

Appendix 5 – Abnormal emissions Schedule 1-Part A and Part B reporting form

Schedule 1 - Notification of abnormal emissions (001/21)

Part A

Permit Number	VP3339PD
Name of Operator	Morganite Electrical Carbon Ltd
Location of Facility	Upper Fforest Way Morriston Swansea SA6 8PP
Time and date of the detection	14:25; 11/02/2021

Notification for any activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment	
Time and Date of the Event	
Location/Source of the Event	
Description of where event took place	
Substance released	
Quantity released	
Measure taken, or intended to be taken to stop any emission	
Description of the failure or accident	

Notification for the breach of a permit condition	
Emission Point Reference/Source	A61 – Ace Kiln 5 & 6
Parameter(s)	Total Particulate
Limit	10mg/m ³
Measured value and uncertainty	43.0mg/m ³ (2.5mg/m ³)
Time and Date of Monitoring	08:25 – 09:27; 13/01/2021
Measures taken or intended to be taken to stop the emission	Review of kiln monitoring program data has shown no apparent issue with the programme running. There was no visible smoke plume at the time of the monitoring. Monitoring was done at higher temperature >1150°C, the filter paper contained a white particulate deposit which is not typical of particulate deposits normally seen (Photo attached below). The filter paper has been requested from monitoring company in order for us to analyse the makeup of the particulates on the filter. Planned preventative maintenance on the kiln which has been conducted following the monitored run has found deposits of white materials within air injector pipes, this will also be analysed to compare against the filter paper deposits. New ceramic pots (saggars) used to hold the product within the kilns may possibly be giving of the white deposits. The contents of the particulate is currently under investigation, re-monitoring has been arranged for 24th February 2021.

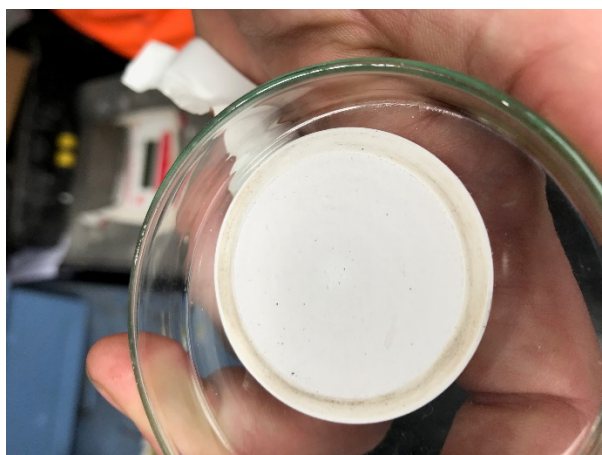


Photo of white particulate on the filter paper from A61 sampling.

Notification in the event a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment	
Description of where the effect on the environment was detected	
Substance(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B

Any more accurate information on the matters for notification under Part A	It is possible that the white material on the filter was from the new ceramic saggars which were used. Planned preventative maintenance on the kiln which has been conducted following the monitored run found deposits of white materials within air injector pipes. It was hoped to analyse a sample of the white material to compare with that of the filter paper, but no material was kept as the notification of the breach came in after the maintenance was completed. If material is found again on the next PM schedule, samples will be taken to determine. The filter paper has been analysed for contents in onsite analytical lab using emissions spectrometry (results below). Results are inconclusive at this stage until we determine contents of saggars.
Measures taken, or intended to be taken, to prevent a recurrence of the incident	Re-monitoring was carried out on 24th February 2021 at similar temperature to that of the original sampling. The result was 5.42mg/m³ which is below the ELV for Particulate. Photo of the filter below, the appearance of the filter is typical of what is normally found. A requirement for the Kiln PM schedule going forward is to clean out and inspect the air injectors, any materials found in the injectors going forward can be removed and analysed to determine its potential origins.

	Continue to monitor through annual emissions monitoring. The kiln is currently not been in use since the re-monitoring and has only been fired 3 times during 2021.
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission	No action required.
The dates of any unauthorised emissions from the Morriston Carbon site in the preceding 24 months	28/07/2020 – A27 Particulate 29/07/2020 – A28 Particulate 29/07/2020 – A28 Oxides of Nitrogen (ATL) 29/07/2020 – A61 Particulate (ATL)



Photo of particulate on the filter paper from A61 re-sampling on 24th February 2021

Name	Mark Williamson
Post	EHS Lead
Signature	<i>Mark Williamson</i>
Date	10/08/2021