

This Report has been cleared for submission to the Board by Programme Manager, Mr David Flynn

Signed: *Donata Richards*, Date: 6th February 2018



**OFFICE OF ENVIRONMENTAL
SUSTAINABILITY**

**INSPECTOR'S REPORT ON AN INTEGRATED POLLUTION CONTROL
LICENCE REVIEW, LICENCE REGISTER NUMBER P0465-02**

TO: DIRECTORS

FROM: Gavin Clabby

DATE: 6TH FEBRUARY 2018

Licensee: G.Bruss GmbH DICHTUNGSTECHNIK

CRO number: 902311(status: normal)

Location/address: Urban site located at Finisklin Road, Sligo.

Application date: 09 October 2014

Class of activity (under EPA Act 1992 as amended as amended): 5.7 The manufacture of paints, varnishes, resins, inks, dyes, pigments or elastomers where the production capacity exceeds 1,000 litres per week, not included in paragraphs 5.12 to 5.17.

Category of activity under Chp II, IED (2010/75/EU): Not applicable

Category of activity under Chp V, IED (2010/75/EU): Not applicable

European Directives/Regulations relevant to this assessment are listed in the appendix of this report.

Main BAT note: BAT Guidance Note on the Best Available Techniques for the Manufacture of Organic Chemicals.

Any other relevant BREF documents/national BAT notes are listed in the appendix of this report.

Activity description/background: The conversion or moulding of premanufactured elastomer into engine seals for the automotive industry.

Types of waste accepted: none

Additional information received: Yes (28/07/2017, 06/10/2017, 05/12/2017, 08/01/2018)

No of submissions received: None

EIS submitted: No

NIS submitted: No

Site visit: 21/12/2017

1. Activity description/background

G.Bruss GmbH DICHTUNGSTECHNIK (hereafter 'the licensee') is a German owned manufacturer of synthetic rubber seals for the automotive industry. The company has been in operation at its Sligo site since 1982 and currently employs 300 people.

The production process involves the conversion or moulding of pre-manufactured elastomer into specific components (engine seals). The finishing process for these components is oven tempering (heating to 200°C), to complete vulcanisation of the elastomer. Other finishing processes are non-solvent coating and cryogenic shot blasting. The pre-manufactured elastomer (see Fig.1 in appendix) is supplied to the Sligo site by the Bruss Headquarters plant in Hamburg, Germany.

The review application relates to a new solvent-based coating process ('Gleitmo' Coating) that is being introduced at the site.

2. Scope of Review

| Proposed change | Details/comment |
|---------------------|--|
| Site related change | <i>Construction of small housing unit for new manufacturing process (see Fig.2 in appendix).</i> |
| New emission points | <i>1 process emission point to air on new housing unit; associated emissions: VOCs.</i> |
| Site change | <i>Boundary change to incorporate newly acquired car park</i> |

NB: It should be noted here that one of the components used in the Gleitmo coating process is dibutyltin dilaurate (DBTD), which is an organotin compound.

Activity class 12.1 of the first schedule of the EPA Act 1992 is described as 'Operations involving coating with organotin compounds, not included in 12.2.1 or 12.2.2'; this description suggests that the revised licence should include activity class 12.1, in addition to the current class of activity, 5.7.

However, the amounts of DBTD used annually are very small (approximately five kilograms). Also, the Gleitmo process does not result in the compound being discharged directly to the environment.

Therefore, it has been decided in this assessment not to apply the additional class of activity (12.1) to the revised licence. Furthermore, the RD as drafted (under activity class 5.7) is considered compliant with the relevant BAT note for activity class 12.1 (BAT Guidance note for Solvent Use in Coating, Cleaning and Degreasing).

3. Licence/Permit History

| Licence | Details | Date |
|----------|--|-----------------|
| P0465-01 | <i>Original IPC licence issued. There have been no amendments, reviews or transfers of this licence.</i> | 19 January 2000 |

4. Compliance and Complaints Record

Compliance and complaints under existing licence

There have been no complaints or significant non-compliance issues in relation to the operation of this installation under the current licence (P0465-01). There was one compliance investigation (CI) opened in July 2013, which related to bunding and drainage issues. This CI was closed in January 2014.

5. Best Available Techniques

BAT for IPC installations

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application, and as confirmed, modified or specified in the attached Recommended Determination comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the Integrated Pollution Control (IPC) installation is located, designed, built, managed, maintained, operated and decommissioned.

6. Planning Permission, EIS and EIA Requirements

6.1 EIA Screening

In accordance with Section 83(2A) of the EPA Act 1992 as amended, the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an environmental impact assessment (EIA), where the activity meets the criteria outlined in Section 83(2A)(b) and 83(2A)(c). In accordance with the EIA Screening Determination, the Agency has determined that the activity is not likely to have a significant effect on the environment, and accordingly an EIA is not required.

6.2 Planning Status

A number of planning applications have been made by the licensee, for the area within the installation boundary. Details of these planning applications and permissions have been provided in the application form. Only one of these planning applications (PL 11/70056) was made after the enactment of the Planning and Development Act, 2000 (application made 02/11/2011). The licensee submitted, as part of the review application, a letter from the planning authority (Sligo County Council) confirming that an EIA was not required in support of planning application PL 11/70056.

The licensee has provided a determination by Sligo County Council that the modification of the activity to which this review relates constitutes exempted development.

7. Submissions

There were no submissions made on this application.

8. Emissions to Air

This section addresses any channelled emissions to air, fugitive emissions and climate impact from the installation.

Note on solvent usage and Chapter V of the IED

In addition to the general requirements for the class of activity under the EPA Act 1992 as amended, Chapter V of the Industrial Emissions Directive (Special Provisions for Installations and Activities Using Organic Solvents) also specifies separate requirements for solvent related activities. Chapter V is transposed into national legislation as S.I. No 565 of 2012 (Solvent Regulations) and the emission limits specified therein are legally binding.

Chapter V refers to Annex VII (Technical Provisions for Installations and Activities Using Organic Solvents). The solvent related activity specified in the IED that is regarded as relevant to the installation is Rubber Conversion (specifically vulcanisation and coating). The solvent consumption threshold for this activity is 15 tonnes per annum. However, the installation does not use any solvent in the vulcanisation process (vulcanisation is completed on the readymade rubber material by heating). Also, the proposed 'Gleitmo' coating process would use less than one tonne of solvent per annum. Therefore, Chapter V requirements do not apply to this installation.

8.1 Channelled Emissions to Air

The table below gives details on the channelled emissions at the installation (proposed or existing), their location, the processes which gives rise to each emission, and whether the type of abatement is considered BAT.

| Main channelled emission point descriptions | | | | | |
|---|----------------------|--------------------|---|-----------------------------|-----------|
| Emission Reference | Location | Proposed/ Existing | Process Description | Abatement | |
| | | | | Description | BAT (Y/N) |
| A2-01, A2-02, A2-03, A2-04 | Main production area | Existing | Tempering ovens (heating rubber to complete vulcanisation - See Fig. 3 in appendix) | Electrostatic precipitators | y |

| Main channelled emission point descriptions | | | | | |
|---|--------------------------------|--------------------|---|--------------------------------|-----------|
| Emission Reference | Location | Proposed/ Existing | Process Description | Abatement | |
| | | | | Description | BAT (Y/N) |
| A2-05 | <i>New 'Gleitmo' extension</i> | <i>Proposed</i> | <i>Solvent-based coating of DBTD onto certain products. – see Fig. 2 in appendix)</i> | <i>Activated carbon filter</i> | <i>y</i> |

The following table compares, for each main emission point, the limits specified in the current licence (P0465-01) with the limits proposed in the licence review application (P0465-02). Any relevant BAT associated emission levels (BAT-AELs) are also detailed in this table.

| Main channelled emissions characteristics | | | | | |
|---|---|------------------------------------|---|--|--|
| Emission Reference | Parameter | Limits in current licence | Limits in proposed licence | Relevant BAT-AEL (incl. mass flow threshold) | |
| A2-01, A2-02, A2-03, A2-04 | Volumetric flow rate (Nm³/hour) | Not specified | None required (as mass emission limits are specified) | - | |
| | Rubber fume (mg/m³) | 150 (<0.5kg/hr) 50 (>0.5kg/hr) | Rubber fume replaced by TOC and total particulates | - | |
| | TOC | Not specified | 0.12 kg/hr | 50 mg/m ³ (>0.5kg/hr) | |
| | Total particulates (mg/m³) | Not specified | 0.05 kg/hr | 20 mg/m ³ (>0.2kg/hr) | |
| A2-05 | Volumetric flow rate (Nm³/hour) | Not specified (new emission point) | None required (as mass emission limits are specified) | - | |
| | TOC | Not specified (new emission point) | 0.4/0.14 kg/hr | 50 mg/m ³ (>0.5kg/hr) | |

Assessment and mitigation

In the characterisation of emissions to air, for the purposes of this review application, the applicant monitored and analysed the emissions (pre- and post-abatement) with respect to the parameters of concern specified in the national BAT note for the sector, which are discussed below.

A2-01, A2-02, A2-03 and A2-04

Results showed that no Class I or Class II organic substances were detected, and therefore, all organic substances could be classified under the heading of total organic carbon (TOC). The most notable feature of the results is the low mass emission rates measured for emission points A2-01 to A2-04 (for both TOC and particulates).

None of the measurement results, pre-abatement, yielded values in excess of the relevant BAT mass flow thresholds. Therefore, the Agency does not consider these emissions to air as main emissions, and consequently air modelling was not required.

Given the above it is not considered appropriate to apply the BAT-AELs (which are concentration limits that apply above a certain mass flow threshold). However, as these emission points constitute a large portion of the installation's emissions to air (and are channelled and abated), it is considered reasonable and prudent to monitor and control these emissions.

Therefore, it is considered appropriate to apply, to each of the four emission points, TOC and particulate mass emission limits that are one quarter of the value of the relevant BAT mass thresholds. In this manner, the Agency can ensure the total emissions for A2-01, A2-02, A2-03 and A2-04 are less than the BAT mass threshold, and therefore remain as not significant.

A2-05 (new Gleitmo process)

Results showed that no Class I or Class II organic substances were detected, and therefore, all organic substances could be classified under the heading of total organic carbon.

Hourly emission rate data for TOC (pre-abatement) for this emission point (1.49 kg/hr) suggests that the emission is significant, and that the BAT-AEL of 50 mg/m³ should apply.

A screening model for TOC was carried by the applicant at a proposed lower mass emission rate of 0.141 kg/hr. This screening model satisfactorily demonstrated, at a conservative level and in accordance with Agency guidance¹, that there would be no significant impact at this emission rate.

However, post-abatement monitoring data (393 mg/m³, 0.255 kg/hr) shows that the licensee would currently not be able to meet this modelled flow rate, the BAT-AEL of 50 mg/m³, or the BAT mass threshold of 0.5 kg/hr.

Given the above information, the RD specifies that the licensee shall modify the current abatement on emission point A2-05 such that the modelled mass emission rate is achieved, and applied as a mass emission limit. This limit would be below the BAT mass threshold, and therefore the BAT-AEL (concentration limit) would not apply. The

¹ Air Dispersion Modelling from Industrial Installations Guidance Note (AG4), copyright: EPA, Johnstown Castle Estate, Co. Wexford.

RD specifies that the required mass emission limit is achieved no later than September 30th 2018. (An interim mass emission rate of 0.4 kg/hr is specified in the RD.). The licensee has indicated that the necessary additional abatement and proposed mass limits would be feasible.

Finally, it is also worth noting that for the emissions from the Gleitmo process - which uses dibutyl tin dilaurate (DBDT) - there was no DBDT detected during the characterisation monitoring (pre- or post-abatement). This is to be expected given the low volatility of DBDT and the nature of the process. Consequently, no limit is set in the RD for DBDT. However, given the hazardous nature of the substance, the RD requires biannual monitoring of DBDT (for emission point A2-05) as a precautionary measure for this new process.

The RD also requires monitoring for Class I and Class II organic substances (on all emission points to air).

8.2 Fugitive Emissions

Fugitive emissions at the installation may arise from handling and from use of solvent during the coating processes.

Assessment and mitigation

It is considered that the potential for fugitive emissions at the installation is very low. Processes at the installation include several (non-solvent) wet/dry finishing coatings applied to processed parts. These processes do not give rise to emissions to air. Rubber fume emissions from the main process are vented through the main emission points. The only process with potential for fugitive emissions is the solvent-based 'Gleitmo' coating process. However, this is a low volume process (less than 100 litres annually) which operates in a closed unit (operating under negative pressure) that vents directly via the abated main emission point, A2-05. Finally, the process buildings themselves operate under negative pressure in conjunction with an air purification system.

Condition 6 of the RD requires the licensee to maintain a programme for the identification and reduction of any fugitive emissions using an appropriate combination of best available techniques.

8.3 Climate Impact

Climate change is a significant global issue which affects weather and environmental conditions which consequently affects human resources and amenities as well as biodiversity and habitats. Climate change is caused by warming of the climate system by enhanced levels of atmospheric greenhouse gases (GHG) due to human activities.

Emissions of GHG gases from the installation are not considered significant. There are no process boilers at the installation. In 2014, a heat exchange system replaced the oil-fired boilers used for space heating. Other measure energy saving measures have been implemented at the installation; including, the retrofit of more efficient electrical motors and lighting. Condition 7 of the RD requires an energy efficiency audit and an assessment of resource use efficiency.

9. Discharges to Water and Ground

This section addresses any emissions to water, sewer or ground/groundwater from the installation, as well as storm water discharges.

9.1 Discharges to Waters

9.1.1 Emissions to Waters

There are no process emissions to waters at the installation.

9.1.2 Storm water discharges to waters

The table below gives details on installation's storm water discharges to waters (not sewer); the sources of potential contamination of these discharges, the type of on-site abatement (if any), as well as details of the receiving water.

| Stormwater discharge point details | | | |
|------------------------------------|---------------------|---|----------------------------------|
| Emission Reference | Proposed / Existing | Monitored parameters (monitoring frequency) | Trigger levels established (Y/N) |
| SW-2 | Proposed | Visual (daily), pH, TOC (weekly); scope & frequency may be reduced under Condition 6 of RD. | No but required by RD |
| | | | |
| Drainage areas: | | Low traffic yard area containing individually housed transformers; car park. | |
| Abatement: | | See Condition 3.8 of the RD. | |
| Receiving water: | | Garavogue Estuary | |
| Automatic diversion in place: | | No. | |

Assessment and mitigation

The large majority of the installation's surface water run-off is discharged to the Irish Water sewer network. However, in preparing the application for the revised licence, it was discovered that the small car park and a yard area (containing transformers) drains to the local authority storm water network. (A new discharge point is now labelled as SW-2 in the RD. More precise details of the location are to be agreed by the Agency under the proposed licence.) It is not known whether these drainage areas constitute sufficient risk to warrant the installation of an interceptor. Therefore, the RD (Condition 3.8) requires the licensee to submit a report to the Agency establishing the risk of contamination to surface waters draining from these areas. This report must also detail any mitigation measures. Condition 3.8 also requires that any measures approved by the Agency are implemented within 24 months of date of grant of licence.

The RD also requires that accident and emergency response procedures are put in place. These measures will help to control any impacts which could occur should any mitigation measures fail.

9.2 Emissions to Sewer

9.2.1 Process emissions to sewer

The limits proposed in the RD are based on the Section 99E consent given by Irish Water as a statutory part of the review application. No new or increased emissions were otherwise sought by the licensee. The limits specified in the RD are identical to those in the current licence, but with the addition of one new limit (for suspended solids).

The table below gives details on the installation's emissions to sewer; the processes which contribute to the emissions, the type of on-site treatment (if any), off-site treatment (if any) and the proposed maximum daily flows.

| On-site treatment | | | | |
|---|---------------------|---|-----------|--|
| Emission Reference | Proposed / Existing | Process Description | Abatement | Proposed max. flow (m ³ /day) |
| SE-1 | Existing | Occasional washing of product. (No detergents or additives used.) | None | 2 |
| Off-site treatment | | | | |
| Name of sewer network/agglomeration: Sligo | | | | |
| Normal daily flow rate in network (m ³ /day): 19,000 | | | | |
| Responsible authority for network/agglomeration: Irish Water | | | | |
| Type of treatment: Tertiary treatment/nutrient removal | | | | |
| Receiving water name (and waterbody type): Garavogue Estuary | | | | |
| Waste water discharge authorisation: D0014-01 | | | | |
| The maximum emission volumes from the installation represent about 0.01% of effluent discharge volumes from the Irish Water municipal wastewater treatment plant (MWWTP). The most recent AER for the agglomeration indicates that this MWWTP is in compliance with the discharge limits for all licensed parameters. | | | | |

Assessment and mitigation

There are seven parameters characterising the emission(s) from the installation; these are detailed in the application documentation.

The emission limit values (ELV's) applied by the Agency for these parameters have been assessed against the following three criteria:

1. The characteristics of the installation's effluent must satisfy the consent conditions specified by Irish Water, as required by Section 99E of the EPA Act 1992 as amended.

Irish Water, under Section 99E of the EPA Act 1992 as amended, gave its consent for the discharges from the installation, specifying certain ELVs, as well as certain other conditions and monitoring requirements. These ELVs have been incorporated into the RD.

2. It must be demonstrated that the level of treatment of an installation's effluent, on and off site, is collectively equivalent to BAT.

It is considered that the emission limits (as well as any associated percentage removal rates) for the Irish Water MWWTP will ensure that the level of treatment of the installation's discharges is collectively equivalent to BAT.

3. In granting a licence for an installation, and in accordance with Section 83(5)(a)(iii) of the EPA Act 1992 as amended, as well as in accordance with Articles 5 and 7 of S.I. 272 of 2009, the Agency must ensure that the quality of any relevant receiving water is not impaired or that the relevant Environmental Quality standards are not exceeded.

Given the small contribution made by the installation to the Sligo agglomeration, and given the performance standards and significant spare capacity at the Irish Water MWWTP, it has been determined, that at the point of discharge from the MWWTP (even with minimal dispersion/dilution in the receiving water) it is highly unlikely that the environmental quality standards² (EQSs) for the receiving water will be breached due to the installation's emissions.

Given the above it is considered that the recommended ELVs for this discharge to sewer are considered to satisfy the requirements of the Water Framework Directive, and the EPA Act 1992 as amended.

Additional requirements by Irish Water

In addition to the ELVs, Irish Water also specified 14 additional requirements relating to the discharges to sewer. Thirteen of these requirements are provided for in the standard conditions of the RD. The remaining additional requirement (plastic shot/process particle screening) is incorporated into the RD as Conditions 5.4.5 and 5.4.6.

² EQSs as specified in Schedule 5 of *European Communities Environmental Objectives (Surface Waters) Regulations 2009* as amended.

9.2.2 Storm water discharges to sewer

The table below gives details on installation's storm water discharges to sewer (not direct to receiving waters); the sources of potential contamination of these discharges, the type of on-site abatement (if any), as well as details of the receiving water.

| Stormwater discharge point (to sewer) details | | | |
|--|---------------------|---|----------------------------------|
| Emission Reference | Proposed / Existing | Monitored parameters (monitoring frequency) | Trigger levels established (Y/N) |
| <i>SW-1</i> | <i>Proposed</i> | <i>Visual (daily), pH, TOC; scope & frequency may be reduced under Condition 6 of RD.</i> | <i>None but required by RD</i> |
| Drainage areas: | | | |
| | | <i>Buildings, site roads and walkways, car parks.</i> | |
| Abatement: | | | |
| | | <i>Class II by-pass interceptor (required by RD).</i> | |
| Automatic diversion in place: | | | |
| | | <i>No.</i> | |

Assessment and mitigation

In the current licence, there is no specified discharge point for storm water emissions to sewer. A new discharge point is now labelled as SW-2 in the RD. More precise details of the location are to be agreed by the Agency under the proposed licence.

In light of the uncontaminated nature of the storm water run-off it is considered that at the point of discharge from the Irish Water MWWTP it is highly unlikely that the EQSs for the receiving water will be breached due to the installation's emission of clean storm water to sewer.

9.3 Discharges to ground/groundwater

9.3.1 Emissions to ground/groundwater

There are no process emissions to ground/groundwater at the installation.

10. Noise

The main sources of noise at the installation include air compressor units, overhead ventilation fans, intake fans, an enclosed cooling tower, milling machines, and an emergency standby generator.

Assessment and Mitigation

As part of the current licence, a noise monitoring survey is carried out annually at two individual installation boundary locations, as well as at two noise sensitive receptors outside the boundary. Historical data from these surveys indicate that the installation is consistently compliant with the licence limits. There has been no history of noise complaints in recent years at the installation.

The licensee did not identify the new process (Gleitmo) as an additional source of noise at the installation. Similarly, as part of this assessment, the new process, due to its nature and scale, was not considered a likely source of noise. (A similar conclusion was reached by the inspector during the site visit.) Therefore, no revised noise propagation modelling was required as part of this review.

Standard noise conditions and emission limit values, which apply at the noise sensitive locations/boundary, have been included in the RD. In accordance with the EPA document Guidance Note for Noise: Licence Applications, Surveys and Assessments in relation to Scheduled Activities (NG4) (2016), the day time ELV has been changed from 55dB L_{Aeq} to 55dB L_{Ar}, to allow for corrections for tonal noise, and an evening time ELV has been introduced.

11. Waste Generation

The activity does not produce significant quantities of waste. There are no waste disposal or recovery activities undertaken on-site. Waste generated on-site includes various non-hazardous wastes typically associated with manufacturing sites: waste packaging, plastics, scrap metals, municipal and biodegradable waste. There are also some hazardous waste streams associated with the existing and new processes; these include small quantities of solids and solvents-based coating materials. (A comprehensive list has been supplied in the review application.) All wastes generated on site are transported and recovered/disposed off-site in accordance with National and European Legislation.

Assessment and mitigation

If dealt with in accordance with the conditions of the RD, the management of waste generated at the installation will be in accordance with the requirements of Section 29 (2A) of the Waste Management Acts as amended.

12. Use of Resources and Hazardous Substances

The applicant has provided a comprehensive list of resources consumed at the installation; these are listed in the review application documentation.

The operation of the installation involves the consumption of water, and electricity. The estimated quantities used in 2017 are given in the table below; this table also details improved levels of efficiency.

| Resource | Quantity per annum |
|-------------|--|
| Electricity | 7,692 MWh (+12.8% increase in production/energy efficiency when compared |

| Resource | Quantity per annum |
|----------|--|
| | to 2012 (the year when the installation commenced an energy efficiency project.) |
| Water | 3,069 m ³ (38% reduction on previous year; due to installation of more efficient washing equipment) |
| Fuel oil | None (Oil burning boilers phased out in recent years) |

Other substances used on site

Approximately 5.6 tonnes of coating materials are used on site annually. The clear majority of this quantity (5.4 tonnes) relate to the long-standing use of 'Oxiso O5 S' (industrial grease with solvent dispersing agents; not classified as hazardous), with the remainder being associated with the new Gleitmo process (Gleitmo SFL 9680; H360FD). One of the installation's raw materials (FKM Fluorocarbon rubber) which contained lead monoxide (H360D) was successfully substituted by a lead free rubber in Q4 2017. Approximately 0.7 tonnes of 'Korro 60/90' (corrosion inhibitor; H360FD) which was used annually on-site, is currently being phased out.

Assessment and mitigation

It is considered that the use of natural resources by the activity will not be significant. None of the above hazardous substances are emitted directly to the environment; and the likelihood of accidental release, is considered very low.

As can be seen above, the licensee has made a number of improvements resulting in the more efficient use of natural resources, as well as reducing the use of hazardous substances.

In the application of BAT, Condition 7 of the licence provides for the efficient use of resources and energy in all site operations. This condition also requires an energy audit to be carried out and repeated at intervals as required by the Agency.

13. Prevention of Accidents

The application identifies the hazards at the installation, as well as measures for prevention of accidents and limitation of consequences. It is considered that the installation has adequate measures in place for surface water and groundwater protection, fire prevention and emergency response.

In addition, the RD contains standard conditions in relation to the storage and management of materials and wastes. Condition 9 of the RD also requires that accident and emergency response procedures are put in place. (Sections 9.1.2 and 9.2.2 above also discuss any mitigation measures required for contaminated storm waters.) These measures will help to control any impacts which could occur should any mitigation measures fail.

14. Cessation of activity

The application details a range of measures to be employed upon cessation of the activity. Condition 10 of the RD requires procedures to be put in place to ensure the proper closure of the activity with the aim of protecting the environment.

15. Appropriate Assessment

There are several Natura 2000 sites located in the vicinity (within 15 km) of the activity:

| | |
|--|--|
| Lough Gill SAC (Site code: 001976) | Ballysadare Bay SAC (Site code: 000622) |
| Ben Bulbin, Gleniff and Glenade Complex SAC (Site code: 000623), | Cumeen Strand/Drumcliffe Bay SAC (Site code: 000627) |
| Union Wood SAC (Site code: 000638) | Streedagh Point Dunes SAC (Site code: 001680) |
| Unshin River SAC (Site code: 001898) | Drumcliffe Bay SPA (Site code: 004013) |
| Cumeen Strand SPA (Site code: 004035) | Ballysadare SPA (Site code 004129) |
| Sligo/Uplands SPA (Site code: 004187) | |

However, it is considered that only the European sites at Sligo Harbour and Lough Gill (Site codes: 001976, 000627 and 004035) are considered within the zone of influence of the installation's emissions (see appendix). This zone of influence was determined on the basis that, as determined in section 7 above, air emissions will have minimal impact beyond the boundary of the installation, and furthermore that there are no direct discharges to water/groundwater other than uncontaminated surface water. (All process emissions to water are treated at the Sligo MWWTP which discharges to the Garavogue Estuary in Sligo Harbour.)

The appendices of this report list the European Sites assessed, their associated qualifying interests and conservation objectives.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Lough Gill and Sligo Harbour.

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.

This determination was made in light of the scale and nature of emissions to the environment; in particular, the scale of the emissions to air from the installation; by virtue of the determined mass emissions for the oven emissions, none of which are considered to be significant, as well as by virtue of the screening model for Gleitmo

process emission. With regards to the hydrologically linked sites, it has been determined that the Sligo municipal WWTP has the capacity to sufficiently treat the effluent discharges from the activity; and that furthermore, there are no direct process emissions to surface water or emissions groundwater from the installation. Precautionary infrastructural and procedural measures, specified in the application, are designed to prevent significant impacts occurring due to chemical spills or fire.

16. Fit & Proper Person Assessment

The Fit & Proper Person test requires three elements of examination:

Technical Ability

The licensee has provided details of the qualifications, technical knowledge and experience of key personnel. The licence application also includes information on the on-site management structure. It is considered that the licensee has demonstrated the technical knowledge required.

Legal Standing

Neither the licensee nor any relevant person has relevant convictions under the Environmental Protection Agency Act 1992 as amended, or under any other relevant environmental legislation.

Financial Provision/Strength

ELRA, CRAMP & FP

The licence category and proposed installation was assessed for the requirements of Environmental Liabilities Risk Assessment (ELRA), Closure, Restoration and Aftercare Management Plan (CRAMP) and Financial Provision (FP), in accordance with Agency guidance. Under this assessment it has been determined that ELRA, CRAMP and FP were not required.

Fit & Proper Conclusion

It is my view that the applicant can be deemed a Fit & Proper Person for the purposes of this review.

17. Cross Office Consultation

I consulted OEE Inspectors, Kealan Reynolds, John Gibbons and Helen Boyce in relation to this site, as well as OEE Inspector Niamh O'Donoghue in relation to individual licence conditions, and Victor Olmos in relation to air monitoring. In general, the OEE have no significant concerns regarding the proposed changes to the licensable activity.

18. Charges

The annual enforcement charge recommended in the RD is €10,786.68, which reflects the anticipated enforcement effort required and the cost of monitoring.

19. Recommendation

The RD specifies the necessary measures to provide that the installation shall be operated in accordance with the requirements of Section 83(5) of the EPA Act 1992 as amended, and has regard to the AA screening and EIA screening. The RD gives effect to the requirements of the Environmental Protection Agency Acts 1992 as amended.

I recommend that a Proposed Determination is issued subject to the conditions and for the reasons as drafted in the RD.

Signed

A handwritten signature in blue ink is written over a solid horizontal black line. The signature is stylized and appears to consist of the letters 'G' and 'C'.

Gavin Clabby

Inspector

Office of Environmental Sustainability

Procedural Note

In the event that no objections are received to the Proposed Determination on the application, a licence will be granted in accordance with Section 87(4) of the Environmental Protection Agency Acts 1992 as amended as soon as may be after the expiration of the appropriate period.

Appendices

AA table

List of European Sites assessed, their associated qualifying interests and conservation objectives.

| European Site (site code) | Distance/ Direction from installation | Qualifying interests (* denotes a priority habitat) | Conservation objectives |
|---|---|--|--|
| Lough Gill SAC (Site code: 001976), | 1 km south | <p>Habitats:</p> <p>Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)*</p> <p>Species:</p> <p>White-clawed crayfish (<i>Austropotamobius pallipes</i>)</p> <p>Sea Lamprey (<i>Petromyzon marinus</i>)</p> <p>Brook Lamprey (<i>Lampetra planeri</i>)</p> <p>River Lamprey (<i>Lampetra fluviatilis</i>)</p> <p>Salmon (<i>Salmo salar</i>)</p> <p>Otter (<i>Lutra lutra</i>)</p> | As per NPWS (2015) Conservation objectives for Lough Gill SAC [001976]. Generic Version 5.0 Department of Arts, Heritage and the Gaeltacht (dated 13/08/2016). |
| Cumeen Strand/Drumcliffe Bay SAC (Site code: 000627), | 1.3 km west | <p>Habitats:</p> <p>Estauries</p> <p>Mudflats and sandflats not covered by seawater at low tide</p> <p>Embryonic shifting dunes</p> <p>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)</p> <p>Fixed coastal dunes with herbaceous vegetation (grey dunes)*</p> | As per NPWS (2013) Conservation objectives for Cumeen Strand/Drumcliffe Bay (Sligo Bay) SAC [000627]. Version 1 Department of Arts, Heritage and the Gaeltacht (dated 18/09/2013). |

| European Site (site code) | Distance/ Direction from installation | Qualifying interests (* denotes a priority habitat) | Conservation objectives |
|---|---|--|--|
| | | <p><i>Juniperus communis</i> formations on heaths or calcareous grasslands</p> <p>Petrifying springs with tufa formation (Cratoneuria)*</p> <p>Species:</p> <p>Marsh Snail (<i>Vertigo angustior</i>)</p> <p>Sea Lamprey (<i>Petromyzon marinus</i>)</p> <p>River Lamprey (<i>Lampetra fluviatilis</i>)</p> <p>Harbour Seal (<i>Phoca Vitulina</i>)</p> | |
| Cumeen Strand SPA (Site code: 004035), | 1.3 km west | <p>Habitats:</p> <p>Wetland habitat</p> <p>Species:</p> <p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)</p> <p>Oystercatcher (<i>Haematopus ostralegus</i>)</p> <p>Redshank (<i>Tringa tetanus</i>)</p> | As per NPWS (2013) Conservation objectives for Cumeen Strand SPA [004035]. Version 1 Department of Arts, Heritage and the Gaeltacht. (dated 18/09/2013). |

Relevant European (and international) legal instruments

| |
|---|
| The following Irish and European instruments are regarded as relevant to this application assessment and have been considered in the drafting of the Recommended Determination. |
| Environmental Impact Assessment (EIA) Directive (85/337/EEC, as amended) |
| Habitats Directive (92/43/EEC) & Birds Directive (79/409/EC) |
| Water Framework Directive [2000/60/EC] |
| Air Quality Directives (2008/50/EC and 2004/107/EC) |
| Environmental Liability Directive (2004/35/CE) |
| Dangerous Substances Directive (2006/11/EC) |
| Regulation (EC) No 1907/2006 (REACH Regulation) |
| Energy Efficiency Directive. |

Other BREF documents and National BAT notes relevant to this assessment

| Sectoral BREF | Publication date |
|---|------------------|
| Reference Document on the Best Available Techniques for the Manufacture of Organic Fine Chemicals | August 2006 |
| Reference Document on the Best Available Techniques in the Production of Polymers | August 2007 |
| Horizontal BREF | Publication date |
| Common Waste water and Waste Gas Treatment/Management Systems in the Chemical Sector | July 2014 |
| Reference Document on the Best Available Techniques for Energy Efficiency | February 2009 |
| National BAT notes | Publication date |
| BAT Guidance Note for the Organic Chemical Sector | 2008 |
| BAT Guidance note for Solvent Use in Coating, Cleaning and Degreasing | 2008 |

Images



Fig.1 Typical elastomer (black rubber) supplied by Bruss HQ, Hamburg.



Fig.2 Small extension containing new enclosed rotary drum unit for Gleitmo coating process.



Fig.3 Enclosure and abatement unit for one of the installation's four vents for tempering ovens.

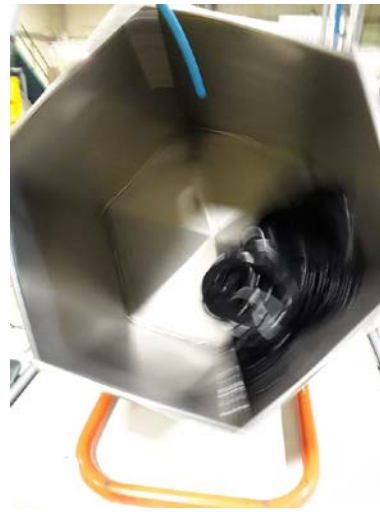


Fig.4 Typical open rotary drum for non-solvent coating (on benchtop).