

Environment Agency permitting decisions

Surrender

We have decided to accept the surrender of the permit for Wiveliscombe Pork Processing operated by Karro Foods Limited.

The permit number is EPR/CP3630BQ.

The facility is located at Sandys Moor, Taunton Road, Wiveliscombe, Taunton Somerset TA4 2TU.

The surrender number is EPR/CP3630BQ/S003.

The decision was effective from 25/11/2015

Summary of the decision

We have decided to accept the surrender of the permit.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements.

A non-technical description of the Permitted Installation is included in the Introductory Note to the Permit; however key points considered relevant to the decision to accept the surrender of the permit are outlined below.

A permit was issued under the Pollution Prevention and Control (PPC) Regulations to Vion Foods UK Limited on 19th May 2005 to carry out the following activities, listed in Part 1 of Schedule 1 to the PPC Regulations (now it falls under the Environmental Permitting Regulations), as part of an installation:-

- Section 6.8 Part A(1)(b) – Slaughtering animals at plant with a carcass production capacity of more than 50 tonnes per day
- Section 6.8 Part A(1)(d)(i) – Treating and processing materials intended for the production of food products from animal raw materials (other than milk) at plant with a finished product production capacity of more than 75 tonnes per day
- Section 5.3 Part A(1)(c)(i) – Disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by biological treatment

and the following directly associated activities:

- Raw materials storage
- Steam raising plant
- Refrigeration plant
- Waste processing and handling
- Engineering workshop
- Finished goods storage pre despatch
- Vehicle washing
- Laboratories

The company name changed on 21 January 2013 to Karro Foods Limited but the permit was never updated to reflect this.

The main features of the Installation when operational were as follows:-

The main installation activities were the slaughtering of animals and the treating and processing of meat involved in the production of cured bacon and joint products. The primary processes were the slaughter line, butchery (pork and bacon), processing and curing, smoking and slicing/packing. Associated activities included two boilers for raising steam, storage of raw materials, products and wastes; refrigeration plant, vehicle washing, engineering workshop, laboratories and effluent treatment. Effluent was treated in an on-site effluent treatment plant, and the treated effluent was discharged to the public sewer.

The main point source emissions to air were from the installation boilers, which were fuelled by a mix of fuel oils and gas. All process water from the facility was discharged to sewer via the on-site effluent treatment plant (ETP). Storm water from roofs was discharged to a local brook via a buffer tank and storm water from clean yards and roadways discharges to a local brook via interceptors. There were no direct emissions to land, including List I or List II substances to groundwater, from the Installation.

The Operator has applied to surrender the permit owing to site closure. The activities carried out by Karro Foods Limited ceased in April 2015.

We are satisfied that the necessary measures have been taken to avoid any pollution risk and to return the site to a satisfactory state. We consider in reaching that decision we have taken into account all relevant considerations and legal requirements.

Purpose of this document

This decision document:

- explains how the operator's application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account

Structure of this document

- Key issues of the decision
- Annex 1 the decision checklist

Key issues of the decision

Pollution Risk

The principal activity that was carried out within the Installation operated by Karro Food Limited was the slaughtering of animals and the treating and processing of meat involving the production of cured bacon and joint products. The primary processes were the slaughter line, butchery (pork and bacon), processing and curing, smoking and slicing/packing. Associated activities included two boilers for raising steam, storage of raw materials, products and wastes; refrigeration plant, vehicle washing, engineering workshop, laboratories and effluent treatment. Effluent was treated in an on-site effluent treatment plant, and the treated effluent was discharged to the public sewer.

The majority of substances used/generated on the site were:

- Hydrocarbons from fuel, compressor, lubricant and hydraulic oil supplies
- Detergents, including caustics, chlorinated caustics, and alkaline substances
- Ferric Sulphate and Caustic Soda
- Meat process effluent with high Biochemical oxygen demand (BOD) content

When the permit was issued there were certain data gaps and a number of improvement conditions which were included in the permit. Table 1 below provides details on the improvement programme and how the operator has met these conditions.

Table 1 – Summary of improvement programmes.

Improvement programme number	Improvement programme set in permit (EPR/CP3630BQ)	How has the operator met this improvement condition
IP3	The Operator shall provide a report in writing to the Agency detailing the monitoring method used to determine effluent flow at monitoring point M1. The report shall be in a format to be approved in writing by the Agency	The operator submitted a report (5 th December 2005) by an independent consultant covering the wastewater treatment plant. The report confirms that the system complies
IP4	The Operator shall assess the current method for effluent flow as identified in IP3 with the requirements given in the MCERTS standard 'Minimum requirements for the self-monitoring of effluent flow' version 2, Aug 2004. A written report shall be provided to the	The operator submitted a report (5 th December 2005) by an independent consultant covering the wastewater treatment plant. The report confirms that the system complies

	Agency detailing how this standard is to be achieved and shall include time scales for implementation	
IP5	The Operator shall provide written clarification of the water source used to maintain flow in the nearby stream and shall provide a written report of measures in place or proposed to ensure that the Installation borehole, natural spring beneath the main Installation building, and Installation surface water receptors cannot receive contaminated water, including fire water. The report shall include timescales for any improvement	On the 23 rd November 2005 the operator provided details on the measures that were put in place to protect the natural spring (including concrete chamber rings and divert to a sump outside the building line). In order to assess the contamination in the water it was proposed that a conductivity monitor was fitted to the untreated discharge to Hillfarrance Brook and any significant variances would be investigated. Timescales were also detailed.
IP6	The Operator shall carry out a review of the ETP, looking at: <ul style="list-style-type: none"> - Optimisation of the effluent treatment plant - Reduction of accident likelihood of failure of the balancing tank or sludge tanks - Cost benefit analysis of options to improve the holding capacity of the ETP - Options to improve monitoring of effluent discharge, with consideration of continuous monitoring. The operator shall provide the written outcome of this review, including proposals for improvement, for approval by the Agency. Proposals shall include a methodology and timescales for monitoring of emissions to sewer from the effluent treatment plant.	The operator submitted a report (5 th December 2005) by an independent consultant covering the wastewater treatment plant. The main body of the report covers off IP6 with a list of recommendations provided. A summary of the recommendations, how the operator proposes to meet the recommendation and also the timescale to implement these was detailed.
IP7	The Operator shall submit written proposals for the feasibility of installing a high level alarm on the blood tanks, linked to an	The operator confirmed on the 23 rd November 2005 that a high level alarm was

	automatic cut-off for the blood trough pumps	fitted on the blood tanks.
IP11	The Operator shall submit a written report to the Agency detailing how the indicative benchmark for mercury release to sewer as given in General Sector Guidance for Food and Drink S6.10, issue 1, August 2003 shall be achieved. The report shall include time-scales for implementation of any necessary improvements that shall be agreed with the Agency	On the 11 th January 2006 the operator submitted information to demonstrate that mercury release to the sewer is significantly below the industry benchmark as detailed in General Sector Guidance for Food and Drink S6.10.
IP12	The Operator shall submit to the Agency in writing, a programme of regular testing and inspection of all oil, chemical, raw material, waste and effluent storage areas commencing with an initial audit. The audit and programme shall include the following: <ul style="list-style-type: none"> - Inspection of primary, secondary and tertiary containment measures - Inspection of coatings applied to secondary and tertiary containment - Segregation of chemicals dependant upon reactivity The proposed inspection regime shall be agreed by the Agency in writing and implemented throughout the installation. A summary of the initial audit shall also be submitted to the Agency for approval with improvements identified as appropriate and time scales for remedial actions to be agreed by the Agency.	On the 31 st January 2006 the operator submitted audit report forms, a summary of the findings including improvements identified and timescales of for remedial actions. A proposed inspection regime and timetable was also submitted. Also linked to IP6 and IP13
IP13	The Operator shall undertake an assessment of the surfacing and containment measures on site. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.11, July 2003. A written report summarising the findings shall be submitted to the Agency. A timescale for implementation of	On the 28 th November 2005 the operator submitted a copy of the assessment of the surfacing and containment measures on site.

	any improvements shall be agreed with the Agency.	
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Site Condition Report

The operator has submitted a Site Condition Report dated July 2015, the main elements of which are summarised below:

Environmental Setting

The site remained greenfield until the construction of the current factory in 1991. There have been no recorded pollution incidents at the Installation since Grampian Country Foods (now Karro Foods Limited) purchased the site in 1998. Prior to Karro Foods purchasing the site reported incidents involved the release of dirty yard wash down to Hillfarance Brook via surface water drains.

The Installation is located approximately 1km south east of Wiveliscombe town centre, Somerset. The area immediately to the south, southwest, east and southeast is predominantly agricultural, while the area to the north and northwest is a mixture of commercial/industrial premises and residential housing. The local waste water treatment works is located 250m to the south.

Hillfarance Brook runs parallel to the southern site boundary and the Installation discharged surface water and untreated abstracted groundwater to the Brook via a surface water channel to the south east of the site. All process water from the facility was directed via an on-site ETP to the public sewer for further treatment. There was a groundwater abstraction borehole within the installation and a natural spring beneath the pig lairage within the main factory building. The superficial soils overlying the aquifer are classified as having a high leaching potential. The majority of the site is underlain by river alluvium comprising sands, gravel silts and clays. The site overlays a minor aquifer but is not within a Groundwater Protection Zone. Shallow groundwater is anticipated to be in hydraulic continuity with the Brook.

Changes to Activities

There have been no changes to the activity boundary from permit start until the shutting of the plant on 1 May 2015.

There have been no changes to the permitted activities during the life of the permit. The classification of the permitted activities in the Environmental Permitting Regulations changed in 2013, but no change was made to the permit to reflect this. The activities undertaken on site have not changed.

There has been no change in substances used at the site throughout the life of the permit.

Measures Taken to Protect Land

All of the following had primary, secondary and tertiary containment methods and these methods were tested and inspected:

- Waste oils
- Non bulk compressor, lubricant and hydraulic oil storage
- Boiler fuel oil storage tank
- Clean and waste blood storage
- ETP building
- ETP compound effluent holding and sludge tanks
- Derv (white diesel) tank
- Non bulk hygiene chemical storage cages
- Water treatment room
- High pressure washers – diesel generators

Further information has been provided as part of the surrender application with regards to primary, secondary and tertiary containment methods.

The Pollution Risk section above provides details on relevant improvement conditions that were imposed when the permit was issued and how the operator has met these improvement conditions.

Pollution Incidents

Karro Foods Limited has no records of pollution incidents which may have affected the land.

Soil and Ground Water Quality Monitoring

Soil

Whilst there was no site investigation reference data to compare the surrender sampling to, it was compared to a 'baseline' in the form of a sample from a grassed area away from the commercial operations of the site and the samples were very similar. Soil samples were taken at key areas of potential contamination. The high risk areas that were sampled were:

- Adjacent to sludge tank 2
- Adjacent to balancing tank
- Adjacent to effluent tank
- In location of former diesel storage Speciated Total Petroleum Hydrocarbon.

The results showed that there is no significant difference between them. Examination of the underlying soils did not identify any ground that exhibited visible or olfactory evidence of contamination that may have occurred as a result of leaking chemical/effluent storage tanks or from hydrocarbons.

It was considered from the testing carried out that the high risk areas identified on site were not heavily impacted by contaminants.

Groundwater

Regular tests were carried out on the groundwater hole and spring throughout the life of the permit. There have been no significant changes in the chemistry of groundwater from January 2006 to May 2015.

Decommissioning and Removal of Pollution Risk

The chemicals used on site (ferric sulphate and caustic soda) have been removed. The tanks have been cleaned and the system left open to the atmosphere.

The waste oil was pumped out and this is now open to the atmosphere.

The diesel tank is to stay on the site and will be under the control of decommissioning (structure) company Machinery 2000.

The high pressure washing oil tank has been removed from the site.

All cleaning chemicals and storage drums have been removed from the site.

The drains have been pressure cleaned through; the effluent plant has been decommissioned and all yard drains have been diverted to go via interceptors to the brook.

The balance tanks, Dissolved Air Flotation, part of the ETP, sludge tanks and contact chambers have been cleaned. The liquids left in the ETP were collected and disposed of. The tanks were drained and left open so no liquids can accumulate.

The refrigeration system has been decommissioned, the gas (R22) has been pumped out and disposed of by specialist contractors (F&T) and is now open to the atmosphere.

All fuel oils have been removed. The fuel tank is open to the atmosphere.

Condition of the Site at Closure

All permitted activities stopped at the Wiveliscombe site on 01/05/2015. We have carried out a final site inspection on 05/11/2015 and confirm that the site has ceased operation and all potential pollutants have been removed from site.

The decommissioning of the site is complete; the removal of all pollution risks has been managed.

Whilst there was no site investigation reference data to compare the surrender sampling to, it was compared to a 'baseline' in the form of a sample from an undeveloped field and the samples were very similar. Soil samples were taken at key areas of potential contamination.

The test results for both land and ground water show no significant deterioration in quality during the life of the permit.

Conclusion

Based on our analysis and consideration of the application to surrender the permit, the Environment Agency is satisfied that the necessary measures to avoid a pollution risk during the operation of the regulated facility were undertaken and that all potential polluting activities have been removed. The Environment Agency therefore concludes that the pollution risk has been removed and that the measures put in place by the operator during the life of the permit have protected the site from deterioration.

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
The site		
Extent of the surrender application	The operator has provided a plan showing the extent of the site of the facility that is to be surrendered. We consider this plan to be satisfactory.	✓
Pollution risk	We are satisfied that the necessary measures have been taken to avoid a pollution risk resulting from the operation of the regulated facility.	✓
Satisfactory state	We are satisfied that the necessary measures have been taken to return the site of the regulated facility to a satisfactory state. In coming to this decision we have had regard to the state of the site before the facility was put into operation.	✓