

Site Reference: EPR/A2/001

Date Inspected: 29th September 2016

Inspection Type: Check Inspection

Person Seen: Eddie Goddard
Raj Parmar

Site Name O-I manufacturing UK
&Address: Edinburgh Way
Harlow
Essex
CM20 2UG

Inspected By: Fay Rushby
Steven Adams

Inspection report: The following information provides a formal record of the above inspection:

1. EP Maintenance update

The EP has received recent maintenance for the oil pressure switch for zone 3, and works were also undertaken to replace obsolete parts to assist future maintenance.

Zone 1 & 3 are currently operational, however zone 2 is blocked and requires cleaning. Discussions were had in relation to bringing the scheduled clean forward.

2. Spot samples

Emissions testing was undertaken in June 2016, with the furnace working under normal operating conditions.

The emissions monitoring results indicate that Particulate and NO_x emissions are well within limits, and acid gas emissions are much improved with just Fluorides exceeding emission limits as follows:

Parameter	Emission Rate	Emission Limit	Comments
Particulate	0.001	0.06	Well within emission limits.
NO _x as NO ₂	0.44	0.8	Well within emission limits.
Sulphur Dioxide	0.64	0.75	Within emission limits.
Carbon Monoxide	<0.01	-	There is no further need to include CO in spot samples.
Hydrogen Fluoride	0.011	0.008	Exceeds emission limit.
Hydrogen Chloride	0.028	0.03	Within emission limits.

The abatement plant was advised as operational at the time of the testing, however it is thought that the reagent injection system is not working properly

A revised flow rate was also obtained for the purposes of calculating emissions compliance with CEM results.

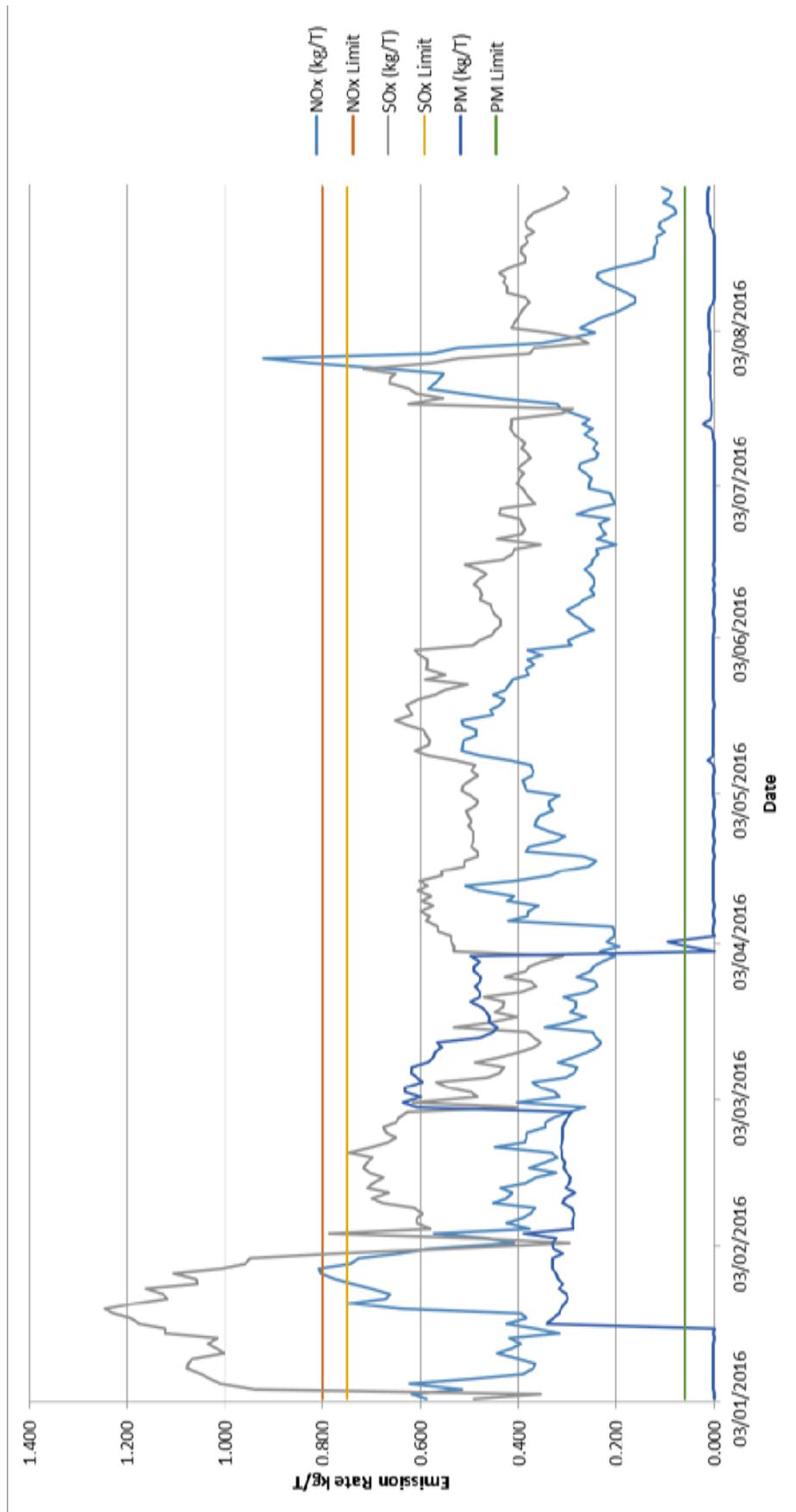
- You must ensure that sorbent injection can deliver compliance with BAT AELs during green or amber glass campaigns.
- The rate of sorbent injection must be determined, and this should also be reported in the stack emissions monitoring report.
- Please note an incorrect permit reference on page 3 of the monitoring report.

It is also noted that GTS undertake spot sampling using a variety of averaging periods. The permit makes reference to 3 x 30 minute sampling periods (from the Guidance Notes)

- Please ask GTS about the revised sampling periods.

3. CEM data

Daily averages apply for the purpose of demonstrating compliance with emission limits. These were charted to assess compliance:



Since the EP was brought back on line (April), emissions have been excellent. You advise that the spike in August was due to low tonnage (makes a big impact when emissions are quoted as kg/T).

4. Noise

The VSA plant was identified as the source of noise subject to complaint within Harlow. Works to date include the installation of an acoustic wall, however this has had the effect of bouncing the noise into the East Herts District Council area, resulting in a further complaint.

The following works were discussed:

- Increasing the height and angle of the rear wall.
- The use of the services of an acoustic consultant.

5. Permitting anomaly

Unfortunately, I have identified that condition 3.1.2 of your new permit is not relevant to how you determine compliance with emission limits when converting the emission concentration from mg/m³ to kg/tonne. The permit will shortly be varied using a Regulator Initiated non-substantial permit variation

I propose that the erroneous condition be replaced with either of the following:

- 3.1.2 Measured emissions for comparison with emission limits in condition 3.1.1 shall be calculated by conversion from concentrations to specific mass emissions as follows:

$$\frac{((\text{Emissions concentration in mg/Nm}^3 \times \text{Volume Flow}) \times 3600) / 1000000}{\text{Furnace pull in Tonnes/hr}}$$

All values for concentrations in waste gases refer to standard conditions: dry gas, temperature 273.15 K, pressure 101.3 kPa.

or

- 3.1.2 For continuous measurements, a 15-minute average sampling period shall be used.

Signed:



Environmental Health Officer

Date of Report:

3rd October 2016