 of the Protocol on Volatile Organic Compounds (VOCs).
- 12. They refer to the following Parties to the Protocol: Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Liechtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, Norway, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.
- 13. Question 7: With reference to <u>article 7</u>, please provide up-to-date information on the national programmes, policies and strategies your country has developed to implement the obligations under the Protocol that serve as a means of controlling and reducing emissions of VOCs or their transboundary fluxes. If your country is a Party to the Gothenburg Protocol, you may cross-refer to question 39.

⁶ 1991 Geneva Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes.

14. Question 8: With reference to <u>article 2</u>, <u>paragraph 3 (a) (i)</u>, please specify the national or international emission standards applied in your country to control and reduce VOCs emissions from stationary sources, the construction or substantial modification of which commenced after 29 September1999, taking into consideration <u>annex II</u> to the Protocol. Please complete the table below.

Table 4: Question 8

Stationary source	Emission standards for VOCs ^{1/}	National legislation
1. Use of solvents		
2. Petroleum industry,		
including petroleum product		
handling		
3. Organic chemical industry		
4. Small-scale combustion		
sources (e.g. domestic		
heating and small industrial		
boilers)		
5. Food industry		
6. Iron and steel industry		
7. Handling and treatment of		
waste		
8. Agriculture		

^{1/} Specify the units and statistical treatment.

15. Question 9⁷: With reference to <u>article 2</u>, <u>paragraph 3 (b) (i)</u>, please indicate BAT that are economically feasible and applied in your country to control and reduce VOCs emissions from the stationary sources in major source categories, the construction of which commenced on or before 29 September1999, taking into consideration <u>annex II</u> to the Protocol. Please complete the table below.

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⁷ The question refers only to Parties in those areas in which national or international tropospheric ozone standards are exceeded or where transboundary fluxes originate or are expected to originate.

Table 5: Question 9

Stationary source in major source categories 1/	BAT applied	Source of BAT (provide reference of e.g. national legislation, guidance, documentation)
1. Use of solvents		
2. Petroleum industry,		
including petroleum product		
handling		
3. Organic chemical industry		
4. Small-scale combustion		
sources (e.g. domestic		
heating and small industrial		
boilers)		
5. Food industry		
6. Iron and steel industry		
7. Handling and treatment of		
waste		
8. Agriculture		

1/ For the definition of major source category see article 1, paragraph 10.

- 16. Question 10⁸: With reference to <u>article 2, paragraph 3 (b)(ii)</u>, please indicate the techniques applied in your country to reduce VOCs emissions from petrol distribution and motor vehicle refuelling operations and to reduce the volatility of petrol, taking into consideration annex II (IV.B, paras. 39–44) and annex III (IV, paras. 27–34) to the Protocol.
- 17. Question 11: With reference to <u>article 2</u>, <u>paragraph 3 (a)(ii)</u>, please provide details of the national or international measures applied to products containing solvents, taking into consideration <u>annex II.V</u> to the Protocol. Please indicate whether there is labelling of products specifying their VOCs content.
- 18. Question 12: With reference to <u>article 2</u>, <u>paragraph 3 (a)(iii)</u>, please specify the national or international emission standards applied in your country to newly registered mobile sources, taking into consideration <u>annex III</u> to the Protocol. Please complete the table below. If your country is a Party to the Gothenburg Protocol, you may cross-refer to questions 51–56.

⁸ The question refers only to Parties in those areas in which national or international tropospheric ozone standards are exceeded or where transboundary fluxes originate or are expected to originate.

Table 6: Question 12

Mobile source	Emission sta (g/km)	National legislation	
	Petrol	Diesel	
1. Passenger cars and			
light commercial			
vehicles			
2. Trucks and buses			
3. Motorcycles and			
mopeds			
4. Off-road vehicles,			
machines and			
locomotives			
5. Other sources, e.g.			
ships (pleasure craft)			

IV. THE 1994 SULPHUR PROTOCOL

- 19. The questions in this section are based on the reporting obligation of Parties in accordance with <u>article 5</u>, paragraph 1 (a) and (c), and enable Parties to provide information on the implementation of the obligations under articles 2.5 and 4.1 of the Protocol. By virtue of article 2, paragraph 5, questions 15 and 16 do not apply to Parties subject to the United States/Canada Air Quality Agreement of 1998.
- 20. They refer to the following Parties to the Protocol: Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, the Netherlands, Norway, Slovakia, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the European Community.
- 21. Question 13: With reference to <u>article 4</u>, <u>paragraph 1(a)</u>, please provide details of the national strategies, policies and programmes your country has adopted to implement obligations under article 2 of the Protocol. If your country is a Party to the Gothenburg Protocol, you may cross-refer to question 39.
- 22. Question 14: With reference to <u>article 2</u>, <u>paragraph 4</u>, please provide details of how your country is making use of the most effective measures, appropriate to your country's particular circumstances, for reducing sulphur emissions for new and existing sources. This could include measures to:
 - (a) Increase energy efficiency;

- (b) Increase the use of renewable energy;
- (c) Reduce the sulphur content of particular fuels and to encourage the use of fuel with low sulphur content, including the combined use of high-sulphur with low-sulphur or sulphur-free fuel;
- (d) Apply BAT not entailing excessive costs, using the guidance in <u>annex IV</u>.
- 23. Question 15: With reference to <u>article 2, paragraph 5 (a)</u>, and <u>annex V</u>, please provide details of the emission limit values applied in your country to all major stationary combustion sources, the construction or substantial modification of which was authorized after 31 December 1995. If your country is a Party to the Gothenburg Protocol, you may cross-refer to questions 40 and 41. Please complete the table below.

Table 7: Question 15

Major stationary combustion source	Oxygen (O ₂) % in flue	Emission limit value (mg SO ₂ /Nm ³)	Desulphurization rate indigenous fuels (%)	National legislation	Comments
	gas				
1.Solid fuels					
(a) $50-100 \text{ MW}_{\text{th}}$					
(b) $100-500 \text{ MW}_{\text{th}}^{1/}$					
$(c) > 500 \text{ MW}_{th}$					
2. Liquid fuels					
(a) $50-300 \text{ MW}_{th}$					
(b) $300-500 \text{ MW}_{th}$					
$(c) > 500 \text{ MW}_{th}$					
3. Gaseous fuels			n.a.		
(a) Gaseous fuels in					
general					
(b) Liquified gas					
(c) Low calorific					
gases from					
gasification of					
refinery residues,					
coke oven gas, blast					
furnace gas					

^{1/} If you apply, as an alternative, a desulphurisation rate, the category should be split up into 100-167 and 167-500 MW_{th}.

24. Question 16: With reference to <u>article 2</u>, <u>paragraph 5</u> (b), <u>and annex V</u>, please provide details of the emission limit values applied in your country to major stationary combustion sources, the construction of which was authorized on or before 31 December 1995. If other emission limitations or other appropriate provisions are applied, please describe these, taking due account of the conditions for such alternatives as specified in article 2, paragraph 5 (b). If your country is a Party to the Gothenburg Protocol, you may cross-refer to question 41. Please complete the table below.

Table 8: Question 16

Major stationary	Oxygen	Emission	Desulphuri	Alternative	National	Comments
combustion	(O_2)	limit values	-zation rate	emission	legislation	
source relevant	in flue	(mg SO ₂	indigenous	limitations		
age of plant	gas	/Nm ³)	fuels (%)	(where		
	(%)			appropriate)		
1. Solid fuels						
(a) 50-100						
${ m MW}_{ m th}$						
(b) 100-500						
MW_{th}						
$(c) > 500 \text{ MW}_{th}$						
2. Liquid fuels						
(a) 50-300						
MW_{th}						
(b) 300-500						
MW_{th}						
$(c) > 500 \text{ MW}_{th}$						
3. Gaseous fuels			n.a.			
(a) Gaseous						
fuels in general						
(b) Liquified						
gas						
(c) Low						
calorific gases						
from						
gasification of						
refinery						
residues, coke						
oven gas, blast						
furnace gas						

25. Question 17: With reference to <u>article 2</u>, <u>paragraph 5</u> (c), <u>and annex V</u>, please provide details of the national standards for the sulphur content of gas oil applied in your country. Please complete the table below.

Table 9: Question 17

Туре	Sulphur content	National legislation
	(% or ppm)	
1. Diesel for on-road vehicles		
2. Other types (e.g. diesel for off-		
road vehicles gas oil for inland		
navigation, heating, etc.)		

V. PROTOCOL ON PERSISTENT ORGANIC POLLUTANTS

- 26. The questions in this section are based on the reporting obligation of Parties in accordance with <u>article 9</u>, paragraphs 1 (a) and 2, and enable Parties to provide information on the implementation of the obligations under articles 3.1 (a), 3.1 b)(i), 3.1 b)(ii), 3.1 (c), 3.3, 3.5(b)(i), 3.5(b)(ii), 3.5 (b)(v), 3.8 and 7.1 of the 1998 Protocol on Persistent Organic Pollutants (POPs). Questions 28 and 29 are not yet mandatory. They are designed to enable Parties to provide information on progress made towards the implementation of articles 3.5 (b)(iii) and 3.5 (b)(iv) concerning obligations that will become effective in 2011.
- 27. They refer to the following Parties to the Protocol: Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, the Netherlands, Norway, Republic of Moldova, Romania, Slovakia, Slovenia, Sweden, Switzerland, the United Kingdom and the European Community.
- 28. Question 18: With reference to <u>article 7</u>, <u>paragraph 1</u>, please provide details of the national strategies, policies and programmes your country has developed to discharge its obligations under the Protocol.
- 29. Question 19: With reference to <u>article 3, paragraph 1 (a)</u>, please provide details of the measures taken by your country to eliminate the production and use of substances listed in <u>annex I to the Protocol</u>. Please complete the table below.

Table 10: Question 19

Substance	Elimination of	Measures taken (e.g. national legislation)
Aldrin	Production	
	Use	
Chlordane	Production	
	Use	
Chlordecone	Production	
	Use	
DDT ⁹	Production	
	Use	
Dieldrin	Production	
	Use	
Endrin	Production	
	Use	
Heptachlor	Production	
	Use	
Hexabromobiphenyl	Production	
	Use	
Hexachlorobenzene	Production	
	Use	
Mirex	Production	
	Use	
PCBs ¹⁰	Production	
	Use	
Toxaphene	Production	
	Use	

- 30. Question 20: With reference to <u>article 3</u>, <u>paragraph 1 (b) (i)</u>, please provide details of the measures your country has taken to ensure that the destruction or disposal of substances listed in annex I is undertaken in an environmentally sound manner, taking into account relevant international regimes, in particular the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention).
- 31. Question 21: With reference to <u>article 3</u>, <u>paragraph 1 (b) (iii)</u>, please provide details of the measures taken to ensure that the transboundary movement of substances listed in annex I is conducted in an environmentally sound manner, taking into consideration applicable international regimes, in particular the Basel Convention.

⁹ Dichlorodiphenyltrichloroethane.

¹⁰ Polychlorinated biphenyls.

32. Question 22: With reference to <u>article 3, paragraph 1 (c)</u>, please provide details of the measures taken to restrict the substances listed in <u>annex II</u> to the uses described in that annex. Please complete the table below.

Table 11: Question 22

Substance	Measures taken (e.g. national legislation)
DDT	
HCH ¹¹ (mixed isomers)	
Lindane (HCH gamma	
isomer)	
PCBs	

isomer)	
PCBs	
33. Question 23: Has paragraph 2 of the Protoco	your country granted any exemptions in accordance with article 4, ol?
Yes \square No \square	
• •	ails of the exemption and indicate when your country provided the mation required under <u>article 4</u> , <u>paragraph 3</u> .
34. Question 24: Did y than those identified in an	your country apply any of the exemptions allowed for in annex I, other nnex II?
Yes □ No □	
If yes, please provide deta	ails.

- 35. Question 25: With reference to <u>article 3</u>, <u>paragraph 3</u>, please provide details of the measures taken in your country to ensure that wastes and articles still in use containing the substances listed in annexes I, II, or III, upon becoming wastes, are destroyed or disposed of in an environmentally sound manner.
- 36. Question 26: With reference to <u>article 3</u>, <u>paragraph 5 (b)(i)</u>, and <u>annex V</u>, please explain how you ensure the application of BAT, to each new stationary source (construction commenced after 23 October 2005) within a major stationary source category for which that annex identifies BAT, for example through national legislation, permitting procedures, guidance, etc.

¹¹ Hexachlorocyclohexane.

37. Question 27: With reference to <u>article 3</u>, <u>paragraph 5 (b)(ii)</u>, and <u>annex IV</u>, please provide details of the limit values applied to each new stationary source (construction commenced after 23 October 2005) within a category referred to in that annex. Please complete the table below.

Table 12: Question 27

Major new stationary sources	Limit values for PCDD/F (in ng TE/m³, based on 11% oxygen in flue gas)	Other emission reduction strategies (if applicable)
A. Municipal solid		
waste		
(>3 tons/hour)		
B. Medical solid waste		
(>1 ton/hour)		
C. Hazardous waste		
(>1 ton/hour)		

- 38. Question 28¹²: With reference to <u>article 3, paragraph 5 (b)(iii)</u>, and <u>annex V</u>, please provide information on progress made towards applying BAT to each existing stationary source (construction commenced on or before 23 October 2005) within a major stationary source category for which that annex identifies BATs, in so far as this is technically and economically feasible. If your country intends to apply, as an alternative, different strategies that will achieve equivalent emission reductions, please describe these.
- 39. Question 29¹²: With reference to <u>article 3</u>, <u>paragraph 5</u> (b)(iv), and <u>annex IV</u>, please provide information on progress made towards applying limit values to each existing stationary source (construction commenced on or before 23 October 2005) within a category mentioned in that annex, in so far as this is technically and economically feasible. If your country intends to apply, as an alternative, different strategies that will achieve equivalent emission reduction, please describe these.

¹² Not mandatory. The obligation will become effective after 23 October 2011.

Table 13: Question 29

Major existing stationary sources	Limit values for PCDD/F (in ng TE/m³, based on 11% oxygen in flue gas)	Other emission reduction strategies (if applicable)
A. Municipal solid		
waste		
(>3 tons/hour)		
B. Medical solid waste		
(>1 ton/hour)		
C. Hazardous waste		
(>1 ton/hour)		

40. Question 30: With reference to <u>article 3</u>, <u>paragraph 5 (b) (v)</u>, and taking into consideration <u>annex VII</u>, please provide details of the measures taken to control emissions from mobile sources. Please complete the table below.

Table 14: Question 30

Mobile source categories for POPs	Measures (e.g. limit values ^{1/} , national legislation, guidance)
A. Diesel-fuelled passenger cars	
B. Heavy duty vehicles	
C. Off-road engines	

^{1/} When limit values are given, please provide those for category A in g/km and those for categories B and C in g/kWh.

41. Question 31: With reference to <u>article 3</u>, <u>paragraph 8</u>, please provide the available (historical) information you have collected relating to the production and sales of the substances listed in annexes I and II to the Protocol. Please complete the table below.

Table 15: Question 31

Substance	Production	Sales
	(quantity per year)	(quantity per year)
Aldrin		
Chlordane		
Chlordecone		
DDT		
Dieldrin		
Endrin		
Heptachlor		
Hexabromobiphenyl		
Hexachlorobenzene		
Mirex		
PCBs		
Toxaphene		
НСН		

VI. THE 1998 PROTOCOL ON HEAVY METALS

- 42. The questions in this section are based on the reporting obligation of Parties in accordance with article 7, paragraphs 1 (a) and 2 and enable Parties to provide information on the implementation of the obligations under articles 3.1, 3.2 (a), 3.2 (b), 3.3 and 5.1 of the Protocol. Questions 35 and 36 are not yet mandatory. They are designed to enable Parties to provide information on progress made towards implementation of articles 3.2 (c) and 3.2 (d) concerning obligations that will be in force in 2011. Question 38 concerns an obligation that will enter into force in 2008.
- 43. They refer to the following Parties to the Protocol: Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, Norway, Republic of Moldova, Romania, Slovakia, Slovenia, Sweden, Switzerland, the United Kingdom, the United States and the European Community.
- 44. Question 32: With reference to <u>article 5</u>, <u>paragraph 1</u>, please provide details of the national strategies, policies and programmes your country has developed to discharge its obligations under the Protocol.
- 45. Question 33: With reference to <u>article 3, paragraph 2 (a),</u> and <u>annex III</u>, please explain how you ensure the application of BAT to each new stationary source within a major source

category (construction or substantial modification commenced after 29 December 2005) for which that annex identifies BAT, for example through national legislation, permitting procedures, guidance, etc.

46. Question 34: With reference to <u>article 3, paragraph 2 (b), annex II</u> and <u>annex V</u>, please provide details of the limit values applied to each new stationary source within a major stationary source category. If different emission reduction strategies that achieve equivalent overall emission reductions are applied, please describe these. Please complete the table below.

Table 16: Question 34

Category	New stationary	Pollutant	ELV ^{4/} (in	% O ₂ in	National	Alternative
annex II	sources		mg/ m ³	flue gas	legislation	strategies ^{3/}
1	Combustion of solid	Particulat				
	and liquid fuels	e matter				
		(PM)				
	Sinter plants	PM		n.a		
	Pellet plants:			n.a.		
	(a) grinding, drying	PM				
2	(b) pelletizing	PM				
	or:					
	(c) total plant	PM				
	emissions 1/					
	Blast furnaces	PM		n.a		
3	Electric arc furnaces			n.a		
		PM				
	Production of copper					
5 and 6	and zinc (incl. Imperial	PM		n.a		
3 and 0	Smelting furnaces)					
	Production of lead	PM		n.a		
7	Cement industry	PM		n.a		
8	Glass industry	Pb				
9	Chlor-alkali plants	Mercury		n.a		
	(mercury cell process) 2/	(Hg)				
	Hazardous waste	PM				
	incineration	Hg				
10 and 11	Medical waste	PM				
10 and 11	incineration					
	Municipal waste	PM				
	incineration	Hg				

^{1/} Specify limit value in g/Mg pellets produced.

^{2/} Specify limit value in g $Hg/Mg\ Cl_2$ production capacity.

^{3/} If applicable describe how the equivalent overall emission reductions are achieved.

^{4/} Emisión limit value (ELV).

- 47. Question 35¹³: With reference to <u>article 3</u>, <u>paragraph 2 (c)</u>, and <u>annex III</u>, please provide information on progress made towards applying BAT to each existing stationary source (construction commenced on or before 29 December 2005) within a major stationary source category for which annex III identifies BAT. If your country intends, as an alternative, to apply different strategies that will achieve equivalent emission reductions, please describe these.
- 48. Question 36¹³: With reference to <u>article 3, paragraph 2 (d)</u>, and <u>annex V</u>, please provide information on progress made towards applying limit values to each existing stationary source (construction commenced on or before 29 December 2005) within a major stationary source category, in so far as this is technically and economically feasible. If your country intends, as an alternative, to apply different strategies that will achieve equivalent emission reductions, please describe these. Please complete the table below.

Table 17: Question 36

Category	Existing	Pollutant	ELV	% O ₂ in	National	Alternative
annex II	stationary sources		(in mg/ m ³)	flue gas	legislation	strategies ^{3/}
1	Combustion of	PM				
	solid and liquid					
	fuels					
	Sinter plants	PM		n.a		
	Pellet plants:			n.a.		
	(a) grinding,	PM				
2	drying					
	(b) pelletizing	PM				
	or:					
	(c) total plant	PM				
	emissions 1/					
	Blast furnaces	PM		n.a		
3	Electric arc	PM		n.a		
	furnaces					
	6. Production of					
	copper and zinc	PM		n.a		
5 and 6	(incl. Imperial					
	Smelting furnaces)					
	Production of lead	PM		n.a		
7	Cement industry	PM		n.a		
8	Glass industry	Pb				
9	Chlor-alkali plants	Hg		n.a		
	(mercury cell					
	process) 2/					
	Hazardous waste	PM				

¹³ Not mandatory. The obligation will become effective after 29 December 2011.

Category	Existing	Pollutant	ELV	% O ₂ in	National	Alternative
annex II	stationary sources		$(in mg/m^3)$	flue gas	legislation	strategies ^{3/}
	incineration	Hg				
	Medical waste	PM				
10 and 11	incineration					
	Municipal waste	PM				
	incineration	Hg				

- 1/ Specify limit value in g/Mg pellets produced
- 2/ Specify limit value in g Hg/Mg Cl₂ (chlorine gas) production capacity
- 3/ If applicable describe how the equivalent overall emission reductions are achieved.
- 49. Question 37: With reference to <u>article 3</u>, <u>paragraph 3</u> and <u>annex VI</u>, <u>paras. 1 to 4</u>, please describe the product control measures being applied to marketed petrol in accordance with the conditions and timescales specified in <u>annex VI</u>. If leaded petrol with a lead content above 0.013 g/l is marketed for use by old on-road vehicles, indicate what percentage of total petrol sales it represents.
- 50. Question 38: With reference to <u>article 3, paragraph 3,</u> and <u>annex VI, paragraph 5,</u> please describe the measures applied to limit the mercury content in batteries, in accordance with the conditions and timescales specified in <u>annex VI</u>. Please complete the table below.

Table 18: Question 38

Product	Hg content applied (% per weight)	Measures (e.g. national legislation, guidance, etc.)
1. Alkaline manganese batteries		
prolonged use (except button cells)		
2. Other alkaline manganese batteries		
(except button cells)		

VII. GOTHENBURG PROTOCOL

51. The questions in this section are based on the reporting obligation of Parties in accordance with article 7, paragraph 1 (a), and enable Parties to provide information on the implementation of the obligations under articles 3.2, 3.3, 3.5, 3.8 and 6.1 (a) of the Protocol. Any Party that applies different emission reduction strategies that achieve equivalent overall emission levels for all source categories together, in accordance with article 3.2 and 3.3 and article 7 (a)(i), may go directly to question 49. By virtue of article 3.10 (b), questions 59–66 do not apply to the United States.

- 52. They refer to the following Parties to the Protocol: Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, the United States and the European Community.
- 53. Question 39: With reference to <u>article 6</u>, <u>paragraph 1(a)</u>, please provide details of the supporting strategies, policies and programmes your country has adopted to facilitate the implementation of its obligations under article 3 of the Protocol. Where pollutant specific policies, strategies or programmes are used, please make a clear distinction between (a) sulphur; (b) NO_x ; (c) VOCs; and (d) ammonia.
- 54. Question 40: With reference to <u>article 3, paragraph 2,</u> and <u>annex IV, paragraph 9,</u> specify the limit values for sulphur emissions applied to each new stationary source (construction or substantial modification commenced after 17 May 2006) in your country within stationary source categories identified in that annex. If you have applied alternative emission reduction strategies, please go to question 49. Please complete the table below.

Table 19: Question 40

Stationary source category ^{1/}	O ₂ in flue gas (%)	Limit value ^{2/}	Alternative: Desulphurization rate for domestic solid fuel	National legislation
1. Solid and liquid fuels 50-100				
MW _{th}				
2. Solid and liquid fuels 100-300				
MW _{th}				
3. Solid and liquid fuels >300 MW _{th}				
4. Gaseous fuels			n.a.	
5. Liquified gas			n.a.	
6. Low-calorific-value gases (e.g.				
gasification of refinery residues or				
combustion of coke oven gas)				
7. Blast furnace gas			n.a.	
8. Combustion plant in refineries >50			n.a.	
MW _{th} total refinery capacity (average				
of all new installations)				

^{1/} For new stationary source, see <u>article 1</u> (Definitions); for further information on stationary source categories see <u>annex IV</u> (paras. 9–12).

55. Question 41: With reference to <u>article 3</u>, <u>paragraph 3</u> and <u>annex IV</u>, <u>paragraph 9</u>, please provide details of the limit values for sulphur emissions applied in your country to each existing

^{2/} Different limit values for different types of fuels may be provided, e.g. biomass, peat, etc.

stationary source (construction commenced on or before 17 May 2006) within a stationary source category identified in that annex, in so far as it is technically and economically feasible and taking into consideration the costs and advantages. If you have applied alternative emission reduction strategies, please go to question 49. Please complete the table below.

Table 20: Question 41

Stationary source category ^{1/}	O ₂ in flue gas (%)	Limit value ^{2/}	Alternative: Desulphurization rate for domestic solid fuel (%)	National legislation
1. Solid fuels 50-100 MW _{th} ^{1/}				
2. Solid fuels 100-500 MW _{th} ^{2/}				
3. Solid fuels >500 MW _{th}				
4. Liquid fuels 50-300 MW _{th}			n.a.	
5. Liquid fuels 300-500 MW _{th}			n.a.	
6. Liquid fuels >500 MW _{th}			n.a.	
7. Gaseous fuels			n.a.	
8. Liquified gas			n.a.	
9. Low-calorific-value gases (e.g.			n.a.	
gasification of refinery residues or				
combustion of coke oven gas)				
10. Blast furnace gas			n.a.	
11. Combustion plant in refineries			n.a.	
(average of all existing				
installations)				

^{1/} If you apply, as an alternative, a desulphurization rate, the category should be 50–150 MW_{th}.

- 56. Question 42: With reference to <u>article 3</u>, <u>paragraph 2</u>, and <u>annex IV</u>, <u>paragraphs 11 and 12</u>, please provide details of the limit values currently applied in your country for sulphur recovery for new and existing Claus plants and sulphur dioxide emissions from new and existing installations for titanium dioxide (TiO₂) production.
- 57. Question 43: With reference to <u>article 3</u>, <u>paragraph 2</u>, and <u>annex IV</u>, <u>paragraph 10</u>, please provide details of the limit value for sulphur content of gas oil that is currently applied in your country.
- 58. Question 44: With reference to <u>article 3, paragraph 2</u> and <u>annex V</u>, please provide details of the limit values for NO_x emissions applied to each new stationary source (construction or substantial modification commenced after 17 May 2006) within stationary source categories

^{2/} If you apply, as an alternative, a desulphurization rate, the category should be 150-500 MW_{th}.

identified in that annex. If you have applied alternative emission reduction strategies, please go to question 49. Please complete the table below.

Table 21: Question 44

Stationary source category	Limit value (mg/Nm³)	National legislation
A. Boilers	(mg/1tm)	
1. Solid fuels 50-100 MW _{th}		
2. Solid fuels 100-300 MW _{th}		
3. Solid fuels >300 MW _{th}		
4. Liquid fuels 50-100 MW _{th}		
5. Liquid fuels 100-300 MW _{th}		
6. Liquid fuels>300 MW _{th}		
7. Natural gas 50-300 MW _{th}		
8. Natural gas >300 MW _{th}		
9. Other gases		
B. Onshore combustion turbines >50 MW _{th}		
1. Natural gas		
2. Liquid fuels		
C. Cement production		
1. Dry kilns		
2. Other kilns		
D. Stationary engines		
1. Spark ignition engines, 4-stroke, >1 MW _{th} : Lean-burn		
engines		
2. All other spark-ignition engines		
3. Compression ignition (=Diesel) engines, >5 MW _{th} :		
natural gas (jet ignition engines)		
4. Compression ignition (=Diesel) engines, >5 MW _{th} :		
heavy fuel oil		
5. Compression ignition (=Diesel) engines, >5 MW _{th} :		
diesel oil or gas oil		
E. Sinter plants		
F. Nitric acid production, excl. acid concentration units		

59. Question 45: With reference to <u>article 3</u>, <u>paragraph 3</u>, and <u>annex V</u>, please provide details of the limit values for NO_x emissions applied in your country to each existing stationary source (construction commenced on or before 17 May 2006) within a stationary source category identified in that annex, in so far as it is technically and economically feasible and taking into consideration the costs and advantages. If you have applied alternative emission reduction strategies, please go to question 49. Please complete the table below.

Table 22: Question 45

Stationary source category	Limit value (mg/Nm³)	National legislation
A. Boilers		
1. Solid fuels 50-100 MWth		
2. Solid fuels 100-300 MWth		
3. Solid fuels >300 MWth		
4. Liquid fuels 50-100 MWth		
5. Liquid fuels 100-300 MWth		
6. Liquid fuels>300 MWth		
7. Natural gas 50-300 MWth		
8. Natural gas >300 MWth		
9. Other gases		
B. Onshore combustion turbines >50Mwth		
1. Natural gas		
2. Liquid fuels		
C. Cement production		
1. Dry kilns		
2. Other kilns		
D. Sinter plants		
E. Nitric acid production, excl. acid concentration		
units		

45 bis. [Comment from the secretariat: The Executive Body decided that the below question, which was formerly question 13 of part II of the questionnaire "General policy questions" (ECE/EB.AIR/2009/13) be better placed here, between questions 45 and 46].

Please describe how your country applies best available techniques (BAT) to mobile sources and to each new or existing stationary source with regard to the Gothenburg Protocol obligations and taking into account guidance documents I to V adopted by the Executive Body at its seventeenth session (decision 1999/1).

60. Question 46: With reference to <u>article 3</u>, <u>paragraphs 2 and 3</u>, and <u>annex VI</u>, please provide details of the limit values for VOCs emissions applied in your country to new stationary sources (construction or substantial modification commenced after 17 May 2006) for the stationary source category defined in table I of that annex and to existing stationary sources (construction commenced on or before 17 May 2006), in so far as it is technically and economically feasible and taking into consideration the costs and advantages. If you have applied

alternative emission reduction strategies, please go to question 49. Please complete the table below.

Table 23: Question 46

Source category	Limit value	National legislation
	(g VOCs/Nm ³)	
Storage and distribution of petrol,		
excluding loading of seagoing ships:		
Vapour recovery unit serving storage and		
distribution facilities at refinery tank farms		
or terminals with petrol throughput of		
5000 m ³ annually		

- 61. Question 47: With reference to <u>article 3</u>, <u>paragraphs 2</u> and 3, and <u>annex VI</u>, please provide details of the limit values for VOCs emissions applied in your country to new stationary sources (construction or substantial modification commenced after 17 May 2006) for the stationary source categories defined in Tables II, V, VI, VIII, IX, X, XI, XII, XIV and XV of that annex and to existing stationary sources (construction commenced on or before 17 May 2006), in so far as it is technically and economically feasible and taking into consideration the costs and advantages. If you have applied alternative emission reduction strategies, please go to question 49.
- 62. Please complete the table below.

Table 24: Question 47

Source category and solvent consumption (Mg/year)	Limit value (mg C/Nm³) and relevant conditions/ alternatives e.g. solvent reuse, process sub-part, % of solvent input	Limit value for fugitive emissions of non- methane VOCs (% of solvent input) and relevant conditions/ alternatives e.g. process sub-part, kg solvent per unit of product	National legislation
1. Adhesive coating (annex VI, table II) (a) Footwear manufacture >5 Mg/year ^{1/} (b) Other adhesive coating, excl. (a)			

Source category and solvent consumption (Mg/year)	Limit value (mg C/Nm³) and relevant conditions/ alternatives e.g. solvent reuse, process sub-part, % of solvent input	Limit value for fugitive emissions of non- methane VOCs (% of solvent input) and relevant conditions/ alternatives e.g. process sub-part, kg solvent per unit of product	National legislation
(i) 5–15 Mg/year (ii) >15 Mg/year			
2. Coating processes in various industrial sectors (annex VI, table V)			
(a) Other coating, incl			
metal, plastics, textile,			
fabric, foil and paper (excl.			
web screen printing for			
textiles)			
(i) 5–15 Mg/year			
(ii) >15 Mg/year			
(b) Wood coating			
(i) 5–15 Mg/year			
(ii) >15 Mg/year			
3. Coil coating > 25 Mg/year			
(annex VI, table VI)			
(i) New installations			
(ii) Existing installations			
4. Manufacturing of coatings,			
varnishes, inks and adhesives			
(annex VI, table VIII)			
(a) 100-1,000 Mg/year			
(b) >1,000 Mg/year			
5. Printing processes (annex VI, table IX)			
(a) Heat set web offset			
(i) 15–25 Mg/year			
(ii) > 25 Mg/year			
(b) Publication rotogravure			
> 25 Mg/year			
(i) New installations			
(ii) Existing installations			
(c) Other rotogravure,			
flexography, rotary screen			

Source category and solvent consumption (Mg/year)	Limit value (mg C/Nm³) and relevant conditions/ alternatives e.g. solvent reuse, process sub-part, % of solvent input	Limit value for fugitive emissions of non- methane VOCs (% of solvent input) and relevant conditions/ alternatives e.g. process sub-part, kg solvent per unit of product	National legislation
printing, lamination and varnishing units (i) 15–25 Mg/year (ii) >25 Mg/year			
(e) Rotary screen printing on textiles, paperboard > 30 Mg/year			
6. Manufacturing of pharmaceutical products >50 Mg/year (annex VI, table X) (i) New installations (ii) Existing installations			
7. Conversion of natural or synthetic rubber > 15 Mg/year (annex VI, table XI)			
8. Surface cleaning (annex VI, table XII) (a) Using substances mentioned in para. 3 (w) 1–5 Mg/year >5 Mg/year (b) Other surface cleaning 2–10 Mg/year >10 Mg/year			
9. Vehicle refinishing >0.5 Mg/year (annex VI, table XIV)			
10. Impregnation of wooden surfaces >25 Mg/year (annex VI, table XV)			

^{1/} Specify limit value in g solvent per pair

63. Question 48: With reference to <u>article 3</u>, <u>paragraphs 2 and 3</u>, and <u>annex VI</u>, please provide details of the limit values for VOCs emissions applied in your country to new stationary sources (construction or substantial modification commenced after 17 May 2006) for the stationary source categories defined in tables III, IV, VII and XIII of that annex and to existing

stationary sources (construction commenced on or before 17 May 2006), in so far as it is technically and economically feasible and taking into consideration the costs and advantages. If you have applied alternative emission reduction strategies, please go to question 49. Please complete the table below.

Table 25: Question 48

Capacity, technique, further specification and solvent consumption	Limit value for total emissions of non- methane VOCs (NMVOCs) (specify unit)	National legislation
1. Wood and plastic lamination >5 Mg/year (annex VI, table III)	(specify unit)	
2. Coating processes in the car industry (annex VI, table IV) (a) Car coating (M1, M2) > 15 Mg/year of solvent consumption (i) >5,000 coated items a year - New installations - Existing installations (ii) ≤5,000 coated monocoques or >3,500 coated chassis a year (b) Coating of new truck cabins (N1, N2, N3) >15 Mg/year of solvent consumption (i) ≤5,000 coated items a year -New installations - Existing installations		
(ii) >5,000 coated items a year		
- New installations - Existing installations (c) Coating of new trucks and vans (without cabin) (N1, N2,N3) >15 Mg/year of solvent consumption (i) ≤2,500 coated items a year - New installations - Existing installations		
(ii) >2,500 coated items a year - New installations - Existing installations (d) Coating of new buses (M3) >15 Mg/year of solvent consumption (i) ≤2,000 coated items a year - New installations - Existing installations		

Capacity, technique, further specification and solvent consumption	Limit value for total emissions of non- methane VOCs (NMVOCs) (specify unit)	National legislation
(ii) >2,000 coated items a year		
New installationsExisting installations		
3. Dry cleaning (annex VI, table VII)		
4. Extraction of vegetable and animal fat and refining of vegetable oil >10 Mg of solvent		
consumption a year (annex VI, table XIII)		
(a) Animal fat (b) Castor		
(c) Rape seed		
(d) Sunflower seed(e) Soya beans (normal crush)		
(f) Soya beans (white flakes)		
(g) Other seeds and vegetable material(h) All fractionation processes, excl. degumming(i) Degumming		

- 64. Question 49: With reference to <u>article 7</u>, <u>paragraph 1(a)(i)</u>, please specify whether your country, instead of applying the measures referred to in articles 3.2 and 3.3, has applied any alternative emission reduction strategies to achieve overall emission levels for all source categories together, equivalent to those resulting from the measures. Please provide details of any such strategies and the way in which overall emission levels are achieved.
- 65. Question 50: With reference to <u>article 7</u>, <u>paragraph 1(a)(ii)</u>, where your country, taking into consideration the costs and advantages, considers certain limit values, as specified in accordance with article 3.3, not to be technically and economically feasible for specific existing stationary sources, please provide a justification for this.
- 66. Question 51: With reference to <u>article 3</u>, <u>paragraph 5</u> and <u>annex VIII</u>, please provide details of the most recent limit values applied in your country to new passenger cars and light-duty vehicles. Please complete the table below.

Table 26: Question 51^{1/}

	Reference	National				Limi	t values					
Category,	mass	legislation	Carbon		J T T T T T T T T T T T T T T T T T T T			NOx		$-NO_X$	Parti-	
class	(RW)(kg)	and date of application	monox	ide (CO)	carbon (HC)					culate		
		иррисация	L1(L1(g/km) L.2 L.3(g/		g/km)	L2+L3(g/km)		L4			
				(g/km)					(g/km			
			Petrol	Diesel	Petrol	Petrol	Diesel	Petrol	Diesel	Diese		
M	All											
N1 (I)	RW≤1305											
N1 (II)	1305<											
	RW≤1760											
N1 (III)	1760 <rw< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></rw<>											

^{1/} For further information, see annex VIII, table I.

67. Question 52: With reference to <u>article 3, paragraph 5</u> and <u>annex VIII</u>, please provide details of the most recent limit values applied in your country to new heavy-duty vehicles if the ESC/ELR test^{1/} is used. Please complete the table below.

Table 27: Question 52

National ^{1/}	СО	HC	NOx	Particulates	Smoke
legislation	(g/kWh)	(g/kWh)	(g/kWh)	(g/kWh)	(m ⁻¹)
and date of					
application					

^{1/} For further information, see annex VIII, table II.

68. Question 53: With reference to <u>article 3, paragraph 5,</u> and <u>annex VIII,</u> please provide details of the most recent limit values applied in your country to new heavy-duty vehicles if the ETC test¹ is used. Please complete the table below.

Table 28: Question 53

National ^{1/} legislation and date of application	CO (g/kWh)	Non-methane HC (g/kWh)	Methane (g/kWh)	NO _x (g/kWh)	Particulates (g/kWh)

^{1/} For further information, see annex VIII, Table III.

69. Question 54: With reference to <u>article 3</u>, <u>paragraph 5</u>, and <u>annex VIII</u>, please provide details of the most recent limit values applied in your country to new diesel engines for non-road mobile machines (ISO 8178). Please complete the table below.

Table 29: Question 54

Net power ^{1/} (p) (kW)	National legislation and date of application	CO (g/kWh)	HC (g/kWh)	NO _x (g/kWh)	PM (g/kWh)
130≤ P<560					
75≤ P<130					
37≤ P<75					
18≤ P<37					

^{1/} For further information, see annex VIII, table V.

70. Question 55: With reference to <u>article 3</u>, <u>paragraph 5</u>, and <u>annex VIII</u>, please provide details of the most recent limit values applied in your country to new motorcycles and three- and four-wheelers (> 50 cm³; > 45 km/h). Please complete the table below.

Table 30: Question 55

Engine type ^{1/}	National legislation and date of application	CO (g/km)	HC (g/km)	NO _x (g/km)
1. Two-stroke				
(a) Motorcycles				
(b) 3- and 4- wheelers				
2. Four-stroke				
(a) Motorcycles				
(b) 3- and 4-wheelers				

^{1/} For further information, see annex VIII, table VI.

71. Question 56: With reference to <u>article 3, paragraph 5</u>, and <u>annex VIII</u>, please provide details of the most recent limit values applied in your country to new mopeds ($\leq 50 \text{ cm}^3$; $\leq 45 \text{ km/h}$)¹/. Please complete the table below.

Table 31: Question 56

National legislation and date of application	CO (g/km)	HC+ NO _x (g/km)

^{1/} For further information, see annex VIII, table VII.

72. Question 57: With reference to <u>article 3</u>, <u>paragraph 5</u>, and <u>annex VIII</u>, tables VIII and X please provide details of the limit values applied in your country to petrol. Please complete the table below.

Table 32: Question 57

Parameter ^{1/}	Limits		National
	Minimum	Maximum	legislation and date of application
1. Research octane number			
2. Motor octane number			
3. Reid vapour pressure, summer period (in			
kPa)			
4. Distillation:			
(a) Evaporated at 100° C (in %v/v)			
(b) Evaporated at 150° C (in %v/v)			
5. Hydrocarbon analysis:			
(a) Olefins (in %v/v)			
(b) Aromatics			
(c) Benzene			
6. Oxygen content (in % m/m)			
7. Oxygenates (in %v/v):			
(a) Methanol, stabilizing agents must be			
added			
(b) Ethanol, stabilizing agents may be			
necessary			
(c) Iso-propyl alcohol			
(d) Tert-butyl alcohol			
(e) Iso-butyl alcohol			
(f) Ethers containing 5 or more carbon			
atoms per molecule			
8. Other oxygenates (in %v/v)			
9. Sulphur content (in mg/kg)			

^{1/} For further information, see annex VIII, tables VIII and X.

73. Question 58: With reference to <u>article 3</u>, <u>paragraph 5</u> and <u>annex VIII</u>, tables IX and XI, please provide details of the limit values applied in your country to diesel fuel. Please complete the table below.

Table 33: Question 58

Parameter ^{1/}	Limits		National
	Minimum	Maximum	legislation and date of application
1. Cetane number			
2. Density at 15° C (in kg/m ³)			
3. Distillation point: 95% (in °C)			
4. Polycyclic aromatic hydrocarbons (in % m/m)			
5. Sulphur content (in mg/kg)			

^{1/} For further information, see annex VIII, tables IX and XI.

- 74. Question 59: With reference to <u>article 3</u>, <u>paragraph 8 (a)</u> and <u>annex IX</u>, <u>paragraph 3</u>, have you established, published and disseminated an advisory code on good agricultural practice to control ammonia emissions? If so, please provide details of its provisions, relevant to:
 - (a) Nitrogen management, taking account of the whole nitrogen cycle;
 - (b) Livestock feeding strategies;
 - (c) Low-emission manure spreading techniques;
 - (d) Low-emission manure storage systems;
 - (e) Low-emission animal housing systems;
 - (f) Possibilities for limiting ammonia emissions from the use of mineral fertilizers.
- 75. Question 60: With reference to <u>article 3</u>, <u>paragraph 8 (a)</u>, and <u>annex IX</u>, <u>paragraph 4</u>, please provide details of the steps taken in your country to limit ammonia emissions from the use of solid fertilizers based on urea.
- 76. Question 61: With reference to <u>article 3</u>, <u>paragraph 8 (a)</u>, and <u>annex IX</u>, <u>paragraph 5</u>, please indicate whether the use of ammonium carbonate fertilizers is prohibited in your country and specify the relevant legislation.
- 77. Question 62: With reference to <u>article 3</u>, <u>paragraph 8 (a)</u>, and <u>annex IX</u>, <u>paragraph 6</u>, please explain how your country ensures the use of the low-emission slurry application techniques listed in <u>guidance document V</u> (ECE/EB.AIR/WG.5/2007/13), taking into account local soil and geomorphological conditions, slurry type and farm structure.

- 78. Question 63: With reference to <u>article 3</u>, <u>paragraph 8 (a)</u>, and <u>annex IX</u>, <u>paragraph 7</u>, please provide details of the measures taken in your country to limit ammonia emissions from solid manure application, and in particular whether there is a requirement that solid manure applied to land to be ploughed is incorporated within at least 24 hours of spreading.
- 79. Question 64: With reference to <u>article 3</u>, <u>paragraph 8 (a)</u>, and <u>annex IX</u>, <u>paragraph 8</u>, please provide details on the use in your country of the low-emission storage systems for new slurry stores (construction commenced after 17 May 2006) on large pig and poultry farms (2,000 fattening pigs, or 750 sows or 40,000 poultry) or techniques that have been shown to reduce emissions by 40 per cent or more compared to the reference listed in <u>guidance document V</u> (ECE/EB.AIR/WG.5/2007/13).
- 80. Question 65: With reference to <u>article 3</u>, <u>paragraph 8 (a)</u> and <u>annex IX</u>, <u>paragraph 9</u>, please provide details of whether emission reductions of 40 per cent have been achieved in your country for existing slurry stores (construction commenced on or before 17 May 2006) on large pig and poultry farms (2,000 fattening pigs, or 750 sows or 40,000 poultry).
- 81. Question 66: With reference to <u>article 3, paragraph 8 (a)</u> and <u>annex IX, paragraph 10,</u> please provide details of the use in your country of housing systems for new animal housing on large pig and poultry farms which have been shown to reduce emissions by 20 per cent or more compared to the reference listed in <u>guidance document V (ECE/EB.AIR/WG.5/2007/13)</u>.

VIII. FEEDBACK ON THE QUESTIONNAIRE

82. Question 67: Have you encountered difficulties in answering this questionnaire, whether technical or interpretative? Please provide further details by completing the table below.

Table 34: Question 67

Question No	Problem	Suggestion for improvement		
