

Surrender notice with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Vertellus Specialties UK Limited

Vertellus Specialties UK Limited
Seal Sands Road
Seal Sands
Cleveland
TS2 1UB

Surrender application number

EPR/BU0311IX/S007

Permit number

EPR/BU0311IX

Vertellus Specialties UK Limited

Permit number EPR/BU0311IX

Introductory note

This introductory note does not form a part of the notice.

The following notice gives notice of the surrender in part of an environmental permit.

Any changes made as a result of the part surrender are set out in the schedules.

Vertellus Specialties UK Limited operate a chemical manufacturing facility on a largely industrialised area at Seal Sands, approximately 1km from the River Tees, producing fine organic and speciality chemicals for a range of industrial uses including; pharmaceutical, photographic, oil extraction, plastics, polymers and agrochemicals.

These chemical production activities are regulated under the following scheduled activities under the Environmental Permitting (England and Wales) Regulations 2016:

- Section 4.1 A (1) (a) (i) – production of organic compounds such as hydrocarbons.
- Section 4.1 A (1) (a) (ii) – production of organic compounds containing oxygen;
- Section 4.1 A (1) (a) (iii) – production of organic compounds containing sulphur;
- Section 4.1 A (1) (a) (iv) – production of organic compounds containing nitrogen;
- Section 4.1 A (1) (a) (v) – production of organic compounds containing phosphorus;
- Section 4.1 A (1) (a) (vi) – production of organic compounds containing halogens.

Some products are manufactured on a continual basis whilst others are produced in campaigns, or in limited batches. Three major chemical products are manufactured throughout the year in relatively large quantities, which are:

- DCDPS (4, 4'-Dichlorodiphenyl sulfone), a plastics monomer;
- Topanol, a plastics antioxidant; and
- SASMAC (sodium allyl sulphonate, maleic anhydride cyanomer), an oil extraction treatment chemical.

Additional to these are a changing portfolio of chemical products manufactured in quantities from tens of kilogrammes per year, to hundreds of tonnes per year. Production is undertaken in seven process buildings, which include; two multi-purpose buildings, a dedicated sulphone building, a kilo facility, a pilot plant and a plant dedicated to pyridine and its derivatives.

The operator is authorised to manufacture caprylene at the site. The production of caprylene by the reaction of capryl alcohol with a catalyst is conducted on a campaign basis largely using existing equipment and infrastructure within Plant 4. The distillation column is a significant addition to the infrastructure in Plant 4.

Gaseous emissions from the production process are directed through existing water scrubber vents. All trade effluents from the site are processed in the on-site Effluent Blending Plant (EBP) where they are mixed with effluents from other areas of the site on a batch-wise basis.

This application allows the surrender of the on-site biological effluent treatment plant (BTP) activity. The on-site biological effluent treatment plant is fully decommissioned. Effluent generated from the site will be treated in the site's Effluent Blending Plant (EBP) prior to disposal at the Northumbrian Water Limited (NWL) Wastewater Treatment Works (WWtW).

Vertellus has an agreement with Northumbrian Water Limited (NWL) to discharge site's effluent (trade effluent and rainwater) at a maximum flow rate of 5m³/hr or 120m³/day. This agreement authorises discharge of the site's effluent to the NWL WWtW through a newly constructed pipeline.

The site's trade effluent is collected, blended and adjusted for pH in tanks T80 and T81 before discharge to NWL Bran Sands WWtW via tanks T85, T86 and T87. The effluent in the blending plant will be adjusted for pH prior to discharge to the Bran Sands WWtW via a newly constructed pipeline. The volume of trade

effluent produced on site that requires pH adjustment will not exceed 50 cubic metres per day. Typical daily effluent that requires pH adjustment is in the region of 33m³/day.

Rainwater and surface run-off water are collected and stored separately in tanks T8 and T88 prior to discharge through T85, T86 and T87. All effluent at the site (including rainwater) is channelled through the same route. There are procedures for handling, segregation, analysis and recording of the site's trade effluent and rainwater/surface run-off water.

The effluent plant and storage tanks are automated and fitted with high level alarms to minimise any spillages and overflow. The storage area is also fully concreted and bunded with blind sumps to contain any spillages and leakages.

The National Grid Reference for the site is NZ5369324704. It is located less than 1km from the Teesmouth and Cleveland Coast Special Protection Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI).

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application BU0311 (EPR/BU0311IX/A001)	Received 24/03/03	
Additional information received	Requested 21/07/03	Addressed by site protection and monitoring plan and conditions in the permit.
Additional information received	22/07/03	Response to request for information dated 11/07/03.
Additional information received	24/10/03	Additional information regarding the multi-product protocol.
Additional information received	24/11/03	Response to request for information dated 21/11/03.
Permit determined BU0311 (EPR/BU0311)	26/11/03	Permit issued.
Application for variation	Received 25/05/04	
Variation determined BP3237 (EPR/BU0311IX/V002)	31/07/04	Permit not consolidated.
Environment Agency implemented change	10/03/05	Environment Agency led change as a result of investigation into loss of containment involving DCPDS process.
Variation determined ZP3932SB (EPR/BU0311IX/V003)	30/04/05	Permit not consolidated.
Application EPR/BU0311IX/V004	26/05/10	
Additional information received	26/07/10	Response to request for information dated 26/07/10.
Variation determined EPR/BU0311IX/V004	25/08/10	Varied permit issued.
Application BU0311IX/V005 (variation and consolidation)	Duly made 12/11/18	Application to vary and update the permit to modern conditions to add production of caprylene.
Response to Schedule 5 Notice dated 04/01/19	31/01/19	Additional information received on: <ul style="list-style-type: none"> - Discharges to air, water, ground and groundwater; - Containment; - Storage and handling of raw materials, products and wastes.

Status log of the permit		
Description	Date	Comments
Response to Schedule 5 Notice dated 04/01/19	06/02/19	Additional information received on: - Vertellus effluent specification for Bran Sands Effluent Treatment Works; - Summary of borehole monitoring data; Work request for addition of capryl alcohol & caprylene to borehole monitoring regime.
Additional information received	27/02/19	Submission of revised site plans/drawings.
Response to Schedule 5 Notice dated 18/02/19	19/02/19	Additional information received on storage and containment of capryl alcohol raw material.
Additional information received	27/02/19	Additional information received on projects for future storage of capryl alcohol.
Variation determined EPR/BU0311IX (Billing Ref: QP3635QN)	11/04/19	Varied permit issued.
Application EPR/BU0311IX/S007 (variation and consolidation with EPR/VP3809PL)	Duly made 11/10/19	Application to vary and consolidate environmental permits EPR/BU0311IX and EPR/VP3809PL.
Response to the Schedule 5 Notice dated 13/01/2020	27/01/20	Response to questions 1 to 8 of the Schedule 5 Notice providing additional information in support of the H1 assessment, revised site layout plan, effluent management, storage and channelling procedure, design/construction specifications of some of the tanks and procedures for inspection and maintenance of the pollution control equipment.
	28/01/20	Document containing information on the flow and concentrations of the substances used in the H1 assessment.
	07/02/20	Email containing revised drawing showing effluent storage areas and drainage/discharge routes, procedures for storage of effluent, inspection and maintenance of the pollution control equipment and revised H1 screening.
Response to the Schedule 5 Notice dated 25/02/2020	05/03/20	Email containing revised H1 screening.
Additional information	12/03/20	Document titled "Vertellus Effluent Treatment at Bran Sands – Explanation"
Additional information	10/06/20	Email containing document titled "Operating response Rev2" and amended site plan showing monitoring points.
Variation determined EPR/BU0311IX Billing reference: AP3803BM	17/06/20	Varied and consolidated permit issued.
Part surrender application EPR/BU0311IX/S007	Duly made 18/09/19	Application to surrender the operations of the on-site biological effluent treatment plant (BTP) activity.
Part surrender determined EPR/BU0311IX Billing reference: AP3003BC	17/06/20	Part surrender complete.

End of introductory note

Notice of surrender

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 25 of the Environmental Permitting (England and Wales) Regulations 2016 accepts the surrender in part of

Permit number

EPR/BU0311IX

Issued to

Vertellus Specialties UK Limited (“the operator”)

whose registered office is

**St Ann's Wharf
112 Quayside
Newcastle Upon Tyne
NE1 3DX**

company registration number 02864354

to operate a regulated facility at

**Vertellus Specialties UK Limited
Seal Sands Road
Seal Sands
Cleveland
TS2 1UB**

to the extent set out in the schedules.

This notice shall take effect from 17/06/2020.

Name	Date
Claire Roberts	17/06/2020

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None.

Schedule 2 – conditions to be amended

The following conditions are amended as detailed, as a result of the application made by the operator.

- Table S1.1 as referenced in Condition 2.1.1 has been amended to remove Section 5.4 Part A(1)(a)(i) activity - biological treatment of on-site effluent from the permit.

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	S4.1 A (1) (a) (i) Producing organic chemicals such as hydrocarbons.	Production of organic chemicals e.g. caprylene.	From receipt of raw materials to despatch of finished product including all reaction and treatment stages in between. Plant utilities are part of the permitted process including boilers 1 & 2, vacuum systems, heating and cooling systems, over pressure protection systems, thermal oxidiser and waste handling. The effluent blending plant (EBP) is included.
AR2	S4.1 A (1) (a) (ii) Producing organic chemicals containing oxygen.	Production of organic chemicals e.g. Topanol.	
AR3	S4.1 A (1) (a) (iii) Producing organic chemicals containing sulphur.	Production of organic chemicals e.g. Sasmac, Cyguard and DCDPS.	
AR4	S4.1 A (1) (a) (iv) Producing organic chemicals containing nitrogen.	Production of organic chemicals e.g. pyridine and derivatives.	
AR5	S4.1 A (1) (a) (v) Producing organic chemicals containing phosphorous.	Production of organic chemicals e.g. HEMA PC (2-Methacryloyloxyethyl-2'-(trimethylammoniummethyl) phosphate, inner salt).	
AR6	S4.1 A (1) (a) (vi) Producing organic chemicals containing halogens.	Production of organic chemicals e.g. CSAP (4-chloro-3-sulphonamidopyridine).	
Directly Associated Activity			
AR7	Storage and handling of raw materials.	Storage and handling of raw materials in bulk storage tanks, drums, IBCs, bags and other containers.	From receipt of raw materials to transfer to use within process areas.
AR8	Storage and handling of waste materials.	Storage and handling of solid and liquid wastes from individual manufacturing processes.	From generation of wastes to storage and transfer or disposal off-site.
AR9	Effluent blending	Blending of effluents in the EBP from various manufacturing processes on site against agreed	From generation of effluents to transfer and treatment at the EBP.

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
		recipes to produce blended effluent for disposal at the Bran Sands WWtW.	Treatment by blending and pH adjustment limited to <50m ³ /day. Blending /storage in tanks T80, T81, T65 - 70 prior to discharge to the Bran Sands WWtW via tanks T85, T86 and T87. No mixing of site's generated trade effluent with rainwater and/or surface runoff water prior to analysing and recording the volume.
AR10	Effluent transfer	Handling and discharge of site's generated trade effluent.	From the EBP tanks to the Bran Sands Effluent Treatment Works via pipeline. No mixing of site's generated trade effluent with rainwater and/or surface runoff water prior to analysing and recording the volume.
AR11	Storage and transfer	Storage, handling and discharge of uncontaminated rainwater and surface run-off waters.	Storage in tanks T8 and T88 prior to discharge to the Bran Sands WWtW via tanks T85, T86 and T87. No mixing of site's generated trade effluent with rainwater and/or surface runoff water except where authorised under AR10 and AR11.

Schedule 3 – conditions to be added

None.