



**POLLUTION PREVENTION AND CONTROL ACT 1999
ENVIRONMENTAL PERMITTING (ENGLAND & WALES) REGULATIONS 2010**

Permit Number: 2.2/047104/JT2

Installation Address:

Symmetry Medical Sheffield Limited
Beulah Road
Hillsborough
Sheffield
S6 2AN

In accordance with Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2010 as amended Symmetry Medical Sheffield Limited is hereby permitted to operate a scheduled activity at the address detailed above, namely the melting and making of non-ferrous metals to make medical components in plant with a melting capacity of less than 20 tonnes per day as described in Schedule 1, Part 2, Chapter 2, Section 2.2, Part B (a) and subject to the following Permit conditions.

Signed

Dated this day: October 24th 2011

**Assistant Manager
Authorised by Sheffield City Council to sign on their behalf**

The Secretary of States Guidance PG2/3 and PG 2/4 (04) has provided the framework for the conditions in this Permit.

Name & Address of Operator:

Symmetry Medical Sheffield Limited
Beulah Road
Hillsborough
Sheffield
S6 2AN

Russell Robinson: (0114) 286 8809 Mobile: (07900) 088 820
Darren Beeden: (0114) 285 5881 Mobile: (07778) 890976

Registered Office:

Symmetry Medical Sheffield Limited
Beulah Road
Hillsborough
Sheffield
S6 2AN

Address of Permitted Installation:

Symmetry Medical Sheffield Limited
Beulah Road
Hillsborough
Sheffield
S6 2AN

Holding Company:

Symmetry Medical Inc
3724 North State Road 15
Warsaw
Indiana 46582
U.S.A.

Talking to Us

Any communication with Sheffield City Council should be made to the following address quoting the Permit Number:

**ENVIRONMENTAL PROTECTION SERVICE
SHEFFIELD CITY COUNCIL
2-10 CARBROOK HALL ROAD
CARBROOK
SHEFFIELD
S9 2DB**

Alternatively Email: epsadmin@sheffield.gov.uk

Telephone: (0114) 273 4651

Fax: (0114) 273 6464

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Explanatory Note to Pollution Prevention and Control Permit for Part B Installations.

(This note does not form a part of the Permit)

The following Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010 No.675), as amended, ("the EP Regulations") to operate an installation carrying out activities covered by the description in Chapter 2 Section 2.2 Part B (a) of Schedule 1 of those Regulations, to the extent authorised by the Permit:

Process Changes

Under the provisions of the EP Regulations, you are required to notify the Council of any proposed change in operation at least 14 days before making the change. This must be in writing and must contain a full description of the proposed change in operation and the likely consequences. Failure to do so is an offence.

If you consider that a proposed change could result in the breach of the existing Permit conditions or is likely to require the variation of Permit conditions then you may apply in writing under Regulation 20(1) of the EP Regulations. Additionally, if this involves a SUBSTANTIAL CHANGE to the installation you will be required to submit an application, pay the relevant fee and advertise the application accordingly. You may serve a Notice on the Council requesting that they determine whether any change that is proposed would constitute a substantial change before you proceed with application.

Variations to the Permit

The Permit may be varied in the future by the Council serving a Variation Notice on the operator. If the Operator wishes any of the conditions of the Permit to be changed, a formal application must be submitted.

Surrender of the Permit

Where the operator of a Part B installation or mobile plant ceases or intends to cease the operation of the activity the operator may notify the regulator of the surrender of the whole Permit, in any other case, notify the regulator of the surrender of the Permit in so far as it authorises the operation of the installation or mobile plant which he/she has ceased or intends to cease operating. The notification shall contain information as described in Regulation 24 or 25 of the EP Regulations.

Transfer of the Permit or Part of the Permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 21 of the EP Regulations. A transfer will be allowed unless Sheffield City Council considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

Annual Subsistence Fee

In accordance with Regulation 65 of the EP Regulations, the holder of a Permit is required to pay a fee for the subsistence of the Permit. This fee is payable annually on 1st April. You are advised that under the provisions of Regulation 65 (5) of the EP Regulations, if you fail to pay the fee due promptly, Sheffield City Council may revoke the Permit. You will be contacted separately each year in respect to this payment.

Public Register

The Council is required by Regulation 46 of the EP Regulations to maintain a Public Register containing information on all LAPPC installations and mobile plant. The register is available for inspection by the public free of charge during office hours (Monday to Friday 9.00 am to 5.00 pm) at the following address:

Environmental Protection Service
Sheffield City Council
2-10 Carbrook Hall Road
Carbrook
Sheffield
S9 2DB

Tel: 0114 273 4651 or email epsadmin@sheffield.gov.uk

Confidentiality

Sheffield City Council has a duty to consider the question of confidentiality of information supplied to it. If any information supplied is considered confidential, a statement of which information this applies to and the reasons why it is considered confidential should be specified. The operator is reminded that s/he may apply to Sheffield City Council for the exclusion of information from the public register under the provisions of the Environmental Permitting (England and Wales) Regulations 2010 as amended.

Appeals

Under Regulation 31 of the EP Regulations operators have the right of appeal against the conditions attached to their Permit. Schedule 6 of the EP Regulations sets out the detailed procedures.

Appeals against a Variation Notice do not have the effect of suspending the operation of the Notice. Appeals do not have the effect of suspending Permit conditions.

Notice of appeal against the conditions attached to the permit must be given within six months of the date of the Notice, which is the subject matter of the appeal.

How to Appeal

There are no forms or charges for appealing. However, for an appeal to be valid, appellants (the person/operator making the appeal) are legally required to provide:

- Written notice of the appeal;
- A statement of the grounds of appeal;
- A statement indicating whether the appellant wishes the appeal to be dealt with by written representations procedure or a hearing – a hearing must be held if either the appellant or enforcing authority requests this, or if the Planning Inspector or the Secretary of State decides to hold one.
- (Appellants must copy the above three items to the local authority when the appeal is made)
- A copy of any relevant application;
- A copy of any relevant permit;
- A copy of any relevant correspondence between the appellant and the regulator; and
- A copy of any decision or notice, which is the subject matter of the appeal.

Where to Send Your Appeal Documents

Appeals should be addressed to:

**The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN**

In the course of an Appeal process the main parties will be informed of procedural steps by the Planning Inspectorate.

To withdraw an appeal the appellant must notify the Planning Inspectorate in writing and copy the notification to the local authority.

DESCRIPTION OF ACTIVITIES.

The process consists of:

a) Wax Pattern Manufacture

The injection of liquid wax into a metal dye to produce a wax replica (pattern) of the required component.

b) Wax Assembly

The assembly of patterns from assembly benches onto a wax runner system to provide a path for metal to enter the pattern. Emissions from this process are vented externally through a centrifugal flow fan labelled W on Schedule 2 of this Permit.

c) Investment

The coating of the wax assembly in water based refractory slurry to form the shell mould. Particulate matter emissions from the stucco coating process are extracted to a dust filtration system, vented internally.

d) De-Wax and Mould Firing

The removal of wax from the mould using two Pacific kiln flash fire De-Wax furnaces incorporating in-built after burners for residence times of 30 seconds at 800°C and 30 seconds at 1000°C. Emissions from this De-Wax process are exhausted to atmosphere via two stacks, one serving each furnace labelled F1 and F2 on Schedule 2 of this Permit with airflows below 150m³/min.

e) Casting

The melting of metal in one of two Radyne electrical induction furnaces, with net rated thermal input of 160 kilowatts and maximum charge weight of 6 kg. Emissions from the casting process are extracted via an extraction hood through a dry bag filter to a single stack labelled M on Schedule 2 of this Permit.

f) Knock Out, Shot-blasting, Cut-off and Fetting

The cooling of the shell containing metal and removal of ceramic shell is termed the Knock Out process. Emissions of ceramic particulate matter are circulated through a Non-Flam wet dust extractor, which is vented internally.

The Shot-Blasting of the cast assembly in a dedicated booth. The particulate matter emissions from this process are extracted to a reverse jet cleaning cartridge type dust collector, vented internally.

The removal of the castings from the metal assembly by the use of an abrasive cut-off wheel and a plasma cutter. Particulate matter emissions from this process are vented externally via a stack labelled P on Schedule 2 of this Permit after passing through a wet arrester. The scrubber liquor is monitored, and if the level drops below a certain level an automatic shut off device is activated.

The fettling of waste material from the castings and fettling benches. Emissions of particulate matter from this process are circulated through 2 Airmaster type automatic shake fabric filter units which vent internally.

The grit blasting of castings in dedicated booths using aluminium oxide shotblast media. Emissions of particulate matter from the process are filtered through a dust collector with pleated cartridges, vented internally.

g) Degreasing of Castings

The use of a "Pero" fully enclosed machine for the use of less than 1 tonne of trichloroethylene in any twelve month period to clean the castings.

h) This Permit covers the storage of raw materials, the storage and handling of wastes and the despatch of final products.

The activities are carried out within the installation boundary marked in green indicated on the Site Location Plan shown in Schedule 1 to this Permit. The Site Layout Emission Points are as shown on the plan in Schedule 2.

CONDITIONS OF PERMIT

Section 1 - Upgrading

- 1.1 There are no conditions of Upgrading required.

Section 2 – Production Capacity

- 2.1 The installation shall have a melting capacity of less than twenty tonnes per day.
- 2.2 Records of production that demonstrate compliance or otherwise with condition 2.1 of this Permit shall be kept on site for a period of at least 2 years, and made available to Sheffield City Council's Environmental Protection Service upon request.

Section 3 – Plant and Equipment

- 3.1 The activities shall be carried out within the installation boundary shaded in green as indicated on the Site Location Plan shown in Schedule 1 of this Permit.
- 3.2 Sheffield City Council's Environmental Protection Service shall be notified of any proposed operational changes including any alterations to the process involving the provision of new plant or equipment or use of different materials or substances which may affect emissions. The information shall be submitted at least 14 days before the changes take place.

Section 4 – Emission Limits and Controls

- 4.1 All emissions to air, other than steam or condensed water vapour shall be free from persistent visible emissions and free from droplets.
- 4.2 Emissions to air shall be free of offensive odour beyond the installation boundary as perceived by an Authorised Officer from Sheffield City Council's Environmental Protection Service.
- 4.3 All emissions to air including fugitive emissions arising in normal operating conditions, including charging and pouring, shall be free from persistent visible emissions.

- 4.4 There shall be no burning in the open air in connection with the activities within the installation boundary.
- 4.5 Emissions of total particulate matter from any stack with airflow of 150m³/min of air or more, including the melting furnace stacks, shall not exceed 20mg/m³.
- 4.6 Emissions of total particulate matter from the wet arrester serving the plasma cut off shall not exceed 20mg/m³.
- 4.7 Emissions of cobalt, chromium and their compounds from the stack serving the Melting, Pouring and Cooling Bed Area shall not exceed the emission limit of 5mg/m³.
- 4.8 Emissions from combustion processes such as the Flash Fire De-Waxers shall be free from visible smoke and in any case shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742:1969.
- 4.9 All reasonably practicable steps shall be taken to minimise the duration and visibility of emissions during start up and shut down.
- 4.10 The efflux velocity of emissions from the final point of discharge to atmosphere from all emission points shall be a minimum of 15m/s.

Section 5 – Monitoring, Sampling and Measurement of Emissions

- 5.1 The Permit holder shall ensure that a visual assessment of fugitive fume and dust emissions from the building housing the melting process is carried out at least once a day when molten metal is being cast from the air melt induction furnaces. The duration of the assessment shall be for a minimum of one minute. All results of observations shall be recorded in accordance with condition 5.16 of this Permit.
- 5.2 The Permit holder shall ensure that an olfactory assessment of odour from the installation including the Wax Assembly, Casting & De-Wax furnaces is made at least once per day. The duration shall be a minimum of one minute. All observations shall be recorded in the recording system kept in accordance with Condition 5.16.
- 5.3 The Permit holder shall ensure that adverse results from the assessments carried out in accordance with conditions 5.1 and 5.2 of this Permit are investigated immediately to identify the cause of the emission and ensure appropriate corrective action is taken. The investigation and any corrective action taken shall be recorded in accordance with condition 5.16 of this Permit.

- 5.4 Emissions of total particulate matter from any stack with an airflow of 150m³/min of air shall be tested at least once in every twelve month period in order to determine compliance with the emission limit of 20mg/m³.
- 5.5 Emissions of total particulate matter from any stack serving the melting furnaces shall be tested at least once in every twelve month period in order to determine compliance with the emission limit of 20mg/m³.
- 5.6 Emissions of cobalt, chromium and their compounds from the stack serving the Melting, Pouring and Cooling Bed Area shall be tested at least once in every twelve month period in order to determine compliance with the emission limit of 5mg/m³.
- 5.7 Prior to undertaking any emissions monitoring, the Permit holder shall submit an emissions monitoring protocol detailing the pollutants and stacks to be tested, the methods to be used and the proposed date of testing. The monitoring protocols shall be submitted at least 7 days before the testing is to take place to Sheffield City Council's Environmental Protection Service for approval in writing.
- 5.8 The results of all non-continuous monitoring tests shall be forwarded to Sheffield City Council's Environmental Protection Service, within 8 weeks of completion of the testing.
- 5.9 Where the results of any non-continuous monitoring exceed the emission concentration limit, the Permit holder shall inform Sheffield City Council's Environmental Protection Service no later than 10:00 hours the following working day after receipt of the results of the emissions testing.
- 5.10 Dilution air shall not be introduced to aid dispersion or to comply with emission limits except by written agreement with Sheffield City Council's Environmental Protection Service.
- 5.11 Monitoring shall be carried out in accordance with methods described in M1 "Sampling requirements for monitoring stack emissions to air from industrial installations"¹ and M2 "Monitoring of stack emissions to air", or by another method agreed in writing by Sheffield City Council's Environmental Protection Service.

¹ The Environment Agency's Monitoring Certification Scheme <http://www.mcerts.net>

- 5.12 Non-continuous emissions monitoring of particulate matter shall be carried out in accordance with the main procedural requirements of BS ISO12141:2002 or BS EN 13284:Part 1 with averages taken over operating periods excluding start up and shut down. Sampling equipment should be capable of collecting particulate matter of 0.1 microns diameter or less, with an efficiency of at least 75%.
- 5.13 The monitoring reports shall record all pollutant concentrations expressed at reference conditions, 273k, 101.3kPa, the oxygen and water references shall be that which correspond to the normal operating conditions in the process concerned.
- 5.14 The Permit holder shall notify Sheffield City Council's Environmental Protection Service immediately in cases where:
- An emission is likely to have an effect on neighbouring premises;
or
 - There is a failure of any arrestment plant.

The information reported to Sheffield City Council's Environmental Protection Service shall include:

- The date and time of the incident;
 - The cause and nature of the incident;
 - Details of any abnormal emissions;
 - Details of remedial action taken.
- 5.15 In the event of results from any monitoring activity (whether continuous or non-continuous) demonstrating a breach of emission limit or other condition of Permit, the Permit holder shall undertake the following actions:
- Cease the activity or process causing the breach immediately;
 - Investigate the cause immediately;
 - Carry out corrective action as soon as is practicably possible;
 - Record in the recording system required by condition 5.16 as much detail as possible regarding the cause and extent of the problem and the action taken to rectify the situation;
 - Undertake emissions re-testing to demonstrate compliance as soon as possible;
 - Only re-start the activity in question when it can comply with emission limits and Permit requirements;
 - Notify Sheffield City Council's Environmental Protection Service within one day of becoming aware of the results of the breach.

- 5.16 The Permit holder shall ensure that records containing the details and results of all visual assessments and records of all inspections and observations made in accordance with Permit conditions are kept. These records shall include the time and date of inspection, the nature, colour, persistency and intensity of any emission and the name of the person carrying out the assessment. The records shall be kept on the permitted premises and made available for inspection by authorised officers of Sheffield City Council's Environmental Protection Service. Such records shall be kept for a minimum of two years and shall be submitted in writing to Sheffield City Council on demand.
- 5.17 Results of non-continuous monitoring shall include details of process conditions at the time of monitoring, monitoring uncertainty and any deviations from the procedural requirements of standard reference methods and any error invoked from such deviations.

Section 6 – Maintenance

- 6.1 The Flash Fire Dewaxers and afterburners shall be operated and maintained in accordance with manufacturer's recommendations and serviced at least once in every 12 month period. Details of the maintenance and servicing shall be recorded in the log book or recording system kept in accordance with condition 5.16 of this Permit.
- 6.2 The Permit holder shall ensure that a visual inspection of the Flash Fire De Waxer afterburners and associated ductwork is carried out at least once in every 2 month period under normal operating conditions for any signs of wear, tear or damage to ensure sound operation. Any damage shall be repaired as soon as possible. All inspections including any remedial action taken shall be recorded in the log book or recording system kept in accordance condition 5.16 of this Permit.
- 6.3 The wet arrestor serving the plasma cut off area shall be visually inspected at least once per week to ensure correct functioning of the plant including adequate liquor circulation. Details of the inspection shall be recorded in the log book or recording system kept in accordance with condition 5.16 of this Permit.
- 6.4 An audit of items of plant and equipment shall be undertaken. The audit shall identify all plant and equipment that is critical to prevent, reduce or control emissions from the installation, including but not limited to the after burner, alarms, wet arrestment plant, detection systems and continuous monitors. A copy of the audit shall be submitted to Sheffield City Council's Environmental Protection Service for written approval within 8 weeks of the date of this Permit.

- 6.5 A preventative maintenance schedule shall be produced for all critical plant and equipment identified from the audit required by condition 6.4. A copy of the maintenance schedule shall be submitted to Sheffield City Council's Environmental Protection Service for written approval within 8 weeks of the date of this Permit.
- 6.6 An adequate supply of spares and consumables shall be kept on site or made available within 1 day from guaranteed suppliers for all items of plant and equipment identified as being critical as a result of the audit carried out in compliance with condition 6.4.
- 6.7 For plant and equipment identified in the audit required by condition 6.4, alarms or other warning systems shall be provided to indicate equipment malfunction or breakdown by a date agreed with Sheffield City Council's Environmental Protection Service.
- 6.8 The alarms or warning systems required by condition 6.7 for plant and equipment shall be checked as part of a preventative maintenance schedule and maintained in accordance with manufacturer's instructions. A record of such checks and maintenance shall be noted in the recording system kept in accordance with condition 5.16 this Permit.
- 6.9 External surfaces of the process buildings, ancillary plant and open yards/storage areas shall be inspected at least annually or more frequently, if necessary, and cleaned to prevent the accumulation of dusty material in circumstances where dust may become wind entrained. Particular attention shall be paid to roadways, external storage areas and yards. Cleaning operations shall be carried out by methods which minimise emissions of particulate matter to air.
- 6.10 Records of breakdowns and plant failure shall be kept and analysed in order to eliminate common failures. The records shall be made available for inspection by officers of Sheffield City Council's Environmental Protection Service on demand.
- 6.11 The Permit holder shall ensure that all abatement plant, detection systems, alarms and protection systems are maintained in good working order in accordance with manufacturer's recommendations as part of a written preventative Maintenance Programme.
- 6.12 The Permit holder shall ensure that all abatement plant, detection systems, alarms and protection systems are serviced at least once in every 12 month period by a competent person. Details of the maintenance shall be kept on site and made available for inspection by authorised officers of Sheffield City Council's Environmental Protection Service.

Section 7 – Materials Handling

- 7.1 Arrested dust from the bag filters shall be collected directly into heavy duty bags lining the receptacles under the arrestment plant to prevent double handling of fines.
- 7.2 When full, the bags in the receptacles under the bag filter arrestment plant shall be tied or fastened securely and placed in a waste skip in order to prevent emissions to atmosphere. Any split bags shall be double bagged.
- 7.3 Storage and handling of particulate matter including wastes shall be in a manner as to prevent or minimise dust or particles, such as in enclosed bags or containers.
- 7.4 Spillages of potentially dusty or odorous materials shall be dealt with in accordance with a written Spill Procedure which is approved in writing by Sheffield City Council's Environmental Protection Service.
- 7.5 Cleaning operations shall be carried out by wet sweeping methods or vacuuming in order to minimise emissions of particulate matter to the air.

Section 8 – Use of Trichloroethylene

- 8.1 The Permit holder shall ensure that a detailed inventory of trichloroethylene usage in the Pero machine is kept. The consumption of trichloroethylene shall be accurately recorded and a mass balance calculation shall be carried out to determine the consumption and losses on site, in accordance with 5.4 of Schedule 3 to this Permit. The inventory shall also include any trichloroethylene removed from the site as waste and any quantities that can be proven to be recovered for reuse. A twelve month summary of the inventory shall be forwarded in writing to Sheffield City Council's Environmental Protection Service within one month of the closing date to which the summary inventory relates. The first summary shall cover the period until 31st December 2011 and be submitted by 31st January 2012.
- 8.2 Full and empty trichloroethylene barrels shall be kept sealed when not in use in order to minimise emissions to the atmosphere .
- 8.3 Barrels or containers of trichloroethylene shall be stored in bunded areas. All bunding shall be impervious and resistant to the liquids in storage and be capable of holding 110% of the capacity of the largest storage container.
- 8.4 The location of the de-greasing unit shall, as far as reasonably practicable, be free from draughts to reduce losses through air turbulence. The area shall also be free from naked flames and hot surfaces.

- 8.5 The degreasing unit shall be totally enclosed at all times. Loading and unloading of the degreaser unit shall be through air lock chambers.
- 8.6 The basket used for loading shall be designed to enhance the cleaning efficiency, whilst also minimising the retention of organic solvent and vapours with each load cleaned. The basket shall be loaded to its maximum capacity whilst ensuring that the orientation and packing of the components is optimised to reduce possible retention and drag of organic solvent.
- 8.7 The programming and loading of work into vapour degreasing machines shall be controlled, monitored and reviewed to ensure that the number of surface cleaning operations is minimised.
- 8.8 All potentially odorous waste materials, for example, rags impregnated with solvents, waste cleaning solvents etc. shall be stored in suitable enclosed containers prior to removal from site. The containers shall be of metal and shall be fitted with self-closing lids.
- 8.9 All reasonable efforts shall be made to minimise the amount of residual organic solvent bearing material left in drums and other containers after use.
- 8.10 All spillages of organic solvents shall be cleared immediately in accordance with a written Spill Procedure. Depending upon the severity of the spill this may be by cloth or suction pump into a sealed container. Any solvent contaminated cloths shall be placed in a sealed container. Details of spillages including reasons, quantities, and remedial and preventative actions shall be recorded in the log book or recording system kept in accordance with condition 5.16 of this permit.

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Section 9 – Substitution Plan

- 9.1 The Permit holder shall maintain a register of designated Risk Phrase Materials¹ used in the process. The register shall be made available for inspection by Sheffield City Council's Environmental Protection Service upon request.

¹ Halogenated VOCs assigned or which need to carry the risk phrase R40 or substances or preparations which because of their content of VOC are assigned or need to carry the risk phrases R45, R46, R49, R60, R61.

- 9.2 The Permit holder shall submit a substitution plan to Sheffield City Council's Environmental Protection Service at least once per year. The plan shall describe how the Permit holder is replacing designated substances assigned with Risk Phrase R45, R46, R49, R60 or R61. If replacement of the Risk Phrase substance is not practicable, the plan shall include details of the reasons for this, and details of how the operator is controlling and limiting the use of these substances. The plan shall be updated as necessary and updates shall be forwarded to Sheffield City Council's Environmental Protection Service. The first plan shall be submitted by 31st January 2012.

- 9.3 The Permit holder shall inform Sheffield City Council's Environmental Protection Service in writing of any proposed changes to the Risk Phrase register at least 7 days prior to the changes taking place.

Section 10 – Solvent Management Plan

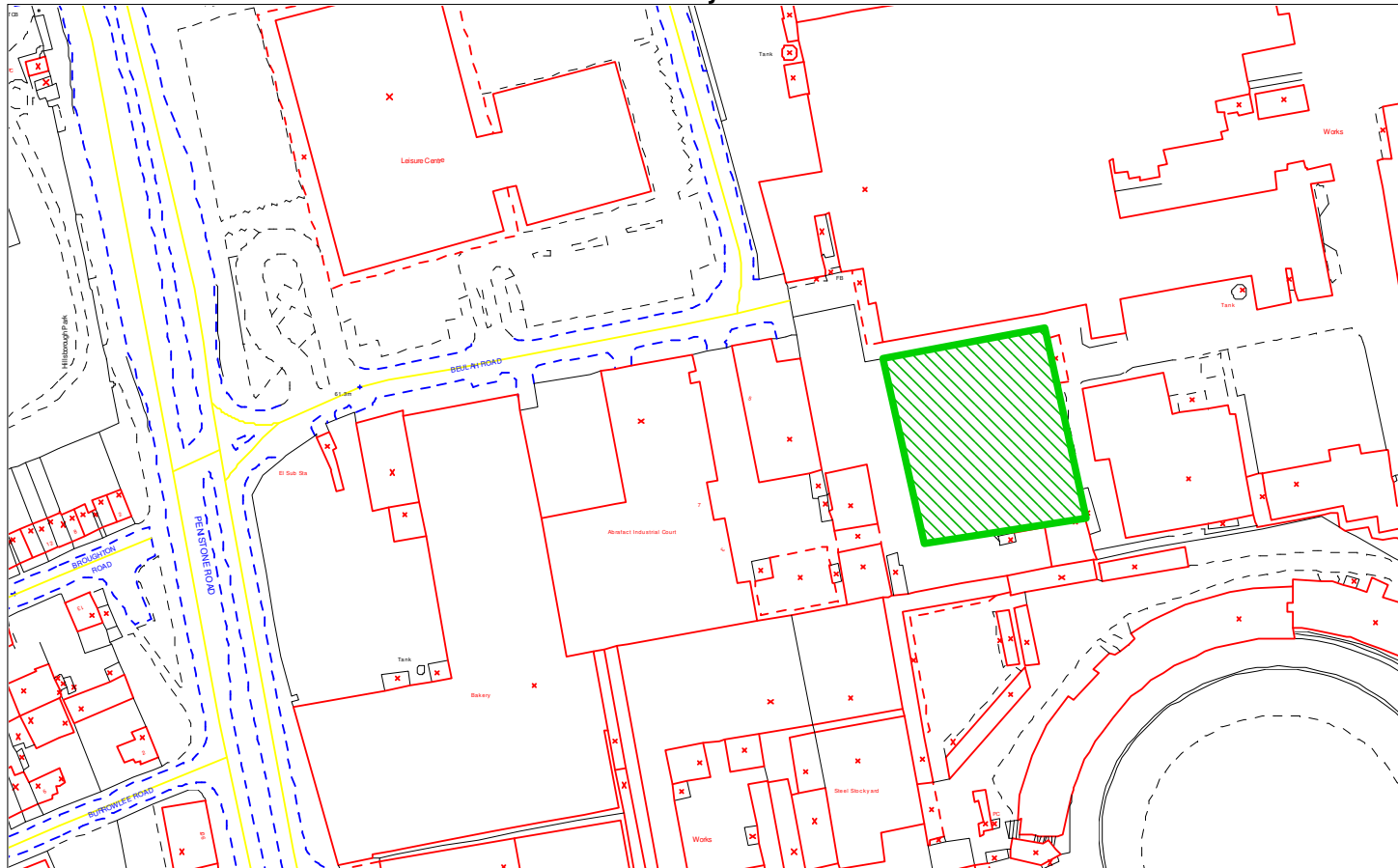
- 10.1 Within 12 months of the issue of this Permit, the Permit holder shall produce and submit a Solvent Management Plan to Sheffield City Council's Environmental Protection Service. The Solvent Management Plan shall be produced in accordance with clauses 5.5 to 5.6 of the Secretary of State's Process Guidance Note PG 6/45 (04), which have been reproduced in Schedule 3 to this Permit.
- 10.2 The Solvent Management Plan shall be reviewed at least annually. Review records and updates to Solvent Management Plans shall be forwarded to Sheffield City Council's Environmental Protection Service annually.

Section 11– General Conditions

- 11.1 The stacks serving the de-wax furnaces and casting area (F1, F2 & M) shall be adequately insulated to minimise cooling of waste gases and steam to prevent liquid condensation. Stacks and ductwork shall be leak proof.
- 11.2 Stacks or vents shall not be fitted with any restriction at the final opening to exit velocity such as a plate, cap or cowl other than an accelerator cone or low resistance cowl.
- 11.3 Staff at all levels shall receive training and instructions necessary for their duties and shall include the following:
- Responsibilities under the Permit;
 - Minimisation of emissions at start up and shut down;
 - Actions during abnormal emissions including minimisation of emissions.
- 11.4 The Permit holder shall keep and maintain a statement of training requirements for each operational post and keep a record of the training received by each employee whose actions may have an impact on emissions to atmosphere. These documents shall be made available to Sheffield City Council's Environmental Protection Service upon request.

- 11.5 The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this Permit.
- 11.6 The Permit holder shall give written notification to Sheffield City Council in the following instances:
- a) Permanent cessation of the operation of any part of, or all of the Permitted Installation;
 - b) Cessation of the operation of any part of, or all of the Permitted Installation for a period, likely to exceed 1 year;
 - c) Any proposed change in the operation of the installation; and Resumption of the operation of any part of, or all of the Permitted installation after a cessation notified under (b) above.
- 11.7 The Permit holder shall notify the following matters to Sheffield City Council's Environmental Protection Service, in writing, within 14 days of their occurrence:
- Any change in the trading name of Symmetry Medical Sheffield Limited registered name or registered office address;
 - A change to any particulars of any ultimate holding company of Symmetry Medical Inc (including details of an ultimate holding company where Symmetry Medical Inc has become a subsidiary);
 - Any steps taken with a view to Symmetry Medical Sheffield Limited going into administration; entering into a company voluntary arrangement or being wound up.

Schedule 1 Site Location Plan and Installation Boundary



Schedule 3 – Extracts from PG 6/45 (04)

- 5.3 Construction of inventories of materials consumed and disposed of may involve the identification of individual organic solvents, or solids. This may give rise to an issue of commercial confidentiality. Information supplied must be placed on the public register, unless exclusion has been granted on the grounds of commercial confidentiality or national security. (Further guidance can be found in chapter 8 of the General Manual on policy and procedures for A2 and B installations).
- 5.4 A determination of the organic solvent consumption, the total mass of organic solvent inputs minus any solvents sent for reuse/recovery off-site, should be made and submitted to the regulator annually, preferably to coincide with the operators stocktaking requirements, in the form of a mass balance in order to determine the annual actual consumption of organic solvent (C):

Where: $C = I_1 - O_8$

I_1 Total quantity of organic solvents, or their quantity in preparations purchased which are used as input into the process/activity.

A calculation of the purchased organic solvent input (I_1)

- (i) The mass of organic solvent contained in raw materials and preparations in the initial stock (IS) at the start of the accounting period; plus
- (ii) The mass of organic solvent contained in raw materials and preparations in the purchased stock (PS) during the accounting period
- (iii) Minus the mass of organic solvent contained in the raw materials and preparations in the final stock (FS) at the end of the accounting period.

Total Organic Solvent Input (I_1) = IS + PS – FS

Solvent Management Plan

- 5.5 The Solvent Management Plan provides definitions and calculations to demonstrate compliance with the VOC requirements of this note. The use of the standard definitions and calculations also ensures consistency of VOC compliance across installations with an industrial sector.

5.6 The definitions provided must be used in all calculations relating to the Solvent Management Plan (SMP) (**Figure 5.1**).

- For SED installations using the emission and fugitive limits, the SMP should be used for determining the fugitive emissions (SED Box 9). Once completed, it need not be done until the equipment is modified

Definitions:

The following definitions provide a framework for the mass balance calculations used in determining compliance.

Inputs of Organic Solvent in the time frame over which the mass balance is being calculated (I)

I_1 The quantity of organic solvents, or their quantity in preparations purchased which are used as input into the process/activity (including organic solvents used in the cleaning).

I_2 The quantity of organic solvents or their quantity in preparations recovered and reused as solvent input into the process/activity. (The recycled solvent is counted every time it is used to carry out the activity)

Outputs of Organic Solvents in the time frame over which the mass balance is being calculated (O)

O_1 Emissions in waste gases

O_2 Organic Solvents lost in water, if appropriate taking into account waste water treatment when calculation O_5 .

O_3 The quantity of organic solvents which remains as contamination or residue in products output from the process/activity.

O_4 Uncaptured emissions of organic solvents to air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.

O_5 Organic solvents and/or organic compounds lost due to chemical or physical reactions. (Including for example those which are destroyed, e.g. by thermal oxidation or other waste gas or waste water treatments, or captured, e.g. by adsorption, as long as they are not counted under O_6 , O_7 or O_8).

O_6 Organic solvents contained in collected waste.

O₇ Organic solvents, or organic solvents contained in preparations, which are sold or are intended to be sold as a commercially valuable product.

O₈ Organic solvents contained in preparations recovered for reuse but not as input into the process/activity, as long as not counted under O₇.

O₉ Organic solvents released in other ways.