

Compliance Assessment Report CAR_NRW0046378

Permit being assessed: BV4223IE.

For: Llanelli Plant , **held by:** Huntsman Corporation (UK) Ltd

At: LLANELLI PLANT BYNEA , LLANELLI, LLANELLI, DYFED, SA14 9TE.

Type of assessment: Audit,

Reason: Routine.

On: 05/02/2025 between 10:30 and 13:00.

Parts of permit assessed: See CAR Report .

NRW Lead Officer: Elliot Jones.

Report sent to: EHS Manager, Huntsman Corporation (UK) Ltd, on 24/02/2025.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	Assessed (A)	
IR3B - Installations - Emissions and monitoring - Emissions of substances not controlled by emission limits	Action only (X)	
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.2

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

Total non-compliances recorded	Total non-compliance score
1	4

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
IR3B	Provide regular updates through 2025 of the drain survey findings and notify of any significant remediation work required.	31/12/2025
IR3E	Complete and submit evidence of FT-270 Weak effluent flow	Already

Criteria	Action needed	Complete by
	meter calibration.	completed

Compliance 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

Huntsman Site Visit

Huntsman Corporation UK limited operates in accordance with EPR/BV4223IE
Huntsman operates a specialist organic chemical plant with a capacity of 37,000 tonnes per annum, located on the site of former Bynea Steel Works, running along the Eastern and North-Eastern boundaries is the River Loughor.

Purpose of Compliance Assessment Report

- Assurance audit 5th February 2025.

Attendees

- NRW Senior Industry Regulation Officer
- Huntsman Environment, Health & Safety Manager

Introduction

A site inspection of Huntsman Corporation UK, Bynea Llanelli was arranged for 5th February 2025. Purpose of the visit was an assurance audit, following up on progress from recommendations issued during a COMAH inspection in 2024.

Officer provided the operator with an agenda prior to the visit, allowing operator time to gather appropriate documents.

Officer underwent a site induction on arrival, a short video followed by a knowledge quiz.

Agenda

- COMAH Visit 2024
- Site Discharge Point/Reed Bed
- Stack Emission CEMS

Site Inspection

During March 2024, a COMAH inspection was undertaken on site with a main focus on secondary and tertiary containment. Following the assessment, COMAH officer issued the operator with the following recommendation:

Recommendation 2: “The Duty Holder should ensure that any underground drainage systems, e.g. the strong effluent lines, are periodically inspected to verify their condition.”

In response to the recommendation, the operator has introduced a CCTV inspection programme for the buried sections of the weak effluent system. This system forms part of the secondary containment and includes underground drainage pipes and connections to manholes and sumps.

The initial drainage survey begun in early November 2024. This was the first drain survey undertaken on site for a number of years.

Significant volumes of debris and sludge required removal from the system prior to performing the CCTV inspection, this delayed progress and limited the inspection to a portion of the tank farm. Review of the CCTV footage has revealed no significant damage to the inspected portion of the drainage.

Due to the significant volume of debris found in the drainage the site has currently surveyed an estimated 25% of the system, with the remainder of the drain survey planned throughout 2025.

Despite no considerable damage being found during the initial survey, operator has outlined plans to completely reline the drainage system with a PVC liner. Improving the long-term integrity of the drainage system.

Action: Provide regular updates through 2025 of the drain survey findings and notify of any significant remediation work required.

Operator has also undertaken additional work on the site's secondary containment. Sealing joints, in the tank farm have been renewed and where required concrete bunds have been repaired. These were further improvements advised during the most recent COMAH visit.

Permitted Discharge Point and Reed Bed

Following a short walk offsite, officer visited the sites sole permitted discharge point (W1). Reed bed filtered water is discharged into the Lougher estuary via underground pipe that resurfaces on the bank of the estuary. Discharge point is closely monitored by camera relaying back to the sites main control room. The control room has the ability to regulate the discharge flow rate and close the discharge should a known problem have occurred on site.

Water being discharged during the visit was visually clean with no evidence of any pollution.

The site has a series of reed beds responsible for the filtration of the weak effluent prior to discharge to W1. Weak effluent is deposited into the beds by a fine mist sprinkler system. Water percolates through the reed bed before being aerated and lastly discharged. W1 sample point is located on the exit of the reed bed, within the permitted grounds of the site. External contractor has been undertaking work within the Reed bed, removing young

saplings and brambles that have taken root in the reeds.

Operator has begun internal discussions about potentially renewing and reseeded the Reed bed.

Sampling and Analysis

The sites sampling procedures and analysis methods are stored on a bespoke ICT system accessible to all the required members of staff. W1 samples are retrieved weekly by trained staff and analysis is completed in house by the onsite laboratory. Analysis results are uploaded to a spreadsheet for comparison reasons, allowing operator to track any trends in the monitored parameters.

Weak flow effluent meter responsible for monitoring flow from the Reed bed to the culvert, was found to be uncalibrated. Flow Meter calibration expired on the 24th January 2025.

In accordance with non-compliance scoring guidelines, a **non-compliance score of C3** has been allocated against sub criteria **1R3E – Monitoring**.

Action: Complete and submit evidence of FT-270 Weak effluent flow meter calibration.

Stack Emission CEM Improvements

During Quarter 2 2024 operator experienced difficulties with the sites Incinerator, Continuous Emission Monitoring (CEM). Emission point A1.

Operator has been working collaboratively with the CEM manufacturer to improve the accessibility and quality of the data.

Operator has implemented a system with a capability of receiving daily reports via email from the CEM regarding performance and monitored concentrations. Daily reporting allows for earlier detection of emission limit breaches.

CEM provides live instantaneous results to the central control room, and incorporates an alarm system notifying a breach of one of the monitored parameters. Alarm informs the operator of the need to alter operating conditions of the incinerator, returning the site to compliance.

Operator is also in the process of installing a secondary backup CEM system on the amines incinerator, should the primary system incur any issue. The ADAM 6060 TCP to be installed over the coming months.

Conclusion

Operator has begun inspection of the drainage system as per Recommendation 2 from the 2024 COMAH visit. Inspection revealed significant volume of debris in the drainage system and its removal has increased the timeframe for the survey to be completed. Operators maintains committed to completing the survey and work will continue through 2025. Officer

has requested frequent updates on the progress of the drain survey and notifying should any significant remediation work be identified.

Additional improvement have been made to the integrity of the tank farms containment, renewing sealing joints and repairing concrete bunds where required.

Visting the permitted discharge point and the reed bed assisted the officers understanding the treatment of the weak effluent prior to discharge. Monitoring submissions submitted through 2024, outlines that the reed bed appears to be working effectively with no W1 breaches recorded through 2024.

The calibration of the FT270 flow meter, responsible for monitoring the weak effluent discharge was found to have expired. Officer set the above action for the operator to return to compliance.

Whilst complying this report, operator completed and submitted the relevant documentation for FT270 flow meter. Calibration completed 6th February 2025. Officer is satisfied that the flow meter has returned to compliance and therefore consider the action, **Complete**.

Operator outlined improvement made to the data handling and performance notification for the site's amines incinerator. Collaborating with the CEM manufacturer, to implement a daily reporting system and a secondary back up system. These additional features will improve reliability and allow for earlier detection of potential emission limit breaches.

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.

If your assessment result in Section 1 is suspended, what does this mean?

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 compliance criteria (used in section 1 and 2):

1. Management

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2. Operations

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

3. Emission and Monitoring

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

4. Information

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

Enforcement response

Any non-compliance with a permit condition 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 twenty 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 to 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.