



**This form will report compliance with your permit as determined by an Environment Agency officer**

Site	JG Pears Newark Animal Rendering - EPR/AP3436DG	Permit Ref	AP3436DG		
Operator/ Permit holder	JG Pears (Newark) Limited				
Date	23/04/2021	Time in	10:00	Out	12:00
What parts of the permit were assessed	Odour Management				
Assessment	Audit	EPR Activity:	Installation: X	Waste Op:	Water Discharge:
Recipient's name/position	Group Environment Manager				
Officer's name	<Not assigned>		Date issued	19/05/2021	

**Section 1 - Compliance Assessment Summary**

This is based on the requirements of the permit under the Environmental Permitting Regulations (EPR). A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our [Compliance Classification Scheme](#) (CCS). CCS scores can be consolidated or suspended, where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your [local office](#).

Permit Conditions and Compliance Summary			Condition(s) breached
a) Permitted activities	1. Specified by permit	N	
b) Infrastructure	1. Engineering for prevention & control of pollution	A	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	N	
	5. Plant and equipment	C3	1.1.1, 1.1.2
c) General management	1. Staff competency/ training	N	
	2. Management system & operating procedures	C3	1.1.1, 1.1.2
	3. Materials acceptance	A	
	4. Storage handling, labelling, segregation	A	
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	N	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	N	
	2. Noise	N	
	3. Dust/fibres/particulates & litter	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	N	
	2. Records of activity, site diary, journal & events	A	
	3. Maintenance records	A	
	4. Reporting & notification	N	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

**KEY: C1, C2, C3, C4 = CCS breach category ( \* suspended scores are marked with an asterisk),**  
**A = Assessed (no evidence of non-compliance), N = Not assessed, NA = Not Applicable, O = Ongoing non-compliance – not scored**  
**MSA, MSB, TCM = Management System condition A, Management System Condition B and Technically Competent Manager condition which are environmental permit conditions from Part 3 of schedule9 EPR (see notes in Section 5/6).**

<b>Number of breaches recorded</b>	2	<b>Total compliance score</b> (see section 5 for scoring scheme)	8
If the Total No Breaches is greater than zero, then please see Section 3 for details of our proposed enforcement response			

## Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- the part(s) of the permit that were assessed (e.g. maintenance, training, combustion plant, etc)
- where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- any non-compliances identified
- any non-compliances with directly applicable legislation
- details of any multiple non-compliances
- information on the compliance score accrued inc. details of suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

### **Introduction**

This was a remote audit focusing on raw materials management and plant maintenance. These aspects were chosen as they were believed to be the issues that lead to the increased level of odour from the facility in early February.

The sites original investigation into the increase in odour complaints in early February concluded that a number of loads of raw material accepted from a competitors site, combined with a faulty cooker valve seal, lead to the increased level of odour. This audit further investigated the root cause, other potential contributory causes and actions taken to prevent these issues from re-occurring.

Carrier, broker, dealer checks were also carried out, along with checks of waste transfer notes and hazardous waste consignment notes.

### **Outstanding CAR Form Action**

Previous Action – The site needs to examine the outlet gas stream of site abatement systems (combined heat and power (CHP) & bio-filters). Important parameters need to be assessed including the compounds that are present in these gas streams and their concentrations in order to define the real impact of odour from these emissions.

This previous CAR form action relates to the part of the sites Odour Management Plan (OMP) that still requires Environment Agency approval. Some work has been completed on this action, with analysis of the inputs going into the Regenerative Thermal Oxidiser (RTO) and CHP being undertaken in October/November 2020. Chemical testing of the outlet gas streams from the sites abatement is scheduled to be completed in the summer of 2021.

**Action – provide a copy of the report into the testing of the outlet streams by 31/07/2021.**

### **Control of Odour through Raw Materials Management**

#### **Acceptance of Raw Materials**

Due to the breakdown of a competitors site additional raw materials comprising of blood, feathers and offal were accepted onsite during the period 5 February to 8 February. These raw materials had been at the competitors facility for a number of days prior to being transferred over to the J G Pears facility.

During transport the blood is stored in sealed tanks, the offal is stored in a sheeted trailer and the feathers are stored in a sheeted trailer. Some of the trailers have multiple compartments allowing them to store different raw materials separately, but in one vehicle. The raw materials coming from the competitors site were delivered into the yard using the competitors vehicles and trailers. The shunting wagons at J G Pears are used to transfer all trailers into the raw material reception buildings.

During the period of 06:00 Friday 5 February until 06:00 Saturday 6 February a total of 65 deliveries of raw materials were recorded, of which 3 were from the competitors site, all of which were deliveries of feathers. The 3 deliveries of feathers were given priority during unloading, which took between 15 minutes and 40 minutes after the vehicles had arrived onsite. Once the feathers were in the reception hall, they were transferred into the cooking process before the other feathers that were already in the reception hall. All of the competitors feathers were processed by Sunday 7 February.

It is noted that the use a combination of hand written processing time logs and electronic logs, along with the lack of collection/delivery times on some of the Animal By Product Movement

Documents makes traceability of the raw materials through the collection, delivery and production process difficult and in some circumstances not possible. This means it is challenging to audit this against your document used to control the raw materials accepted onsite, which is the "Storage and Handling of ABP (Raw Material) v1.3, dated 25/03/21". Permit condition 1.1.2 requires you to keep records demonstrating compliance with condition 1.1.1, which includes records of the prioritisation of the raw material deliveries.

Advice and Guidance – it would be beneficial to make the delivery, tracking and prioritisation system fully electronic, so that it is traceable and auditable throughout the entire product process. This includes ensuring the ABP Movements Document number is included in the traceability logs.

**Action – update relevant staff to ensure all ABP Movement documents are fully completed, including collection/delivery times (where they are included on the forms). The deadline for this action is 31/05/2021.**

On the weekend of 17/18 April the competitors plant broke down again and raw material was redirected to J G Pears. The wind direction on that weekend was E, ESE and NE, which is similar to the wind direction on the weekend of 5-7 February, with winds coming from the WSW, but changing to being E and NE. No reports of odour were received by the Environment Agency on that weekend. It is important to note that although the raw materials accepted would have been similar to those accepted in February and that the wind direction was similar, there was no faulty cooker valve seal and so the odour loading on the biofilter would not have been as high as it was in February. This will be explored further in the control of odour through maintenance of equipment section.

### Re-Weighing

The site had previously anticipated that they would be able to reduce re-weighing of the offal and subsequent shunter movements by 57%, which would be achieved by assuming that the percentage of water present within the offal trailers was fixed, however this reduction is only around 25%. Investigations by the site have found that this water content varies more than they expected and therefore more re-weighing of the trailers was required. This re-weighing means that more trailer movements occur onsite, potentially leading to greater fugitive emissions of odour from the vehicle trailers.

The site are now actively looking at a method to measure the mass/volume of water present in each trailer when it is drained prior to be tipped. This means that no re-weighing would be required and therefore fugitive odour emissions caused by the re-weighing process would not occur. Not only would this have a benefit in odour reduction, but also in energy usage as trailer movements would be reduced.

**Action – propose a suitable timescale for the installation and commissioning of the method you intend to use to measure the mass/volume of water present in the trailers. The deadline for this action is 30/09/2021.**

### Control of Odour through Maintenance of Equipment

#### Maintenance of Equipment

During the routine daily equipment checks it was noticed that the actuator and valve that seals Hydrolser B (feather cooker) had failed and needed to be closed manually in order for the cooker to be operated. This manual operation meant that steam was escaping from this valve during the cooking process. The steam would be of high odour intensity and would be emitted into the feathers cooking building. The local exhaust ventilation serving this building is primarily sent to the biofilter for treatment, however there has been a recent edition of ducting and a vent that goes to the CHP/RTO.

Prior to the deliveries in February the new ducting had been installed that draws air from the feathers reception hall and from above the feather ovens and passes it into the CHP/RTO. The ducting is high in the roof of the buildings and offers additional extraction in those areas. It is not designed to take all of the air from those areas, but supplement the existing system and reduce the loading on the biofilter.

The actuator and valve were repaired on the 8 February. The delay in repairing the seal was due to not having a replacement part in stock. During that time period (5 February – 8 February) there was no change in the frequency of use, or the mass of feathers processed in Hydrolyser B. This meant that emissions of high intensity odour would have been routinely emitted (as it is a batch process)

during that time from Hydrolyser B.

It is apparent that the new ducting to the CHP/RTO did not stop the high intensity odour from passing into the biofilter, which is only designed to treat air with lower levels of odour, of which the level of odour does not significantly fluctuate. It is likely that the new ducting was ineffective due to its proximity (approximately 8 – 10 metres away) to the source of the odour. There is the potential to use flexible ducting connected to the CHP/RTO that could be easily moved to target any future localised high intensity odour sources. This would then stop the biofilter from being overloaded during future incidents of equipment failure.

**Action – provide a written proposal for the use of flexible ducting (or similar) in strategic locations that could suffer from high intensity odour emissions during equipment failure, including suitable timescales for its installation and commissioning. The deadline for this action is 30/05/2021.**

No reason was given as to why the oven was still being operated whilst it was damaged, other than the feathers must be processed. The only change since this incident was to replace the cooker valve seal. It was identified that the entire valve was worn and needed to be replaced, which has now been replaced (as opposed to just the seal). A replacement valve seal is now kept in stock. Your OMP is listed as an operating technique in table S1.2 of your permit and as such must be followed. The OMP states that “Thermal destruction of high intensity odours such as those associated with cooking, raw materials and drying is conducted by passing these high intensity odours gas streams through the CHP plant boiler. Temperatures inside the boiler reach 1000°C. Back up facilities exist via the RTO for thermal destruction of high intensity odours.” Due to the odour abatement setup within the feathers processing building and the source of the high intensity odour (leak of the valve seal on Hydrolyser B), this instruction in your OMP was not followed, which meant that high odour intensity air passed into the biofilter, instead of the CHP or RTO.

**Permit breach – A score of Category 3 has been recorded against condition 2.3.1 in your permit. This has been given as you did not follow your Odour Management Plan, which is a listed operating technique. You failed to follow your OMP as you allowed high odour intensity air to pass into the biofilter, an event which lasted a number of days. You also failed to cease the activity that was giving rise to the high intensity odours.**

**Permit breach – A score of Category 3 has been recorded against condition 1.1.1 in your permit. This has been given as you failed to identify that the faulty valve on Hydrolyser B could cause odour pollution outside of your site and minimise the risk that it posed.**

#### New Feather Line

A new continuous feather processing line has been purchased and will be installed in the near future. This will replace the batch feather cookers. The installation of this new feather line means that your environmental permit may need to be varied.

**Action – propose a suitable timescale for the installation and commissioning of the new continuous feather processing line. The deadline for this action is 30/06/2021.**

#### Regenerative Thermal Oxidiser

The RTO has been upgraded and a pre-burner installed, which will increase the efficiency of odour destruction. The RTO is kept permanently on and the RTO pre-burner is turned on if the CHP goes offline. The RTO pre-burner can be up and running in 10 minutes.

#### Large Scale Plant Failure

The OMP states that the “Major failure of production equipment would result in controlled shut down of production line - material diverted to other process lines where possible and off site if needed.” The offsite redirection of raw material would be to a competitors site, of which there are two in the UK that can accept this type of raw materials. This approach is feasible in the short term as there is capacity in the two other facilities to process all of the Cat 3 animal by-products produced in the UK, however if two of these facilities were to breakdown, then there would be too much Cat 3 ABP to process by the remaining facility.

This situation had not been greatly considered, however due to the apparent frequency of breakdowns occurring at the competitors facility, then the likelihood of this situation occurring is moderate. Within the J G Pears business there is another facility that would be able to accept this material, however this would be through incineration as it is a Cat 1 ABP facility. The Operator

considered it unlikely that AD plants would be able to accept the feathers as they are hard to biodegrade. There are AD facilities within the UK that have the ability to treat Cat 3 ABP and they may also be able to treat feathers.

**Action – investigate the options for treatment/disposal of the Cat 3 ABP via AD or other methods. Update your OMP to formalise these treatment/disposal routes as a contingency measure for management of your raw materials in the situation that you have a significant plant breakdown. The deadline for this action is 30/06/2021.**

### **Public Communications and Engagement**

Communications from the site to local residents include reports to the Parish Council and speaking to individual local residents directly during odour monitoring in the villages and after complaints have been received.

It may be worth investigating if there are more proactive ways that information about the site and the changes that it is making / activities that it undertakes can be disseminated. It is noted that there is a dedicated page on the J G Pears website (<https://jgpears.com/community-liaison/>) for community liaison, however it does not appear to be being used to its full potential.

### **Carrier, Broker, Dealer Checks, Waste Transfer Notes and Consignment Notes**

Wooden packaging – The waste carrier licenses are all valid and in date. The receiving site is permitted to accept that waste type.

Metals – The waste carrier licenses are all valid and in date. The receiving site is permitted to accept that waste type.

Municipal mixed waste – The waste carrier licenses are all valid and in date. The receiving site is permitted to accept that waste type.

Hazardous waste – everything has been completed, except for the time the waste was collected, which is the same for every consignment note. The time the waste is collected must be completed. The waste carrier license is valid and in date. The receiving site is permitted to accept those waste types.

### **Summary**

It is likely that the combination of both the failure of the cooker valve seal and the acceptance of the raw materials from a competitors site lead to the overloading of the biofilter, which in turn caused the elevated levels of odour at nearby residential receptors.

As the acceptance of raw materials from a competitors site re-occurred in mid-April and no complaints of odour were received, then it is likely that the facilities odour management system can cope with the odours generated under those conditions.

The equipment that failed, causing the emission of high intensity odour on this particular weekend has been repaired and spares are now being kept onsite so that repairs can be undertaken **without delay**. The entire part has now also been replaced, so is less likely to fail again. A new feathers processing line will be installed in the near future. Consideration should be given to further odour abatement methods, such as flexible ducting, to avoid overloading the biofilter if situations like this should arise in the future.

There are a number of actions that need to be undertaken in order to reduce the odour emissions from your facility and reduce the likelihood of odour incidents like this occurring. These actions are detailed in the main body of the CAR form.

## **Section 3- Enforcement Response**

**Only one of the boxes below should be ticked**

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence\* and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

*\*Non-compliance with MSA, MSB & TCM do not constitute an offence but can result in the service of a compliance, suspension and/or revocation notice.*

Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.	X
In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.	
We will now consider what enforcement action is appropriate and notify you, referencing this form.	

#### Section 4- Action(s)

Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.

Criteria Ref.	CCS Category	Action Required / Advised	Due Date
See Section 1 above			
B5	C3	See actions in body of form	N/A
C2	C3	See actions in body of form	N/A

## Section 5 - Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- advise on corrective actions verbally or in writing
- require you to take specific actions in writing
- issue a notice
- require you to review your procedures or management system
- change some of the conditions of your permit
- decide to undertake a full review of your permit

Any breach of a permit condition is an offence\* and we may take legal action against you.

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and or suspension or revocation of the permit.
- A civil sanction Enforcement Undertaking (EU) offer may also be available to you as an alternative enforcement response for this/these offence(s).

### See our Enforcement and Civil Sanctions guidance for further information

*\*A breach of permit condition MSA, MSB & TCM is not an offence but may result in the service of a notice requiring compliance and/or suspension or revocation of the permit.*

This report does not relieve the site operator of the responsibility to

- ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- ensure you comply with other legislative provisions which may apply.

### Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance which could have a <b>major</b> environmental effect	60
C2	A non-compliance which could have a <b>significant</b> environmental effect	31
C3	A non-compliance which could have a <b>minor</b> environmental effect	4
C4	A non-compliance which has <b>no</b> potential environmental effect	0.1

**Operational Risk Appraisal (Opra)** - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

#### MSA, MSB & TCM are conditions inserted into certain permits by Schedule 9 Part 3 EPR

**MSA** requires operators to manage and operate in accordance with a written management system that identifies and minimises risks of pollution.

**MSB** requires that the management system must be reviewed, kept up-to-date and a written record kept of this.

**TCM** requires the submission of technical competence information.

## Section 6 – General Information

### Data protection notice

The information on this form will be processed by the Environment Agency to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). The Environment Agency may also use and/or disclose it in connection with:

- offering/providing you with its literature/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 and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

The Environment Agency may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

### Disclosure of information

The Environment Agency will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within 28 days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

### Customer charter

#### What can I do if I disagree with this compliance assessment report?

You must notify your local officer within 28 days of receipt if, you wish to challenge any part of this compliance assessment report. If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with the officer's line managers. If you wish to raise your dispute further through our official [complaints](#) and Commendations procedure, phone our general enquiry number 03708 506 506 (Mon to Fri 08.00–18.00) and ask for the [customer contact](#) team or send an email to [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk). If you are still dissatisfied, you can make a complaint to the Ombudsman. For advice on how to complain to the [Parliamentary and Health Service Ombudsman](#), phone their helpline on 0345 015 4033.