

Compliance Assessment Report CAR_NRW0041062

Permit being assessed: AP3433ES.

For: Dowlais Slaughterhouse EPR/AP3433ES, held by Kepak Group Limited

At: Pengarnddu Industrial Estate Dowlais Top, Merthyr Tydfil, South Wales, CF48 2TA.

Type of assessment carried out: Report/Data Review, Reason: Routine.

On 31/12/2022.

Parts of permit assessed: Annual Returns

NRW Lead Officer: Mostyn Wall.

Report sent to: Tom Caswell, Technical Services Manager on 10/02/2023.

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Assessed (A)	
B4 - Infrastructure - Containment of stored materials	Action only (X)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	C4 No impact	4.1.3

Result types are explained in more detail in the 'Important Information' section below.

Total number of non-compliances recorded	Total non-compliance score
1	0.1

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

Criteria	Action needed	Complete by
B4	Site to report back the inspection regime of the diesel tank and containment system used.	28/02/2023
G4	Ensure that the EMS system has a notification system for reporting, monitoring and annual reports deadlines.	28/02/2023

Action criteria codes are listed in the 'Important information' section below.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

At this time, we do not intend to take any further action.

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

4. Details of our assessment

Kepak Quarterly Returns and Annual Report 2022

Q1 Report 2022 Jan-March

Monitoring of release points W1 & W2 are compliant with the permit limits.

Release to Sewer. Monitoring of S1 is compliant with the permit

Q2 Report 2022 April-June

Monitoring of release points W1 & W2 are compliant with the permit limits

Release to Sewer. Monitoring of S1 is compliant with the permit.

Q3 Report 2022 June-Sept

Monitoring of release points W1 & W2 are compliant with the permit limits

Release to Sewer. Monitoring of S1 is compliant with the permit.

There were reported exceedances of the permit limits of 800m³ for daily flow. However as per CAR form NRW0035868 dated 25/10/2019, the tolerance of the MCERTS Page 3 of 5 flowmeter on site allows an uncertainty of +/-8%, meaning that NRW cannot score permit breaches for up to 8% over the maximums given by the permit. Therefore the daily limit of 810.9 m³/day did not breach the limits with the 8% applied of 864m³ daily.

Q4 Report 2022 Sept-December

Monitoring of release points W1 & W2 are compliant with the permit limits.

Release to Sewer. Monitoring of S1 is compliant with the permit.

Annual testing of organophosphorus compounds are compliant with the permit.

The annual report and Q4 returns were submitted to NRW on the 6.02.23. Q1 and Q2 returns were also submitted late to NRW. This is a category 4 non-compliance. All quarterly reports must be submitted within 28 days of the end of the reporting period and the annual report must be submitted by the 31st Jan.

Action. Ensure that the EMS system has a notification system for reporting, monitoring and annual reports deadlines.

Annual Report

Energy and Water Consumption 2022

The site used 15,536.64 MWh of delivered electricity and 40,395.26 MWh of Primary

electricity in 2022.

Primary carbon dioxide was 3,971.17 tonnes in 2022.

The site used 18,646 MWh of delivered gas and 218,794 m³ of process water as used.

Waste

In 2022 the majority of waste was either recycled, sent to a anaerobic digester or for further rendering. Total waste was 79,205.956 tonnes, with only 93.027 tonnes/0.1% being sent to landfill.

Reporting Form R2				
Parameter	Raw Materials Used tonnes	Quantity Used in Production tonnes	Quantity to Waste tonnes	Fate of Waste
Animal tissue - SRM	-		6,162.91	Incineration
Animal tissue – Bones, Heads & Feet	-		16,929.694	*Rendering
Blood - Ovine	-		1,859.726	Anaerobic Digestion
Incinerator Bottom Ash	-		N/A	N/A
Packaging			**See notes	**See notes
Sanitiser/Hygiene Chemicals/Detergents/ETP Chemicals			0.395	Foul Sewer + Anaerobic Digestion
Refrigerants			N/A	Air emissions
Mixed Waste			93.027	Landfill
Metal			8.3	Recycled
Plastic			1,859.726	Recycled
Cardboard/Paper			46,080.068	Recycled
Stomach Content, Lairage Waste & DAF Sludge			6,212.11	Anaerobic Digestion

Packaging waste data is reported in mid march.

Fugitive Emissions Report 2022

The gas boilers are serviced on an annual basis to identify any faults that could lead to abnormal gas releases. The most recent maintenance test in April found the external and internal conditions of the gas boilers to be satisfactory and no repairs or alterations required, CO and NOx emissions were recorded during the service. The next scheduled

maintenance test is April 2023.

The site upgraded its refrigerant gas leak detection system, moving to the “Parasense” system, a series of small automatic gas leak detectors linked via the Building Management System. The equipment senses the presence of refrigerant gases and raises audible and visible alarms so leaks can be quickly dealt with. These alarms are linked to an email system which automatically inform engineers on the location and severity of a leak. The upgrade of the system is a significant improvement and will lead to lower emissions and early leak detection.

Waste Disposal

The table below summaries the sites arrangements for different types of potentially odorous waste and animal by-products.

Contractor	Description of Waste	Service/Disposal Route	Transport
Waste Contractor / Transport			
GP Services	Gut content / lairage waste/ DAF sludge/ Ovine blood	Transport/AD	Bulk/Tanker
Biffa	Mixed Waste, Hazardous Waste, WEEE Waste, Waste Oil, Recycled Cardboard, Plastic Metal Wood	Transport/ Sorting, Recycling and Landfill	Various
Disposal			
APC	Bovine Blood	Transport/Further processing	Tanker
Crest Leather Rino Mastrotto Gruppo Mastrotto	Hides/Skins	Tanning	Lorries
Sarval / Advanced Proteins	Lambs Heads/Feet	Transport/Rendering	Bulker
Saria /Advanced Proteins	Bones/SRM Incineration	Transport/Rendering/Incineration	Bulker

The site has a refrigerated bovine blood storage system. Blood is collected daily and carbon filters for the system are inspected every 2 months and changed every 6 months.

Lairage. The lairage works on a clean-as-you-go basis and as soon as the pens are emptied, the dung is removed and pen cleaned. In addition to constant housekeeping, the lairage is cleaned on a daily basis. Kepak plan to notify NRW of any planned deep cleaning of the lairage. The build-up of odours in the lairage is inhibited by a constant circulation of air by means of air fans and air extraction. It is also minimised by adherence to cleaning schedules and compliance with company procedures. These procedures are externally monitored by the FSA to ensure food safety and hygiene.

Effluent treatment plant (ETP). The ETP building upgrade was completed in 2022 and greatly improved the building by making it a weather proof and enclosed building. Doors are kept closed when not in use and the importance of this is reiterated to staff. Effluent sludge is removed either daily, or every other day, depending on levels of production. The plant is cleaned on a daily basis and deep cleaned weekly. Dedicated staff monitor the functioning of the plant continuously to tackle any problems that may arise. Both effluent holding tanks are sealed and are fitted with active carbon filters.

Kepak have also recently invested in an automatic pH neutralising system that monitors and controls the effluent pH by chemical addition. The pH controller has a present pH set point for the effluent and uses this measured value to determine whether the effluent is within compliance with that set point. If not, chemical pumps are operated to inject acidic or caustic solutions as required to bring the effluent in the holding tank to the correct level. The site states that system has greatly improved the clarity of wastewater and improvements can be seen in the S1 monitoring to sewer.

Water

The site has an underground structure containing the drainage system, diesel tank and associated pipework.

Action. Site to report back the inspection regime of the diesel tank and containment system used.

Spillages. The site had one spillage in 2022. **CAR form NRW0040895.** Kepak has responded to the actions in the CAR form. The response to the actions are outlined below.

- **Ensure doors are closed. Provide training for staff. Kepak to install signage on the doors to notify staff that they should remain closed.**

Our Effluent Plant procedure document has been updated to reinforce the importance of doors to the Effluent Plant remaining closed, to prevent odour and spillage issues. The staff have been shown the document and they have signed a record of training document.

In addition to extra training, signage has been installed on the doors to the ETP to notify staff that they need to remain closed.

- **Kepak to investigate why the pipe was blocked. What is the scheduled maintenance of the pipe and vessel to ensure blockages do not occur? Secure vessel lid. Install door closure mechanisms to ensure doors are closed.**

The actions that we identified after our investigation of the spillage have been actioned. The output pipe has been changed from plastic to stainless steel, and 3 stainless steel

valves have been added to the pipe. Additionally, the lid of the vessel has been welded on with a chain to prevent the lid coming off in future.

The main doors to the ETP are roller-shutter, and only open when a button is pressed. The other doors are emergency exits, so a door closure mechanism isn't being considered due to health and safety concerns. However, all staff have been compliant with procedure as the doors to the ETP have been closed on all environmental external audits since retraining.

Kepak cannot pinpoint a reason why the pipe was blocked as it was cleared without intervention. The site is considering insulating the pipe to prevent cold weather causing blockages.

The site has verbally informed NRW that they are continuing to look into the containment plans for the balance tanks. NRW will follow up this action throughout 2023.

The responses and actions by Kepak close out the action points from CAR form NRW0040895.

EMS improvement report

Kepak has corporate and site EMS targets. Kepak has significantly reduced the energy per tonne of product over the last few years. Kepak has good goals to improve resource efficiency and reduce the sites future carbon footprint. The table below shows the sites progress over the last few years.

Enviro Performance	2020 Target	2020	2021	2022
Environmental Permit Banding	50% A/B 0% E	E	D	E
Energy per tonne of product	652.2	594	682	348.48
Water per tonne of product	2.26	2	2.42	2.23
Environmental Management System	Implement System	Certified System	Certified System	Certified System
Meet Customer Requirements	Silver & Gold plans	Requirements met	Requirements met	Requirements met

The sites improvements in 2022 include, ETP improvements with automatic pH and flow control producing a more consistent process. A water mapping project highlighted the need for further process monitoring of water usage on the site. The site has highlighted the potential for significant water savings in the knife sterilization process.

The site is exploring a radiator system additive to improve thermal efficiency.

Six concrete slabs replaced around exterior of site as per replacement schedule. Project ongoing into 2023.

In early 2022, the site made improvements to the monitoring of the refrigeration system through the installation of a series of small automatic gas leak detectors.

The site is at the infancy stage of a number of projects to reduce energy consumption and emissions. These include rainwater harvesting, installing ground-based solar panels, and replacing the motors in our compressors with novel brushless motor technology which integrated with our building management system.

Improving Biodiversity – Cultivation of wild meadow areas on site alongside tree-planting program to improve biodiversity.

Kepak has demonstrated clear improvements towards reducing energy use and modernising/improving the installation.

End.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

What are suspended scores?

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry and Waste action criteria (used in section 1 and 2):**A: Permitted activities**

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within 20 working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.