

**PERMIT TO OPERATE A PRESCRIBED PROCESS**  
**POLLUTION PREVENTION AND CONTROL ACT 1999**  
**THE POLLUTION PREVENTION AND CONTROL (ENGLAND & WALES)**  
**REGULATIONS 2000**

WM MORRISON SUPERMARKETS PLC  
WARWICK HIGHWAY  
REDDITCH  
WORCESTERSHIRE  
B98 0SW

Redditch Borough Council hereby permits Wm Morrison Supermarkets Plc to carry on a dry cleaning installation under Section 7.0 of The Pollution Prevention and Control (England & Wales) Regulations 2000 (as amended) and as described in this permit and in accordance with the conditions specified in the attached schedule.

Permit reference No. 6/46/1/06

COPY

Signed.....  
Authorised Officer

Date..30/7/9.....

Revised

## **SCHEDULE**

Schedule of conditions attached to and forming part of the permit.

### **Operator**

Wm Morrison Supermarkets Plc Warwick Highway, Redditch, Worcestershire,  
B98 0SW

### **Registered Office**

Wm Morrison Supermarkets Plc, Hilmore House, Gain Lane, Bradford, West  
Yorkshire, BD3 7DL

## **DESCRIPTION OF PERMITTED ACTIVITY**

The above named company is permitted to operate a dry cleaning installation  
containing the dry cleaning machine listed below,

Make	Model	Serial Number	Load Capacity	Date of Installation	Dry Cleaning Solvent
Fibrimatic	S2018	192L70123	18kg	2008	Perchloroethylene

## **SCHEDULE OF PERMIT CONDITIONS**

1. Operations must be carried out in such a manner that no more than 20 grams of solvent per kilogram of product cleaned and dried shall be emitted as measured and reported annually. The 20 grams includes all organic solvents used within the installation e.g. dry cleaning solvent, water-proofing solutions and spot cleaning solutions.
2. A weekly inventory of solvent usage, product cleaned and solvent waste sent for recovery or disposal shall be maintained and held on site for inspection by the regulator for at least 12 months.

*Condition 2 is varied to change the date for submission of the report required in condition 2 from "31<sup>st</sup> October each year to 1<sup>st</sup> February each year"*

**Note:** The solvent management balance sheet for dry cleaning installations in **Appendix 4** can be used to demonstrate compliance with conditions (1) and (2) (above).

3. The operator shall implement the schedule of procedures, checks and maintenance requirements to each dry cleaning machine as listed in B1.5 of the permit application dated 30 August 2006.
4. The regulator shall be advised in writing 14 days prior to any proposed significant alteration to the operation, or modification of the installation which may have an effect on emissions of VOC from the installation, in particular changes to the matters listed in condition 3.
5. All operating staff must know where the operating manual for each dry cleaning machine can be found and have ready access to it.
6. All operating staff must be trained in the operation of each dry cleaning machine and the control and use of dry cleaning solvents. The training received must be recorded.
7. The machine shall be installed and operated in accordance with supplier recommendations, so as to minimise the release of VOC to air, land and water.
8. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator must:
  - investigate immediately and undertake corrective action; adjust the process or activity to minimise those emissions
  - adjust the process or activity to minimise those emissions; and
  - promptly record the events and actions taken.
  - In this condition abnormal emission will include any detectable solvent smell other than in the area of the dry cleaning machine.

9. In cases of non-compliance causing immediate danger to human health, operation of the activity must be suspended; and the regulator informed within 24 hours.
10. Dry cleaning machines shall be operated as full as the type of materials to be cleaned will allow. (e.g. Full loads for light non delicates materials such as suits. Delicates and heavy materials, such as, wedding dresses and blankets may need to be cleaned in part loads).
11. Where cleaning solvents containing VOC are not received in bulk they shall be stored:
- in the containers they were supplied in with the lid securely fastened at all times other than when in use;
  - within spillage collectors, of suitable impervious and corrosion-proof materials and capable of containing 110% of the largest container;
  - away from sources of heat and bright light;
  - with access restricted to only appropriately trained staff.

**Note:** from a health and safety point of view: a well ventilated area should be used.

12. Where cleaning solvents containing VOC are not received in bulk, the lids of the containers shall only be removed when the container is next to the cleaning machine readily for filling. Cleaning solvents shall be obtained in containers of a size which allows the entire container to be emptied into the machine at each topping up. Once emptied the lid of the container shall be replaced securely.
13. Spot cleaning with organic solvents or organic solvent borne preparations shall not be carried unless they are the only method of treating a particular stain on the material to be cleaned.
14. The dry cleaning machine loading door shall be kept closed when not in use.
15. The dry cleaning machine loading door shall be closed before the start-up of the machine, and kept closed at all times through the drying and cleaning cycle.
- All machines installed after 19 May 2005 shall have interlocks to prevent start-up of the machine until the loading door is closed and to prevent opening of the loading door until the machine cycle has finished and the cage has stopped rotating.
  - All machines installed after 19 May 2005 shall have interlocks to automatically shut down the machine under any of the following conditions: cooling water shortage, failure of the cooling ability of the still condenser, failure of the cooling ability of the refrigeration system or failure in the machine heating system resulting in the inability to dry the load.

16. The still, button trap and lint filter doors shall be closed before the start-up of the machine and kept closed at all times through the drying and cleaning cycle.

- All machines installed after 19 May 2005 shall have interlocks to automatically shut down the machine if the still, button trap and lint filter doors are not properly closed.

17. The still shall have a thermostatic control device or equivalent with which to set a maximum temperature, in accordance with manufacturers' recommendations for the solvent used.

18. The heat source shall automatically switch off at the end of the distillation process.

19. The machine shall have a spillage tray with a volume greater than 110% of the volume of the largest single tank within the machine.

20. All machines installed after 19 May 2005 shall have a secondary water separator to minimise potential solvent losses.

21. Prior to disposal, containers contaminated with solvent shall be stored with the lids securely fastened to minimise emissions from residues during storage prior to disposal, and labelled so that all that handle them are aware of their contents.

22. Solvent contaminated waste, for example still residues, shall be stored:

- in suitable sealed containers with the lid securely fastened at all times other than when in use
- on a suitable impervious floor; and
- away from any drains which may become contaminated with residues as a result of spillage,
- away from sources of heat and bright light; and
- with access restricted to only appropriately trained staff.

**Note:** from a health and safety point of view: a well ventilated area should be used.

23. Equipment to clean up spillages must be quickly accessible in all solvent handling and storage areas.

24. The operator shall maintain a records incorporating details of all maintenance, testing, repair work carried out on each dry cleaning machine and the scales used to weigh the loads, along with details of training required under condition 6. The records shall be available within 7 days upon request by the regulator

25. Spares and consumables in particular, those subject to continual wear shall be held on site, or should be available at short notice from guaranteed suppliers, so that plant breakdowns can be rectified rapidly.

26. Where PER is used within the installation a suitable continuous monitoring device for PER shall be installed within the operating area of dry cleaning machine to monitor for leaks and any other malfunctions which may lead to the release of PER.

27. The continuous PER monitoring device shall be maintained and calibrated in accordance with the manufacturers recommendations.

28. All PER machines shall have a secondary water separator followed by an activated carbon adsorption bed to minimise potential solvent losses.

### **Bulk Storage of Dry Cleaning Solvents**

**The following requirements only apply where bulk storage of dry cleaning solvents is carried out.**

29. Where delivery vehicles are equipped with back-vent facilities, bulk storage tanks for dry cleaning solvents shall be back-vented to the delivery tank during filling.

30. When connecting hoses prior to delivery, the vapour return hose shall be connected before any delivery hose. The vapour return hose shall be connected at the road tanker end first, and then at the storage tank end.

31. Bulk storage tanks for solvent storage shall be light coloured to reduce potential breathing losses from storage tanks and located away from potential source of heat [where practicable bulk storage tanks should be located outside].

32. Delivery connections to bulk storage tanks shall be located within a bunded area, fixed, clearly labelled and locked when not in use.

33. Bulk storage tanks shall be fitted with a reliable means of measuring their contents. *{For example a dial gauge; dipsticks are not recommended as they act as potential source of release; if they are used a screw cap must be fitted to prevent release of solvent when not in use.}*

– All bulk storage installed after 19 May 2005 shall be fitted with high-level (visual and audible alarms or volume indicators to warn of overfilling).

34. Prior to receipt of a bulk delivery of cleaning solvent the receiving tank shall be checked to ensure that it has sufficient capacity.

35. Bunding and containment of bulk tanks shall:

- completely surround the bulk liquid storage tanks; and
- be impervious and resistant to the liquids in storage; and
- be capable of holding 110% of the capacity of the largest storage tank

36. Emissions from the filling and topping up of the dry cleaning machine from bulk storage shall be minimised, by the use of closed transfer systems between the bulk storage tank and the machine.

37. Where solvent is hard piped from bulk storage tanks to machines, appropriate measures shall be in place to prevent storage tanks from draining into machines for example: prevention of gravity flow, or syphoning of solvent from the storage tank into the dry cleaning machine.

38. A competent person shall remain near the tanker and keep a constant watch

on hoses and connections during unloading.

39. A copy of the following shall be sent to the Council at the frequency given below:

<b>Information to be sent to Council</b>	<b>Frequency at which information should be sent</b>
(i) The monthly inventory sheets for the previous quarter <b>Or</b> (ii) With the written agreement of the Council	Once a quarter  Once a year - January
The record of regular maintenance during the previous 12 months, referred to in condition 3, to be sent each January.	Once a year - January
A list of staff nominated and trained, in accordance with conditions (5) and (6)	Once a year - January

## Appendix 1: Solvent and Product Cleaned Inventory

### Weekly Inventory Sheet:

#### Installations using PER machines only

Name of the premises

.....

Permit ref number.....

Start date of week.....

Week Number (1-52).....

#### Solvent Input(I1)

Serial Number of machines	Weight of products cleaned (kg)	Initial stock of solvent in machine at start date (litres)	Solvent added to machine over week (litres)	Final stock of solvent in machine at end of week (litres)
Totals	kg(A)	litres(B)	litres(B)	litres(D)

Still residues raked out (litres) and sent for recovery or disposal during week	Still residues pumped out (litres) and sent for recovery or disposal during week
Litres X 0.15	Litres X 0.6
litres(E)	litres(F)

Solvent input for week (I1)	=	Solvent input for week (I1)	+	Solvent purchased during the accounting period(C)	-	Final solvent Stock at the end of the accounting period(D)	-	Solvent in waste sent for recovery, or disposal(E+F)
(I1week)	=	B	+	C	-	D	-	(E+F)



**Annual Inventory Sheet: installations using PER machines only**

**Name of the premises**

.....

**Permit ref number**.....

**Date**.....

<b>Week number (1-52)</b>	<b>Weight of products cleaned for week (kg) (A)</b>	<b>Solvent Input for week (1week) (litres)</b>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
<b>Totals</b>	<b>A<sub>total</sub> kg</b>	<b>litres(G)</b>

<b>Week number (1-52)</b>	<b>Weight of products cleaned for week (kg) (A)</b>	<b>Solvent Input for week (11week) (litres)</b>
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
<b>Totals</b>	<b>A<sub>total</sub> kg</b>	<b>litres(G)</b>

- Spot Cleaning Correction Factor

Where 10 litres or less per annum are used of:

- proprietary solvent borne purchased spot cleaning solutions, and/or
- solvent borne spot cleaning solutions made up from solvent other than the main dry cleaning fluid (PER).

**The spot cleaning correction factor is 6.25 (litres) and is already entered into the table below.**

Where more than 10 litres per annum are used of:

- proprietary solvent borne purchased spot cleaning solutions, and/or
- solvent borne spot cleaning solutions made up from solvent other than the main dry cleaning fluid (PER).

Then the method at Appendix 2 should be used to calculate the correction factor to replace 6.25 in the table below.

Corrected solvent Input for year including solvent borne spot cleaners (I1) (litres)	Corrected solvent Input X Compliance Factor for PER 80kg/litre	Weight of product cleaned for compliance (J) (kg)	Actual weight of product cleaned and dried (A <sub>total</sub> ) (kg)
6.25*+G litres	(6.25*+G) X 80	=J kg	A <sub>total</sub> kg

For PER Compliance the weight of products cleaned and dried in kgs should be at least : J kg

**WM MORRISONS SUPERMARKETS PLC WARWICK HIGHWAY**  
**REDITCH WORCESTERSHIRE B98 0SW**

**FIGURE 1**

**WM MORRISONS SUPERMARKETS PLC WARWICK HIGHWAY**  
**REDITCH WORCESTERSHIRE B98 0SW**

**FIGURE 2**



## Calculation of Spot Cleaning Correction Factor

Where more than 10 litres of proprietary solvent borne spot cleaning solutions and/or solvent borne spot cleaning solutions made up from solvent other than the main dry cleaning fluid are used, the actual solvent content of each solvent borne spot cleaning has to be determined. For purchased spot solvent borne spot cleaners this information can be obtained from the supplier. For spot cleaners made up within the dry cleaning installation the recipe used should be used to determine the actual solvent content.

Spot Cleaner	Amount used [litres] [P]	Solvent Content % [Q]	Specific Gravity of solvent within spot cleaner [grams/litre] [R]	Mass of solvent in spot cleaner used S =[P×Q/100]×R
<b>Totals</b>	<b>[P<sub>total</sub>] litres</b>			<b>[S<sub>total</sub>] grams</b>

Installations using PER machines only solvent borne spot cleaning correction factor  
= [S<sub>total</sub>] grams x 0.00625

Installations using all other solvents and mixed solvents only solvent borne spot  
cleaning correction factor = S<sub>total</sub>] grams

## EXPLANATORY NOTES

### These notes do not form part of the Permit

1. You should note that section 12(10) of the Act provides that, in relation to any aspect of the process not regulated by specific conditions within the permit the best available techniques shall be used such that:
  - a. All the appropriate preventative measures are taken against pollution, in particular through application of the best available techniques; and,
  - b. No significant pollution is caused.
2. Section 3(1) of the Regulation defines "BAT" as follows:
  - a. 'available techniques' means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator;
  - b. 'best' means, in relation to techniques, the most effective way of achieving a general high level of protection of the environment as a whole;
  - c. 'techniques' includes both technology used and the way in which the installation is designed, managed, operated and decommissioned.
3. This permit is given in relation to the requirements of the Pollution Prevention and Control Act 1999 and subordinate regulations. It must not be taken to replace any responsibilities you may have under workplace health and safety legislation.
4. This permit, in that it regulates only air pollution matters, does not absolve you of the responsibility of any other statutory requirement, such as any need to obtain planning permission, hazardous substances consent or Building Regulations approval from the Council. Discharge consents from the local sewage undertaking or a waste disposal licence from the Environment Agency may still be required.



5. This permit is covered by Secretary of State's Guidance:

PG 6/46(06) Secretary of State's Guidance For Dry Cleaning	
GG 1(91) Introduction to Part 1 to Part 1 of the Act	ISBN - 0-11-752423-9
GG 2(91) Authorisations	ISBN - 0 11-752424-7
GG 3(91) Applications and Registers	ISBN - 0-11-752425-5
GG 4(91) Interpretation of Terms used in Process Guidance Notes	ISBN - 0-11-752426-3
GG 5(91) Appeals	ISBN - 0-11-752427-1
General Guidance Manual on Policy and Procedures for A2 and B Installations.	ISBN - 0-85521-028-1

6. The operator will be liable to enforcement action where;
- (a) a change is made (without approval of the regulator) to the activities described in the permit,
  - (b) any of the activities are carried on outside process boundary,
  - (c) a new activity (as defined within the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended) is carried on without a proper permit, and
  - (d) any of the conditions of the permit are breached.
7. An annual fee due on 1<sup>st</sup> April each year (currently chargeable per activity per annum but subject to change by statutory instrument) is payable to Redditch Borough Council.
8. It is an offence to operate the prescribed activity without a current permit.

