

Sarval Rendering Plant, Nuneaton Frequently asked questions (FAQs) Last updated: August 2023

Updates to FAQ document in August 2023:

Amended questions

Minor changes to text and formatting

New questions

None

1. What does Sarval rendering plant do?

The company take animal by-products from the meat processing industry and produce meat and bone meals for pet food manufactures, and high-grade tallow to be made into biofuel. The rendering process generates malodourous exhaust gases that need to be abated to prevent nuisance. The site utilises several different odour abatement processes which includes two stage acid and hypochlorite scrubbers, high temperature boilers, the regenerative thermal oxidiser, biofilters, and a granular activated carbon filter.

- Concentrated gases from the rendering process are ducted via a water scrubber to a gasfired Regenerative Thermal Oxidiser. This destroys malodourous compounds at an efficiency of 99.7%. A pre-acid scrubber and activated carbon filter system is also available on site.
- Two scrubbing towers are used to treat malodourous air with sulphuric acid, caustic liquor, and sodium hypochlorite.
- Biofilters containing woodchip media treat malodour extracted from some parts of the processing area, balance tank and tallow storage area.
- Each of the site buildings is sealed to the outside atmosphere, with vehicle access controlled via fast-acting roller shutter doors. Air is exchanged within the buildings by a negative pressure extraction system. The air-handling system directs the malodourous air to a scrubber tower in the first instance, then to the biofilters.
- Non-condensable gases collected during the process are destroyed by the steam-raising hoilers
- Condensed water vapour is pre-treated at an effluent treatment plant before discharge to sewer.

2. What is an Environmental permit?

Certain specific activities, that could be harmful to the environment, need an environmental permit to operate. A permit gives the holder permission to carry out certain types of activities at a specific location. The permit sets conditions which will protect the environment and people's health. If we grant a permit, we carry out periodic inspections to check compliance with the permit. We review permit conditions and can change them at any time. We may take enforcement action if we consider that the permit holder has breached one or more conditions of their permit.

We must decide whether to grant or refuse an environmental permit under the Environmental Permitting (England and Wales) Regulations 2010. We will only grant a permit if the operator applying has shown that the proposed facility meets the requirements of UK and European laws in how it will be designed and run. We will not grant a permit if we believe it is likely to cause significant pollution to the environment or harm people's health.



3. How do I report an incident?

Report all incidents to our 24-hour hotline on 0800 807060. This line operates 24 hours a day, 7 days a week. The below link includes a section on how to "Report an Environmental Incident" which provides additional information for members of the public on reporting any concerns. https://www.gov.uk/government/organisations/environment-agency#org-contacts

4. Why am I asked the same series of questions when I report an odour to you?

Calls to our incident hotline are answered by a team providing a service for customers reporting environmental incidents across the whole of England. The advisers taking the call may not be familiar with the location of the incident being raised.

We get many types of incidents reported to us and, so that our team collect all the information required to assess the risk of harm to people and the environment, they will ask all callers a set of questions tailored to the type of incident being reported.

These are usually;

- What is the name of the site where the odour is coming from?
- · What is the site location/ street name or postcode of area where was odour detected?
- What are the weather conditions? (For example, wind direction and strength)
- Can you describe the odour?
- Can you rate the odour from 0 to 6? (See odour intensity scale above)
- · What time was the odour first noticed today or has it been present for a few days?
- Is the odour getting inside the house or building?
- Are the windows and doors being kept closed?
- How is the odour affecting you? (e.g., cannot use garden, cancelled events, feel unwell)

Reports received via the hotline number are assessed by our incident team immediately and if this is categorised as significant or a flurry of incidents are reported, these are passed to a local duty officer within 30 minutes. We always request that reports are made via the incident line and not directly to a site officer. This ensures they are picked up when a site officer is on leave or out of the office. Incidents passed directly to an officer are also not recorded on our National Incident Recording System as they bypass the logging process.

Reports can also be passed to us by email, but please be aware that these may take slightly longer to review. This may result in us not having all the available information to assess the full scale of the incident at the actual time of the issue.

Our incident team email address is. incident_communication_service@environment-agency.gov.uk

If you use the email to notify us of an issue, please provide the answers to the above questions and your name, address and contact details.



5. Why don't I receive feedback after I report an incident?

Our call centre call handlers are not able to provide you with information about the site you are concerned about, as their role is to collect information and get it to the right people inside our organisation.

We do not routinely provide feedback on action taken on incidents on an individual basis. This is to prioritise our regulatory activities which protect the environment. This does not mean that your report has gone unheard or unaddressed. We take all reports of environmental pollution seriously and the report is combined with other reports and intelligence to determine our response. By managing our responses in this way, we can ensure that the incidents which pose the greatest risk to the environment are prioritised.

We have put this web page together to help provide feedback to the community and we are regularly meeting with your elected representatives to keep them up to date.

6. Are the details of my report passed onto the Company?

We encourage members of the community to report issues directly to the Company. This informs the Company that they are causing an impact and allows them to instigate an immediate investigation to stop the problem occurring.

The operator is informed about all incident reports that we receive. We do not release any personal information and therefore the operator cannot identify members of the community. The operator is expected to respond to complaints regarding odour in accordance with the Odour Management Plan for the site, and to advise us of any resulting changes to their operations.

7. What action do you take when I report an incident?

We do not attend the site when every incident is reported to us, however we do use this information to help us focus our checks on times of the day and locations when residents have reported concerns. The frequency of these checks will be variable depending on local weather conditions and we focus on times when there is the greater potential for odour off site.

We will carry out unplanned inspections as a direct result of incident reports, alongside some planned odour checks, inspections, and audits of the site.

We assess odour at several locations around the exterior of the plant to assess if this is likely to be causing pollution to people living in and using amenities in the area.

8. Has the company made any improvements to the site?

Recent company investments and improvements include the following:

 Bio Bed – this is a treatment process by which the gas from the hoppers, crushing area, external balance tank, tallow storage facility and pre-evaporation room is bubbled through wood chippings containing bacteria to remove the compounds causing odours. The company has had one for some time and completed works in 2022 to construct and bring a



second Bio Bed on-line. The previous Bio Bed (1) has been cleaned and maintained for future use.

- No.3 Scrubbing Tower is a single stage scrubber (sodium hypochlorite and sodium hydroxide) which treats air from the drying and pressing area, the tallow filter room, and the external tallow tanks. Works to refurbish this tower were completed in December 2021 and this is fully operational.
- High intensity odours can also be treated in the PASCF (Pre-Acid Scrubber and Carbon Filter) System. This provides an additional back up of 10,000m3/hr of treatment capacity. The system is independent from the steam raising process and therefore is a failsafe to treat odours at periods when there is low steam demand, or the boilers are not incinerating odours. The media in the carbon filter is regularly replaced to keep this facility in good working order.
- A weather station has been installed which records weather conditions for any future interrogation.
- Whilst the site is busy, the company confirm that they are not operating near or at capacity.
- Installation of heat exchange equipment to provide cooling of effluent in tank 5 has been completed. The aim of this is to improve the operation of the effluent treatment system in hot weather.
- An aeration system has been installed in Tank 4 and this tank is available as a contingency if required. This tank will be brought into use if inputs increase, or contingency is needed.
- Tank 5 has been inspected by a qualified engineer and minor remedial actions completed.
 All pipes and fittings have been cleaned and all the air diffuser discs have been replaced.
 The heat exchanger has been commissioned on the tank.
- The company have updated and implemented their complaints process to ensure that any calls are immediately escalated and investigated.
- The company are making daily odour checks in the local area.

9. How do you test for odour?

We use an assessment process designed to provide as much information as possible. The 'FIDOR' acronym - Frequency, Intensity, Duration, Offensiveness and Receptor Sensitivity - is a useful reminder of some factors that will influence the degree of odour pollution.

We record odour intensity on a scale of 0 to 6 as follows:

- 0 No odour
- 1 Very faint odour (need to inhale into the wind to smell anything)
- 2 Faint odour (you can detect an odour when you inhale normally)
- 3 Distinct odour (there is clearly an odour in the air as you leave your car or enter the area)
- 4 Strong odour (a bearable odour but strong, you could stay in the area for some time)
- 5 Very strong odour (unpleasantly strong, you will want to leave the area quickly)
- 6 Extremely strong odour (likely to cause nausea and a strong need to remove yourself from the odour immediately)

This is the same scale that we ask you to use to report odours to us via our hotline.



Environmental Permit conditions require an EA officer to make a judgement about whether odour beyond the site boundary is considered to be pollution and whether the operator is using all appropriate measures to limit and control odours.

10. How do individuals' levels of sensitivity to odour and odour annoyance differ?

Odour sensitivity describes how sensitive a person is to a particular smell. If you are highly sensitive to an odour you can detect it when it is present at lower concentrations in the air than someone who has a low sensitivity. Sensitivity to odour annoyance is slightly different because it describes how easily someone is offended by a particular smell.

How easily annoyed a person is by a smell also varies widely. A lack of annoyance may be because an individual is less sensitive to a smell, for the reasons given above, but it may also be related to where they are and what they are doing when they experience it. This is important when it comes to the difference between experiencing smells in or around your home, compared to experiencing them as part of your work. You are much more likely to be offended by a smell if it disturbs your home and leisure time than if it impacts on you in your workplace or away from home.

Odours can also remind people of past experiences, both good and bad. This is due to how smell is processed in your brain. Because of this, if you associate a smell with a bad memory, it may have the effect of upsetting you or annoying you more easily. These differences in sensitivity and annoyance are perfectly normal. It is important for all those involved in managing and reporting odour to be aware of why differences might occur and to be cautious before dismissing other people's points of view.

11. Why does the Environment Agency use "sniff tests" and not monitoring equipment for odour assessments?

Sniff testing is the name given to the assessment of smells using the human nose. Some people are surprised that the human nose is used rather than monitoring equipment. There are several reasons for this. The odour condition in environmental permits require odour pollution to be "perceived by an authorised officer" which means that it is necessary for an officer to smell the odour themselves.

The human nose is still the best means we have for detecting the full range of gases that cause odour. The concentrations at which these odorous gases are present in outdoor (ambient) air is usually very low beyond site boundaries (even if the smell is intense), and few pieces of equipment are sensitive enough to pick up the full range of these gases, when compared to the nose.

In addition, sniff testing is physically versatile and allows us to assess odour at most locations without worrying about external power, weather conditions, terrain etc. Monitoring equipment is used in specific situations where additional data is needed if access is available. This is particularly useful when specific gases need to be monitored such as the odorous gas hydrogen sulphide.



12. How does the Environment Agency categorise breaches of an environmental permit?

Information about how we score permit breaches is set out in guidance available here:

<u>Waste operations and installations: assessing and scoring environmental permit compliance - GOV.UK (www.gov.uk)</u>

We have formal descriptions of each category within our Compliance Classification Scheme ("CCS") guidance which enables scoring to be consistent. The 4 categories that our officers use to score permit breaches are:

- CCS 1 a non-compliance which could have a major impact on human health, quality of life or the environment.
- CCS 2 a non-compliance which could have a significant impact on human health, quality of life or the environment.
- CCS 3 a non-compliance which could have a minor impact on human health, quality of life or the environment.
- CCS 4 a non-compliance which has no potential environmental impact. CCS4 is often used for administrative errors.

13. How do you decide if an odour incident is also a breach of the permit?

An operator will not be in breach of the odour condition in their environmental permit when they cause odour pollution beyond the site boundary, provided they are using all appropriate measures. However, even if the operator is using all appropriate measures but we consider the residual odour is at such a level that it is unreasonable, it will be necessary for the operator to take further measures to reduce odour pollution, or risk having to reduce or cease operations if appropriate. Where the residual odour pollution is, or is likely to be, unacceptable we will work closely with operators to require them find solutions.

Repeated substantiated odour breaches may result in escalation, particularly when no improvement plan is proposed by the operator. We have a range of regulatory powers that we can use, including taking legal action. We require any site that we regulate to be well run and managed, and not cause harm to the environment or human health. If we agree an action plan with the operator to address the problem, this does not mean we have ruled out taking enforcement action. Our focus will always be to ensure any issues are resolved as quickly as possible. Any enforcement response we take will be in accordance with our published Enforcement and Sanctions guidance which you can find on our website. See link below.

https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy



14. What is a category 2 incident?

Incidents are classified using our nationally consistent Common Incident Classification Scheme (CICS).

For EA purposes, an incident is:

- a specific event or occurrence
- brought to our attention
- within our areas of responsibility
- and which may have an environmental and/or operational impact.

All incidents reported to us are recorded on our National Incident Reporting System (NIRS) and assigned a unique report number.

An incident with category 2 impact has a significant impact or effect on the environment, people and/or property, or on our operations.

A category 2 odour Incident has a significant effect on the human senses and a significant impact on amenity value.

Significant effect on human senses

- Odour offensive and persistent enough to cause significant effect on human senses.
- Odour that is intense and offensive to human senses, persistent or extensive enough that it leads to a noticeable change in behaviour of those exposed e.g., more than ten complaints during one week where people have to shelter (windows and doors closed)
- A widespread effect e.g., complaints are received from some of the local community e.g., more than twenty complaints within one week (not necessarily sheltering)
- An ongoing odour issue, which for a reasonable proportion of the time, is of a significant intensity or extent.

Abnormal odour which leads to noticeable adverse impact on local businesses.

Significant effect on amenity value

- Odour resulting in a significant adverse effect on an amenity or recreation area (such as a park)
 or preventing reasonable use of a domestic area, such as a garden or allotment.
- Odour that is intense, offensive, persistent, or extensive enough that it prevents or restricts some of the local population's use of a public or private amenity or recreation area.



15. How do I submit complaints, enquiries, Freedom of Information requests/Environmental Information regulation requests (FOI/EIR)?

A complaint is any expression of dissatisfaction made against the Environment Agency, a member of our staff or anyone working on our behalf. We can receive complaints verbally or in writing by any member of staff, at any time, while on Environment Agency business. We do not tolerate abusive, threatening, or hostile behaviour, verbally or in correspondence.

If you require further details concerning the EA's complaints procedure and service commitment standards, more information is available on our website at: https://www.gov.uk/government/organisations/environment-agency/about/complaintsprocedure

Both FOI and EIR requests are requests for recorded information. An EIR applies to requests for environmental information and an FOI applies to all other recorded information that we hold.

Please send complaints, enquiries and FOI/EIR's to our enquiries team at enquiries_westmids@environment-agency.gov.uk. We aim to response to all requests within 20 working days from the date it is received.