

Certification Europe

**AIC Dry Cleaning Report
under the
2002 Solvents Regulations**

**Emissions of Volatile Organic Compounds from Organic Solvents Regulations
2002**

(S.I. No. 543 of 2002)

**Accredited Inspection Contractor (AIC)
Report for Dry Cleaning**

Name (legal entity) and address of the operator of the installation¹:

Cyclone Cleaning Services t/a DLA Dry Cleaners

Mill Street,

Birr

County Offaly

Address of the installation (if different to operator address):

As above

RELEVANT ACTIVITY – DRY CLEANING

Scheduled Activity:	Solvent Consumption Threshold (t/yr):
Dry Cleaning	No Threshold

COMPLIANCE OR OTHERWISE OF THIS INSTALLATION WITH THE REGULATIONS

In accordance with article 24(1) of the Emissions of Volatile Organic Compounds from Organic Solvents Regulations 2002 (S.I. No. 543 of 2002), the undersigned Accredited Inspection Contractor inspector hereby declares that the above named installation isⁱⁱ

- **In compliance with the requirements of the Emissions of Volatile Organic Compounds from Organic Solvents Regulations 2002 (S.I. No. 543 of 2002).**

MAJOR NON-COMPLIANCES, MINOR NON-COMPLIANCES, AND OBSERVATIONS

The undersigned Accredited Inspection Contractor inspector notes the following in relation to this installation:

Major Non-compliances (reason(s) for operation being non-compliant):	NONE
Minor Non-compliances (less serious issues which in time could become major non-compliances – inspection passed):	YES See section 4 of the report
Observations (areas for improvement by the operator with a view to avoiding minor non-compliances in the future):	YES See section 4 of the report

INSTALLATION DETAILS

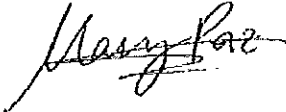
Competent authorityⁱⁱⁱ: **Offaly County Council**

Type of installation:	existing installation (in operation on or before 30 June 2003)
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Reason for reporting^{iv}: **annual reporting**

Register number^v: **O.S.- 01/09**

Solvent used in the period (I1) (kg)^{vi}: **536**

Inspector signature: 

Date: **23rd November 2009**

Inspector name (print)^{vii}: **Mary Paz Lopez**

Date of AIC inspection: 3rd November 2009

Accredited Inspection Contractor^{viii}: **Certification Europe Ltd.**

INAB reg. no^{ix}: **9005**

1 EMISSION LIMIT VALUE

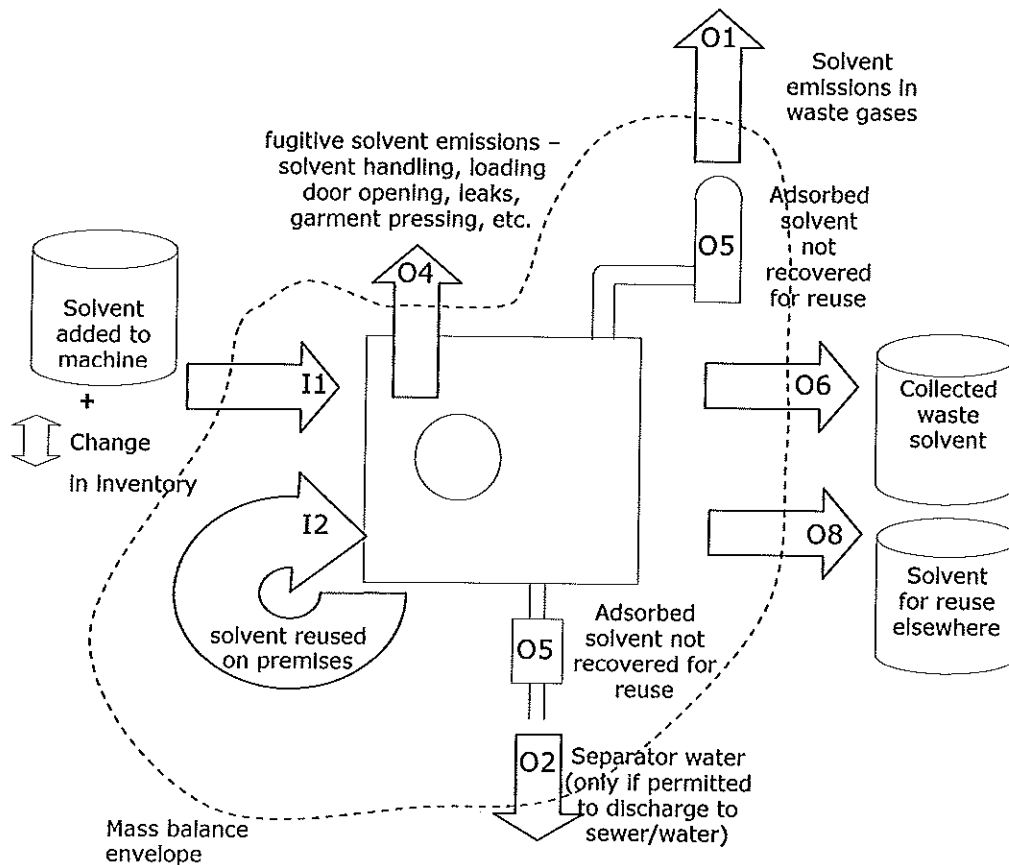
The Emission Limit Value (ELV) under the 2002 Regulations for dry cleaning is as follows:

Total Emission Limit Value (ELV) for Dry Cleaning Installations
20 g solvent emitted per kg of product cleaned and dried

2 SOLVENT MANAGEMENT PLAN

2.1 Relevant Mass Balance Terms & Values for the Installation

The mass balance terms for the solvent management plan in Schedule 6 to the 2002 Regulations that are relevant for dry cleaning are shown in the following illustration and subsequent table. The spreadsheet of records for dry cleaners also provides detail on how these terms are calculated.



Directive's Mass Balance Terms relevant to dry cleaning		Relevance to Dry Cleaning	Value for the Installation (kg) ^x
			12 month period: 1/11/08 to 31/10/09
Inputs of organic solvents (I):			
I1	<i>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</i>	Relevant. The amount of solvent put into the machine for the first time. The change of level of solvent in the machine between the start and end of the period is also added in. Use of spotting chemicals containing VOCs is also added.	536
Outputs of organic solvents (O):			
O1	<i>Emissions in waste gases</i>	Relevant. The amount of solvent emitted from the machine that isn't captured by the condensers or adsorbers.	WILL BE CALCULATED BY SOLVENT MANAGEMENT PLAN AS PART OF THE TOTAL EMISSION FIGURE
O2	<i>Organic solvents lost in water, if appropriate taking into account waste water treatment when calculating O5</i>	May be relevant for any solvent released to water/sewer in separator water, but only if sanitary authority allows discharge. ¹¹	WILL BE CALCULATED BY SOLVENT MANAGEMENT PLAN AS PART OF THE TOTAL EMISSION FIGURE
O4	<i>Uncaptured emissions of organic solvents to air.</i>	Relevant to dry cleaning. Includes leaks, emissions from opening doors, solvent handling, etc.	WILL BE CALCULATED BY SOLVENT MANAGEMENT PLAN AS PART OF THE TOTAL EMISSION FIGURE
O5	<i>Organic solvents and/or organic compounds lost due to chemical or physical reactions</i>	Only adsorption is relevant. May not be relevant for every facility. Applicable to solvent removal from air or separator water. Does not include adsorbed solvent that is regenerated and reused within the dry cleaning machine.	0
O6	<i>Organic solvents contained in collected waste</i>	Relevant - waste solvent itself plus solvent in carbon filters disposed. Also separator water if it is handled as hazardous waste.	252
O8	<i>Organic solvents contained in preparations recovered for reuse but not as input into the process</i>	Any waste sent away for recovery/recycling rather than disposal. May not be relevant to every dry cleaning facility.	0

Product Processed	
	Value for the Installation for the 12 month period 1/11/08 to 31/10/09
Product processed (kg)	18,383

2.1 Solvent Management Plan Calculations

Taking the values for I1, O5, O6, and O8 as relevant from the table in section 2.1 and inserting them into the following mass balance equation:

$$\begin{aligned}\text{Actual total emissions: } (O1 + O2 + O4) &= I1 - (O5 + O6 + O8) \\ &= (536) - [(0) + (252) + (0)]\end{aligned}$$

$$\text{Actual total emissions} = 284 \text{ kg}$$

$$\text{(multiplying by 1000):} = 284,000 \text{ g}$$

3 DEMONSTRATION OF COMPLIANCE

Total emission value = Actual total emissions in g / Product processed in kg

$$= (284,000\text{g}) / (18,383\text{kg})$$

$$= 15.45 \text{ g/kg}$$

As can be seen from the above, the installation:

- **is in compliance**

with the total emission limit value of 20 g solvent emitted per kg of product cleaned and dried.

4 MAJOR AND MINOR NON-COMPLIANCES, & OBSERVATIONS¹²

4.1 Major Non-compliances

Major non-compliances: issues in relation to the Solvents Regulations which result in a failed inspection and must be rectified to ensure compliance is restored within the shortest time possible (if there is immediate danger to human health the operator must suspend operation until the competent authority allows restart of operations concerned).

Major non-compliance(s) in relation to the installation are as follows:

None

4.2 Minor Non-compliances

Minor non-compliances: issues in relation to the solvents Regulations which do not result in a failed inspection but which should be addressed by the operator in the next 12 month period, perhaps to avoid major non-compliances arising in future.

Minor non-compliance(s) in relation to the installation are as follows:

Nov/09-01 The installation has not complied with the requirements of the best practice guidelines with regard to **documents** that should be kept on site. The evidence for this is as follows.

- **The installation does not have a copy of their waste contractor's waste management license and collection Permit. The waste contractor is Guardian Silver Lining. This must be kept up to date and on file at all times. See section 1.9.2 of the Best Practice Guidelines for Dry Cleaning (August 2008) for details.**

Nov/09-02 The installation has not complied with the requirements of the best practice guidelines with regard to **waste**. The evidence for this is as follows;

- **Separator water is indirectly disposed of to sewers; the installation has a device connected to a plastic drum where separator water is collected. The Perc is poured back into the still; this should be recorded as an addition. The Local Authority is**

aware of this practice but not written confirmation has been obtained yet.

Separator water is a hazardous waste and should be collected for off-site disposal using a licenced waste contractor. See section 1.9.2 of the Best Practice Guidelines for details.

- Residues from the button and lint traps are disposed of as domestic waste. These are hazardous waste. See section 2.2 of the Best Practice for Dry Cleaners (August 2008) for disposal details.
- The barrels containing waste should be labeled. Stickers or labels may be available from the waste contractor.

Nov/09-03 The installation must comply with the requirements of the best practice guidelines with regard to the following

The installation should review their weighing/ loading policy and ensure that the machine is kept running to the manufacturers guidelines. The inspector noticed that some loads exceed the capacity of the machine. Neither overloading nor under loading the machine are recommended for Perc usage.

The installation must ensure that these Non-Conformances are closed off within 1 month of the inspection.

4.3 Observations

Observations(s): Issues in relation to the Solvents Regulations which do not result in a failed inspection but which should be addressed by the operator in the next 12 month period, perhaps to avoid minor non-compliances arising in future.

Observations(s) in relation to the installation are as follows:

Nov/09-04 The following observations were noted by the inspector in relation to records on the day of the inspection. These must be closed off by the installation in order to reduce the likelihood of minor- non compliances being raised in the future

- The installation identified an addition of 20L of Perc that had not been recorded in the Weekly Record Sheets. The installation should ensure that all the additions are recorded as they occur.
- The capacity of the carbon adsorber and the number of cycles between regenerations should be established and recorded as required in section 1.7.2 and Appendix 1.3 of the Best Practice Guidelines for Dry Cleaners (August 2008) for details.

Nov/09-05 There have been some spillages recorded during the 12 months of records inspected. They have estimated around 24 Litres of perc lost in the period.

Nov/09-06 All calibration of scales must be recorded. See section 1.7.4 of the Best Practice Guidelines for Dry Cleaners (August 2008) for details.

Nov/09-07 The installation should send a copy of the Certificate of Compliance issued by the local authority to the AIC office once issued.

ENDNOTES TO THE AIC REPORT FOR DRY CLEANING

- ⁱ This should be a legal entity, i.e. either sole trader, or body corporate, and not simply a trading name or trading company. The operator address can be different to the address where the installation is located or is to be located.
- ⁱⁱ Tick that which is applicable based on the evidence of the site visit and section 3 of the AIC report.
- ⁱⁱⁱ Indicate who the competent authority is. In the case of activities which are IPPC licensable, the competent authority is the EPA. For all other scheduled solvent activities, the competent authority is the county council or city council in whose functional area the installation is located.
- ^{iv} Tick whether the AIC report is being submitted to fulfil the annual reporting requirement, or because a substantial change is planned for the installation, or because the installation is a new installation which has not yet commenced operation.
For dry cleaning, a substantial change is where:
- There is a change in the nominal capacity (i.e. additional machines or a new larger machine) leading to an increase of more than 25% in **emissions** of VOCs, or where
 - The local authority decides a change is a substantial change if it considers it may have significant negative effects on human health or the environment.
- Note that a replacement machine, or even an additional machine, **may not** result in a 25% emissions increase, since new machines emit less than older models.
- ^v This is the register number assigned to the installation by the competent authority. If this is the first AIC report to be submitted for the installation, a register number will not yet have been assigned. In this case insert "to be assigned" in this section. If an installation has previously submitted an AIC report to the competent authority, a register number will have been assigned to the installation on the certificate of compliance. In this case insert this register number, if known.
- ^{vi} Insert value for I1 from the solvent management plan in section 2.
- ^{vii} The name of the person - the Accredited Inspection Contractor (AIC) Inspector - who carried out the site visit and compiled the AIC report. Remote electronic submittal will require the approval of the competent authority e.g. subject to electronic signature.
- ^{viii} The name of the accredited inspection contractor organisation or company.
- ^{ix} This is the reference number assigned to the accredited inspection contractor by the Irish National Accreditation Board (INAB) in accordance with the list referred to in article 22 of S.I. No. 543 of 2002.
- ^x Insert here the values for I1, and as relevant O5, O6, and O8 that have been calculated for the installation.
- ¹¹ A waste containing perchloroethylene would be hazardous by carcinogenic (H7) at $\geq 1\%$ and by ecotoxic (H14) at $\geq 2.5\%$. (Source: *Environment Agency (UK) Hazardous Waste Interpretation of the definition and classification of hazardous waste (2nd edition v2.1)*).
- ¹² Look at previous AIC reports to see if previous minor non-compliances or observation have been addressed.