

Compliance Assessment Report CAR_NRW0037201

Permit being assessed: BV7460ID.

For: Newport Semiconductor Plant EPR/BV7460ID, held by Newport Wafer Fab Limited

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

Type of assessment carried out: Report/Data Review, Reason: Routine.

On 03/12/2020.

Parts of permit assessed: 1.3.1 Efficient Use of Raw Materials; 1.4.2 Waste Efficiency Review

NRW Lead Officer: Rebecca Green.

Report sent to: Sarah Underwood, Environmental Engineer on 10/12/2020.

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)	
H1 - Resource Efficiency - Efficient use of raw materials	Assessed (A)	
E5 - Emissions - Waste	Assessed (A)	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Assessed (A)	
C2 - General Management - Management system and operating procedures	Assessed (A)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	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

The Newport Wafer Fab Raw Materials and Waste Efficiency Review – November 2020, was received on 3rd December 2020. This review should be carried out at least every four years and the findings reported to Natural Resources Wales (NRW). This is the first such review since Newport Wafer Fab (NWF) received its varied and consolidated permit in September 2020. The report is accepted.

Perfluorooctanoic acid (PFOA) and n-methyl-2-pyrrolidine (NMP) are no longer used on site due to their associated health, safety and environmental properties. There have not been any other significant changes to raw materials used on site.

Total water used has been decreasing since 2017. This would be better expressed as water used per m² of production (as in the annual reports). Proposed measures to further reduce water consumption include the re-use of rinse waters from some wet processes, after suitable purification, and reviewing the opportunities to reduce evaporation losses from the cooling towers, while maintaining the same performance.

NWF provided a diagram to illustrate how the Waste Hierarchy is applied to each of their waste streams and also a list of the final destination, including mileage, for each one. Companies used to dispose of waste are tightly controlled. Amongst other criteria, they must be legally compliant and as local as possible. NWF try to influence the life cycle impact of their products by encouraging suppliers to operate more sustainably.

Tankered solvent waste travels the farthest for disposal/recovery because this supplier recovers some for re-use and the remainder is converted to fuel. NWF have increased on-site storage capacity and reduced the collection frequency from every two weeks to every six weeks, thus mitigating the CO₂ generated by the long journey to the recycling site.

Several opportunities have been identified for reducing or recycling waste. These include recycling adhesive tapes, using a more dense foam, with 65% recycled content, to protect wafers in transit and using a more robust frame to hold the work during heat treatment. The latter may not be feasible due to significant increased costs.

NWF aim for continuous improvement in their product life cycle so that their overall environmental impact is reduced.

The annual circulation of the "Greening the Supply Chain" survey to all NWF's suppliers is an innovation that other operators should be encouraged to follow.

This review illustrates NWF's commitment and exemplary approach to the efficient use of raw materials and to the minimisation of waste generated throughout the whole of a product's life cycle.
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.