

Site Reference: PPCA/A2_3.3/UG/2003

Date Inspected: 29th March 2016

Inspection Type: Full Inspection

Person Seen: Eddie Goddard
Raj Parmar (via
telephone)

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

Inspected By: Fay Rushby

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

1. Permit discussion

A fully revised permit is now in place at the installation, and the main purpose of the inspection was to discuss how O-I complies or intends to comply with all permit conditions. A summary of our discussion follows:

Emission limits:

No emission limit derogations have been sought. Recent spot tests indicate that acid gas emissions exceeded emission limits, however:

- The plant is not yet at full capacity, which has implications on the kg/tonne emission limit.
- Flue gas temperatures are quite high, which can inhibit the efficacy of the reagent.
- Cullet pre-heating may be driving off HF and HCL. O-I to draw on experience from other sites in the group with similar equipment.
- Sulphur balance to be re-worked and the batch recipe adjusted if future spot samples indicate that furnace pull and flue gas temperate were not influencing factors.

Spot sampling is planned again for April 2016.

- It is not clear if this has been undertaken.
- Please remember notifications!

Continuous emissions monitoring is undertaken for particulate matter, SO_x and NO_x.

- Monitoring equipment is advised as running well.
- Data retrieval remains a problem for periodic reporting.
- Calendar year quarters proposed for reporting as soon as data retrieval matters are resolved.
- GTS undertakes a comparison of CEM data with spot results.
- The intention is to automate reporting to convert concentration measured to kg/tonne glass melted, however for 2016 volumetric flow data from the GTS spot tests will be used. It is hoped that old ports on the stack can be used for volumetric flow equipment.
- The lime injection rate in kg/hr is on display in the furnace control room, as is the air flow for lime injection in Nm³/hr.

General emissions control.

- Delivery pipes on the batch house are 12/15 years old, but tested and found sound 2 years ago.
- PPM regime in place for ongoing security.

Management control:

The following management controls were discussed:

- A Storm Water Pollution Prevention Plan (SWPP) is in place and likely subject to annual revision to maintain validity. This should cover quite a few aspects in section 10 of the permit.
- A 50 year plan for systems auditing with greater emphasis on key areas for pollution control. Raj to check on EMS status.
- Eddie Goddard to be principal point of contact for Harlow.
- Regular team update meetings.
- Day log sheets in place for batch house.
- Integrated SAP maintenance system proposed.
- Training updates for oxy-furnace and environmental awareness. Recent role-play training for spillages undertaken.
- Reviews and annual audits already undertake, so most reporting points should already be covered. Discussed submission of the annual report.
- Near-miss reporting system also in place, additional focus on environmental near-misses.

2. Site update

A site tour was also undertaken:

- The VSA is nearing completion.
- A noise assessment will be undertaken for the VSA as one of the motors may be noisy. Acoustic containment is being considered.
- Single large motor now serves the EP.
- Damper door recently cleared of EP dust.
- EP dust collection and introduction point likely to be changed for operational reasons.

Signed:



Environmental Health Officer

Date of Report:

22nd April 2016

Risk Assessment

1 - Scoring for Inherent Environmental Impact Potential

| Activity category | Score Awarded |
|---------------------|---------------|
| Category 1 activity | 10 |

2 - Scoring for Progress with Upgrading

| Status of Upgrading | Score Awarded |
|--|---------------|
| Upgrades required but deadline not yet reached | 5 |

3 - Scoring for Sensitivity and Proximity of Receptors

| Sensitivity and proximity of receptors to the emission source | Score Awarded |
|---|---------------|
| Medium sensitivity receptors are within 100-250m | 12 |

4 – Scoring for Other Air Pollution Targets

| Contribution of the activity to local AQMA | Score Awarded |
|--|---------------|
| The activity is not a potential contributor to, or the cause of a local AQMA | 0 |

5 - Scoring for Compliance Assessment

| Scale of Non-Compliance | Possible Score | Score Awarded |
|---|-------------------------|---------------|
| (A) Incident leading to justified complaint but no breach of any specific permit condition or of the general/residual BAT condition. | 0 points | 0 |
| (B) Incident leading to a justified complaint*. | 5 points per incident | 0 |
| (C) Breach of permit conditions, not leading to formal action. <ul style="list-style-type: none"> ➤ SOx emission limits. ➤ HF emission limits. ➤ HCL emission limits. | 10 points per breach | 30 |
| (D) Incident leading to formal caution, Enforcement Notice or prosecution. | 15 points per incident | 0 |
| (E) Incident leading to a Prohibition Notice or Suspension Notice. | 20 points per incident | 0 |
| | Total (Max. 50): | 30 |

* Unjustified complaints may be e.g. those considered by the inspector to be unreasonable or which cannot be clearly linked to an incident at the process.

6 – Scoring for Assessment of Monitoring, Maintenance and Records

| Criterion | Possible Score | | | Score Awarded |
|---|----------------|----|-----|---------------|
| | Yes | No | N/A | |
| (A) Is all monitoring undertaken to the degree required in the permit? | 0 | 10 | 0 | 0 |
| (B) Have monitoring requirements been reduced because results over time show consistent compliance? | -5 | 0 | 0 | 0 |
| (C) Is the process operation modified where any problems indicated by monitoring? | 0 | 5 | 0 | 0 |
| (D) Is there a fully documented and adhered to maintenance programme, in line with permit? | 0 | 5 | 0 | 0 |
| (E) Are fully documented records as required in the permit available on-site? | 0 | 5 | 0 | 0 |
| (F) Are all relevant documents forwarded to the authority by date required? | 0 | 5 | 0 | 0 |
| | Total: | | | 0 |

7 - Scoring for Assessment of Management, Training and Responsibility

| Criterion | Possible Score | | | Score Awarded |
|---|----------------|----|-----|---------------|
| | Yes | No | N/A | |
| (A) Are there documented procedures in place for implementing all aspects of the permit? | 0 | 5 | 0 | 0 |
| (B) Are specific responsibilities assigned to individual staff for these procedures? | 0 | 5 | 0 | 0 |
| (C) Is the completion of individual responsibilities checked and recorded by the organisation? | 0 | 5 | 0 | 0 |
| (D) Are there documented training records for all staff with air pollution control responsibilities? | 0 | 5 | 0 | 0 |
| (E) Are trained staff on site throughout periods where potentially air-polluting activities take place? | 0 | 5 | 0 | 0 |
| (F) Is an 'appropriate' environmental management system in place and working effectively? | -5 | 0 | 0 | 0 |
| | Total: | | | 0 |

8 - Determination of Regulatory Effort from Scores

| Actual Score | Score Band | Risk Category |
|--------------|------------|---------------|
| 57 | 40 - 80 | Medium Risk |