



Environmental Agency

POLLUTION PREVENTION AND CONTROL REGULATIONS 2013

Application for an Authorisation in relation to Solvent Consumption

1. What is the name of the installation and the site on which it is located?

Installation name	
Site name	

2. What is the address/location of the site of the installation?

Address	

3. Site plans and maps

Please provide suitable:-

- Maps or plans showing the location of the site of the installation; and
 - (i) The layout of the SEA activities within the installation
 - (ii) The position of any VOC abatement at the installation.
 - (iii) The location of the drains within the installation and in the immediate area of the installation (that could be affected as a result of any VOC releases)
 - (iv) The location of any discharge point of waste gases to atmosphere (please reference each emission point e.g. EP1, EP2, etc). Please specify emission points where solvents classified with risk phrases are emitted.

4. About your activities

4.1 SED activities and directly associated activities. Please complete the tables below with details of proposed SED activities that are to be carried out at the site. Under SED activity please identify all activities as listed in Schedule 1 of the Solvent Emissions Act.

Table 1 SED activity 1

SED activity 1		Annual solvent consumption of activity (tonnes/year)*
SED activity (SEDA)		
Directly associated activities (DAAs)		
	Total consumption of SED activity 1 (SEDA + DAAS)	

Table 2 SED activity 2

		Annual solvent consumption of activity (tonnes/year)*
SED activity (SEDA)		
Directly associated activities (DAAs)		
	Total consumption of SED activity 2 (SEDA + DAAS)	

**If you do not know your actual annual solvent consumption, please use an average figure.*

4.2 In order to identify the total solvent consumption of your installation, please calculate the total annual solvent consumption of all your SED activities in the box below.

Total annual solvent consumption (tonnes/year)*	
*Total consumption = (total in Table 1) + (total in Table 2)	

4.3 Application for an Authorisation.

The date on which the SED installation started should be listed. If different parts of the installation were brought into operation at different times, details of each should be listed with the corresponding date of operation.

Table 3 SED activity 1

SED activity (SEDA)	Date	Directly associated activities (DAAs)	Date

Table 4 SED activity 2

SED activity (SEDA)	Date	Directly associated activities (DAAs)	Date

Please attach extra sheets if required.

4.4 Please provide details of the date of installation and nature of any VOC abatement equipment that was, or is proposed to be, brought into operation at the SED installation.

If different pieces of abatement equipment were, or are proposed to be, brought into operation at different times, details of each should be listed with the corresponding date of operation. (Please refer to Appendix for guidance on risk phrases and MSDS).

Table 5 VOC abatement equipment

Name	Description	Date installed	Location reference on map

5. Please identify substances or preparations used, or proposed for use, in the SED installation that are labelled with the following risk phrases. The individual risk phrases of each substance or preparation should be listed.

- R40 – limited evidence of carcinogenic effects
- R45 – may cause cancer
- R46 – may cause heritable genetic damage
- R49 – may cause cancer by inhalation
- R60 – may impair fertility
- R61 – may cause harm to the unborn child

Note: This only applies where the assignment of one of these risk phrases to the substance/preparation is due to its VOC content and not a non-voc component, e.g. lead, chromate.

Table 6 Risk phrase solvent(s)

Name of substance/preparation & risk phrase(s) (please supply MSDS for each substance named)	Annual consumption or risk phrase substance (tonnes/year)	Date began or intend to begin using risk phrase substance

(Please refer to Appendix for guidance on risk phrases and MSDS)

5.1 Please provide an assessment of substitution of any substances or preparations identified in 5, excluding substances with risk phrase R40. Please refer to Appendix for more detailed guidance on substitution.

Table 7 Substitution Programme

Solvent name & risk phrase(s)	Proposed substitution date	Substitute substance name
Description of programme/action		

Document reference number

Please attach extra sheets if required clearly identified using a document reference number.
Document reference number for additional information

5.2 Explanation if NOT intending to implement a substitution programme

Please attach a full explanation to demonstrate why any substance identified in 5 cannot be substituted. Factors to be considered may include the potential effects on human health and the environment, fitness for use and the costs and benefits associated with using alternatives.

Document reference number for additional information

5.3 Please identify any part of the SED installation where there may be a discharge of a halogenated VOC which;

1. *Is assigned the risk phrase R40, and*
2. *Where the mass emission of the R40 compound is greater than, or equal to, 100g/h.*

(See Appendix for how to calculate the mass emission of the R40 compound).

5.4 Where applicable please explain how the emission limit value of 20mg/m³ specified in Article 5(8) of the SED will be complied with at the discharge point of waste gases to atmosphere.

Document reference number for additional information

6. VOC Control Methods

6.1 Please identify which of the following VOC control methods you propose to use at the SED installation.

Table 8 VOC control methods

VOC control methods	Please tick
a) Meet an emission limit value (ELV) for VOCs in waste gases (measured in mg/CNm ³) and a fugitive ELV (measured as % of solvent use)	
b) Meet a total emission limit value for VOCs (e.g. solvent emissions per unit product)	
c) Implement a solvent reduction scheme to reduce VOCs emissions	

Not all of these options will be applicable to each SED activity

7. Solvent Reduction Scheme

7.1 If you intend to comply by implementing a solvent reduction scheme (Table 9, option c), please provide details of the proposed scheme and how compliance will be achieved including dates, etc.

8. Demonstrating Compliance

8.1 Please provide a summary of how the installation is designed, equipped and will be operated in a manner which ensures compliance with the SED and SEA 2002. We need this information to determine whether the way you operate the installation will meet all the requirements of the SEA 2002.

You should:

- Demonstrate that your installation is designed, equipped and will be operated in a manner which will ensure compliance with the SED and SEA 2002.
- Provide any other information about the installation which you think is relevant to that issue.

9. Derogation

If you intend to apply for a derogation from implementing a Solvent Reduction Scheme under Para 3 of Schedule 3 of the SEA, please provide details of the best available techniques being applied to each SED activity.

10. Additional Information

You may attach any information that you consider relevant to your application. Please provide this information in electronic form wherever possible.

Additional documentation provided should be clearly referenced and the number provided below.

Document reference number(s) (and file name(s) if appropriate).

Declaration

I/we certify that the information in this application is correct. I/we apply for a permit in respect of the particulars described in this application (including supporting documentation I/we have supplied).

Signature(s) of applicant(s):

APPENDIX

SED activity shall mean any activity falling within Schedule 1 of the Solvent Emissions Act 2002.

Directly associated activity in relation to a SED activity shall mean any directly associated activity which has a technical connection with the SED activity carried out on the same site and which could have an effect on any discharge of volatile organic compounds into the environment.

Risk phrases

Risk phrase substances are defined as follows:

“in relation to an SED activity other than dry cleaning, a substance or preparation which, because of its content of volatile organic compounds classified as carcinogens, mutagens or toxic to reproduction under Directive 67/548/EEC is assigned or needs to carry the risk phrases R45, R46, R49, R60 or R61 or, in the case of halogenated volatile organic compounds, is assigned or needs to carry the risk phrase R40 and a substance or preparation and a substance becomes a risk phrase substance or preparation when because of its content of volatile organic compounds or, as the case may be, halogenated volatile organic compounds, it is assigned or needs to carry one or more of those risk phrases”.

Assessment of Substitution of Substances

The purpose of this assessment shall be to examine the opportunities for the replacement of the substances or preparations assigned R45, R46, R49, R60 and R61, as far as possible and within the shortest possible time, by less harmful substances and preparations. Where the applicant considers that replacement of any of the substances or preparations is not possible, the assessment shall include a reasoned argument, including technical and/or economic reasons, for the continued use of such substances or preparations.

The assessment should detail how each risk phrase substance or preparation will be replaced and within what timescale. Full justification for all findings/proposals must be provided as part of the assessment. In particular, where you consider that substitution of any such substance or preparation is not possible, a technical and economic justification should be provided.

Identification of any part of the SED installation where there may be a discharge or halogenated VOC which:

- Is assigned the risk phrase R40; and

- Where the mass emission of the R40 compound causing the labelling is greater than, or equal to, 100g/h.

Mass emission can be produced by:

- a) Using a mass balance calculation,
- b) Carrying out testing and flow measurement of the process emissions. This may require speciation of the risk phrase component.

Details of the method used and, in the case of b), process-operating conditions should be provided.

VOC Control Methods

VOC controls are required for ALL SED installations. There are three VOC control methods that are specified in the SED, namely:

- a) Meet an emission limit value (ELV) for VOCs in waste gases (measured in mgC/Nm³) and a fugitive ELV (measured as % of solvent use); or
- b) Meet a total emission limit value for VOCs (e.g. solvent emissions per unit product); or
- c) Implement a solvent reduction scheme to reduce VOCs emissions.

Not all of these options will be applicable to each SED activity. The Environmental Agency will set relevant permit conditions and VOC limits for your installation based on the control method that you select.