

INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER: 115-1

**FACILITY: Soltec Ireland Ltd, Mullingar Industrial Estate,
Mullingar, Co. Westmeath**

APPLICANT: Soltec Ireland Ltd

RECOMMENDATION: The licence to be granted subject to conditions.

1. Introduction

Soltec Ireland Ltd. recovers waste solvents by distillation. Two distillation plants are in use at the facility comprising three stills in total - two in the 'old' plant and one in the 'new' plant. Recovered distillate is packaged and sold as thinners and degreasing solvent.

The facility is comprised of two adjoining sites with a single access point between them. The original 'old' Site A comprises a building and yard. The front of the building houses a motor factors retail outlet. The rear of the building houses two batch distillation units (denoted collectively as UA5) which commenced operation in 1994. The outdoor areas to the side and rear of the building are used for the storage of solvent in drums. There is a concern in relation to this unbunded waste storage area which is discussed in Sections 2 and 5 below.

The second 'new' part of the site (Site B) comprises a building in which a distillation unit (denoted as UB5) and solvent storage tanks were commissioned in 1999. Recovered solvent is stored in drums within the building prior to dispatch. The building also contains a control room and office and staff accommodation. The outdoor area to the rear of the building is used for bulk tanker unloading of waste solvent and for the storage of solvent in drums.

The facility is located in an industrial estate on the edge of Mullingar, adjacent to the railway line and on a dead end road of the industrial estate. Neighbouring facilities are commercial in nature.

Soltec Ireland have applied for Classes 1 (solvent reclamation or regeneration) and 13 (storage of waste) of the Fourth Schedule of the Waste Management Act, 1996.

Soltec Ireland Ltd employs eight people.

Quantity of waste (tpa)	164 tonnes (1998) 316 tonnes (1999) 4,000 tonnes per annum projected for 2005
Environmental Impact Statement Required	No
Number of Submissions Received	None

FACILITY VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
27/10/99	Site notice inspection and tour	B. Meaney	-
23/10/00	Site tour	B. Meaney	Some new distillation plant in place. Improved containment bunding to be installed in old plant.

2. Facility Development

The facility is bounded to the rear by a railway line embankment and to the sides and front by a wall, rigid fencing and steel gates. Unfenced car parking areas are to the front of both buildings. The buildings are alarmed. Condition 3.4.2 requires the erection of a fence or wall to the rear of the facility for two reasons: (i) to deter intruders and (ii) to ensure that containers of waste solvent handled close to the rear boundary do not fall beyond the bounds of the facility. Condition 3.7.6 requires that the rear of the site be built up by a kerb, wall or other barrier to ensure the containment of any liquid spillage.

On the 'old' Site A, waste drums have been observed in storage in unbunded areas. (See the attached Map D2.1). Condition 3.7 of the PD prohibits storage of waste in unbunded areas. Condition 3.6 requires the overall development of waste storage areas which will ensure that these storage areas, if they are to be used by the applicant, will be brought up to the standard required by Condition 3.7. This part of Site A is to be the subject of a groundwater survey required to be carried out under Condition 8.8.1 (see section 5 below).

Bulk tankers unload waste solvent at the facility via an overground pipe. Condition 3.7.7 requires that this pipe be covered or otherwise enclosed to ensure that any solvent spilled as a result of a rupture or damage to the pipe is collected in the sump located beneath the pipe.

There is a laboratory at the facility in which basic chemical analysis is carried out – specific gravity, fractional boiling point, water content.

All solvent is processed on a batch basis, whether in the 'old' or 'new' distillation plants. Distilled solvent is condensed, collected, packaged and stored pending sale. Distillation residue in the form of still bottoms is collected from the vessels and drummed pending export "for energy recovery in cement kilns or [by] incineration".

There is no significant potential for the generation of nuisance other than odour. Odour emissions are controlled by Condition 7.1 of the PD.

3. Waste Types and Quantities

Standard thinners (mainly comprising acetone, toluene and/or xylene) make up 85-90% of waste solvent accepted for processing. Other solvents typically accepted are iso-propanol, methyl ethyl ketone, perchloroethylene and trichloroethylene (Attachment E.1 of the application). Typical sources of waste solvents are the auto-refinishing and pharmaceutical sectors. Waste solvent accepted at the facility is stated by the applicant to be typically quite clean thereby yielding a relatively small quantity of solid residue (still bottoms). Typical contaminants in the waste solvent are stated as being paint residues, water and small amounts of dissolved solids.

Condition 5.6 of the PD requires the development of waste acceptance procedures which shall require that all waste solvents be characterised prior to their arrival at the facility and checked upon arrival at the facility.

Condition 5.2 restricts the acceptance of solvents based on their boiling point. This is in line with information provided by the applicant in relation to both the 'new' and 'old' distillation plants.

The applicant employs the services of a chemist on a consultancy basis. The chemist carries out some waste chemical analysis and generally advises the applicant in this area. Routine analysis (boiling point, distillation range, specific gravity and water content) is carried out in the on-site laboratory by operational staff.

4. Emissions to Air

Each of the two distillation plants have emissions of volatile solvents to air.

Old plant (UA5):

The two stills making up the 'old' plant (UA5) operate as closed systems. Emissions to air arise as a result of opening and cleaning the vessels at the end of a distillation run (the vessels are nominally empty at this point except for solid residues). Volatile emissions are ducted outdoors via a hood extraction system at each still. Analysis of air emissions taken during the cleaning out of stills has shown that the emissions can be elevated (peaks in excess of 1,500-2,000 ppm as methane). Condition 6.3.3 requires that options are investigated for the reduction of emissions from this source.

New plant (UB5):

The 'new' plant (UB5) generally operates under vacuum which results in a minor continuous discharge to air. A peak is generally observed upon starting the vacuum after charging the vessel. Condition 6.1 sets emission limit values for the 'new' plant UB5 (emission point A2).

General:

Condition 6.3.3 requires that investigations are undertaken to examine the level of fugitive emissions from the distillation vessels:

- during charging;
- upon start-up of the vacuum pump; and
- upon opening and cleaning the vessels at the end of a distillation run.

5. Emissions to Groundwater

The carrying out of investigations for groundwater quality was requested in Article 16(1) notices dated 24 March 2000 and 14 August 2000. A response was received in relation to each notice but the requested information was not submitted. An Article 16(4) notice was issued on 20 October 2000. A response was received from the applicant's consultants but the requested information was not submitted. The applicant was notified on 30 November 2000 that the Agency intended proceeding with the application in the absence of the requested information. The requested information was subsequently received on 2 February 2001 and was accepted for consideration by the Agency.

In carrying out the investigations, the applicant had three boreholes sunk at the facility and groundwater analysis carried out. From groundwater flow gradients indicated in the survey report, I am not confident that the area around the 'old' distillation plant (UA5) was covered by the groundwater survey. In my opinion, this part of the facility presents the most likely source of historical groundwater contamination, if any, at the facility given that drums have been stored in this unbunded area (see the attached Map D2.1). Consequently, Condition 8.8.1 requires the sinking of an additional (fourth) borehole at a location in this area to be agreed with the Agency.

6. Emissions to Surface Water

There are no emissions to surface water.

7. Emissions to Sewer

There are no trade effluent emissions to sewer.

8. Other Significant Environmental Impacts

None

9. Waste Management, Air Quality and Water Quality Management Plans

There are no provisions made in the Draft Waste Management Plan for the Midlands Region (January 2000) relating to Soltec Ireland Ltd.

10. Submissions/Complaints

There have been no submissions with respect to the facility.

There have been no complaints with respect to the facility.

11. Reasons for the Recommendation

It is recommended that a licence be granted for Classes 1 and 13 of the Fourth Schedule as applied for in the application.

I recognise that waste storage activities on part of the 'old' Site A are unsatisfactory from the point of view of preventing the potential for groundwater or soil contamination beneath this area. Conditions 3.6 and 3.7 of the PD address this concern. Condition 8.8.1 requires that the quality of groundwater beneath this part of the facility be examined for contamination that may have been caused by the activity.

Signed _____
Brian Meaney

Dated