



**REPUBLIC OF ALBANIA  
COUNCIL OF MINISTERS**

**DECISION**

*(Draft 3, Version 1 dated 22.04.2014)*

No. \_\_\_\_\_, date \_\_\_\_\_

**“ON MEASURES ON THE LIMITATION OF EMISSIONS OF VOLATILE ORGANIC  
COMPOUNDS DUE TO THE USE OF ORGANIC SOLVENTS IN CERTAIN ACTIVITIES  
AND INSTALLATIONS”\***

Pursuant to Article 100 of the Constitution and to paragraph “a” of Article 14 of the draft 3, version 3 of the Law no \_\_\_\_\_, dated \_\_\_\_\_ “On ambient air quality and cleaner air”, upon proposal of Minister of Environment, the Council of Ministers

**DECIDED**

**I. GENERAL PROVISIONS**

1. The purpose of this Decision is to prevent or reduce the direct and indirect effects of emissions of volatile organic compounds into the environment, mainly into air, and the potential risks to human health, by providing measures and procedures to be implemented for certain activities.
2. The scope of this Decision covers the activities defined in Annex I, in so far as they are operated above the solvent consumption thresholds listed in Annex IIA.

**II. DEFINITIONS**

3. For the purposes of this Decision, the following terms will have the meaning:
  - a. “**NEA**” shall mean the National Environment Agency according to Law No.10431, date 9.6.2011 “On Environment Protection”;
  - b. “**REA**” shall mean the Regional Environment Agency according to Law No.10431, date 9.6.2011 “On Environment Protection”;
  - c. “**ink**” shall mean a mixture, including all the organic solvents or mixtures containing organic solvents necessary for its proper application, which is used in a printing activity to impress text or images on to a surface;
  - ç. “**normal operation**” shall mean all periods of operation of an installation or activity except

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\* This Decision transposes:

1. **31999L0013** COUNCIL DIRECTIVE 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (Official Journal L 085, 29/03/1999 P. 0001 – 0022) as amended
2. COMMISSION DECISION of 6 September 2000 on criteria for assessing national plans according to Article 6 of Council Directive 1999/13/EC (notified under document number C(2000) 2473) (2000/541/EC)

- start-up and shut-down operations and maintenance of equipment;
- d. **“start-up and shut-down operations”** shall mean operations whilst bringing an activity, an equipment item or a tank into or out of service or into or out of an idling state. Regularly oscillating activity phases are not to be considered as start-ups and shut-downs;
  - dh. **“installation”** shall mean a stationary technical unit where one or more activities falling within the scope defined in paragraph 2 of chapter 1 are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions;
  - e. **“existing installation”** shall mean an installation in operation or, in accordance with legislation existing before the date on which this Decision is brought into effect, an installation which has been issued a class A environmental permit, provided that the installation is put into operation no later than one year after the date on which this Decision is brought into effect;
  - ë. **“small installation”** shall mean an installation which falls within the lower threshold band of items 1, 3, 4, 5, 8, 10, 13, 16 or 17 of Annex IIA or for the other activities of Annex IIA which have a solvent consumption of less than 10 tonnes/year;
  - f. **“input”** shall mean the quantity of organic solvents and their quantity in mixtures used when carrying out an activity, including the solvents recycled inside and outside the installation, and which are counted every time they are used to carry out the activity;
  - g. **“SIEFW”** shall mean the State Inspectorate of Environment, Forests and Water according to Decision No.46, date 29.1.2014 “On establishment, organization and functioning of State Inspectorate of Environment, Forests and Water;
  - gj. **“consumption”** shall mean the total input of organic solvents into an installation per calendar year, or any other 12-month period, less any VOCs that are recovered for reuse;
  - h. **“nominal capacity”** shall mean the maximum mass input of organic solvents by an installation averaged over one day, if the installation is operated under conditions of normal operation at its design output;
  - i. **“contained conditions”** shall mean conditions under which an installation is operated such that the VOCs released from the activity are collected and discharged in a controlled way either via a stack or abatement equipment and are therefore not entirely fugitive;
  - j. **“standard conditions”** shall mean a temperature of 273,15 K and a pressure of 101,3 kPa;
  - k. **“Categories M1-M3, N1-N3, O1-O3”** in Annex I shall have the meaning given by the Guideline of the Minister in charge of transport no.11, dt. 06.06.2011 “On the approval of the type of automotive vehicles and their trailers, of the systems, spare parts and specific technical units to be used by these means”;
  - l. **“class A, B or C environmental permit”** shall have the same meaning as given by law no.10448, date 14.7.2011 “On environmental permitting”;
  - ll. **“varnish”** shall mean a transparent coating;
  - m. **“waste gases”** shall mean the final gaseous discharge containing volatile organic compounds or other pollutants, from a stack or abatement equipment into air. The volumetric flow rates shall be expressed in m<sup>3</sup>/h at standard conditions;
  - n. **“mass flow”** shall mean the quantity of VOCs released, in unit of mass/hour;
  - nj. **“average over 24 hours”** shall mean the arithmetic average of all valid readings taken during the 24-hour period of normal operation;
  - o. **“Minister”** shall mean the minister in charge of environment protection;
  - p. **“ministry”** shall mean the ministry in charge of environment protection;
  - q. **“substantial change”**
    - i. for an installation falling within the scope of class A permits under the law no.10448, date 14.7.2011 “On environmental permitting”, shall have the definition specified in that law,
    - ii. for a small installation, shall mean a change of the nominal capacity leading to an increase of emissions of volatile organic compounds of more than 25 %. Any change that may have, in the opinion of the NEA, significant negative effects on human health

- or the environment is also a substantial change,
- iii. for all other installations, shall mean a change of the nominal capacity leading to an increase of emissions of volatile organic compounds of more than 10 %. Any change that may have, in the opinion of the NEA, significant negative effects on human health or the environment is also a substantial change;
  - r. **“adhesive”** shall mean any mixture, including all the organic solvents or mixtures containing organic solvents necessary for its proper application, which is used to adhere separate parts of a product;
  - rr. **“operator”** shall have the same meaning as given by the law no.10448, date 14.7.2011 “On environmental permitting”;
  - s. **“mixture”** shall mean mixtures or solutions composed of two or more substances;
  - sh. **“organic compound”** shall mean any compound containing at least the element carbon and one or more of hydrogen, halogens, oxygen, sulphur, phosphorus, silicon or nitrogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates;
  - t. **“volatile organic compound”** (VOC) shall mean any organic compound having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use. For the purpose of this Decision, the fraction of creosote which exceeds this value of vapour pressure at 293,15 K shall be considered as a VOC;
  - th. **“NLC”** shall mean the National Licensing Centre according to the Law no.10081, date 23.2.2009 “On licenses, authorizations and permits in the Republic of Albania” as amended;
  - u. **“registration”** shall mean the recording by the NEA or REA, as appropriate, of the installation or activity intended to be operated which falls within the scope of this Decision and is notified by the operator;
  - v. **“reuse of organic solvents”** shall mean the use of organic solvents recovered from an installation for any technical or commercial purpose and including use as a fuel but excluding the final disposal of such recovered organic solvent as waste;
  - x. **“substances”** shall mean any chemical element and its compounds, as they occur in the natural state or as produced by industry, whether in solid or liquid or gaseous form;
  - xh. **“emission”** shall mean any discharge of volatile organic compounds from an installation into the environment;
  - y. **“fugitive emissions”** shall mean any emissions not in waste gases of volatile organic compounds into air, soil and water as well as, unless otherwise stated in Annex IIA, solvents contained in any products. They include uncaptured emissions released to the outside environment via windows, doors, vents and similar openings;
  - z. **“total emissions”** shall mean the sum of fugitive emissions and emissions in waste gases;
  - zh. **“emission limit value”** shall mean the mass of volatile organic compounds, expressed in terms of certain specific parameters, concentration, percentage and/or level of an emission, calculated at standard conditions, N, which may not be exceeded during one or more periods of time;
  - aa. **“organic solvent”** shall mean any VOC which is used alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials, or is used as a cleaning agent to dissolve contaminants, or as a dissolver, or as a dispersion medium, or as a viscosity adjuster, or as a surface tension adjuster, or a plasticiser, or as a preservative;
  - bb. **“halogenated organic solvent”** shall mean an organic solvent which contains at least one atom of bromine, chlorine, fluorine or iodine per molecule;
  - cc. **“coating”** shall mean any mixture ,including all the organic solvents or mixtures containing organic solvents necessary for its proper application, which is used to provide a decorative, protective or other functional effect on a surface;

### III. OBLIGATIONS APPLYING TO NEW INSTALLATIONS

4. Operators shall take the necessary measures so that:

- a. New installations comply with chapters V, VIII and IX of this Decision;
- b. New class B and C installations are registered at NEA and REA respectively or have been issued an environmental permit to operate before being put into operation.

#### **IV. OBLIGATIONS APPLYING TO EXISTING INSTALLATIONS**

- 5. Without prejudice to the requirements on class A environmental permitting legislation, operators shall ensure that the existing installations:
  - a. comply with chapters V, VIII and IX of this Decision no later than 31 October 2024;
  - b. register or get an environmental permit to operate by 31 October 2024 at the latest;
- 6. The operators of those installations to be permitted or registered using the reduction scheme of Annex IIB shall notify this to the NEA by 31 October 2022 at the latest;
- 7. Where an installation:
  - a. undergoes a substantial change, or
  - b. comes within the scope of this Decision for the first time following a substantial change,
 that part of the installation which undergoes the substantial change shall be treated either as a new installation or as an existing installation, provided that the total emissions of the whole installation do not exceed those that would have resulted had the substantially changed part been treated as a new installation.

#### **V. REQUIREMENTS**

- 8. NEA or REA, as appropriate, shall:
  - a. create and keep a register of the installations or activities which fall within the scope of this Decision and have been notified by the respective operators;
  - b. make specifications in the conditions of the environmental permits to ensure that installations comply with paragraphs 9 to 20 of this chapter.
- 9. All installations shall comply with:
  - a. either the emission limit values in waste gases and the fugitive emission values, or the total emission limit values, and other requirements laid down in Annex IIA; or
  - b. the requirements of the reduction scheme specified in Annex IIB.
- 10. (a) For fugitive emissions, NEA or REA, as appropriate, shall apply fugitive emission values to installations as an emission limit value. However, where the operator is able to demonstrate to the satisfaction of the NEA or REA that for an individual installation this value is not technically and economically feasible, NEA or REA can make an exception for such an individual installation provided that significant risks to human health or the environment are not to be expected. For each derogation, the operator must demonstrate to the satisfaction of the NEA or REA that the best available technique is being used;
  - (b) activities which cannot be operated under contained conditions may be exempted from the controls of Annex IIA, when this possibility is explicitly mentioned in that Annex. The emission reduction scheme of Annex IIB is then to be used, unless it is demonstrated to the satisfaction of the NEA or REA that this option is not technically and economically feasible. In this case, the operator must demonstrate to the satisfaction of the NEA that the best available technique is being used.
  - (c) NEA shall report to the Ministry on the derogation concerning letters (a) and (b) in accordance with chapter XI.
- 11. For installations not using the reduction scheme, any abatement equipment installed after the date on which this Decision is brought into effect shall meet all the requirements of Annex IIA.
- 12. Installations where two or more activities are carried out, each of which exceeds the thresholds in Annex IIA shall:
  - a. as regards the substances specified in paragraphs 13, 14 and 15 below, meet the requirements of those paragraphs for each activity individually;
  - b. as regards all other substances, either:

- i. meet the requirements of paragraphs 9 for each activity individually; or
  - ii. have total emissions not exceeding those that would have resulted had paragraph (i) been applied.
13. Substances or mixtures which, because of their content of VOCs classify as carcinogens, mutagens, or toxic to reproduction under the specific legislation on classification, packaging and labelling of dangerous substances and mixtures, are assigned or need to carry the risk phrases R45, R46, R49, R60, R61, shall be replaced, as far as possible and by taking into account the guidance as mentioned in paragraph 35 of chapter VII, by less harmful substances or mixtures within the shortest possible time.
14. For discharges of the VOCs referred to in paragraph 13 above, where the mass flow of the sum of the compounds causing the labelling referred to in that paragraph is greater than, or equal to, 10 g/h, an emission limit value of 2 mg/Nm<sup>3</sup> shall be complied with. The emission limit value refers to the mass sum of the individual compounds.
15. For discharges of halogenated VOCs which are assigned the risk phrases R40 or R68, where the mass flow of the sum of the compounds causing the labelling R40 or R68 is greater than, or equal to, 100 g/h, an emission limit value of 20 mg/Nm<sup>3</sup> shall be complied with. The emission limit value refers to the mass sum of the individual compounds.
16. The discharge of VOCs referred to in paragraphs 13 and 15 above shall be controlled as emissions from an installation under contained conditions as far as technically and economically feasible to safeguard public health and the environment.
17. Discharges of those VOCs which, after the entry into force of this Decision, are assigned or need to carry one of the risk phrases mentioned in paragraphs 13 and 15 above, shall have to comply with the emission limit values mentioned in paragraphs 14 and 15 respectively, within the shortest possible time.
18. All appropriate precautions shall be taken to minimize emissions during start-up and shut-down.
19. Existing installations which operate existing abatement equipment and comply with the following emission limit values:
  - a. 50 mg C/Nm<sup>3</sup> in the case of incineration,
  - b. 150 mg C/Nm<sup>3</sup> in the case of any other abatement equipment,shall be exempt from the waste gases emission limit values in the table in Annex IIA for a period of 12 years after this Decision takes effect, provided the total emissions of the whole installation do not exceed those that would have resulted had all the requirements of the table been met.
20. Neither the reduction scheme nor the application of paragraph 19 above, nor chapter VI below exempt installations discharging substances specified in paragraphs 13, 14 and 15 above from fulfilling the requirements of those paragraphs.

## **VI. NATIONAL PLANS FOR VOC EMISSIONS REDUCTION**

21. The ministry, without prejudice to the requirements of the specific legislation on environmental permitting on class A activities, may draft national plans for reducing VOC emissions from the activities and industrial installations covered by chapter I of this Decision.
22. NEA will have the duty to collect and evaluate the information required by paragraph 29 and to implement the national plan.
23. The ministry can only exclude activities 4 and 11 of Annex IIA from such plans, but none of the other activities may be excluded from the scope of this Decision by means of a national plan.
24. The ministry when preparing the national plans may exempt existing installations from implementation of the emission limit values laid down in paragraphs 9 and 10 of chapter V and Annex II.
25. A national plan may under no circumstances exempt an existing installation from the provisions laid down for class A activities in the legislation on environmental permitting.

26. Existing installations undergoing a substantial change shall remain within the scope of the national plan, provided that they were part of this plan before undergoing such substantial change.
27. The national plan must result in a reduction of the annual emissions of VOCs from existing installations covered by this Decision by at least the same amount and within the same time frame as would have been achieved by applying the emission limits under paragraphs 9 and 10 of chapter V and Annex II, during the validity period of the national plan.
28. A national plan:
  - a. shall include:
    - i. an identification of the activity or activities to which the plan applies;
    - ii. a list of the measures taken or to be taken to ensure that the aim specified in paragraph 21 above will be achieved;
    - iii. the reduction in emissions to be achieved by those activities which corresponds to that which would have been achieved by applying the emission limits as specified in Annex IIA;
    - iv. binding interim reduction targets against which progress towards the aim can be measured;
    - v. the number of installations affected by the plan and their total emissions and the total emission of each of the activities;
    - vi. a full description of the range of instruments through which its requirements will be achieved;
    - vii. evidence that these instruments will be enforceable, and
    - viii. details of the means by which compliance with the plan will be demonstrated;
    - ix. details of the proposed plan monitoring mechanism;
  - b. It shall be compatible with the relevant existing legislation, including the relevant provisions of this Decision.
29. The plan must be accompanied by supporting documentation sufficient to verify that the aim of paragraph 21 above will be achieved .
30. The national plans shall be approved after the consultation with the line ministries, other stakeholders and the public.
31. The line ministries shall have 1 month to comment on the national plans for VOC emission reduction from the activities and industrial installations.
32. The national plan shall be reviewed and, if necessary, updated every 3 years.
33. Criteria for assessing national plans are given in Annex IV.
34. The SIEFW will monitor the implementation of the plan by the relevant installations covered by it.

## **VII. SUBSTITUTION**

35. For each activity the minister shall approve a guidance on the use of substances and techniques, which have the least potential effects on air, water, soil, ecosystems and human health.
36. NEA shall ensure that the guidance referred to in paragraph above is taken into account when setting the conditions for environmental permits.

## **VIII. MONITORING**

37. The operator of an installation covered by this Decision has the obligation to supply the SIEFW once a year or upon request with data that enables the SIEFW and the ministry to verify compliance with this Decision.
38. The operator shall:
  - a. self-monitor continuously for compliance in case the channels, to which abatement equipment is connected, and which at the final point of discharge emit more than an average of 10 kg/h of total organic carbon.
  - b. carry out either continuous or periodic measurements, in the other cases. For periodic measurements at least three readings shall be obtained during each measurement exercise.

- c. not be required measurements in the case where end-of-pipe abatement equipment is not needed to comply with this Decision.

## **IX. COMPLIANCE WITH EMISSION LIMIT VALUES**

- 39. The operator shall demonstrate to SIEFW compliance with the following:
  - a. emission limit values in waste gases, fugitive emission values and total emission limit values,
  - b. the requirements of the reduction scheme under Annex IIB,
  - c. the provisions of paragraph 10 of chapter V.
- 40. Annex III provides guidance on solvent management plans serving to demonstrate compliance with these parameters.
- 41. Gas volumes may be added to the waste gas for cooling or dilution purposes where technically justified but shall not be considered when determining the mass concentration of the pollutant in the waste gas.
- 42. SIEFW shall reverify compliance following a substantial change.
- 43. In the case of continuous measurements the emission limit values shall be considered to be complied with, if:
  - a. none of the averages over 24 hours of normal operation exceeds the emission limit values, and
  - b. none of the hourly averages exceeds the emission limit values by more than a factor of 1,5.
- 44. In the case of periodic measurements the emission limit values shall be considered to be complied with if, in one monitoring exercise:
  - a. the average of all the readings does not exceed the emission limit values, and
  - b. none of the hourly averages exceeds the emission limit value by more than a factor of 1,5.
- 45. Compliance with the provisions of paragraph 14, 15 and 16 of chapter V shall be verified on the basis of the sum of the mass concentrations of the individual volatile organic compounds concerned. For all other cases, compliance shall be verified on the basis of the total mass of organic carbon emitted unless otherwise specified in Annex IIA.

## **X. NON-COMPLIANCE**

- 46. Either the SIEFW or the operator itself, where they find that the requirements of this Decision have been breached, have the obligation to inform the NEA.
- 47. The operator takes measures to ensure that compliance is restored within the shortest possible time.
- 48. SIEFW, in cases of non-compliance causing immediate danger to human health and, as long as compliance is not restored under the conditions of paragraph above, suspends the operation of the activity.

## **XI. INFORMATION SYSTEMS AND REPORTING**

- 49. The ministry shall prepare every 3 years a report on the implementation of this Decision. The first report shall cover the period of the first 3 years after the date this Decision enters into force.
- 50. The minister, through a Ministerial Order, shall approve the outline of the report referred in paragraph 49.
- 51. The information submitted in the report referred in paragraph 49 shall, in particular, include sufficient representative data to demonstrate that the requirements of chapter V and as the case may be, the requirements of chapter VI have been complied with.
- 52. The report shall be prepared and published in the ministry's website within 9 months of the end of the 3-year period covered by it.
- 53. Publication of the report is subject to the restrictions laid down in the specific legislation on

the right of the public to have access on environmental information.

## **XII. PUBLIC ACCESS TO INFORMATION**

54. NEA without prejudice to the specific legislation on the right of the public to have access on environmental information, shall make available to the public
  - a. at least the applications for class A environmental permit for new installations or for substantial changes of those installations.
  - b. the specific legislation applicable for installations
  - c. the list of registered and permitted activities.
  - d. the results of emission-monitoring, as required under the class A environmental permit or registration conditions referred to in chapters VIII and IX .
55. NEA shall give to the public 1 month time, to enable it to comment on such applications before setting the permit conditions.
56. The applicant, without prejudice to the requirements of the legislation on environmental permitting, for class A activities shall have no obligation to reformat the information in the application for permit for the public.
57. NEA, after the environmental permit is issued by NLC, shall make the class A environmental permit and any subsequent updates, available to the public.
58. Paragraph 54 shall apply, subject to the restrictions regarding grounds for refusal by public authorities to provide information, including commercial and industrial confidentiality, laid down in the specific legislation on the right of the public to have access on environmental information.

## **XIII. COMPETENT AUTHORITIES**

59. Ministry, NEA, REA, SEI, are the Competent Authorities for the implementation of this Decision.

## **XIV. FINAL PROVISIONS**

60. Minister shall approve the acts deriving from paragraphs 35 and 50 of this decision.

## **XV. ENTRY INTO FORCE**

This Decision shall enter into force 5 years after its publication in the Official Journal

**PRIME MINISTER**

**EDI RAMA**



## **ANNEX I**

### **SCOPE**

This Annex contains the categories of activity referred to in Paragraph 1. When operated above the thresholds listed in Annex IIA, the activities mentioned in this Annex fall within the scope of this Decision. In each case the activity includes the cleaning of the equipment but not the cleaning of products unless specified otherwise.

#### **Adhesive coating**

— Any activity in which an adhesive is applied to a surface, with the exception of adhesive coating and laminating associated with printing activities.

#### **Coating activity**

— Any activity in which a single or multiple application of a continuous film of a coating is applied to:

- a. vehicles as listed below:
  - i. new cars, defined as vehicles of category M1 and of category N1 in so far as they are coated at the same installation as M1 vehicles,
  - ii. truck cabins, defined as the housing for the driver, and all integrated housing for the technical equipment, of vehicles of categories N2 and N3,
  - iii. vans and trucks, defined as vehicles of categories N1, N2 and N3, but not including truck cabins,
  - iv. buses, defined as vehicles of categories M2 and M3,
- b. trailers, defined in categories O1, O2, O3 and O4,
- c. metallic and plastic surfaces including surfaces of airplanes, ships, trains, etc.,
- d. wooden surfaces,
- e. textile, fabric, film and paper surfaces,
- f. leather.

It does not include the coating of substrate with metals by electrophoretic and chemical spraying techniques. If the coating activity includes a step in which the same article is printed by whatever technique used, that printing step is considered part of the coating activity. However, printing activities operated as a separate activity are not included, but may be covered by the Directive if the printing activity falls within the scope thereof.

#### **Coil coating**

— Any activity where coiled steel, stainless steel, coated steel, copper alloys or aluminium strip is coated with either a film forming or laminate coating in a continuous process.

#### **Dry cleaning**

— Any industrial or commercial activity using VOCs in an installation to clean garments, furnishing and similar consumer goods with the exception of the manual

removal of stains and spots in the textile and clothing industry.

**Footwear manufacture**

— Any activity of producing complete footwear or parts thereof.

**Manufacturing of coating mixtures, varnishes, inks and adhesives**

— The manufacture of the above final products, and of intermediates where carried out at the same site, by mixing of pigments, resins and adhesive materials with organic solvent or other carrier, including dispersion and predispersion activities, viscosity and tint adjustments and operations for filling the final product into its container.

**Manufacturing of pharmaceutical products**

— The chemical synthesis, fermentation, extraction, formulation and finishing of pharmaceutical products and where carried out at the same site, the manufacture of intermediate products.

**Printing**

— Any reproduction activity of text and/or images in which, with the use of an image carrier, ink is transferred onto whatever type of surface. It includes associated varnishing, coating and laminating techniques. However, only the following sub-processes are subject to the Decision:

- a. Flexography — a printing activity using an image carrier of rubber or elastic photopolymers on which the printing areas are above the non-printing areas, using liquid inks which dry through evaporation,
- b. heatset web offset — a web-fed printing activity using an image carrier in which the printing and non-printing area are in the same plane, where web-fed means that the material to be printed is fed to the machine from a reel as distinct from separate sheets. The non-printing area is treated to attract water and thus reject ink. The printing area is treated to receive and transmit ink to the surface to be printed. Evaporation takes place in an oven where hot air is used to heat the printed material,
- c. laminating associated to a printing activity — the adhering together of two or more flexible materials to produce laminates,
- d. publication rotogravure — a rotogravure printing activity used for printing paper for magazines, brochures, catalogues or similar products, using toluene-based inks,
- e. rotogravure — a printing activity using a cylindrical image carrier in which the printing area is below the non-printing area, using liquid inks which dry through evaporation. The recesses are filled with ink and the surplus is cleaned off the non-printing area before the surface to be printed contacts the cylinder and lifts the ink from the recesses,
- f. rotary screen printing — a web-fed printing activity in which the ink is passed onto the surface to be printed by forcing it through a porous image carrier, in which the printing area is open and the non-printing area is sealed off, using liquid inks which dry only through evaporation. Web-fed means that the material

- to be printed is fed to the machine from a reel as distinct from separate sheets,
- g. varnishing — an activity by which a varnish or an adhesive coating for the purpose of later sealing the packaging material is applied to a flexible material.

**Rubber conversion**

— Any activity of mixing, milling, blending, calendering, extrusion and vulcanisation of natural or synthetic rubber and any ancillary operations for converting natural or synthetic rubber into a finished product.

**Surface cleaning**

— Any activity except dry cleaning using organic solvents to remove contamination from the surface of material including degreasing. A cleaning activity consisting of more than one step before or after any other activity shall be considered as one surface cleaning activity. This activity does not refer to the cleaning of the equipment but to the cleaning of the surface of products.

**Vegetable oil and animal fat extraction and vegetable oil refining activities**

— Any activity to extract vegetable oil from seeds and other vegetable matter, the processing of dry residues to produce animal feed, the purification of fats and vegetable oils derived from seeds, vegetable matter and/or animal matter.

**Vehicle refinishing**

— Any industrial or commercial coating activity and associated degreasing activities performing:  
— the coating of trailers (including semi-trailers) (category O).

**Winding wire coating**

— Any coating activity of metallic conductors used for winding the coils in transformers and motors, etc.

**Wood impregnation**

— Any activity giving a loading of preservative in timber.

**Wood and plastic lamination**

— Any activity to adhere together wood and/or plastic to produce laminated products.

**ANNEX IIA**

**I. THRESHOLDS AND EMISSION CONTROLS**

	Activity  (solvent consumption threshold in tonnes/year)	Threshold  (solvent consumption threshold in tonnes/year)	Emission limit values in waste gases (mg C/Nm <sup>3</sup> )	Fugitive emission values (percentage of solvent input)		Total emission limit values		Special provisions
				New	Existing	New	Existing	
1	Heatset web offset printing  (> 15)	15—25  > 25	100  20	30 (1)  30 (1)				(1) Solvent residue in finished product is not to be considered as part of fugitive emissions.
2	Publication rotogravure  (> 25)		75	10	15			
3	Other rotogravure, flexography, rotary screen printing, laminating or varnishing units (> 15) rotary screen printing on textile/cardboard  (> 30)	15—25 > 25 > 30 (1)	100 100 100	25 20 20				(1) Threshold for rotary screen printing on textile and on cardboard.
4	Surface cleaning (1)  (> 1)	1—5  > 5	20 (2) 20 (2)	15 10				(1) Using compounds specified in paragraph 13 and 15 of chapter V.  (2) Limit refers to mass of compounds in mg/Nm <sup>3</sup> , and not to total carbon.
5	Other surface cleaning  (> 2)	2—10  > 10	75 (1) 75 (1)	20 (1)  15 (1)				(1) Installations which demonstrate to NEA that the average organic solvent content of all cleaning material used

								does not exceed 30 % by weight are exempt from application of these values.
6	Vehicle coating (< 15) and vehicle refinishing	> 0,5	50 (1)	25				(1) Compliance in accordance with paragraph 43 of chapter IX should be demonstrated based on 15 minute average measurements.
7	Coil coating (> 25)		50 (1)	5	10			(1) For installations which use techniques which allow reuse of recovered solvents, the emission limit shall be 150.
8	Other coating, including metal, plastic, textile (5), fabric, film and paper coating (> 5)	5—15	100 (1) (4)	25 (4) ◀				(1) Emission limit value applies to coating application and drying processes operated under contained conditions.  (2) The first emission limit value applies to drying processes, the second to coating application processes.  (3) For textile coating installations which use techniques which allow reuse of recovered solvents, the emission limit applied to coating application and drying processes taken together shall be 150.  (4) Coating activities which cannot be applied under contained conditions (such as shipbuilding, aircraft painting) may be exempted from these values, in accordance
		> 15	50/75 (2) (3) (4)	20 (4)				

								with letter (a) of paragraph 10 of chapter V.  (5) Rotary screen printing on textile is covered by activity No 3.
9	Winding wire coating  ( > 5)					10 g/kg (1)		(1) Applies for installations where average diameter of wire ≤ 0,1 mm.  (2) Applies for all other installations.
						5 g/kg (2)		
10	Coating of wooden surfaces  ( > 15)	15—25	100 (1)	25				(1) Emission limit applies to coating application and drying processes operated under contained conditions.  (2) The first value applies to drying processes, the second to coating application processes.
		> 25	50/75 (2)	20				
11	Dry cleaning					20 g/kg (1) (2) (3)		(1) Expressed in mass of solvent emitted per kilogram of product cleaned and dried.  (2) The emission limit in paragraph 15 of chapter V does not apply for this sector.
12	Wood impregnation  ( > 25)		100 (1)	45		11 kg/m3		(1) Does not apply for impregnation with creosote.
13	Coating of leather  ( > 10)	10—25				85 g/m2		Emission limits are expressed in grams of solvent emitted per m2 of product produced.  (1) For leather coating activities in furnishing and particular leather
		> 25				75 g/m2		
		> 10 (1)				150 g/m2		

							goods used as small consumer goods like bags, belts, wallets, etc.
14	Footwear manufacture ( > 5)					25 g per pair	Total emission limit values are expressed in grams of solvent emitted per pair of complete footwear produced.
15	Wood and plastic lamination ( > 5)					30 g/m <sup>2</sup>	
16	Adhesive coating ( > 5)	5—15	50 (1)	25			(1) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150.
		> 15	50 (1)	20			
17	Manufacture of coating mixtures, varnishes, inks and adhesives ( > 100)	100—1 000	150	5		5 % of solvent input	The fugitive emission value does not include solvent sold as part of a coatings mixture in a sealed container.
		> 1 000	150	3		3 % of solvent input	
18	Rubber conversion ( > 15)		20 (1)	25 (2)		25 % of solvent input	(1) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150.  (2) The fugitive emission value does not include solvent sold as part of products or mixtures in a sealed container.
19	Vegetable oil and animal fat extraction and vegetable oil refining activities ( > 10)					Animal fat: 1,5 kg/tonne  Castor: 3 kg/tonne  Rape seed: 1 kg/tonne  Sunflower seed:	(1) Total emission limit values for installations processing individual batches of seeds and other vegetable matter should be set by the NEA on a case-by-case basis, applying the best available techniques.  (2) Applies to all

						<p>1 kg/tonne</p> <p>Soya beans (normal crush): 0,8 kg/tonne</p> <p>Soya beans (white flakes): 1,2 kg/tonne</p> <p>Other seeds and other vegetable matter:</p> <p>3 kg/tonne (1)</p> <p>1,5 kg/tonne (2)</p> <p>4 kg/tonne (3)</p>	<p>fractionation processes excluding de-gumming (the removal of gums from the oil).</p> <p>(3) Applies to de-gumming.</p>
20	<p>Manufacturing of pharmaceutical products</p> <p>(&gt; 50)</p>		20 (1)	5 (2)	15 (2)	<p>5 % of solvent input</p> <p>15 % of solvent input</p>	<p>(1) If techniques are used which allow reuse of recovered solvent, the emission limit value in waste gases shall be 150.</p> <p>(2) The fugitive emission limit value does not include solvent sold as part of products or mixtures in a sealed container.</p>



## II. THE VEHICLE COATING INDUSTRY

The total emission limit values are expressed in terms of grams of solvent emitted in relation to the surface area of product in square meters and in kilograms of solvent emitted in relation to the car body.

The surface area of any product dealt with in the table below is defined as follows:

— the surface area calculated from the total electrophoretic coating area, and the surface area of any parts that might be added in successive phases of the coating process which are coated with the same coatings as those used for the product in question, or the total surface area of the product coated in the installation.

The surface of the electrophoretic coating area is calculated using the formula:

$$\frac{2 \times \text{total weight of product shell}}{\text{average thickness of metal sheet} \times \text{density of metal sheet}}$$

This method shall also be applied for other coated parts made out of sheets.

Computer aided design or other equivalent methods shall be used to calculate the surface area of the other parts added, or the total surface area coated in the installation.

The total emission limit value in the table below refers to all process stages carried out at the same installation from electrophoretic coating, or any other kind of coating process, through to the final wax and polish of top coating inclusive, as well as solvent used in cleaning of process equipment, including spray booths and other fixed equipment, both during and outside of production time.

The total emission limit value is expressed as the mass sum of organic compounds per m<sup>2</sup> of the total surface area of coated product and as the mass sum of organic compounds per car body.

Activity  (solvent consumption threshold in tonnes/year)	Production threshold  (refers to annual production of coated item)	Total emission limit value	
		New	Existing
Coating of new cars (> 15)	> 5 000	45 g/m <sup>2</sup> or 1,3 kg/body + 33 g/m <sup>2</sup>	60 g/m <sup>2</sup> or 1,9 kg/body + 41 g/m <sup>2</sup>
	≤ 5 000 monocoque or > 3 500 chassis-built	90 g/m <sup>2</sup> or 1,5 kg/body + 70 g/m <sup>2</sup>	90 g/m <sup>2</sup> or 1,5 kg/body + 70 g/m <sup>2</sup>
		Total emission limit (g/ m <sup>2</sup> )	
Coating of new truck cabins (> 15)	≤ 5 000	65	85
	> 5 000	55	75
Coating of new vans and trucks	≤ 2 500	90	120
	> 2 500	70	90

(> 15)			
Coating of new buses (> 15)	≤ 2 000	210	290
	> 2 000	150	225

Vehicle coating installations below the solvent consumption thresholds in the table above shall meet the requirements for the vehicle refinishing sector in Annex IIA.

## ANNEX II B

### EMISSION REDUCTION SCHEME

#### 1. Principles

The purpose of the reduction scheme is to allow the operator the possibility to achieve by other means emission reductions, equivalent to those achieved if the emission limit values were to be applied. To that end the operator may use any reduction scheme, specially designed for his installation, provided that in the end an equivalent emission reduction is achieved. The progress in achieving the same emission reduction, including the experience from the application of the reduction scheme shall be submitted in the report referred in paragraph 49 of Chapter IX of this Decision..

#### 2. Practice

In the case of applying coatings, varnishes, adhesives or inks, the following scheme can be used. Where the following method is inappropriate NEA may allow an operator to apply any alternative exemption scheme which it is satisfied fulfils the principles outlined here. The design of the scheme takes into account the following facts:

- (i) where substitutes containing little or no solvent are still under development, a time extension must be given to the operator to implement his emission reduction plans;
- (ii) the reference paragraph for emission reductions should correspond as closely as possible to the emissions which would have resulted had no reduction action been taken.

The following scheme shall operate for installations for which a constant solid content of product can be assumed and used to define the reference paragraph for emission reductions:

- (i) the operator shall forward to NEA an emission reduction plan which includes in particular decreases in the average solvent content of the total input and/or increased efficiency in the use of solids to achieve a reduction of the total emissions from the installation to a given percentage of the annual reference emissions, termed the target emission. This must be done on the following time frame:

Time period		Maximum allowed total annual emissions
New installations	Existing installations	
By 31.10. 2017	By 31.10.2022	Target emission × 1,5
By 31.10. 2020	By 31.10. 2024	Target emission

- (ii) The annual reference emission is calculated as follows:

- a. The total mass of solids in the quantity of coating and/or ink, varnish or adhesive consumed in a year is determined. Solids are all materials in coatings, inks, varnishes and adhesives that become solid once the water or the volatile

organic compounds are evaporated.

- b. The annual reference emissions are calculated by multiplying the mass determined in (a) by the appropriate factor listed in the table below. NEA may adjust these factors for individual installations to reflect documented increased efficiency in the use of solids.

<b>Activity</b>	<b>Multiplication factor for use in item (ii)(b)</b>
Rotogravure printing; flexography printing; laminating as part of a printing activity; varnishing as part of a printing activity; wood coating; coating of textiles, fabric film or paper; adhesive coating	4
Coil coating, vehicle refinishing	3
Food contact coating, aerospace coatings	2,33
Other coatings and rotary screen printing	1,5

(c) The target emission is equal to the annual reference emission multiplied by a percentage equal to:

- (the fugitive emission value + 15), for installations falling within item 6 and the lower threshold band of items 8 and 10 of Annex IIA,
- (the fugitive emission value + 5) for all other installations.

d) Compliance is achieved if the actual solvent emission determined from the solvent management plan is less than or equal to the target emission.

**ANNEX III**  
**SOLVENT MANAGEMENT PLAN**

**1. Introduction**

This Annex provides guidance on carrying out a solvent management plan. It identifies the principles to be applied (paragraph 2 below) and provides a framework for the mass balance (paragraph 3 below) and an indication of the requirements for verification of compliance (paragraph 4 below).

**2. Principles**

The solvent management plan serves the following purposes:

- i. verification of compliance as specified in paragraph 39 of chapter IX;
- ii. identification of future reduction options;
- iii. enabling of the provision of information on solvent consumption, solvent emissions and compliance with the Decision to the public.

**3. Definitions**

The following definitions provide a framework for the mass balance exercise.

Inputs of organic solvents (I):

I1 The quantity of organic solvents or their quantity in preparations purchased which are used as input into the process in the time frame over which the mass balance is being calculated

I2 The quantity of organic solvents or their quantity in preparations recovered and reused as solvent input into the process. (The recycled solvent is counted every time it is used to carry out the activity.)

Outputs of organic solvents (O):

O1 Emissions in waste gases.

O2 Organic solvents lost in water, if appropriate taking into account waste water treatment when calculating O5.

O3 The quantity of organic solvents which remains as contamination or residue in products output from the process.

O4 Uncaptured emissions of organic solvents to air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.

O5 Organic solvents and/or organic compounds lost due to chemical or physical reactions (including for example those which are destroyed, e.g. by incineration or other waste

gas or waste water treatments, or captured, e.g. by adsorption, as long as they are not counted under O6, O7 or O8).

O6 Organic solvents contained in collected waste.

O7 Organic solvents, or organic solvents contained in preparations, which are sold or are intended to be sold as a commercially valuable product.

O8 Organic solvents contained in preparations recovered for reuse but not as input into the process, as long as not counted under O7

O9 Organic solvents released in other ways.

#### **4. Guidance on use of the solvent management plan for verification of compliance**

The use made of the solvent management plan will be determined by the particular requirement which is to be verified, as follows:

- i. Verification of compliance with the reduction option in Annex IIB, with a total emission limit value expressed in solvent emissions per unit product, or otherwise stated in Annex IIA
  - a. For all activities using Annex IIB the solvent management plan should be done annually to determine consumption (C). Consumption can be calculated according to the following equation:  $C = I1 - O8$

A parallel exercise should also be undertaken to determine solids used in coating in order to derive the annual reference emission and the target emission each year.

- b. For assessing compliance with a total emission limit value expressed in solvent emissions per unit product or otherwise stated in Annex IIA, the solvent management plan should be done annually to determine emissions (E). Emissions can be calculated according to the following equation:  $E = F + O1$

where F is the fugitive emission as defined in section (ii)(a). The emission figure should then be divided by the relevant product parameter.

- c. For assessing compliance with the requirements of letter (b) (ii) of paragraph 12 of chapter V, the solvent management plan should be done annually to determine total emissions from all activities concerned, and that figure should then be compared with the total emissions that would have resulted had the requirements of Annex II been met for each activity separately.
- ii. Determination of fugitive emissions for comparison with fugitive emission values in Annex IIA:
  - a. Methodology

The fugitive emission can be calculated according to the following equation:

$$F = I1 - O1 - O5 - O6 - O7 - O8$$

Or

$$F = O2 + O3 + O4 + O9$$

This quantity can be determined by direct measurement of the quantities. Alternatively, an equivalent calculation can be made by other means, for instance by using the capture efficiency of the process.

The fugitive emission value is expressed as a proportion of the input, which can be calculated according to the following equation:

$$I = I1 + I2$$

b. Frequency

Determination of fugitive emissions can be done by a short but comprehensive set of measurements. It need not be done again until the equipment is modified.

## ANNEX IV

### CRITERIA FOR ASSESSING NATIONAL PLANS

#### A. Criteria for demonstrating detailed knowledge of current emissions

1. The national plan should demonstrate that the ministry has detailed knowledge of current emissions.

##### *Minimum acceptable evidence*

The ministry should submit a written statement which:

- a. identifies the activity or activities to which the plan applies; classifies according to a documented system; identifies the number of installations affected by the plan;
- b. quantifies the total emissions from installations affected by the plan;
- c. identifies the source of any emission factors and activity statistics used in estimating emissions; and
- d. describes methods used to derive emission factors, for example methods used to make measurements.

#### B. Criteria for justifying the deployment of a national plan

2. The national plan should justify the case for adopting a different approach to the provisions of paragraph 9 and 10 of chapter V and Annex II.

##### *Minimum acceptable evidence*

The ministry should submit a written statement which explains the benefits of using a national plan as opposed to using the provisions of paragraph 9 and 10 of chapter V and Annex II.

#### C. Criteria for demonstrating that the national plan is compatible with eu legislation, policies, and international commitments in force

3. The national plan shall confirm compatibility with policies, specific legislation in this field also bilateral and multilateral agreement, in which Albania is part.

##### *Minimum acceptable evidence*

The ministry should submit a written statement with supporting evidence that it has considered the compatibility of the national plan with all other relevant legislation.

D. More detailed criteria to be considered when the national plan has met criteria a, b and c

The suggested minimum acceptable evidence is detailed after all of criteria 4 to 26.

#### Criteria for demonstrating compliance with specific requirements of chapter VI of this Decision.

4. The national plan shall apply to existing installations only (Paragraph 21 of chapter VI .



5. The national plan shall not apply to activities 4 and 11 of Annex II(A)(paragraph 23 of chapter VI).
6. The national plan shall not exclude from the scope of this Decision any activity listed in Annex 1 (paragraph 23 of chapter VI).
7. The national plan shall not exempt an existing installation from the provisions laid down in the requirements on class A activities under the specific legislation on environmental permitting (paragraph 21 of chapter VI).
8. The national plan shall include a list of the measures taken or to be taken to ensure that the aim specified in paragraph 21 of chapter VI will be achieved (paragraph 28 of chapter VI).
9. The national plan shall detail the proposed plan monitoring mechanism (paragraph 28 of chapter VI).
10. The national plan shall set binding interim targets against which progress towards the aim specified in paragraph 21 of chapter VI can be measured (paragraph 28 of chapter VI).
11. The national plan shall identify the activity or activities to which the plan refers (paragraph 28 of chapter VI).
12. The national plan shall specify the reduction in emissions to be achieved by those activities, which corresponds to that which would have been achieved by applying the emission limit values and/or fugitive emission values under paragraph 9 and 10 of chapter V and Annex II (paragraph 28 of chapter VI).
13. The national plan shall list the number of installations affected by the plan and their total emissions and the total emission of each of the activities (paragraph 28 of chapter VI).
14. The national plan shall describe the range of instruments through which its requirements will be achieved, evidence that these instruments will be enforceable and details of the means by which compliance with the plan will be demonstrated (paragraph 28 of chapter VI).

#### **Criteria for demonstrating compatibility with other relevant provisions of this Decision**

15. The national plan shall identify the necessary measures, which have been or will be adopted to ensure that installations affected by the plan will comply with chapter V (except, where allowed for in the plan, paragraphs 9 and/or 10), chapter VIII and IX and any requirements of the plan no later than 31 October 2022 (letter (a) of paragraph 5 of chapter IV).
16. The national plan shall identify the necessary measures which have been or will be adopted to ensure that installations affected by the plan will have been registered or authorised by 31 October 2022 at the latest (letter (b) of paragraph 5 of chapter IV).
17. The national plan shall identify the necessary measures which have been or will be adopted to ensure that installations affected by the plan will meet the requirements for monitoring laid down in chapter VIII.
18. The national plan shall identify the necessary measures which have been or will be adopted to ensure that installations affected by the plan will demonstrate compliance with emission limit values and/or fugitive emission values set by the national plan in accordance with chapter IX.

19. The national plan shall identify the necessary measures which have been or will be adopted to ensure that installations affected by the plan will comply with chapter X if it is found that the requirements of the Decision or of the plan have been breached.
20. The national plan shall describe how the reports drafted in accordance with chapter XI shall include sufficient representative data to demonstrate that the requirements of chapter VI have been complied with (paragraph 49 of chapter XI).
21. The national plan shall describe the necessary measures which have been or will be adopted to ensure public access to information relating to installations affected by the plan in accordance with chapter XII.

**Criteria for demonstrating that the plan shall result in an equivalent reduction of annual emissions**

22. The national plan shall quantify the current annual emissions from installations affected by the plan.
23. The national plan shall quantify the reduction in annual emissions from installations affected by the plan which would have been achieved by applying the emission limit values for waste gases and/or fugitive emission values under paragraph 9 and 10 of chapter V and Annex II.
24. The national plan shall quantify the reduction in annual emissions from installations affected by the plan which will be achieved by its implementation.
25. The national plan shall demonstrate that the reduction under criterion 24 shall be at least as great as the reduction under criterion 23.

**Criteria for validating the means by which compliance with the plan will be demonstrated in accordance with criterion 14 and paragraph 28 of chapter VI**

26. The national plan shall show that the means by which compliance with the plan will be demonstrated are sufficiently robust to enable a third party to verify compliance.

*Minimum acceptable evidence for criteria 4 to 26*

There are four main areas where evidence should be provided, summarized as follows.

- (i) The Ministry should submit a list of designated installations to be covered by the national plan, broken down to at least activity level (as specified in Annex II(A)).
- (ii) The Ministry should submit details of how the national plan will be implemented by NEA, including:
  - how time scales will be set and monitored by NEA,
  - how the competent authorities will maintain records of each installation to be covered by the national plan,
  - how at an installation level these records will contain detail of activities covered; measures taken; hours during which equipment is operated; emission limit values and/or fugitive emission values and/or binding interim targets to be met; means of monitoring/demonstrating compliance with emission limit values and fugitive emission values,
  - methods for monitoring, reporting and demonstrating compliance with the plan. The Ministry should utilise either a mass balance approach, in accordance with Annex III, or measurement procedures for mass concentrations and volume flow rates, in accordance with recognised international or harmonized Albanian

standards. If the Ministry proposes alternative means of demonstration, the national plan should provide evidence of comparable rigour.

- (iii) The Ministry should submit an inventory of emissions for all installations affected by the national plan. The Ministry shall provide evidence in the form of representative data and documented methodologies to enable independent verification of the reported emissions. This inventory must be suitable to demonstrate equivalence with the Decision and the Ministry shall provide representative calculations of the reductions in annual emissions reported under criteria 23 and 24 to enable independent verification of the calculation methodologies.
- (iv) The Ministry should describe how the national plan, its targets, and the progress of individual installations towards these targets will be made available to the public. There may be instances where certain information might be regarded as confidential and therefore withheld from public access. Examples include:
  - identities of installations of a military nature,
  - details regarding some installations where indicators of production volume may be commercially sensitive, such as solvent inputs, hours operated, and volume flow rates.