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Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

The Valspar (UK) Corporation Ltd

**Deeside Packaging Coatings
Parkway
Deeside Industrial Park
Deeside
Flintshire
CH5 2NN**

Permit number

EPR/BU7545IM

Deeside Packaging Coatings

Permit number EPR/BU7545IM

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The Deeside Packaging Coatings facility occupies a 9 acre site on the Deeside Industrial Park, to the North West of Chester and is bordered on all four sides by neighbouring industrial premises. Deeside Packaging Coatings is part of The Valspar Corporation based in Minneapolis, USA.

The process consists of the production of organic chemicals such as plastic materials, polymers, synthetic fibres and cellulose-based fibres under Schedule 1, Part 1, Section 4.1 Part A (a)(viii), Section 6.5 Part B (a)(i) the manufacture of dyestuffs, printing ink and coating materials. This permit also implements the requirements of Chapter V of the Industrial Emissions Directive (Solvent Emissions Activities).

The Deeside Packaging Coatings installation manufactures resins and paints for coating applications for rigid containers and closures primarily for the food and drink industry. For example, two-piece beer and beverage cans, food cans and glass container closures. Currently the Deeside installation can be divided into two distinct activities with associated activities; resin and paint manufacture.

In the resin plant the epoxy resin is gravity fed from the heated bulk tanks to a heated weigh tank and into the reactor where two catalysts are added and heated. Cooling water controls the exothermic reaction. This is termed the epoxy upgrade. From this point the batch is modified to become either solvent or water-based epoxy resins

To manufacture solvent-based epoxy resins the batch receives the addition of carboxylic acid and an amine catalyst, followed by the addition of solvents for dilution before being transferred to let down tanks, then drums or IBCs.

The water based epoxy resins are manufactured by modifying the epoxy upgrade with vinyl monomers, then the addition of peroxide and/or catalyst in the heated reactor. Water cooling and feed rate control the heat of the reaction. Once the reaction is complete the batch is fed into let down tanks, where these water based epoxies then go through an inversion process whereby water and amine salt are added and mixed to form a dispersion. The dispersion is then filtered and transferred to bulk storage or filtered into totes.

Lacquers and coatings containing organic solvents are manufactured within the Coatings Plant. In the manufacture of water and solvent-based lacquers, the resins produced in the resin plant are mixed with organic solvent and water until the required specification is achieved and filled into drums, totes or road tankers. For water and solvent based PVC free lacquers, the resins, organic solvents and water are mixed, ground by a mill to reduce the particle size tested, adjusted and filled into drums, totes or bulk tankers.

Liquid raw materials are supplied in bulk form and smaller drums and solid dry raw materials are delivered in bags. Raw materials are stored within a dedicated warehouse and also externally on the yard with the drum storage in a drum compound on the yard. Liquid raw materials are fed into mixing vessels via a central manifold. Nitrogen blanketing is used to prevent an explosive atmosphere within tanks.

Emissions to air are from 4 abated stacks, and two high flow rate local ventilation points. The main emission to air is ethyl acrylate, which is abated using a scrubber.

Valspar's Environmental Management System is externally certified to ISO 14001 and the installation do not currently take part in any Climate Change Agreement (CCA).

The main emissions to air are volatile organic compounds. The installation also manages two water discharges, one of which is foul water and some process effluent to public sewer, and the other a clean uncontaminated surface water discharge to Shotwick Brook, a local watercourse.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

| Status log of the permit | | |
|--|-------------------------|--|
| Description | Date | Comments |
| Application EPR/BU7545IM | Duly made 31/03/06 | |
| Additional information received (Schedule 4) | 19/10/06 | Response date 24/11/06 |
| Additional information received | 12/03/07 | Chemical names, PRVs, dust extraction, cooling tower, drain release point information and trade effluent consent |
| Additional information received | 13/03/07 | Emission points to atmosphere drawing |
| Additional information received | 14/03/07 | Table: Reconciliation of emission points to atmosphere (PPC v IPC) & consent discharge map |
| Additional information received | 29/03/07 | Emission points to water and sewer |
| Permit determined | 24/05/07 | |
| Application EPR/BU7545IM/V002 | Duly made 16/02/2017 | |
| Additional information received | 16/02/2017 | Technical specifications of an additional Methacrylic Acid tank and associated secondary containment |
| Additional Information received (schedule 5) | 4/10/2017 | Amended application and site diagram |
| Additional Information received (schedule 5) | 6/10/2017 | H1 assessment of new emission points A37 and A38 |
| Variation issued EPR/BU7545IM/V002 | 14/12/2017 | Varied and consolidated permit issued |

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number
EPR/BU7545IM

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BU7545IM/V002 authorising,

The Valspar (UK) Corporation Limited ("the operator"),

whose registered office is

***Avenue One
Station Lane
Whitney
Oxfordshire
OX28 4XR***

company registration number **3049772**

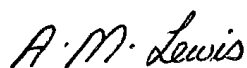
to operate an installation at

***Deeside Packaging Coatings
Parkway
Deeside Industrial Estate
Deeside
Flintshire
CH5 2NN***

to the extent authorised by and subject to the conditions of this permit.

Signed

Date



14/12/2017

Anna Lewis, Principal Permitting Officer

Authorised on behalf of Natural Resources Wales

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) The operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
 - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
 - (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

- 1.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) The operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
 - (b) maintain records of raw materials and water used in the activities;
 - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
 - (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1
 - (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by Natural Resources Wales.
 - (b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.
- 2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.3 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
 - (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.
- 2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Total annual emissions from the emission point(s) set out in tables schedule 3 S3.1, S3.2 and S3.3 of a substance listed in schedule 3 table S3.4 shall not exceed the relevant limit in table S3.4.
- 3.1.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
 - (a) if notified by Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1, S3.2, S3.3
 - (b) annual limits specified in table S3.4
- 3.3.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.
- 3.3.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by Natural Resources Wales.

3.4 Odour

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.4.2 The operator shall:
- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.5 Noise and vibration

- 3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.5.2 The operator shall:
- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by Natural Resources Wales.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.

4.2.2 For the following activities referenced in schedule 1, table S1.1 a report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production /treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to Natural Resources Wales, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 The operator shall submit an annual solvent management plan in order to demonstrate compliance with the requirements of the Industrial Emissions Directive, by 31 January each year in respect of the previous year.

4.3 Notifications

- 4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
- (i) inform Natural Resources Wales,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) in the event of a breach of any permit condition the operator must immediately—
- (i) inform Natural Resources Wales, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
 - (b) any steps taken with a view to the dissolution of the operator.

- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) Natural Resources Wales shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 Natural Resources Wales shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, Natural Resources Wales shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
 - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “without delay”, in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities

| Activity listed in Schedule 1 of the EP Regulations | Description of specified activity | Limits of specified activity |
|--|---|--|
| S4.1(a)(viii) Producing Organic chemicals such as plastic materials (for example polymers, synthetic fibres and cellulose based fibres) | Manufacture of resins | From receipt of raw materials to transfer of products |
| S6.5 Part B (a)(i) Manufacturing or formulating printing ink or any other coating material containing, or involving the use of an organic solvent, where the carrying on of the activity is likely to involve the use of 100 or more tonnes of organic solvents in any 12 month period | Manufacture of coating mixtures, varnishes, inks and adhesives including the Solvent Emissions Activity as described in line 7 Part 1 of Annex VII of the Industrial Emissions Directive 2010/75/EU | From receipt of raw materials to despatch of products. |

Directly Associated Activity

| | | |
|------------------------|--|--|
| Deionised water supply | Provision of deionised water using reverse osmosis | From receipt of raw materials, handling, to use on site. |
| Waste Storage | Provision of waste storage | From generation of waste, storage (including designated storage areas and segregation for generated waste across the site) handling onsite to despatch offsite |
| Hot water supply | 1xapprox 1MW thermal input gas fired boiler | Supply of hot water to the plant and office buildings |
| Cooling water supply | 1xcooling tower | Cooling towers water to supply the resins and plant reactor |
| Nitrogen supply | Provision of nitrogen gas | Nitrogen tank and generating plant supplying the site |
| Coolant supply | 1x chiller | Provision of chilled glycol/water mix to the paint plant mills |
| Compressed air supply | 1xcompressor | Provision of compressed air to the site. |

Table S1.2 Operating techniques

| Description | Parts | Date Received |
|--|---|---------------|
| Application | The response to section 2.0, 3.0, 4.0, 5.0 in the Application, | 30/03/06 |
| Response to Schedule 4 Notice Request issued on 19/10/06 | Response to questions 1, 7, 10, 16, 17, 18, 20, 41, 42, 43 detailing process control. | 24/11/06 |
| Additional information received – chemical names, PRVs, dust extraction, cooling tower, drain release point information and trade effluent consent | The responses numbered 2, 3, 4, 6 and the trade effluent consent | 12/03/07 |

Table S1.2 Operating techniques

| Description | Parts | Date Received |
|---|---|---------------|
| Variation application BU7545IM/V002 | All | 01/02/17 |
| Additional information to add to variation BU7545IM/V002 pertaining to a new tank farm installation | Document "Valspar Deeside Tank Farm Expansion Project Overview" | 16/02/17 |
| Additional information Response to Schedule 5 notice issued 5/5/2017 | Site Plan "VSP_PL_EMP01 Emission points RevB.pdf". locations of all emission points on the installation to water and air. | 04/10/17 |

Table S1.3 Improvement programme requirements

| Reference | Requirement | Date |
|-----------|---|------------|
| IP13 | The Operator shall submit a written plan to Natural Resources Wales for approval. The plan must contain proposals to achieve BAT through the installation of measures to protect secondary containment from attack by acids or any other substance stored therein, which may cause the failure of said secondary containment. The plan must contain dates for the implementation of individual measures. The Notification requirement of condition 2.4.1 will be deemed to have been complied with on submission of the plan. | 31/03/2018 |

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels

| Raw materials and fuel description | Specification |
|------------------------------------|--|
| Gas oil | Less than 0.1% by mass sulphur content. ¹ |

¹Reference: *The Sulphur Content of Liquid Fuels (England and Wales) Regulations 2000* (SI 2000 No. 1460) expressed as percentage by mass.

Schedule 3 – Emissions and monitoring

| Table S3.1 Point source emissions to air – emission limits and monitoring requirements | | | | | | |
|--|---|---------------------------------------|------------------------|------------------|----------------------|-------------------------------|
| Emission point ref. & location | Source | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method |
| A1 [Point A1 on site plan in Schedule 7] | Resin Plant Reactor Scrubber | Total Class B VOCs as carbon | 2000 g/h | 1 hour | Quarterly | BS EN 13649 |
| | | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | Quarterly | BS EN 13649 |
| A2 [Point A2 on site plan in schedule 7] | Resin Plant Reactor Dust Filter | Total Class B VOCs as carbon | 2000 g/h | 1 hour | Quarterly | BS EN 13649 |
| | | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | Quarterly | BS EN 13649 |
| | | Particulates | 20 mg/m ³ | 1 hour | Quarterly | BS 3405:1983 |
| A3 [Point A3 on site plan in schedule 7] | Resin Plant Ethyl acrylate scrubber | Total Class B VOCs as carbon | 2000 g/h | 1 hour | Quarterly | BS EN 13649 |
| | | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | Quarterly | BS EN 13649 |
| A5 [Point A5 on site plan in schedule 7] | Paint Plant Vessels | Total VOCs | See note 1 | 1 hour | Annual | BS EN 13649 |
| A6 [Point A6 on site plan in schedule 7] | DCE dust filter (Coatings Plant) | Particulates | 20 mg/m ³ | 1 hour | Quarterly | BS 3405:1983 |
| A7 to A36 [Points A7-A36 on site plan in schedule 7] | Various Dust Collection Equipment (DCE & Local Exhaust Ventilation (LEV) units, storage and plant tanks | No parameters set | No limit set | N/A | N/A | N/A |

| Table S3.1 Point source emissions to air – emission limits and monitoring requirements | | | | | | |
|--|--|---------------------------------------|------------------------|------------------|----------------------|-------------------------------|
| Emission point ref. & location | Source | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method |
| A37 [Point A37 on site plan in schedule 7] | Coatings Plant – extraction on Product Filling | Total VOCs | See note 1 | 1 hour | Annual | BS EN 13649 |
| A38 [Point A38 on site plan in schedule 7] | Resin Plant – extraction on Product Filling | Total Class B VOCs as carbon | 2000 g/h | 1 hour | Quarterly | BS EN 13649 |
| | | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | Quarterly | BS EN 13649 |
| A39 to A45 [Points A39-A45 on site plan in schedule 7] | Various building ventilation vents, laboratory ventilation vents and methacrylic acid tank | No parameters set | No limit set | N/A | N/A | N/A |

Note 1: Method for determining annual solvent emissions should be an appropriate calculation as described in Part 7 of IED Annex VII (Solvent Management Plan). The limit for the product of the calculation is detailed in table 3.4 below.

| Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements | | | | | | |
|--|--|------------------|--------------------|------------------|----------------------|-------------------------------|
| Emission point ref. & location | Source | Parameter | Limit (incl. unit) | Reference Period | Monitoring frequency | Monitoring standard or method |
| S1 on site plan in schedule 7 emission to Shotwick Brook | Clean and Uncontaminated surface water | No parameter set | No limit set | N/A | N/A | N/A |

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements

| Emission point ref. & location | Source | Parameter | Limit (incl. Unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|--|--|------------------|---------------------------|-------------------------|-----------------------------|--------------------------------------|
| F1 on site plan in schedule 7 emission to Chester Sewage Treatment Works | Site Effluent from foul and process effluent | No Parameter set | No Limit Set | N/A | N/A | N/A |

Table S3.4 Annual limits

| Substance | Medium | Limit (including unit) |
|--------------------------|---------------|--|
| Annual solvent emissions | Air | 3% of organic solvent input ¹ |

¹ Applicable to the manufacture of coatings. Compliance is achieved if the total emission from the activity expressed as a percentage of the organic solvent input to the activity is equal to or less than the total emission limit value.

Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

| Table S4.1 Reporting of monitoring data | | | |
|--|---|-------------------------|--|
| Parameter | Emission or monitoring point/reference | Reporting period | Period begins |
| Class B VOCs | A1, A2, A3, A38 | Quarterly | 1 January, 1 April, 1 July, 1 October respectively each year |
| Class A VOCs | A1, A2, A3, A38 | Quarterly | 1 January, 1 April, 1 July, 1 October respectively each year |
| Particulates | A2, A6 | Quarterly | 1 January, 1 April, 1 July, 1 October respectively each year |

| Table S4.2 Annual production/treatment | |
|---|--------------|
| Parameter | Units |
| - | - |

| Table S4.3 Performance parameters | | |
|--|--------------------------------|----------------|
| Parameter | Frequency of assessment | Units |
| Water usage | Annual | m ³ |
| Energy usage | Annual | MWs |

| Table S4.4 Reporting forms | | |
|-----------------------------------|--|---------------------|
| Media/parameter | Reporting format | Date of form |
| Air | Form air 1 or other form as agreed in writing by Natural Resources Wales | DD/MM/YY |
| Water usage | Form water usage 1 or other form as agreed in writing by Natural Resources Wales | DD/MM/YY |
| Energy usage | Form energy 1 or other form as agreed in writing by Natural Resources Wales | DD/MM/YY |
| Other performance indicators | Form performance 1 or other form as agreed in writing by Natural Resources Wales | DD/MM/YY |

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

| | |
|--------------------------------|--|
| Permit Number | |
| Name of operator | |
| Location of Facility | |
| Time and date of the detection | |

(a) Notification requirements for any activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment

| To be notified within 24 hours | |
|--|--|
| Date and time of the event | |
| Reference or description of the location of the event | |
| Description of where any release into the environment took place | |
| Substances(s) potentially released | |
| Best estimate of the quantity or rate of release of substances | |
| Measures taken, or intended to be taken, to stop any emission | |
| Description of the failure or accident. | |

(b) Notification requirements for the breach of a permit condition

| To be notified within 24 hours | |
|---|--|
| Emission point reference/ source | |
| Parameter(s) | |
| Limit | |
| Measured value and uncertainty | |
| Date and time of monitoring | |
| Measures taken, or intended to be taken, to stop the emission | |

Time periods for notification following detection of a breach of a limit

| Parameter | Notification period |
|-----------|---------------------|
| | |
| | |
| | |

| | |
|---|--|
| (c) In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment: | |
| To be notified within 24 hours | |
| Description of where the effect on the environment was detected | |
| Substances(s) detected | |
| Concentrations of substances detected | |
| Date of monitoring/sampling | |

Part B - to be submitted as soon as practicable

| | |
|--|--|
| Any more accurate information on the matters for notification under Part A. | |
| Measures taken, or intended to be taken, to prevent a recurrence of the incident | |
| Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission | |
| The dates of any unauthorised emissions from the facility in the preceding 24 months. | |

| | |
|------------------|--|
| Name* | |
| Post | |
| Signature | |
| Date | |

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by Natural Resources Wales under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit..

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“hazardous property” has the meaning in Annex III of the Waste Framework Directive

“hazardous waste” has the meaning given in the Hazardous Waste (Wales) Regulations 2005 (as amended)

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“Solvent Emissions Activity” means an activity to which Chapter V of the Industrial Emissions Directive applies;

“Waste code” means the six digit code referable to a type of waste in accordance with the list of wastes established by Commission Decision 2000/532/EC as amended from time to time (the ‘List of Wastes Decision’) and in relation to hazardous waste, includes the asterisk.

“year” means calendar year ending 31 December.

“VOC” means Volatile Organic Compound

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

Permit Number: EPR/BU7545IM

Operator: The Valspar (UK) Corporation Ltd

Facility: Deeside Packaging Coatings

Form Number: Air1 / 11/12/17

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

| Emission | | | | | | | |
|----------------|---------------------------------------|-------------|------------------|-----------------------|----------------------------|--------------------------------------|----------------------------|
| Emission Point | Substance / Parameter | Limit Value | Reference Period | Result ^[1] | Test Method ^[2] | Sample Date and Times ^[3] | Uncertainty ^[4] |
| A1 | Total Class B VOCs as carbon | 2000g/h | 1 hour | | BS EN 13649 | | |
| A1 | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | | BS EN 13649 | | |
| A2 | Total Class B VOCs as carbon | 2000g/h | 1 hour | | BS EN 13649 | | |
| A2 | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | | BS EN 13649 | | |
| A2 | Particulates | 20 mg/m3 | 1 hour | | BS 3405:1983 | | |
| A3 | Total Class B VOCs as carbon | 2000 g/h | 1 hour | | BS EN 13649 | | |
| A3 | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | | BS EN 13649 | | |
| A6 | Particulates | 20 mg/m3 | 1 hour | | BS 3405:1983 | | |
| A38 | Total Class B VOCs as Carbon | 2000 g/h | 1 hour | | BS EN 13649 | | |
| A38 | Total Class A VOCs as individual VOCs | 100 g/h | 1 hour | | BS EN 13649 | | |

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed
(Authorised to sign as representative of Operator)

Date.....

Permit Number: EPR/BU7545IM

Operator: The Valspar (UK) Corporation Ltd

Facility: Deeside Packaging Coatings

Form Number: WaterUsage1 / 11/12/17

Reporting of Water Usage for the year XXXX

| Water Source | Usage (m ³ /year) | Specific Usage (m ³ /unit output) |
|-------------------|---------------------------------|---|
| Mains water | | |
| | | |
| TOTAL WATER USAGE | | |

Operator's comments :

Signed
(authorised to sign as representative of Operator)

Date.....

Permit Number: EPR/BU7545IM

Operator: The Valspar (UK) Corporation Ltd

Facility: Deeside Packaging Coatings

Form Number: Energy1 / 11/12/17

Reporting of Energy Usage for the year XXXX

| Energy Source | Energy Usage | | Specific Usage (MWh/unit output) |
|---------------|--------------|-------------------------|-------------------------------------|
| | Quantity | Primary Energy (MWh) | |
| | | | |
| Electricity * | MWh | | |
| Natural Gas | MWh | | |
| Gas Oil | tonnes | | |
| | | | |
| TOTAL | - | | |

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments :

Signed
(Authorised to sign as representative of Operator)

Date.....