



APPLICATION FOR AN ENVIRONMENTAL PERMIT VARIATION UNDER THE ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016 (AS AMENDED)

**ENVIRONMENTAL RISK ASSESSMENT** 

# **Danish Crown**

DANISH CROWN UK LIMITED, EBENEZER, BUGLE, ST AUSTELL, CORNWALL

ECL Ref: DCUK.01.01/ERA Version: Issue 1 November 2024





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# **ACRONYMS/TERMS USED IN THE TEXT**

CCTV	Closed Circuit Television
EA	Environment Agency
ECL	Environmental Compliance Limited
ERA	Environmental Risk Assessment
FRA	Fire Risk Assessment
LNR	Local Nature Reserve
MAGIC	Multi-Agency Geographic Information for the Countryside
MCERTS	Monitoring Certification Scheme
NGR	National Gid Reference
NNR	National Nature Reserve
OMP	Odour Management Plan
OS	Ordnance Survey
PPMR	Planned Preventative Maintenance Regime
RAMSAR	Ramsar Convention on Wetlands of International Importance
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
The Installation	Danish Crown Bulge Pork Manufacturing Site





#### 1. INTRODUCTION

#### 1.1. Overview

- 1.1.1. Environmental Compliance Limited ("ECL") have been commissioned by Danish Crown UK Limited ("DCUK") to prepare an Environmental Risk Assessment ("ERA") to form part of the Environmental Permit ("EP") variation application at their pork manufacturing site, hereafter referred to as "the Installation", located in Ebenezer, Bugle, St Austell, Cornwall, PL26 8RR.
- 1.1.2. The Permit variation application proposes the following:
  - addition of a new Schedule 1 Activity to capture the biological treatment as part of the on-site effluent treatment prior to discharge to S1;
  - the correction and amendment of Point Source Emission Points to Air to reflect the current arrangements at the Installation and relevant associated Directly Associated Activities.
- 1.1.3. There will be no change to the Directly Associated Activities ("DAAs") as a result of adding the proposed Listed Activity in this variation application.
- 1.1.4. An ERA has been undertaken in accordance with the relevant requirements of the Environment Agency ("EA") online environmental risk assessment guidance<sup>1</sup> in order to:
  - identify potential risks that site operations may present to the environment;
  - screen out any insignificant risks;
  - assess potentially significant risks in detail; and
  - decide on appropriate control measures.
- 1.1.5. Accordingly, the assessment has addressed the potential risks relating to the operation of the proposed Installation, namely:
  - amenity risks (e.g. point source emissions to sewer, fugitive emission to air and water (sewer), odour, noise, pests etc): and
  - accidents (e.g. fire, loss of containment, loss of power, vandalism).

<sup>&</sup>lt;sup>1</sup> EA online guidance – 'Risk assessments for your environmental permit' Available at <u>https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit</u>, accessed June 2024.





#### 2. IDENTIFICATION OF RECEPTORS

#### 2.1. Site Setting

- 2.1.1. The Installation is located in Ebenezer, Bugle, St Austell, Cornwall, PL26 8RR. The Installation covers an area of approximately 2.2 hectares.
- 2.1.2. The Site Location Plan (DCUK.01.01-01) details the Environmental Permit Boundary (outlined in green) and is provided in Section 3 of this variation application submission.
- 2.1.3. Figure 1 provides the indicative location of the Installation (red outline) within the context of the surrounding environment.



#### Figure 1: Indicative Site Location

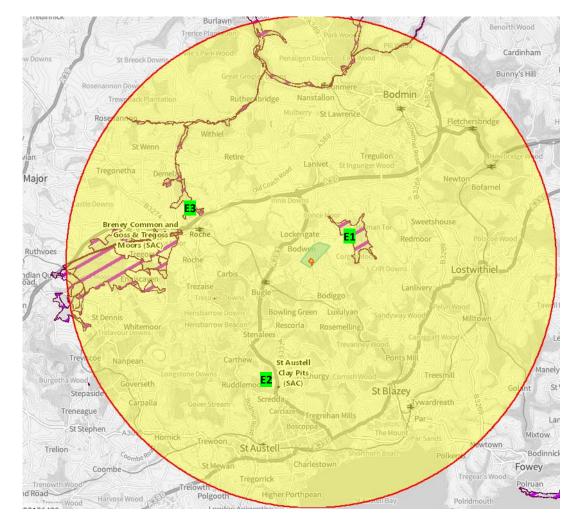
- 2.1.4. The Installation's site setting is predominately rural with open space and agricultural land use. Solar panel farms are located to the north-west and south-east.
- 2.1.5. Small residential hamlets of Bodwen, Lockengate and Tredinnick Pits are located approximately 255m north west, 0.88km north east and 1.1km south east respectively. The village of Bilberry is located approximately 1.04km west of the Installation.





#### 2.2. Potentially Sensitive Ecological Receptors

- 2.2.1. A review of the area using the Multi-Agency Geographic Information for the Countryside<sup>2</sup> ("MAGIC") online tool identified that the Installation is not located within 10km of any Ramsar Convention on Wetlands of International Importance ("RAMSAR").
- 2.2.2. The Installation is located within 10km of three Special Area of Conservation ("SAC") designated sites. The location of the SACs relative to the Installation are shown in Figure 2 below. The Installation is also located within 10km of one Special Protection Area ("SPA"), the location of which is shown in Figure 3.



#### Figure 2: SAC identified within 10km of the Installation Boundary

<sup>&</sup>lt;sup>2</sup> Department for Environment, Food and Rural Affairs ("DEFRA") MAGIC Online Mapping Tool, available at: <u>https://magic.defra.gov.uk/magicmap.aspx</u>, accessed March 2024.



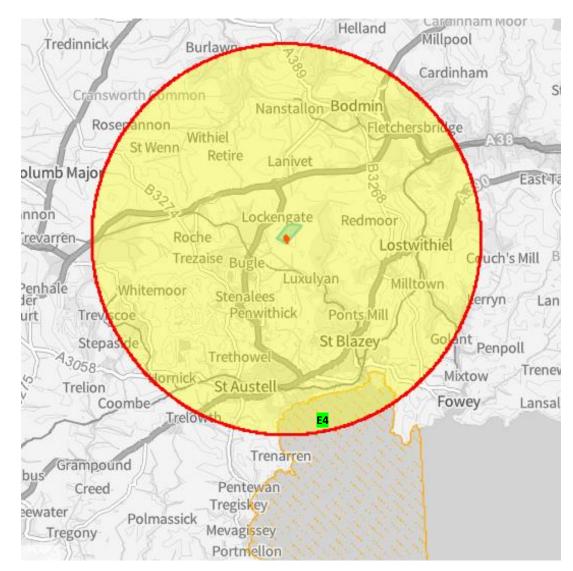


Figure 3: SAC identified within 10km of the Installation Boundary

2.2.3. The Ordnance Survey ("OS") National Grid Reference ("NGR") of the identified ecological receptors together with the direction and distance at the nearest point from the Installation boundary is provided in Table 1.

Ref	Description	Designation	Easting	Northing	Distance from boundary (km)	Direction
E1	Breney Common and Goss and Tregoss Moors	SAC	205275	060415	1.6	E
E2	St Austell Clay Pits	SAC	199621	058630	4.2	SW
E3	River Camel	SAC	199091	062071	4.8	NW
E4	Falmouth Bay to St Austell Bay	SPA	204158	051388	8.4	SW

Table 1: SAC & SPA identified within 10km of the Installation Boundary
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- 2.2.4. No National Nature Reserves ("NNR") or Local Nature Reserves ("LNR") are located within 2km of the Installation boundary.
- 2.2.5. Two Sites of Special Scientific Interest ("SSSI") (consisting of discrete areas) were identified within 2km of the proposed Installation boundary as shown in Figure 4.



#### Figure 4: SSSI identified within 2km of the Installation Boundary

2.2.6. The OS NGR of the identified ecological receptors together with the direction and distance from the Installation boundary at the nearest point is provided in Table 2.

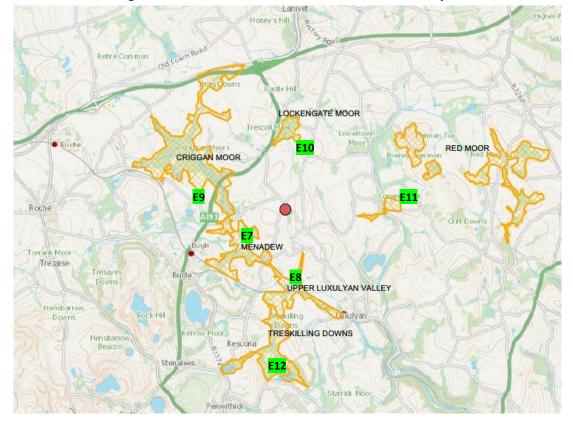
Ref	Description	Designation	Easting	Northing	Distance from boundary (km)	Direction
E5	Mid Cornwall Moors	SSSI	202800	059726	0.6	W
E6	Luxulyan Quarry	SSSI	205165	059180	1.7	E

Table 2: SSSI identified within	2km of the Installation Boundary
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2.2.7. Six Local Wildlife Sites ("LWS") have also been identified within 2km of the Installation. These are shown in Figure 5 and the OS NGR of the identified ecological receptors together with the direction and distance from the Installation boundary at the nearest point is provided in Table 3.



#### Figure 5: LWS within 2km of the Installation Boundary

Ref	Description	Designation	Easting	Northing	Distance from boundary (km)	Direction
E7	Menadew	LWS	202583	059282	0.6	SW
E8	Upper Luxulyan Valley	LWS	203932	059356	0.6	S
E9	Criggan Moor	LWS	202035	061010	0.8	NW
E10	Lockengate Moor	LWS	203587	061793	1.2	N
E11	Red Moor	LWS	205270	060044	1.2	NE
E12	Treskilling Downs	LWS	203344	057624	2.1	S

- 2.2.8. In addition to the above, other potentially sensitive land uses within 1km of the Installation were also considered. A review of the area using the MAGIC tool indicated that none of the following sensitive land uses are located within a 1km radius of the Installation:
  - Ancient Woodland;
  - Scheduled Monuments;
  - World Heritage Sites;
  - Areas of Outstanding Natural Beauty;
  - Groundwater Source Protection Zones; or





- Nitrate Vulnerability Zones.
- 2.2.9. The EA's Nature and Heritage Conservation Report provided as part of pre-application advice is contained in Appendix I.

#### 2.3. Potentially Sensitive Human Receptors

2.3.1. Potential sensitive human receptors within 1km of the boundary have been identified and are displayed in Figure 6 with nearest distances to the Installation boundary and direction given in Table 4.



Figure 6: Potentially Sensitive Human Receptors within 1km of the Installation Boundary



Ref	Name	Receptor Type	Easting	Northing	Distance from Boundary (km)	Direction
H1	Property on unnamed lane	Residential	203602	060337	0.04	NE
H2	Property on unnamed lane	Residential	203804	060037	0.11	SE
H3	Property on unnamed lane	Residential	203668	060445	0.14	NE
H4	Properties in Bodwen	Residential	203418	060499	0.25	NW
H5	Property on Unnamed Road	Residential	203990	059989	0.30	SE
H6	Hillside Cottage and Surrounding Housing	Residential	203417	059677	0.37	SW
H7	Unnamed Road	Commercial	203310	059636	0.47	SW
H8	Higher Menadew Farm Cottages	Commercial (Holiday Rentals)	203259	059683	0.48	SW
H9	Property on Unnamed Road	Residential	203920	059474	0.56	SE
H10	Fig Tree Cottage	Commercial (Holiday Rental)	203193	059642	0.56	SW
H11	Minorca Lane	Commercial	202898	060174	0.59	W
H12	Lower Menadue	Commercial	203724	059393	0.59	S
H13	Sheds/ Outhouses	Commercial	204075	060686	0.60	NE
H14	Property in Lower Menadue	Residential	203832	059331	0.64	S
H15	The Cottage Canna/ Gloweth nr Bulge	Residential	203325	059399	0.66	SW
H16	Property on outskirts of Lockengate	Residential	203267	061080	0.85	NE
H17	Property off Minorca Lane	Residential	202790	060068	0.72	W
H18	Property named Chytan	Commercial /Residential	204091	059419	0.72	SE
H19	Minorca Lane	Commercial	202735	060135	0.73	W
H20	Housing off Minorca Lane	Residential	202756	059968	0.75	W
H20	Canna Farm Campsite	Commercial	203463	059258	0.76	SW
H22	Minorca Lane	Commercial	202725	060061	0.78	W

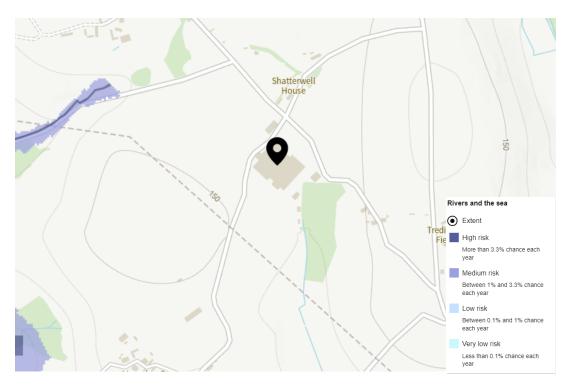
#### Table 4: Potentially Sensitive Human Receptors within 1km of the Installation Boundary





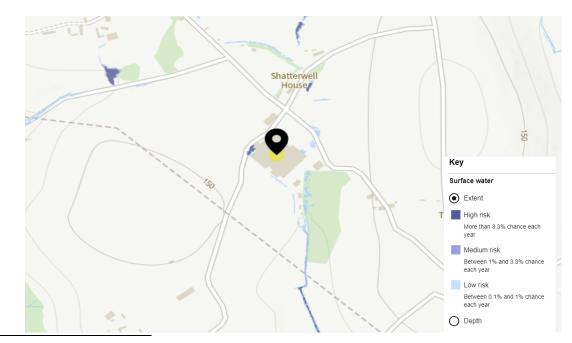
#### 2.4. Risk of Flooding

2.4.1. As shown on the EA's Long Term Flood Risk Map<sup>3</sup> provided in Figure 7, the Installation is at very low risk of flooding from rivers and seas. Very low risk is defined as having less than 0.1% chance of flooding annually. As shown in Figure 8, the Installation is also at very low risk of flooding from surface waters and small watercourses.



#### Figure 7: Long Term Flood Risk Map – Rivers and the Sea





<sup>3</sup> EA's Long Term Flood Risk maps, available at: <u>https://www.gov.uk/check-long-term-flood-risk</u>, accessed June 2024.

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#### 3. IDENTIFICATION OF THE RISKS

#### 3.1. Amenity Risks

- 3.1.1. Taking into account the nature of the activities that will be undertaken at the Installation, the main amenity risks identified as part of this variation are as follows:
  - fugitive emissions to air (odour);
  - point source emissions to sewer;
  - fugitive emissions to surface water and sewer;
  - noise and vibration; and
  - pests.
- 3.1.2. As the proposed activities do not involve any point source emissions i.e. process contributions to land or surface water, no assessment has been undertaken. Furthermore, all proposed activities will be undertaken in areas sealed with an impervious barrier to prevent a pollution pathway. Consequently, no further assessment has been undertaken for fugitive emissions to land or groundwater.

#### 3.2. Accident Risks

- 3.2.1. The main potential accident risks have been identified as:
  - fire;
  - loss of power / system failure;
  - loss of containment of potentially polluting materials; and
  - vandalism.





#### 4. ASSESSMENT OF THE RISKS

#### 4.1. Methodology

- 4.1.1. The risk assessments have been undertaken using the following approach for amenity and accident risks:
  - identification of hazards associated with the risk that have the potential to cause harm;
  - identification of potential receptors i.e. what is the risk (for the purposes of this assessment, typical potential receptors have been identified)?
  - pathway, i.e. how can the hazard get to the receptor?
  - risk management measures employed to reduce the risk to an acceptable level;
  - probability of exposure i.e. how likely is this contact?
  - consequence i.e. what is the harm that can be caused? and
  - assessment of overall risk.
- 4.1.2. The assessments for the amenity and accident risks identified above are presented in Tables 5 and 6 respectively.



Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Emissions to Air						
Fugitive Emissions to Air	-					
	Human population in the surrounding area	Release to Air. Installation is close enough for potential odour emissions to reach potentially sensitive receptors.	<ul> <li>An updated Odour Management Plan ("OMP") has been prepared to incorporate the proposed activities and is contained in Section 8. This document should be read in conjunction with this ERA.</li> <li>General odour management measures include: <ul> <li>regular cleaning and inspection to prevent the buildup of odorous residues;</li> <li>equipment subject to regular maintenance and servicing as per the planned preventative maintenance programme ("PPMR");</li> <li>daily odour monitoring via sniff testing by the Environment, Health and Safety ("EH&amp;S") department;</li> <li>relevant personnel trained in odour management procedures and all personnel will be trained in the prompt reporting of any abnormal noise so it may be rectified.</li> </ul> </li> </ul>	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors	Possible odour nuisance	Not significant if risk management measures are strictly adhered to
			<ul> <li>Odour management measures specific to the function of the ETP:</li> <li>Holding tanks levels can be reduced during elevated ambient temperatures to reduce the retention time and the possibility of decaying organic matter;</li> <li>dissolved oxygen levels can be monitored and blower times increased to maintain sufficient dissolved oxygen levels within the tanks; and</li> <li>emptying of the sludge tanks are undertaken two times per week to reduce build up. This is only undertaken during normal working hours.</li> </ul>			

#### Table 5: Amenity Risk Assessment



Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Emissions to Wate	er					
Point Source Emis	sions to Water – Foul S	Sewer				
Process Effluent	South West Water ("SWW") wastewater	Via foul drainage system.	The proposed effluent treatment system at the Installation have been designed to improve the way in which effluent is managed at the Installation.	Low	Contamination of off-site wastewater	Not significant if risk
	treatment plant and subsequently controlled waters.		There will be no changes to the discharge point location or volumes or parameters discharged. Consequently, a H1 risk assessment to sewer is not required.	management measures should prevent unauthorised releases from	treatment plant and subsequent contamination of controlled	management measures are strictly adhered to
			DCUK will monitor emissions to foul sewer in accordance with Environmental Permit and Trade Effluent Consent requirements. Additionally, periodic sampling and analysis of effluent to be discharged from the Installation will be undertaken by SWW to ensure all limits are adhered to.	reaching the identified receptors	waters	
			The effluent flow meter is inspected and calibrated annually.			
			All plant and equipment will be subject to regular maintenance and servicing as per the PPMR.			
			Prevention of overflows from tanks is achieved by level meters and gauges. The control system will monitor storage tank levels and regulate flows accordingly.			
			The ETP has a number of alarms and protection systems. Additionally, appropriate isolation system has been installed to prevent any uncontrolled releases to foul water.			





Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Noise						
Noise emissions from operation of effluent treatment plant ("ETP")	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to Air. Installation is close enough to potentially sensitive receptors for noise to potentially be audible.	<ul> <li>It is not anticipated that the proposals detailed in the variation application will lead to any increase in noise at the Installation as none of the proposed activities are significant noise generating in nature.</li> <li>The location of equipment has been selected with due regard to local receptors.</li> <li>The selection of low noise equipment and implementation of general operational measures reduce the potential for any noise and vibration emissions, such as: <ul> <li>daily site checks for noise and vibration in external site areas;</li> <li>implementation of a PPMR;</li> <li>all plant and equipment are turned off when not in use;</li> <li>all site plant are subject to daily checks;</li> <li>relevant personnel trained in noise management procedures and all personnel will be trained in the prompt reporting of any abnormal noise so it may be rectified.</li> </ul> </li> <li>In the event of elevated noise being experienced at the Installation, it will be recorded and an investigation will be undertaken to establish the root cause and implement corrective actions.</li> </ul>	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors	Possible noise nuisance	Not significant if risk management measures are strictly adhered to

#### Table 5: Amenity Risk Assessment



Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Pests						
Attraction of pests due to ETP activities	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to Air. Installation is close enough for potential odour emissions to reach potentially sensitive receptors.	<ul> <li>Due to the nature of the food processing activities undertaken at the Installation, strict and robust pest control management measures are implemented in the interest of food hygiene.</li> <li>Pest control measures are summarised as follows: <ul> <li>regular cleaning and strict housekeeping standards. Infrastructure kept clear and subject to housekeeping inspections and procedures.</li> <li>surfacing kept clear to ensure easy cleaning where necessary;</li> <li>daily site checks which include checks for the presence of pests and to ensure housekeeping standards are maintained;</li> <li>all tanks are sealed;</li> <li>all relevant employees are also trained to understand the signs of pests or pest activity to a designated manager; and</li> <li>employment of an external contractor to implement and monitor a pest control programme at the Installation which includes regular visits and follow up reports of any findings. These are discussed during management meetings for prompt close-out.</li> </ul> </li> </ul>	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors	Possible pest nuisance	Not significant if risk management measures are strictly adhered to



#### Probability of Hazard **Overall Risk** Receptors Pathway **Risk Management** Consequence Exposure Fire Fire at the site. Ecological and Release to A Fire Risk Assessment ("FRA") is undertaken on a regular basis Combustion Low Not significant human sensitive Air - windblown in accordance with relevant legislation, including the gases (smoke) if risk Regulatory Reform (Fire Safety) Order 2005. The purpose of receptors in dispersion in Risk and localised management surrounding area atmosphere. the FRA is to evaluate and to remove/minimise the fire risk by management nuisance. measures are (see Section 2.2 implementation of relevant control measures. The FRA has strictly measures and 2.3 of this been reviewed and updated to account for changes to fire risk should prevent adhered to as a result of the variation. unauthorised ERA). releases from Regular inspections and preventative maintenance on all reaching the equipment is undertaken to prevent any faults occurring identified which may lead to a fire. Moreover, designated smoking areas receptors are in place with smoking prohibited in all buildings. The Installation benefits from an automated fire detection system and fire-fighting equipment, such as fire extinguishers, are in strategic positions throughout the Installation and inspected on an annual basis. Nominated personnel are trained in the appropriate use of fire extinguishers. Procedures for the reporting and management of incidents and potential emergency situations including fire have been developed. Evacuation drills are undertaken annually to ensure all staff are aware of the emergency procedures. Site Incident Commanders and support teams are allocated and trained appropriately in the management of incidents including fire response.

#### **Table 6: Accident Risk Assessment**



Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Fire (Cont.)						
Fire at the site (cont.).	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to Air – windblown dispersion in atmosphere.	The EH&S Manager has overall responsibility for the review and implementation of the Installation emergency procedures and training nominated emergency response staff in their responsibilities.	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors	Combustion gases (smoke) and localised nuisance.	Not significant if risk management measures are strictly adhered to
Releases of potentially contaminated firewater	Local watercourse network, offsite wastewater treatment plant and subsequently controlled waters, ground or groundwater	Via site drainage network, percolation through ground or via overland flow.	Potentially contaminated firewater will be appropriately contained and tested prior to disposal. Depending on the scale of the fire and the volume of firewater to be contained, booms, bunds and drain mats will be used to capture small volumes of firewater. The Effluent Treatment Plant capacity can also be utilised to capture greater volumes of firewater. The effluent system will be isolated from the public sewer to prevent discharge and to ensure the potentially contaminated firewater is held prior to sampling and analysis. Discussions will then be held with SWW to gain agreement to discharge the firewater to public sewer or it will be tankered off site to an appropriately licensed facility or installation for treatment and disposal.	Medium Risk management measures should prevent any release from reaching the identified receptors	Contamination of controlled waters Contamination of offsite wastewater treatment plant and subsequent contamination of controlled waters	Not significant if risk management measures are adhered to
			Drain mats will be deployed in order to prevent any firewater from entering any surface water drains.			



Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Spillage of Potent	tially Polluting Substa	nces				
Loss of containment	Local watercourse	Via site drainage	The Installation benefits from impermeable surfacing to prevent any downward migration of potentially pollution	Low	Contamination of controlled	Not significant if
during loading, unloading and	network, offsite wastewater	network, percolation	substances entering the ground or groundwater.	Risk management	waters	risk management
storage of potentially polluting substances	treatment plant and subsequently controlled waters, ground	through ground or via overland flow.	DCUK personnel supervise deliveries at all times. Storage vessel levels are checked prior to unloading to prevent overfilling and overfill protection exists on tanks.	measures should prevent unauthorised releases from	Contamination of offsite wastewater treatment	measures are strictly adhered to
	or groundwater		All vessels containing potentially polluting material will be appropriately bunded to 110% of the volume of the largest container or 25% of the total volume stored, whichever is greater.	identified sub- receptors con- of c	plant and subsequent contamination of controlled waters	
			External examination of all storage vessels and bunding is undertaken by a qualified engineer to reduce the likelihood of tank/bunding failure or loss of containment. Any remediation action or repairs will be actioned in accordance with the inspection report.			
			Barriers and signage are in place to prevent the risk of vehicle collision with storage vessels and bunding.			
			Weekly site inspections are undertaken to observe any spillages and to inspect bund integrity. The checks are recorded on a check sheet whilst any remedial action required			

is recorded electronically.



Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Spillage of Potenti	ally Polluting Substar	nces (Cont.)				
Loss of containment during unloading and storage of potentially polluting substances (cont.).	Local watercourse network, offsite wastewater treatment plant and subsequently controlled waters, ground or groundwater	Via site drainage network, percolation through ground or via overland flow.	Loss of containment will be dealt with in accordance with the Installation's robust spill response procedure. All relevant employees are suitably trained in the spill response procedure and the rapid deployment of spill kits which are strategically located throughout the Installation. Spill kit inventory is checked during the site inspections and contents replaced in line with manufacturer instructions.	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors	Contamination of controlled waters Contamination of offsite wastewater treatment plant and subsequent contamination of controlled waters	Not significant if risk management measures are strictly adhered to
Loss of Containme	ent					
Loss of containment of effluent prior to on-site effluent treatment	Local watercourse network, offsite wastewater treatment plant and subsequently controlled waters, ground or groundwater	Via site drainage network, percolation through ground or via overland flow.	The effluent is directed and captured within two bunded holding tanks. All treatment tanks are also appropriately bunded to ensure that any loss of containment is captured and will not enter the ground or groundwater. Alarms, sensors and control systems, as well as overflow failure prevention systems and isolation systems are in place preventing loss of containment of effluent prior to treatment.	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors.	Contamination of controlled waters Contamination of SWW wastewater treatment plant and subsequent contamination of controlled waters	Not significant if risk management measures are strictly adhered to

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Loss of Containme	ent					
Loss of containment of effluent prior to on-site effluent treatment	Local watercourse network, ground or groundwater	Via site drainage network, percolation through ground or via overland flow.	The effluent is directed and captured within two bunded holding tanks. All treatment tanks are also appropriately bunded to ensure that any loss of containment is captured and will not enter the ground or groundwater. Alarms, sensors and control systems, as well as overflow failure prevention systems and isolation systems are in place preventing loss of containment of effluent prior to treatment.	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors.	Contamination of controlled waters Contamination of SWW wastewater treatment plant and subsequent contamination of controlled waters	Not significant if risk management measures are strictly adhered to
Loss of containment of resultant sludge	Local watercourse network, offsite wastewater treatment plant and subsequently controlled waters, ground or groundwater	Via site drainage network, percolation through ground or via overland flow.	The resultant sludge is held within two bunded solids holding tanks. The sludge is removed twice per week to prevent build-up of material on site. The tank is bunded to 110% and located away from any surface or foul water drains.	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors.	Contamination of controlled waters Contamination of SWW wastewater treatment plant and subsequent contamination of controlled waters	Not significant if risk management measures are strictly adhered to



Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Loss of Power						
Major system failure of proposed effluent treatment activities	Offsite wastewater treatment plant and subsequently controlled waters	Via site drainage network	Competent DCUK personnel are present on site at all times. The process equipment benefits from alarms and controls which enable any malfunctions to be identified immediately. There are power/overflow failure prevention systems and the system is capable of identifying, holding and preventing the release of any effluent should equipment fail. The documented PPMR will detail the required maintenance and inspection of all proposed process equipment to ensure good working order to reduce the risk of a complete system failure.	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors	Contamination of SWW wastewater treatment plant and subsequent contamination of controlled waters	Not significant if risk management measures are strictly adhered to
			In the event of a major system failure, all affected operations will cease. The Engineering Manager will co-ordinate an investigation to identify and rectify the problem with all actions documented. Faults will be addressed, and repairs undertaken where necessary using specialist contractors. Competent personnel will check all areas prior to the recommencement of operations.			

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Vandalism						
Any of the above	Any of the above	Any of the above	The Installation is secured by perimeter palisade fencing and brick walls with barbed wire, lockable entrance with stop barriers and security lighting.	Low Risk management	Any of the above	Not significant if risk management measures are
			A remote closed circuit television ("CCTV") monitoring system surveys all areas of the Installation.	measures should prevent unauthorised		strictly adhered to
			Key members of staff (e.g. Senior Management) are also on call to attend the Installation out of normal working hours of required. The Installation is not unattended at any time.	releases from reaching the identified receptors		
			All visitors are required to sign in at reception and must wear visitor badges at all times. All staff are also encouraged to report unidentified or unknown visitors.			



#### 5. SUMMARY

#### 5.1. Results of the Assessment

- 5.1.1. The results of both the amenity and accident risk assessments (Tables 4 and 5) indicate that none of the risks relating to the proposed variation will be significant if the Installation is operated and managed in accordance with the risk management measures detailed and the Installation's Environmental Management System ("EMS").
- 5.1.2. An updated Odour Management Plan (DCUK.01.01/OMP) has been prepared to incorporate the proposed activities and details the control measures to be implemented to ensure that odour continues to be effectively managed at the Installation. The OMP is contained in Section 6 of the variation application and should be read in conjunction with this ERA.

#### 5.2. Conclusion

5.2.1. In relation to accident and amenity risk, these can be considered as being not significant providing all risk management measures are implemented and strictly adhered to.



APPENDIX I EA NATURE AND HERITAGE CONSERVATION REPORT

# **Nature and Heritage Conservation**

Screening Report: Bespoke installation

Reference	EPR/DP3631RA/P001
NGR	SX 03594 60179
Buffer (m)	60
Date report produced	15/05/2024
Number of maps enclosed	1

conservation screen

## This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on <u>Magic map</u>. Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. <u>Help videos</u> are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

Sites and Features within screening distance	Screening distance (km)	Further Information	on
Special Areas of Conservation (cSAC or SAC)	10	Joint Nature Conserv Committee and Magi	
Breney Common and Goss & Tregoss Moors			
St Austell Clay Pits			
River Camel			
Reference: installations Version: 6.0	Security	Marking: OFFICIAL	Page 1 of 3

Special Protection Area (pSPA or SPA)	10	Joint Nature Conservation Committee and Magic map
Falmouth Bay to St Austell Bay		
Sites of Special Scientific Interest (SSSI)	2	Natural England and Magic map
Mid Cornwall Moors		
Local Wildlife Sites (LWS) (see map below)	2	Appropriate Local Record Centre (LRC)
Menadew		
Upper Luxulyan Valley		
Criggan Moor		
Lockengate Moor		
Red Moor		
Treskilling Downs		

Where protected species are present, a licence may be required from <u>Natural</u> <u>England</u> to handle the species or undertake the proposed works.

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

**Please note** we have screened this application for features for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

The nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the Reference: installations Version: 6.0 Security Marking: OFFICIAL conservation screen

date of this report and the submission of the permit application, which could result in the return of an application or requesting further information





# APPENDIX II SWW TRADE EFFLUENT CONSENT



Peninsula House, Rydon Lane, Exeter, EX2 7HR southwestwater.co.uk 0344 346 2020\* Minicom 0800 169 9965 Fax 01392 423792

> CONSENT NO. T0707 SITE IPID No: 265501 SX 03612 60093

#### South West Water Services Limited Water Industry Act 1991 Consent to the discharge of trade effluent to the public foul water sewer Variation

To:

Danish Crown UK Ltd Ebeneezer Bugle St Austell PL26 8RR

#### WHEREAS

On the 7<sup>th</sup> March 1988 a trade effluent notice was, in pursuance of the provisions of the Water Industry Act 1991, served by you on South West Water Services Limited (hereinafter called "The Sewerage Undertaker") in respect of the trade premises known previously as Tulip Ltd and now known as Danish Crown UK Ltd, Ebeneezer, Bugle, St Austell, PL26 8RR.

Whose registered address is situated at Danish Crown UK Ltd, 57 Stanley Road, Whitefield, Manchester M45 8GZ.

Under the provisions of the above mentioned Act the discharge of trade effluent in accordance with the said trade effluent notice would not be lawful without the consent of the Sewerage Undertaker.

**PURSUANT TO** Section 124 of the Water Industry Act 1991 the Company hereby direct that the conditions to which the Consent is subject are varied to the conditions set out below.

- 1. **Sewer Affected.** The public sewer into which the trade effluent may be discharged is the foul water sewer situated adjacent to Danish Crown UK Ltd at Ebeneezer.
- 2. **Point of Discharge.** The trade effluent shall only be discharged at the point indicated on the plan attached hereto, unless The Sewerage Undertaker has otherwise agreed in writing.
- 3. **Nature or Composition.** The trade effluent to be discharged shall consist solely of waste waters specified in the trade effluent notice served in respect of the premises: screened and treated washings from the curing and preparing of meat products.



- 4. Maximum volume. The maximum volume of trade effluent to be discharged in any continuous period of 24 hours shall not exceed 150 cubic metres.
- 5. **Maximum rate.** The highest rate at which the trade effluent may be discharged shall not exceed 10 cubic metres per hour.
- 6. Change of Nature or Composition. Prior written notice must be given to The Sewerage Undertaker of any proposed change in the process or the process materials or any other circumstance likely to alter the constituents of the trade effluent discharge
- 7. Change of Owner or Occupier. Written notice must be given without delay to The Sewerage Undertaker of any change in the name of the owner or occupier of the premises from which the trade effluent is discharged
- 8. Matters to be eliminated prior to discharge to sewer
  - 8.1. The trade effluent to be discharged shall not contain any special category effluent (as defined in Section 138 of the Water Industry Act 1991) in a concentration greater than background concentration (as defined in the Trade Effluents (Prescribed Processes and Substances) Regulations 1989) Appendix I.
  - 8.2. Where the trade effluent derives from a prescribed process mentioned in Schedule 2 to the Trade Effluents (Prescribed Processes and Substances) Regulations 1989, it shall not contain asbestos (as defined in the said Regulations) and chloroform in a concentration greater than the background concentration (as defined in the said Regulations)
  - 8.3. The trade effluent shall not contain any matter in contravention of Section 111 of the Water Industry Act, 1991
  - 8.4. The trade effluent shall not contain any matter in contravention of the Animal By-products Regulations, 2005
- 9. Matters to be limited prior to discharge to sewer
  - 9.1. The trade effluent to be discharged shall not contain any of the substances or properties listed in Appendix II in amounts or proportions other than those which comply with the limits there stated and shall not contain any substances or properties not listed in Appendix II except with the prior written permission of The Sewerage Undertaker and on such terms and conditions as are set out therein.
- 10. **Inspection Chamber**. An inspection chamber or manhole shall be provided and maintained in connection with each pipe through which the trade effluent is to be discharged into the public sewer, and such inspection chamber or manhole shall be so constructed and maintained as to enable duly authorised representatives of The Sewerage Undertaker to safely and readily obtain samples at any time, of the trade effluent so discharged. The inspection chamber shall be at the point marked "sample point" on the plan hereto unless The Sewerage Undertaker has agreed in

writing to a change of location.

- 11. Quality and Volume measurement.
  - 11.1.Apparatus adequate for measuring and automatically recording the volume, rate and composition of trade effluent so discharged shall be provided with every such pipe and such measurement apparatus shall be maintained and tested by the occupier of the trade premises at their own cost and to the satisfaction of the Sewerage Undertaker.
  - 11.2. If the measuring and recording apparatus ceases to record or is suspected of not measuring correctly, then the Sewerage Undertaker shall have the right to make estimates of the volume and composition of the trade effluent until such time as the said apparatus is again operating to the satisfaction of the Sewerage Undertaker.
  - 11.3. The foregoing provisions of this condition shall be of no effect so long as there is provided and maintained to the satisfaction of the Sewerage Undertaker some other method approved by the Sewerage Undertaker of sampling the trade effluent or determining, measuring and recording the volume and composition of the trade effluent so discharged.
  - 11.4.Records of the volume and composition of the trade effluent discharged into the sewer shall be kept available at all times for inspection by any authorised representative of The Sewerage Undertaker and copies of such records shall be sent to The Sewerage Undertaker on demand.
- 12. Agreed Changes. Changes for which agreement is sought in accordance with Condition 3 and 11 are deemed by The Sewerage Undertaker not to constitute a variation of consent under Section 124 of the Water Industry Act 1991
- 13. Analytical Methods. The method of analysis used to detemine the concentration of a constituent of any sample shall be that method currently used by The Sewerage Undertaker or its agent.

#### 14. Payment.

- 14.1. Payment shall be made to the Sewerage Undertaker for the reception, treatment and disposal of the trade effluent discharged into the public foul water sewer in accordance with the Sewerage Undertaker's current Charging Scheme.
- 14.2.All sums payable to the Sewerage Undertaker under this condition shall become due and payable on demand.

Dated the 1st fine 2015

- Buce Signed: ...

Trade Effluent Manager for and on behalf of South West Water Services Ltd

Address to which all communication should be sent:

Trade Effluent Department South West Water Ltd Lucknow Road Castle Canyke Bodmin PL31 1EZ

Telephone: 01208 264 047 Email: Tradeeffluentwest@Southwestwater.co.uk

Attachments: 1 Appendix I 2 Appendix II 3 Drainage Plan

#### APPENDIX I

Substances limited to Background Concentrations (limit of detection)

Mercury and its compounds Cadmium and its compounds Gamma hexachlorocyclohexane (HCH) DDT Pentachlorophenol and its compounds Hexachlorobenzene (HCB) Hexachlorobutadiene (HCBD) Aldrin Dieldrin Endrin Tetrachloromethane (Carbon Tetrachloride) Polychlorinated Biphenyls Dichlorvos 1,2-Dichloroethane Trichlorobenzene Atrazine Simazine Tributyltin compounds Triphenyltin compounds Trifluralin Fenitrothion Azinphos-methyl Malathion Endosulphan Chloroform Asbestos

#### APPENDIX II

The following constituents shall be in the range

Н	6-10
Temperature at point of discharge to sewer	<43°C

Concentrations of the following constituents shall not exceed:-

Chemical Oxygen Demand (COD) Suspended Solids at 105°C Total Oil and Grease

1000 milligrams per litre200 milligrams per litre100 milligrams

Site Drainage Plan

