

Compliance Assessment Report CAR_NRW0043495

Permit being assessed: BV7460ID.

For: Newport Semiconductor Plant, **held by:** Nexperia Newport Limited

At: Cardiff Road, Newport, South Wales, NP10 8YJ.

Type of assessment: Site Inspection,

Reason: Routine.

On: 13/02/2024 between 10:00 and 16:00.

Parts of permit assessed: Schedule 5 Notification - F-gas release.

NRW Lead Officer: Rebecca Green, accompanied by Kathleen Geraghty, EA.

Report sent to: Sarah Underwood, Environmental Engineer, on 16/02/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3B - Emissions and monitoring - Emissions of substances not controlled by emission limits	C4 No impact	3.2.1 Fugitive emissions
IR1A - Management - General management	Assessed (A)	
IR3E - Emissions and monitoring - Monitoring	Assessed (A)	
IR4C - Information - Notification	Assessed (A)	

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

Total 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
IR3B	Ensure load cells in Fab 10 & Fab 11 are labelled with an identifier unique to each chiller.	Already 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

On 25th January 2024 Natural Resources Wales (NRW) received a Schedule 5 Notification from Nexperia to inform them that there had been a leak of F-gas from one of the chiller units in Fab 10. NRW were due to visit the site on 13th February 2024 and so the chillers in Fab 10 and Fab 11 were inspected during this visit.

The leak was caused by the failure of an O-ring in a threaded joint. 213Kg of R134a gas was released, with an estimated global warming potential equivalent to 305Kg CO₂.

The leak was detected immediately by the toxic gas monitor connected to the FTMS (building management system) and once confirmed the chiller was shut down. Nexperia estimate that the leak continued for about an hour. An engineer was requested immediately and visited the site on 29th January to repair and quantify the leak.

It is unfortunate that Nexperia have had a leak from another chiller only six months after the one from the Fab 11 chiller. However, the actions agreed in CAR_NRW0042279 have mostly been completed ahead of the 1st March deadline and because of this the leak was detected very quickly and an engineer attended as soon as possible.

The room containing the chillers does not have LEV, only heat extraction, and the only access to the outside is via a personnel door. There is no roller shutter door, as there is in Fab 11, and thus there is no pathway to receptors. Nexperia have been issued with a Cat4 non-compliance for an unpermitted release having no environmental effect.

Inspection

Fab 11: the load cells were seen and are operating, although they are not labelled with unique identifiers for each chiller. The intakes for the toxic gas monitors have been re-positioned. They are now under the tanks as R134a is heavier than air.

Action: Label load cell displays with a unique identifier for each chiller by 1st March 2024.

Fab 10: The intakes for the toxic gas monitors have been repositioned so that they are under the tanks. The load cells and displays have been installed and are labelled with the chiller number that they are measuring. They will be operational by 23rd February 2024.

The feasibility of checking the O-rings and joints regularly was discussed and NRW agreed that this was not a practical option. The measures installed in compliance with the actions in CAR_NRW0042279 have proved effective in minimising the leak in Fab 10. Nexperia should be commended for their prompt completion of these actions.

CAR_NRW0042279 - actions from this CAR have been completed and can therefore be closed.
END.

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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.