

1) Form 1

Detailed Submission

14/01180/NAZ

SCHEDULE 2 (new Form 1, 2 and 8) (1999 SI 981)

Form 1

The Planning (Hazardous Substances) Act 1990 - Section 7(1)

The Planning (Hazardous Substances) Regulations 1992 (Regulation 5)

General Application for Hazardous Substances Consent

1. Name and Address of Applicant (IN BLOCK CAPITALS)

NEIL P. ROBERTS MEng IChemE CEng

PROCESS SAFETY

DOW CORNING LTD
CARDIFF ROAD
BARRY
S.GLAMORGAN
CF63 2YL

Telephone No. 01446 723861

Name and Address of Agent (IN BLOCK CAPITALS) (if any) to whom correspondence should be sent

Telephone No.

Contact

2. Address or location of application site together with O.S. grid reference

DOW CORNING LTD
CARDIFF ROAD
BARRY
S.GLAMORGAN
CF63 2YL

OS GRID REFERENCE: ST 13863 68702

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3. Substance(s) covered by the application

- (a) List named substances falling within Part A of Schedule 1 to the 1992 Regulations(a) first, then list any substances falling within the categories in Part B of that Schedule; finally list substances falling within the description in Part C.
- (b) Substances falling within Parts B or C of Schedule 1 to the 1992 Regulations may be listed under the relevant category or description or named specifically. Where a substance falls within Part A and B list under Part A only; where a substance falls within more than one category in Part B list under the category which has the lowest controlled quantity (b). Where a substance falling within Part A or B also falls within Part C list under the Part which has the lowest controlled quantity.

Table A

<i>Name, or relevant category or description of substance</i>	<i>Part and entry number (c) in Schedule 1 to the 1992 Regulations</i>	<i>Do you have a current PHS consent¹ in respect of this substance? (Yes/No)</i>	<i>If "yes", state quantity for which consent granted</i>
Up to 4 tonnes of material classified as "Toxic" (R23) covering: a) Ammonia	Regulation 3 Schedule 1 Part B Categories of Substances not Specifically Named in Part A. 1992 No.656 The Planning (Hazardous Substances) Regulations 1992 2010 No.450 The Planning (Hazardous Substances) (Amendment) Regulations Wales 2010 2. TOXIC R23	NO	

¹ a hazardous substances consent.

4. Manner in which substance(s) are to be kept and used:

For each substance, category or description of substance, covered by the application, provide the following information, referring to the substance location plan where appropriate.

- (a) Tick one box below to show whether the substance(s) will be present for storage only or will be stored and involved in a manufacturing, treatment or other industrial process:

Table B

<i>Part and entry number in Schedule 1 to the 1992 Regulations</i>	<i>Storage only</i>	<i>Stored and involved in an industrial process</i>
Ammonia Part B 2. Toxic		<input checked="" type="checkbox"/> Operating inventory in a refrigeration system

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(b) For each vessel to be used for storing the substance(s) give the following information:

Table C

Vessel No ²	Part and entry number in Schedule 1 to the 1992 Regulations of substance(s) to be stored in vessel	Installed above ground ³ (Yes/No)	Buried (Yes/No)	Mounded (Yes/No)	Maximum capacity (cubic metres)	Highest vessel design temperature °C	Highest vessel design pressure (bar absolute)
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TOXIC SUBSTANCES

Refrigeration system W716 Hydrolysis Plant	Ammonia Part B entry 2 Toxic	YES – secondary containment* and tertiary for liquid spills. Spill will be contained in local bund and has surrounding chemical drains on edge of plant as part of tertiary containment. * There is local containment bund around the fridge with sluice gate to help contain liquid ammonia spills and prevent run off the chem sewer which can lead to rapid vaporisation	NO	NO	TOTAL INVENTORY 3.5 TE Ammonia is held in closed refrigeration system comprising an evaporator, compressor, condenser and ammonia economizer.	72C	20.7 Barg / Full Vacuum
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² identify by reference to substance location plan

³if "Yes", specify whether or not it will be provided with full secondary containment

(c) For each substance, category or description of substance, state the largest size (capacity in cubic metres) of any **moveable** container(s) to be used for that substance, category or description of substances:

- Ammonia is charged to the refrigeration system using cylinders not stored in site. After initial charge these will only be brought to site infrequently by fridge maintenance contractor for top-up following maintenance (to replenish any ammonia removed).

(d) Where a substance, category or description of substance is to be used in a **manufacturing, treatment or other industrial process(es)**, give a general description of the process(es), describe the major items of plant which will contain the substance(s); and state the maximum quantity (in tonnes) which is liable to be present in the major items of the plant, and the maximum temperature (°C) and pressure (bar absolute) at which the substance, category or description of substance is liable to be present:

- AMMONIA (TOXIC) is a refrigerant to be used in for a new fridge system to be installed in the W716 hydrolysis plant. This is a new single integrated refrigeration system which is planned as a replacement for 3 existing refrigeration systems on the plant which use ozone depleting refrigerants (HCFCs) which are to be phased out by the Montreal Protocol.

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5. Additional Information

(a) If you have an existing PHS consent(s) as referred to in Table A, enclose a copy of each consent with this application.

N/A

(b) Has any application for hazardous substances consent or planning permission relating to the application site been made which has not yet been determined?

NO

(c) Will any such application be submitted at the same time as this application?

NO

If you have answered "YES" to either of these preceding questions, provide sufficient details to enable the application(s) to be identified.

(d) Plans. List the maps or plans or any explanatory scale drawings of plant/buildings submitted with this application.

Satellite map form 1a : Map Showing Locations Of Substances Included Under The Toxic R23 Hazardous Substances Planning Application.

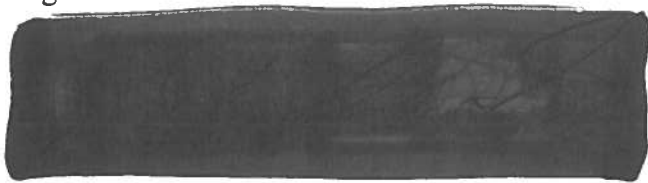
Plot plan map form 1b ; Plot Plan Showing Locations Of Substances Included Under The Toxic R23 Hazardous Substances Planning Application.

(e) Give any further information which you consider to be relevant to the determination of this application.

No additional information other than that given in the covering letter.

Dow Corning Ltd hereby applies for hazardous substances consent in accordance with the proposals described in the application

Signed



Neil P. Roberts MEng IChemE CEng
Process Safety
Dow Corning Ltd

on behalf of Dow Corning Ltd

Date 25th Sept 2014

Notes

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(a) The "1992 Regulations" are the Planning (Hazardous Substances) Regulations 1992, as amended by the Planning (Control of Major-Accident Hazards) Regulations 1999.

(b) The "controlled quantity" means the quantity specified for that substance in column 2 of Parts A, B or C of Schedule 1 to the 1992 Regulations.

(c) For Part C, state the Part only.

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