



**CABOT CARBON LTD
SULLY MOORS RD
SULLY
VALE OF GLAMORGAN
CF64 5RP**

**ENVIRONMENTAL PERMIT BU2110IS
FUGITIVE EMISSIONS
ANNUAL REPORT CY2019**

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Introduction

Cabot Carbon Ltd is required to undertake an annual review of fugitive emissions at the installation in accordance with their Environmental Permit BU2110IS, requirement 4.1.4, which specifies:

"The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed with the Agency, and a summary report of this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period."

The CY2019 fugitive emissions report addresses fugitive emissions from the permitted installation to air, water and land, having regard to best available technique (BAT) and the measures taken by Cabot Carbon Ltd to reduce them. The Annual Fugitive Emissions data table is also attached for reference.

Highlights

We are pleased to report a reduction in fugitive emissions for the fifth consecutive year, also that there were no emissions of a significant or reportable nature in 2019. There were 15 releases in total (versus 41 in 2016, 29 in 2017 and 21 in 2018) across 7 media categories totaling only 34Kg. 80% of 2019 releases were below 1kg/1litre (and 95% below 5kg). Most spills and leaks released to indoor areas or to small bund/containment thereby posing no pollution risk.

The most significant release in 2019 was a silica spill during tanker loading. The silica spill amounted to no more than 25Kgs which was contained within the tanker loading bay. The investigation identified the leak path to be a small nozzle on the top of the tank which is sealed with a Storz type connection blank. THE RCA established that this is an unusual failure, the haulier repaired the leaking connection. Cabot do not have safe access to this part of the vehicle so the haulier completes the appropriate preparation and confirmation is made by the driver through a loading cheek sheet.

In 2019 Cabot completed a fugitive emissions assessment as requested under CAR_NRW0034704 action 2. The assessment used guidelines provided by NRW and the expertise of the Cabot engineering team to review the monitoring and control of chemicals on site in respect of it's potential for fugitive release and impact on the environment. For chemicals of sufficient quantity and volatility consideration was given to the storage and use of the chemical regarding potential leak paths. Cabot have determined that the current controls and monitoring are suitable and sufficient to prevent unidentified loss of containment and the determination is supported by the fugitive emissions reports 2015-2019.

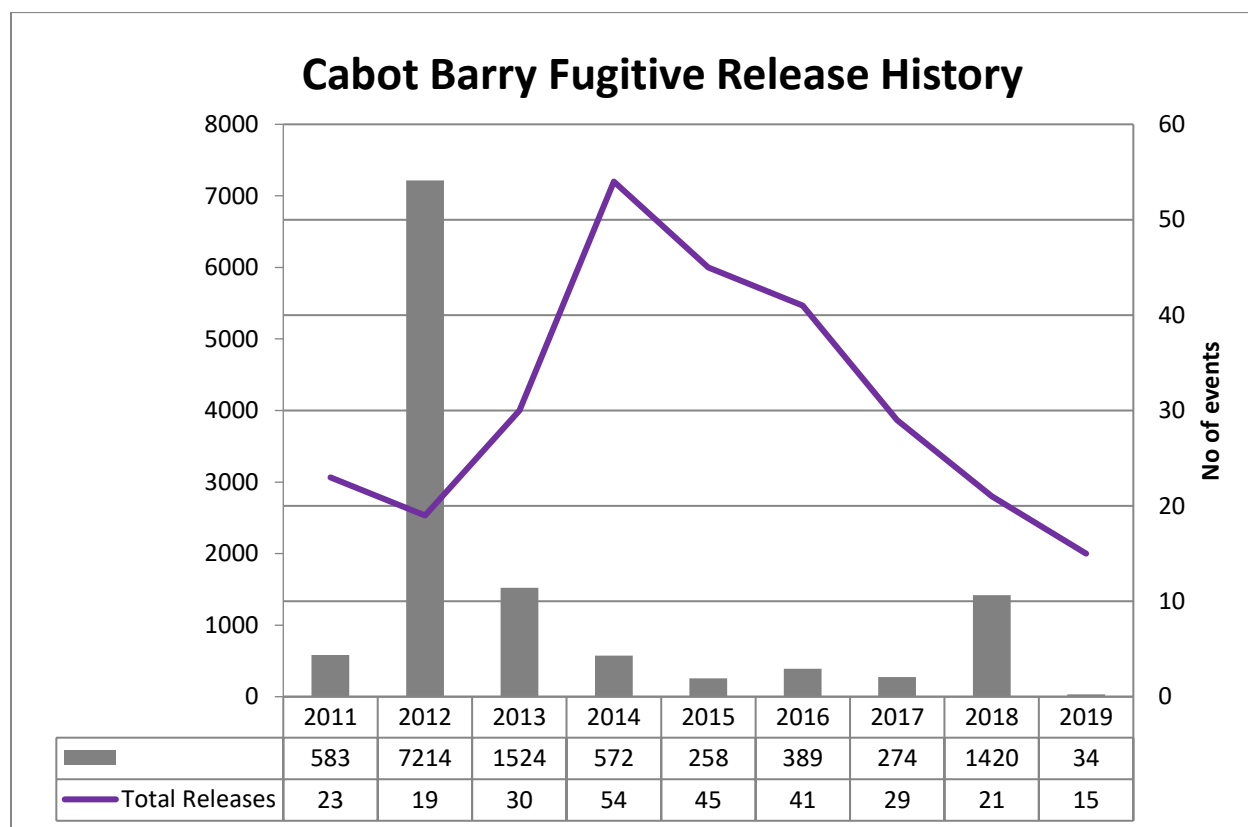
There is a continued focus by the Cabot team on mechanical integrity programmes and risks of corrosion under insulation. Reliability improvements were a focus for 2019 with some £4 million in capital expenditure during the year on projects including:

- PTFE pipework replacement, a rolling programme to reduce the risk of pipework failures.
- Desorption demister upgrade, to reduce the water content of AHCI and as a result reduce the amount of line fouling.
- E165A and E480 cross exchanger replacement, both exchangers were end of life and were replaced before failure.
- Main Unit Filter B shell repair, to improve the mechanical integrity of the filter house

Cabot are committed to continuously improving our Environmental performance, during 2020 we plan to review the content and frequency of our Environmental preventative maintenance activities to ensure suitability and effectiveness. Operators continues to monitor the plant routinely as part of Outside Operator duties, this promotes early detection and response to wisp and drip leaks and any failure modes. Details of all leaks, spills for 2019 are shown below.

Fugitive Release Breakdown

2019	Quantity KG	No. Fugitive Releases	Form
AHCl	0	2	Gas
Fumed Silica	34.0	7	Solid
H2	0.0	1	Gas
HCl	0.0	2	Liquid
LN2	0.0	1	Gas
LPG	0.0	1	Gas
PDMS	0.0	1	Liquid
Total	34	15	



We continue with our 'Drive to Zero' philosophy. Environmental performance is a critical component of operational excellence and is carefully monitored at the Barry facility. Cabot is committed to being an industry leader and we endeavor to conduct our business in an environmentally responsible manner. There have been no other notable reported fugitive releases during the reporting period that warrant further comment.

End.

*** Cabot Barry: 9 years 3 months since last ENC (@ 26th March 2020) **