

Air Products (BR) Limited
Queensway, Spencer Works,
Llanwern, Newport,
South Wales
NP19 4QX

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27th January 2022.

Natural Resources Wales
Rivers House
St Mellons Business Park
St Mellons.
Cardiff
CF3 0EY

Attention: Mr Luke Burton

Re IPPC Permit number BL 2459.

Dear Mr Luke Burton

Please find enclosed:

Fugitive Emissions report for year ending 31st January 2023.

Yours sincerely



T C Ryan
Plant Manager

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Fugitive Emissions Summary Report

Fugitive Emissions – Report Summary for year ending: January 2023

Operator	Air Products (BR) Ltd
Location	Hydrogen Plant, Llanwern
Permit Number	BL2459

1. No leaks from Hydrogen plant or associated equipment noted. The PSA valves have been fitted with self-adjusting valve packings, these stop any small valve packing stem leaks from occurring. A plant walk around and leak detect is carried out on a Friday when the plant weekly logs are taken, a 4 in 1 gas detector is used to detect any leaks which are then repaired as necessary.
2. Plant maintenance system in place for observation and rectification as required
3. Plant shut down completed August 2021.
Critical circuit testing completed as SAP maintenance programme. The SAP maintenance system schedules the CSS testing. The frequency of these tests and their procedures are set and written by our head office support staff. They are carried out by our central maintenance support staff, who receive the required training to carry out these tasks.
Maintenance activities as required as SAP maintenance programme.
4. Load following system in use to reduce venting of Hydrogen and steam during normal operation of plant.
5. Advanced computer system installed, December 2007, to further improve monitoring and control of plant and systems, further routines added through 2009. This now supports the KPI visualization tool which allows efficiency monitoring in real time. This has been updated in 2018 to make the system more accurate.
6. Customer demand for Hydrogen decreased during 2019, Plant load following between 43 and 86% of rates.
7. Lost our major Hydrogen customer April 2020 when Orb Electrical Steels closed, plant loading now fixed at 43% of Rates. Air Products as a company is actively seeking other markets for the Llanwern Hydrogen.
8. The control system was replaced in august 2021 with a more up to date model do address the issue of obsolescence and cyber security.
9. In the next two years we are installing a hydrogen trailer fill system, this will use all the current excess hydrogen we have. This will regain the plants efficiency model.
10. We have started the installation of the Hydrogen Trailer fill for the transport fuel cell market, should be online by September. This will drastically increase the efficiency of the plant as our product will be normally sold out.

Date of return: 27th January 2023.

TC Ryan