Gas safety project 2019 – 2020

1. Explanation of project:

1.1 Gas safety was identified by the Health and Safety Executive as a high priority topic for proactive inspection and enforcement. As part of the assessment it was identified that there is a correlation between retail food businesses that are non-compliant with food hygiene legislation (i.e. have received a food hygiene rating of 2 or less) and those businesses being non-compliant with gas safety. A project plan had been drawn up and agreed and was implemented between July 2019 and February 2020. This included "Gas Safety Week" which is an annual safety week organised by the HSE to promote gas safety.

1.2 To implement the project, data from the Uniform database identified all the retail food businesses in the district with a food hygiene rating of 2 or less. These are businesses who have not achieved a level of food hygiene compliance that is considered "broadly compliant". This created a list of 37 businesses that were considered "high risk" of being non-compliant with gas safety responsibilities. These 37 businesses were then all targeted for a specific gas safety inspection.

1.3 In order to complete an inspection of this nature, guidance had to be reviewed and an inspection aide memoire drawn up and trained to officers to undertake the inspections. Six officers from the Health Protection Team were assigned different inspections to complete. Where reasonable to do so in the time frame allotted to the project, these inspections were to be undertaken at the same visit as a routine food hygiene inspection.

1.4 The guidance highlighted several matters that were to be included in the inspections which were drawn up into an aide memoire which is shown at Appendix 1. As well as the aide memoire a protocol was agreed in how to react to businesses where gas safety risks were identified. This would range from verbal advice, written letter, improvement notice, prohibition notice to prosecution. Training in the aide memoire and protocol was undertaken in-house as an addition to a regular team meeting.

2. Results:

Of the 37 businesses targeted for inspection the following was noted:

13 were identified as not having a gas supply on site.

3 premises were closed

7 premises were identified as non-compliant with regulations and were required to rectify matters. Of these 6 received letters to that effect requiring a gas safe engineer be appointed to further inspect, make remedial repairs and provide evidence in the form of a gas safe certificate. These certificates were later supplied.

The 7th business was considered higher risk and so a Health and Safety Improvement notice was served requiring a gas safe inspection.

The remaining businesses were compliant.

3. Additional work / benefits arising:

There were two additional benefits arising from the project as follows:

1. An additional question was added to the inspection of all retail food businesses requiring that a Gas Safe Certificate, less than 12 months old, be provided. This means that going forward, all retail food businesses will appreciate that maintenance of gas appliances is not optional but a statutory requirement. This will be a beneficial reminder to approximately 500 businesses a year going forward.
2. Where gas safe certificates were provided, work was undertaken to verify that the engineer undertaking the work was qualified and registered to do so. In at least 2 cases it was found out that the engineer was not registered to undertake work on commercial gas equipment. In the cases identified the matter was referred to the Gas Safe Register to action (Gas Safe is the statutory register of Gas Safe Engineers).

4. Conclusion

4.1 The project highlighted that over 50% of businesses that were poorly performing for food hygiene were also non-compliant with gas safety regulations. This is a high correlation and supports the hypothesis that was proposed by the Health and Safety Executive.

4.2 Anecdotally it did not appear that businesses were deliberately flouting regulations, it appeared that it was not a priority for them, possibly because compliance had not been routinely checked at enforcement visits.

4.3 There appears to be a concern that gas engineers who are registered to undertake work on domestic supplies and equipment are willing to undertake work in commercial businesses despite not being registered to do so.

4.4 Moving forward, as evidence for maintenance of gas equipment has been incorporated as a standard requirement at food inspections, compliance across the whole sector should improve.

Appendix 1 – Aide Memoire

GAS SAFETY IN CATERING PREMISES INSPECTION

Date: Officer:	Trading as:
Address:	Contact / Person Seen:
Tel: E Mail:	Food Business Operator
Number of employees:	Visit: Announced / Unannounced

		Yes/No/Comments
Maintenance		
Are regular maintenance checks carried out and how often? **(Reg 36 - GSIUR)**		
Manufacturer's instructions available for each gas appliance?		
Gas Engineers details Gas Engineers name: Gas Safe Register No.:	Gas Company details Engineer's company name: Company Gas Safe Register No.:	
Emergency Procedures		

Is there an emergency shut off valve (EMV)? (Should be near entrance/exit to premises)	
Is the EMV accessible and suitably located?	
Do employees know how to operate the EMV in the event of an emergency?	
Appliance Check	
Is the ignition system working?	
Is the method of lighting acceptable? Check: How they light the appliance (Get them to show you) and check whether manual lighters (or piles of serviettes) are present near appliance. See Figure 1- Tandoori Oven	
Is the appliance free from debris inside? – Check any coal baskets, the bottom, and around gas ports etc. Look for : ash & food. See figure 3	
Is the quality of the flame satisfactory? - should be light blue flame not long yellow wavy visible flames. See Figure 4	
Is there a CE marking plate? See Figure 5	
Is there evidence of maintenance/servicing? Eg: Gas Installation Safety Report (Non-domestic) NB – record engineer's details above.	
Is the ventilation canopy interlocked with the gas supply? (Can the appliance work when the ventilation canopy is switched off?	
Are all the appliances underneath the canopy?	
Is there ventilation make-up air (permanent not windows), NB: check for cling film on vents!	
Appliance pipe work checks	
Are the appliance hoses off the floor?	
Are the **yellow hoses** and joints satisfactory and free from damage?	
Is there an Isolation tap for each appliance?	

Is there a restraining wire? - Should be attached to structure NOT PIPE WORK!! This runs from appliance to wall usually. See Figure 2	
Supplementary information:	
Are there LPG cylinders in use? Where?	
Other Comments	

Enforcement Outcome					
Verbal Advice		Informal Letter (IRF1)		Formal Letter	
Improvement Notice		Prohibition Notice		Prosecution	

Tandoori Ovens:

Figure 1

Ignition switch should be used to light the oven.

Figure 2

Example of restraining wire – Should not be connected to pipes – should be connected to wall as shown here.

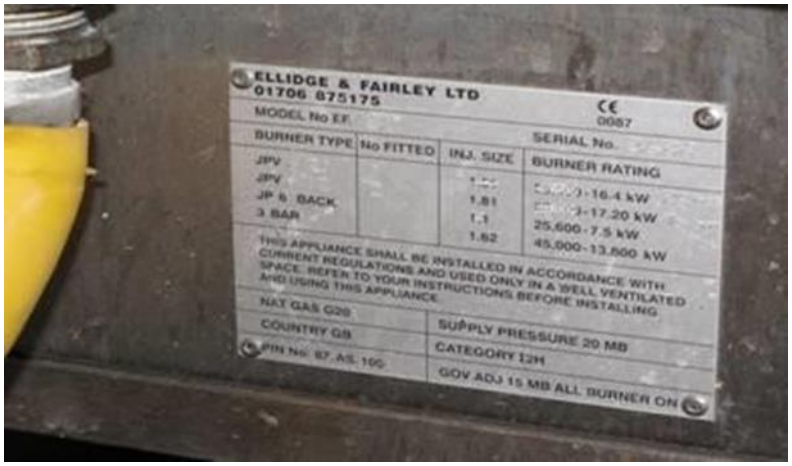
Figure 3

- Incorrect flame colour – indicates incomplete burning.
- Note Debris

Figure 4

Correct Flame Colour

Figure 5



- CE Mark and Data label
- Gas type (Natural gas – unsuitable for LPG use unless altered by an engineer)

GUIDANCE ON POSSIBLE ENFORCEMENT OUTCOMES

Defect found	Expectation:			
	Require maintenance / servicing	Informal Action	Improvement Notice	Prohibition Notice
Incorrect / faulty ignition	✔		✔	
Unsafe method of lighting equipment *		✔	✔	✔
Poor flame quality	✔	✔		
No flame failure device		✔	✔	
No CE Marking **				
No maintenance / servicing	✔		✔	
Ventilation canopy not interlocked	✔	✔	✔	
Not all appliances underneath canopy		✔	✔	
No ventilation make up air.	✔	✔	✔	
Damaged hoses / joints etc.	✔			✔
No Restraining wire		✔		
LPG cylinders attached to natural gas appliance	✔			✔

✔ - A judgment should be made on whether an IN would be more appropriate.

*** -** unsafe methods of lighting could be dealt with by PN for unsafe activity depending on circumstances or IN for training.

**** -** No CE marking may prevent a Gas Safe Engineer from being able to work on the equipment.

Different circumstances / appliances may make the decision on enforcement action difficult. Advice should be sought before taking enforcement action if you are unsure.

OFFICER GAS SAFETY TIPS

1. **Appliance type A:** Fuel-less appliances such as a simple gas cooker (will burn with yellow flame if not enough fresh air and ventilation)

2. **Appliance type B:** Open flue appliances such as a steam oven or fat fryer (can see that a small flu forms part of the construction of the appliance)

3. **Type C:** Room sealed (he says rarely seen in catering areas but could be a balanced flue domestic styled boiler). Would not want to see in a food room with a canopy or forced extract as could prevent boiler from being ventilated properly.

4. Make up air for safe combustion needs to form 85% of extracted air

5. Catering appliances: gas pipe must form gentle **U shape**, not drag on ground, be twisted or have a sharp bend.

6. Gas appliance must be restrained on a chain or wire that attaches the appliance to the structure, never the gas pipe or part of the gas installation.

7. One gas connection per appliance; valve readily accessible and shut-off device close to door or outside kitchen.

8. **Yellow flame bad:** Poorly burnt products of combustion and carbon monoxide(CO)

9. In a commercial kitchen **flexible connection hoses** must be coloured **yellow**, domestic black hoses are not permissible.

10. If an appliance is not CE marked then it cannot legally be serviced or installed.

11. Propane (RED) and Butane (blue) cylinders must not be stored inside

12. The gas emergency isolation valve must have a handle affixed and must be unobstructed

13. Poorly maintained appliances that may produce excess carbon monoxide can be identified by the presence of orange tipping seen at the peak of the flame. The flame should be two shades of blue.

14. Poorly maintained appliances can also be spotted by soot deposits above on canopies etc

15. New installations should have **interlocked extract ventilation** that cuts off gas supply when switched off

16. Natural gas leak, will **rise** (low specific gravity of 0.6) OPEN WINDOWS TO DISPURSE, VENTILATE THEN TURN OFF SUPPLY.

17. Before gas appliance can be disconnected, responsible person must give permission! **Triangular** notice means **Immediate danger** and **Rectangular** Notice affixed to appliance means **At risk**

18. Illegal to test, modify construct, connect or disconnect any gas installation if not on Gas Safe register.