

Compliance Assessment Report CAR_NRW0040314

Permit being assessed: CB3593CX.

For: Nantgarw Enzyme Production Facility, held by Biocatalysts Ltd

At: Cefn Coed, Parc Nantgarw, Cardiff, Cardiff, CF15 7QQ.

Type of assessment carried out: Site Inspection, Reason: Routine.

On 17/08/2022 between 10:00 and 13:15.

Parts of permit assessed: Site Inspection

NRW Lead Officer: Dale Padfield, accompanied by Andi Kemp.

Report sent to: Barry Thomas, Compliance Manager on 24/08/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
A1 - Specified by permit	Assessed (A)	
B4 - Infrastructure - Containment of stored materials	Assessed (A)	

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

Total number of non-compliances recorded	Total non-compliance score
0	0

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?

No action required.

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

Biocatalysts Limited

EPR/CB35393CX

Site inspection and handover 12th August 2022 (10:00 – 13:15)

The purpose of this compliance visit was to conduct a site inspection, discuss the permit requirements with the operator and to hand regulation of the site under EPR from Andi Kemp to Dale Padfield – Natural Resources Wales South Central Industry Regulation. The site was issued a Low Impact Installation permit on the 1st of June 2022, and this was the first inspection conducted since the permit was issued.

Natural Resources Wales (NRW) officers Dale Padfield and Andi Kemp arrived at the Biocatalyst facility at 10:00 on the 12th of August 2022. NRW were given a presentation which provided an overview of the company, the products made at the facility and the various uses of the products across several industries. The facility produces enzymes through the growth and fermentation of bacteria and yeast. An overview of this enzyme production process was given, from the enzyme development, bacteria and yeast growth and fermentation, enzyme selection, filtration & separation and final product bulking.

A discussion of the permit was conducted with the various requirements and conditions explained to the operator. As a low impact installation there are very few reporting requirements. The only annual submission required is a report on how the installation continues to meet the requirements of the low impact criteria, as mentioned this should be submitted no later than the 31st of January each year and should be evidenced, where possible, with documents such as utility usage bills. There is also a requirement under permit condition 3.1.3 for periodic monitoring of ground water at least once every five years and soil at least once every ten years. There are several guidance documents available for this, Horizontal guidance H5, Regulatory Guidance Note (RGN) 9 and the EC IED guidance on Baseline Site Condition Report (SCR). As mentioned within this guidance, it is in the interest of the operator to produce a SCR and maintain and update it throughout the lifetime of the permit. The information documented in SCR will form an important part of the permit surrender process and provides an evidence base for how the land and ground water was protected from site operations during the lifetime of the permit.

The site inspection began with a walk around the outside perimeter of the facility. The North side was viewed first, this is the new built extension to the facility. As a low impact installation, no releases to land or water are permitted from the installation. To satisfy this condition and prevent boiler condensate from entering the ground, Biocatalyst have installed collection containers at the end of each condensate pipe and have a schedule for checking and emptying. The containers were viewed and appeared to contain only small amounts of condensate. The 10,000-litre external buffer tank was seen, the tank is contained within a purpose-built concrete bund and is positioned towards the rear of the site on the East side. This area is also used to store various chemicals and feed stocks, drums and IBCs were seen to be stored on bunded pallets, with only empty containers seen to be stored without secondary containment. Some build-up of rainwater was seen within the buffer storage tank bund and it's likely the bunded pallets will also collect rainwater. It was noted that there are plans to erect a roof over this area, however, until the roof installation is complete the bunds should be inspected regularly, particularly following periods of precipitation, to ensure the 110% capacity requirements of the bunds are maintained. The various emissions points for the boilers and LEVs were seen and are located to the rear of the site.

The South side of the site was inspected next, which serves as the delivery area. A large quantity of IBCs were seen in this area, these IBCs were not provided with secondary containment. It's important to ensure any containers containing liquids are stored with secondary containment, to prevent any loss of inventory entering the surface water drainage network and escaping into the environment. This is a requirement of the environmental permit – condition 3.2.3. Although the content of the IBCs was non-hazardous, as mentioned during the inspection, the inventory doesn't necessarily need to be classified as hazardous to

have a negative impact on the environment.

There is a 6000l bunded methanol storage tank situated within this area, the tank is housed in purpose-built storage shed and is not currently in use. It was noted during the inspection that the delivery point was not serviced with a bund, the site should implement a means to capture any unintended fugitive emissions from this delivery point, as mentioned, a portable drip-tray that can be positioned beneath the connecting pipework during deliveries would be sufficient for this. Once in service the area also needs to be signed to indicate the DSEAR status. The storage shed that houses the methanol tank is not ventilated, the operator has plans to install a gas monitor to detect any build-up of an explosive atmosphere. The impermeable concrete surface throughout this area appeared to be in excellent condition. NRW were pleased to hear that the site re-uses and reutilises IBCs where possible, reusing on site or used to package product.

An inspection of the production areas was conducted. The process areas are comprised of the fermenting tanks, feed tanks, holding and buffer tanks and the filtration unit. The flow of the process was explained. All appeared to match what had been submitted in the application. Key process parameters are monitored via the control room, such as temperatures and feed rates, where adjustments can be made as necessary. Spill kits are located throughout the area, allowing for the containment of small-scale spills. However, the entire production area has an impermeable surface which drains to a bunded interceptor tank with a 10,000l capacity, providing capability to contain any large-scale spills. The wet and dry product blending areas were seen, where product is bulked as either a powder after freeze drying or as liquid before the product is finally packaged.

The site operates an environmental management system (EMS) with ISO 14001:2015 accreditation, with the accreditation valid until October 2023. As a newly permitted installation it would be pertinent to conduct an EMS audit. We will be in contact to arrange this at a later date.

Below is the location on our website where you can find some of the various guidance that was discussed during the meeting.

<https://naturalresources.wales/permits-and-permissions/environmental-permits/environmental-permitting-regulations-guidance/?lang=en>

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.