

IQE Newport performance review 2020.
Environmental Operating Permit
EPR/AB3893FZ

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Prepared on behalf of IQE Silicon Compounds.
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Introduction

This report has been prepared for Natural Resources Wales "*the regulator*" in line with the requirements of IQE Silicon Compounds "*the operator*" environmental operating permit EPR/AB3893FZ to satisfy permit condition 4.2.2.

General Information

This is the second report submitted by IQE since the issue of the operating permit by the regulator on 28/02/2019 and as such it may continue to evolve as future iterations are submitted.

VCSEL demand continued to grow in the South Wales businesses throughout the 2019-2020 period.

Since the start-up of the Epi Mega-Foundry in Newport in late 2017, the plan for migration of the VCSEL product from St.Mellons to Newport was key in order to meet the growing customer demands

Although the 10 x MOCVD reactors were in place and qualified in 2019 only a few of them were running in anger, 2020 really saw the true potential of the volume production that could be achieved and this was realised with an increase of ~ 60% in productivity and throughput.

To date, this is the only volume-manufacturing process at IQE Newport, with arsine emissions the only point of interest.

Monitoring Results (Condition 4.2.2 (a))

As per conditions of permit IQE Silicon Compounds Newport has no requirement to publish any monitoring data for site on an annual basis. The only requirement, which has been met, was initial emissions to air reporting.

Annual reports of energy and water usage are required to be made on an annual basis, for year ending 2020 this has been done using NRW forms E1 for energy usage and W1 for annual water consumption. As per direction of the NRW Performance Form 1 has also been compiled for 2020 and submitted.

As per permit conditions IQE Silicon Compounds Newport will in the future when the second stack is commissioned and further reactors come on line have the emissions to air monitored via an MCERTS company.

Annual Comparison

The following data tables show the comparison in utility & water usage at IQE Silicon Compounds Newport 2019 v 2020.

