

Draft Report

Post Implementation Review: The Plastic Kitchenware (Condition on Import from China) Regulations 2011

1. Introduction and Background

- 1.1 The Kitchenware (Conditions on Imports from China) Regulations¹ (‘the Kitchenware Regulations’) were introduced in 2011. They implement Commission Regulation (EU) No. 284/2011² (‘the EU Kitchenware Regulations’) which lays down specific conditions and procedures for the import of polyamide (nylon) and melamine kitchenware products originating from the People’s Republic of China and Hong Kong Special Administrative Region, China (‘China’).
- 1.2. Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (‘the Plastics Regulations’)³ regulates migration of substances from food contact plastics including melamine and polyamide products. Following a number of non-compliant polyamide and melamine kitchenware products originating from China, the European Commission introduced the EU Kitchenware Regulations.
- 1.3 Polyamide and melamine plastic kitchenware are plastic kitchenware articles which consist completely of polyamide or melamine, or parts of polyamide or melamine, that are intended to come into contact with food.
- 1.4 **Polyamide plastic** may contain primary aromatic amines (PAA), which occur as a result of impurities or degradation products formed during the production process. Many PAAs are considered toxic and some are considered to be possible carcinogens. All Polyamide kitchenware products must comply with the Plastic Regulations and not release PAAs into food in a detectable quantity. For the purpose of the analysis the detection limit for PAAs is set at 0.01 milligrams per kilogram (mg/kg) food or food simulants.
- 1.5 **Melamine plastic** uses formaldehyde in its manufacture. Exposure to formaldehyde has the potential to cause adverse health effects, including immune effects such as hypersensitivity and contact dermatitis in sensitive individuals. The Plastics Regulations establish a migration limit of 15 mg/kg of formaldehyde into food.
- 1.6 The EU Kitchenware Regulations lay down specific requirements and detailed procedures for the import of polyamide and melamine plastic kitchenware products originating or consigned from China.

The specific requirements include:

¹ [Statutory Instrument 2011 No. 1517 and 2011 No. 1605 \(W.186\)](#)

² <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011R0284&from=EN>

³ Regulation 10/2011 on Plastic Materials and Articles intended to come into Contact with Food

- Importers/food businesses must pre-notify the competent authority at the First Points of Introduction (FPI)⁴ in the European Union at least two working days in advance of the estimated date and time of physical arrival of their consignments.
- The importer must submit to the competent authority a declaration and a laboratory report for each consignment, confirming that the products meet the requirements concerning the release of PAA or formaldehyde (as appropriate) as laid down in the Plastics Regulations.
- At the FPI there is a documentary check of each consignment, with identity and physical checks including laboratory analysis carried out on 10% of such consignments.

2. Aim and Purpose of the Report

2.1 As part of the Government's commitment to review provisions in secondary legislation that regulates businesses, the Kitchenware Regulations⁵ require the Food Standards Agency to undertake a review of the Kitchenware Regulations and set out the conclusions in a report. This report:

- restates the objectives intended to be achieved by the Kitchenware Regulations when they were introduced in 2011 including the baseline costs identified in the associated Impact Assessment⁶
- provides an evidence-based evaluation of the extent to which those objectives are being achieved
- assesses whether the objectives remain appropriate and, if they are, the extent to which they may be achieved within a framework that imposes less regulation
- examines how the legislation is executed and enforced in other Member States

3. Objectives of the Kitchenware Regulation

3.1 In 2009, the EU Food and Veterinary Office (FVO) reported⁷ shortcomings in the Chinese system to control plastic kitchenware exported to the European Union, discovered during its 2009 inspections in China and Hong Kong.

⁴ Designated ports of entry

⁵ [England](#), [Scotland](#), [Wales](#) and [Northern Ireland](#) have separate but similar Kitchenware Regulations, however only England and Wales have a have statutory review requirements within their respective Regulations

⁶ http://www.legislation.gov.uk/ukia/2011/542/pdfs/ukia_20110542_en.pdf

⁷ [FVO final report of a mission carried out in China from 14 to 19 September 2009](#)

3.2 The FVO noted:

- deficiencies related to laboratory performance; the laboratory method for testing migration from plastic food contact materials in the Chinese national standard differed from that described in the Plastic Regulations with the consequence that tests by EU and Chinese laboratories could produce different results.
- incomplete official investigation by the Chinese authorities into the non-compliant companies notified under the European Union's Rapid Alert System for Food and Feed (RASFF)⁸
- a potential risk of non-compliant plastic food contact materials exported to the EU via Hong Kong: some food contact material exporters declared that these products were going to be exported only to Hong Kong but were then exported to Europe. Therefore, these products (e.g. nylon kitchenware) were only tested on the basis of Chinese national standards, which in some cases meant that the products were not tested for compliance with EU requirements.

3.3 Large quantities of polyamide and melamine plastic kitchenware originating from China continued to breach the requirements of the Plastic Regulations (85 RASFF notifications and alerts in the EU between 2009/10). Therefore, in order to reduce the number of these non-compliant products the Commission introduced these specific control measures.

3.4 The objective of the EU Kitchenware Regulations is to reduce levels of non-compliant melamine and polyamide kitchenware products imported from China thereby minimising the risk to consumers.

Baseline costs

3.5 The baseline costs anticipated from the enforcement of the Regulations were set out in 2011 in the FSA Impact Assessment⁹ of the Kitchenware Regulations

The key costs identified were:

- *Port Health Authorities (PHA)*: The cost to Port Health Authorities for analysis was estimated at £1,975,400 per annum. This cost was based on the best estimate of 3,400 annual analytical tests carried out at a cost of £581 for each test.

Documentary and onward transportation costs were estimated at £1,459,167 per annum. This was calculated by adding the estimated

⁸[Rapid Alert System for Food and Feed](#) – which also reports on non-compliance for food contact materials.

⁹http://www.legislation.gov.uk/ukia/2011/542/pdfs/ukia_20110542_en.pdf

administrative cost of document and receipt checks (£1,161,667) to the estimated cost of examining products for sampling and analysis (£212,500) and the estimated onward transportation costs (£85,000). It was expected that both the £1,975,400 and £1,459,167 costs would be recovered from importers.

A further administrative cost to PHAs of £149,600 per annum was also estimated by multiplying the administrative cost of reporting each consignment (£4.40) by the estimated number of consignments of plastic kitchenware entering the UK per annum (34,000). This cost was not deemed recoverable.

- *Importers:* As alluded to above, it was envisaged that the costs to PHAs for documentary checks and analytical tests would be recovered from the importers. The FSA Impact Assessment in 2011 suggested that for the most part, importers would not be able to recover these costs from Chinese exporters, particularly where the goods were sampled and found to be compliant with the legal requirements.

Importers incur storage costs when their consignments are stored at the ports, pending the release of analytical results. The cost of storage to importers was estimated at between £573,240 and £1,146,480 per annum. This was estimated by multiplying the cost of a two-week storage period (from £168.60 to £337.20) by the number of consignments expected to be sampled per annum (3,400).

- *HM Revenue and Customs (HMRC):* The baseline cost to HMRC was estimated at £300,560 per annum. This was calculated by multiplying the £8.84 charge for checking each import declaration (sent before the arrival of a consignment) by the estimated annual number of declarations that would accompany a consignment of plastics kitchenware from China (approximately 34,000).
- *Consumer:* The benefit to consumer health was considered to be unquantifiable, as it is impossible to isolate the benefits of this Regulation to a reduction in ill health from chemical contamination.

4. Assessment of the extent to which the objectives of the Regulations are being achieved

4.1 In order to evaluate the effectiveness of the Kitchenware Regulations, this report examines the EU monitoring data and RASFF notifications as well as feedback from key stakeholders such as importers, retailers and Port Health Authorities, on how the Regulations have been working, and whether there have been any unforeseen consequences which have resulted from its introduction.

Monitoring data

4.2 The EU Kitchenware Regulations require Member States to collate monitoring data, in order to verify the rates of non-compliance for melamine and polyamide kitchenware products imported into Member States from China. These data, which includes the number of imported consignments as well as the results of controls (documentary and physical¹⁰ checks), enable the Commission and Member States to monitor levels of compliance with the legislation.

4.3 Ten percent of all consignments are subject to physical checks. Some Member States with a low number of consignments undertake 100% documentary and physical checks.

4.4 The RASFF portal system also acts as a data monitoring tool as all Member States are required to record non-compliant melamine and polyamine kitchenware results on that system.

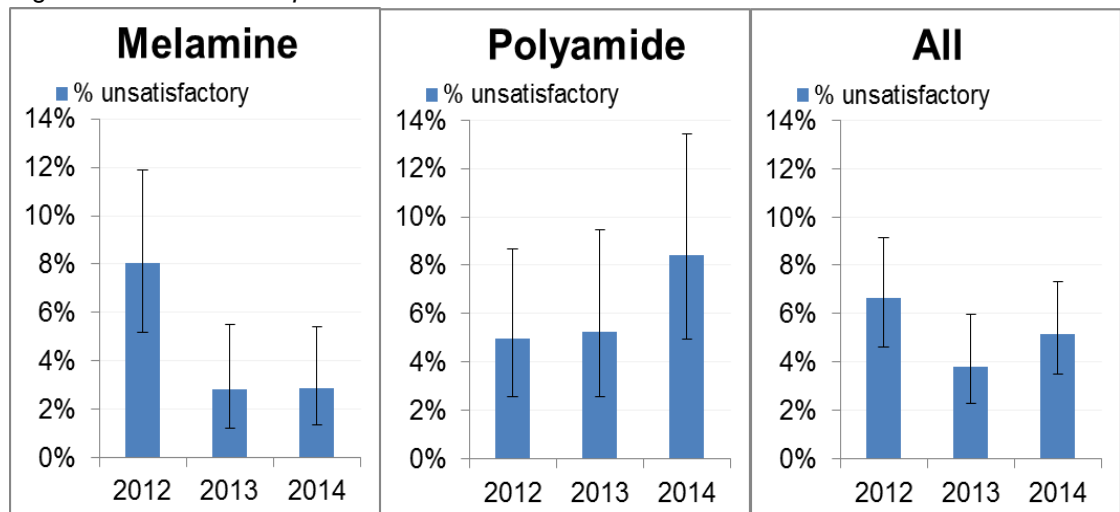
4.5 However, it is important to note that the number of non-compliant products on the RASFF system does not always tally with the EU monitoring data. This could be because the data are recorded on each system at different times or because some of the RASFF results include inland surveillance data. Nevertheless, the data has simply been used to compare the number of non complaint melamine and polyamide products that were recorded on the system in the EU and UK between 2009 and 2015.

¹⁰ Sampling for analysis and laboratory testing and any other check necessary to verify compliance with the requirements concerning the release of PAA and formaldehyde.

EU imports from China

- 4.6 The EU percentage data on non-compliance for melamine and polyamide kitchenware imports for the period 2012-2014 are represented in *figure 1*. These data are accompanied by their confidence intervals. The true proportion is unlikely to be outside these ranges. The intervals are quite wide because the estimates are not precise.

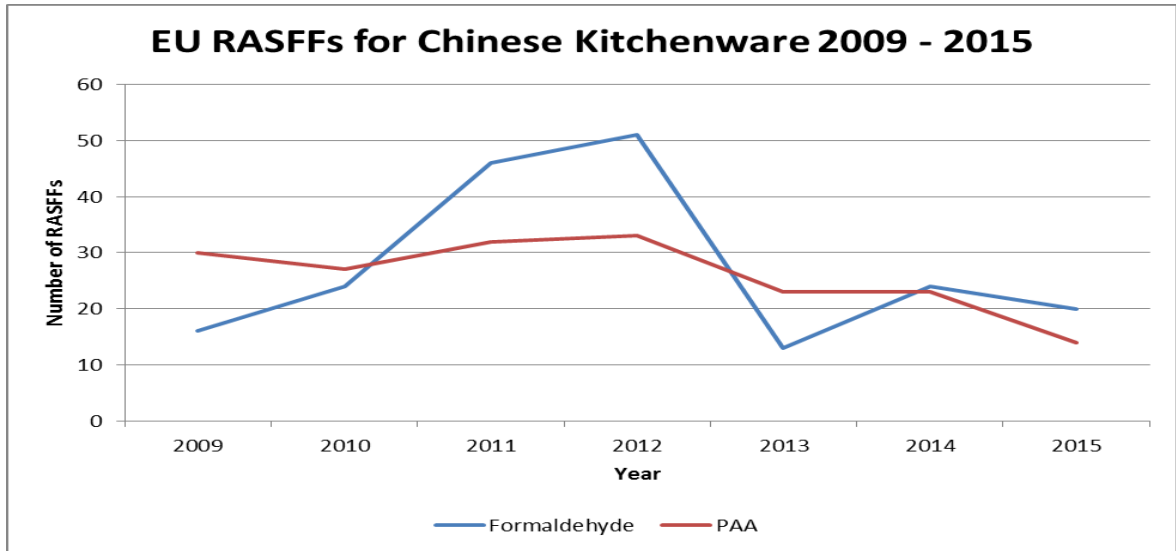
Figure 1 – EU non-compliance data from 2012 - 2014



- 4.7 This lack of precision is due to the small number of samples that are physically checked. The estimates for 2015 are excluded from *figure 1* as they are much less precise. This is because they are based on checks from just a quarter of a year available at the time of compiling this report. However, they are similar to the values seen in previous years.
- 4.8 Melamine kitchenware imports to the EU show some evidence for change over time. The proportion of non-compliant imports in 2012 was significantly higher (at the 5% level) than in 2013 and 2014. This means that the probability of a change this large occurring by chance alone would be less than 5%. Hence, we have strong evidence that the underlying proportion of non-compliant consignments did decrease over time.
- 4.9 For polyamide kitchenware imports, the proportion of non-compliant (unsatisfactory) imports was higher in 2014. However, the difference over time was not large enough to be statistically significant (at the 5% level). Therefore there is insufficient evidence to determine if the number of non-compliant imports rose, stayed the same or even dropped over this period.

4.10 Figure 2 shows the number of non-compliant products in the EU (including the UK) which were reported through RASFF between 2009 and 2015. These data suggest a drop in reported levels of non-compliance, especially in relation to polyamide imports, from thirty non-compliant cases in 2009 to fifteen cases in 2015.

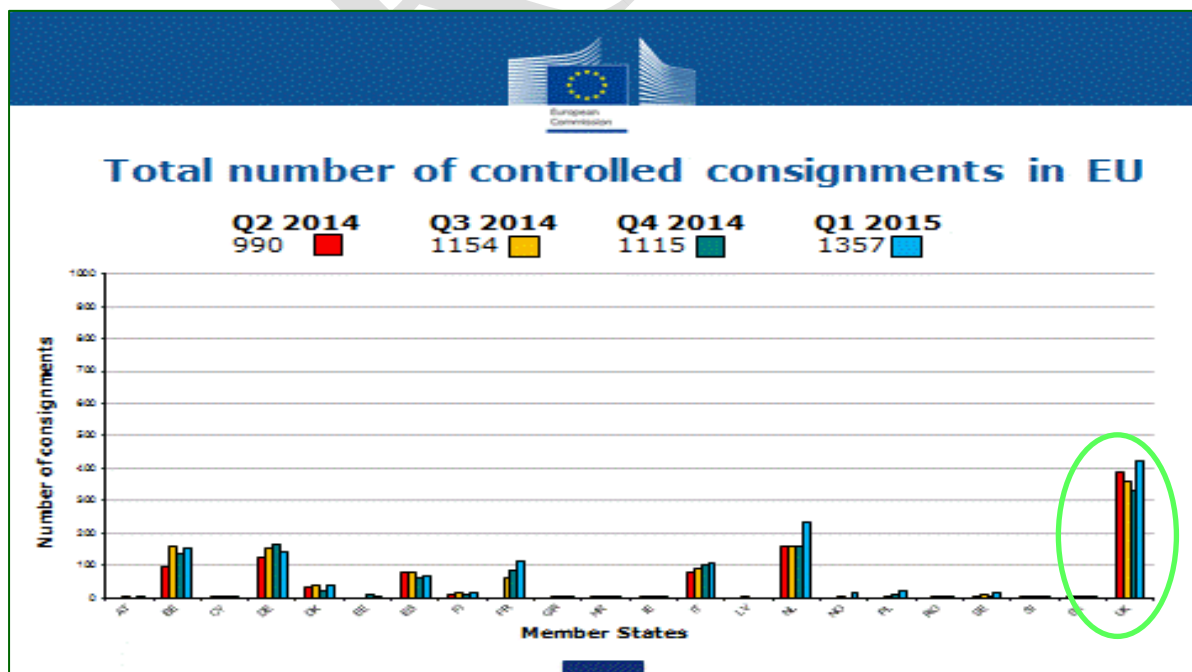
Figure 2 – EU RASFF recorded number of non-compliant products



UK Imports from China

4.11 The UK is by far the largest importer of polyamide and melamine kitchenware imports from China into the EU. Figure 3 shows Member States' import data for

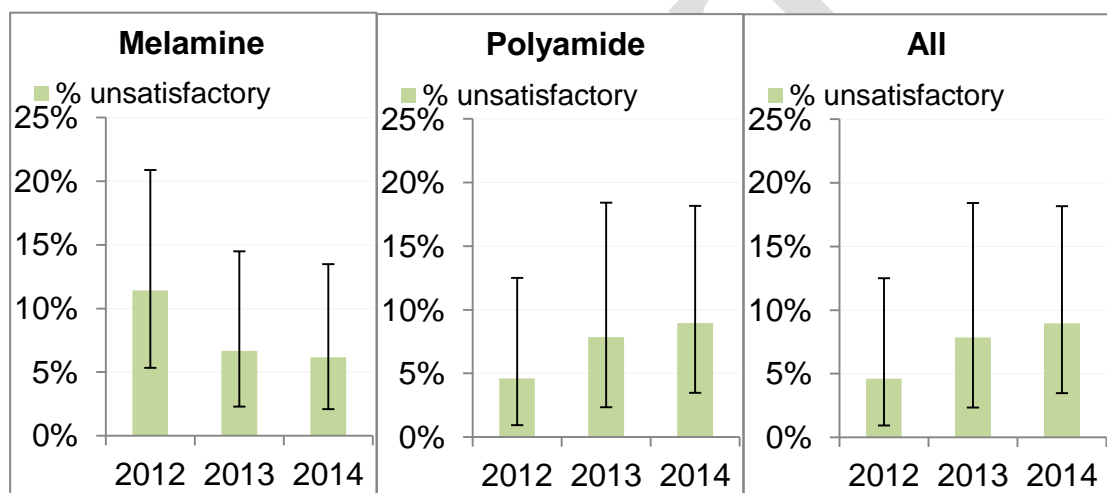
Figure 3 - The total number of consignments imported into the EU in 2014



2014. The graph¹¹ is largely representative of years 2011 to 2015, with the UK (circled) importing some 35-40% of the total annual imports into the EU.

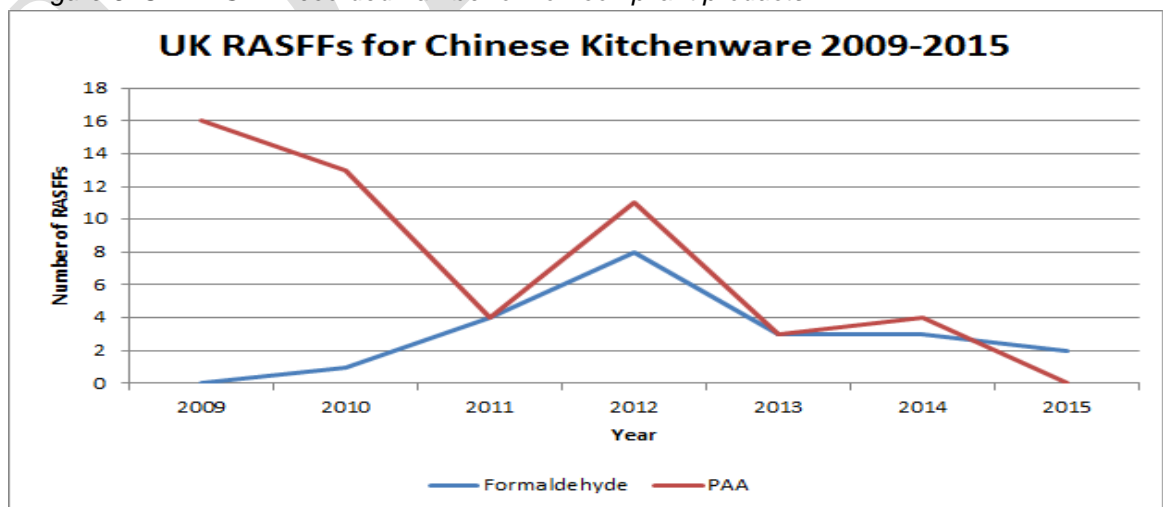
4.12 The UK percentage data on non-compliance for melamine and polyamide kitchenware imports for the period 2012-2014 are represented in figure 4. As with the EU data in figure 1, these data are accompanied by their confidence intervals. The true proportion is unlikely to be outside these ranges. The confidence intervals are wider for the UK data than the EU data because of the smaller number of samples tested in the UK compared with the total tested in the EU. The estimates are not precise which makes it difficult to identify any trends over time.

Figure 4 - UK non-compliance data between 2012 and 2014



4.13 Figure 5 compares the UK recorded number of non-compliant products which were reported through RASFF between 2009 and 2015. These data suggest a

Figure 5-UK RASFF recorded number of non-compliant products



¹¹ reproduced with the permission of the European Commission

drop in reported levels of non-compliance, especially in relation to polyamide products from sixteen non-compliant cases in 2009 to no cases in 2015.

- 4.14 Due to the low numbers of products sampled and analysed for compliance every quarter (10% of consignments) it is not possible to deduce that any noticeable decrease in levels of reported non-compliant imports (either from the number of RASFF or percentage of non-compliant imports) is a direct result of the kitchenware measure. Overall, although the sampling shows some reasonable evidence of decline across the EU, we are not able to prove that the change was due to the kitchenware measure, rather than some other cause.

Q.1 *We would welcome any views or any further evidence towards the assessment in paragraph 4.14?*

5. *Assess whether the objectives remain appropriate and, if they are, the extent to which they can be achieved within a framework that imposes less regulation*

- 5.1 The FSA contacted key stakeholders to invite views and gather information on how the Kitchenware Regulations are working in practice. Representatives of Port Health Authorities, importers, retailers and HM Revenue and Customs were contacted. Their feedback provides supporting information to assist in evaluating the the Kitchenware Regulations.

- *Port Health Authorities*

- 5.2 Port Health Authorities (PHAs) are responsible for enforcing the Kitchenware Regulations at the designated points of entry into the UK, known as the *First Points of Introduction* (FPI). They are responsible for performing documentary checks on all consignments within two days from time of arrival. They are also required to carry out random identity and physical checks, including the laboratory analysis of ten percent of consignments.

- 5.3 The respective PHAs charge fees on a cost recovery basis to cover the costs of documentary and analytical checks. Fees can also be charged for any additional controls required in relation to any non-compliant consignments found. The fees payable only cover the cost borne by the PHA in the discharge of their duties.

- 5.4 The table below provides a comparison of fees payable to three port Health Authorities for analysis of formaldehyde and PAAs in melamine and polyamide kitchenware respectively.

Figure 6 - Port Health Authority fees

Port Health Authority	Formaldehyde analysis	PAA analysis	Documentary check
Suffolk Coastal	£415	£415	£40
Southampton	£360	£360	£50
London	£259	£215	£44.60

- 5.5 Suffolk and Southampton Port Health Authorities process the largest proportion of kitchenware consignments in the UK. In 2015, they accounted for over 90% of 1148 consignments of polyamide and melamine kitchenware imported from China into the UK.
- 5.6 Discussions with officials at Suffolk and Southampton PHAs did not reveal any issues with enforcement of the Kitchenware Regulations. Although the checking and identification process is occasionally onerous, all costs are being successfully recouped from the importers.
- 5.7 The baseline costs estimated a non-recoverable administrative cost to PHAs of £149,600. In hindsight this was an over-estimation, due to an over-estimation of the number of consignments imported into the UK per annum (34,000). The cost based on the actual (average) number of consignments (1,372) is more in the region of £6,036.
- 5.8 One of the PHAs suggested a risk-based approach as an alternative to legislation, given the low levels of non-compliant products now being recorded. This would target only food contact articles identified as being primarily for vulnerable groups such as young children.

Q.2 Are there any areas of the UK implementation for the Kitchenware Regulations that could be improved to reduce burden on UK businesses?

Q.3 Do you have any further comments on the enforcement of these Regulations?

- *Importers*

- 5.9 Discussions with importers highlighted a cost burden to them as a result of the documentary checks and analytical tests which they are unable to

recoup from the Chinese manufacturers. This was envisaged in the original impact assessment.

- 5.10 Most of the importers we contacted felt that the quality of the products on the market has improved as a result of the enforcement of the Kitchenware Regulations, and that the costs associated with sampling and analysis are being absorbed by the importers. Market forces dictate the cost of kitchenware products and importers are unable to increase the cost as consumers are likely to buy similar kitchenware products made of steel or wood rather than nylon or melamine.
- 5.11 One importer explained that it undertakes additional random testing on the products it imports in order to ensure compliance. Although this proves burdensome and costly, the importer considered it necessary so as to avoid delay and the disposal costs for non-compliant products.
- 5.12 Importers mentioned to us the storage costs they incur as a result of the holding time pending release of analytical results. This can sometimes take anything up to six weeks, although the baseline cost (paragraph 3.5) was estimated on the bases of a two-week storage period. They reported that they are unable to retrieve other non-kitchenware products contained in the consignment during the storage period.
- 5.13 The baseline cost of storage to industry was estimated at between £573,240 and £1,146,480 per annum. However with hindsight this was an overestimation on the basis of a possible 3,400 stored consignments (10% of the estimated total of 34,000) rather than the resulting 10% of 1,372 consignments.

- *Retailers*

- 5.14 The BRC, which represents the interest of some key retailers, has informed us that they are not aware of any significant cost increases for melamine and polyamide kitchenware products as a result of these Regulations. Discussions with a representative of small businesses revealed that they are unaware of any additional costs to products as a result of these Regulations. However, it is important to note that some retailers import melamine and polyamide kitchenware products directly. Their comments have been noted above.

Q.4 Please comment on any further burdens/ costs to importers and retailers that are not identified in this section

- *HM Revenue and Customs (HMRC)*

5.15 HMRC is responsible for the customs clearance requirements (interventions) associated with the final release of polyamide and melamine kitchenware consignments into free circulation.

5.16 HMRC makes an average of 1,372 interventions at £9.60, costing approximately £13,176 per annum for checks to kitchenware documentation. Therefore, once again there is a significant difference from the initial baseline cost which estimated costs to HMRC of £300,625 per annum. This difference is based on overestimation of the expected annual number of UK consignments of 34,000 rather than the actual number of consignments of 1,372.

6. *Examination as to how the legislation is executed and enforced in other Member States*

6.1 To provide a common approach to sampling and testing the European Commission issued two sets of guidance:

- Technical guidelines on testing the migration of primary aromatic amines from polyamide kitchenware and of formaldehyde from melamine kitchenware, and;
- EU guidelines on conditions and procedures for the import of polyamide and melamine kitchenware originating from China.

6.2 Member States provide the Commission with quarterly statistical reports detailing the numbers of documentary, identity and physical checks undertaken at the FPIs. This transparent monitoring approach suggests the implementation and enforcement within Member States is aligned with all Member States carrying out required analytical and documentary checks.

6.3 This uniformity in implementation and enforcement of the Regulations across Member States suggest that British businesses are not being put at a competitive disadvantage.

Q.5 We would welcome any further comments on the enforcement of the Regulations in other Member States

7. *Conclusions*

7.1 From our discussions with importers and HMRC it is evident the Kitchenware Regulations continue to provide for the execution and enforcement in England and Wales of the EU Kitchenware Regulations.

7.2 However, it is not evident whether the current regulatory framework provides the best means of reducing the number of non-compliant plastic kitchenware and therefore minimising the risks to consumers. There have been suggestions from stakeholders for alternatives to the current regulatory regime such as introducing a risk-based approach. Irrespective of the import controls, once the products enter into the EU market they are subject to normal compliance checks undertaken by enforcement authorities.

7.3 While there appears to be some evidence of a reduction in reported levels of non-compliance in the EU and UK since the introduction of the Regulations in 2011 (especially in relation to polyamide kitchenware), the low number of products that undergo laboratory testing (10%) are deemed insufficient to draw any form of meaningful conclusions.

7.4 This review has not revealed any unintended consequences. The evidence suggests that whilst there is a financial burden to both the HMRC and the importers of these products, the costs of enforcement are significantly lower than expected.

7.5 The initial estimated recoverable cost to PHAs of £1,975,400 was based on an estimated 3,400 analytical tests per annum. The actual figure is closer to 131 analytical tests per annum. There was also an over-estimation of the costs to HMRC. The cost assigned to HMRC was estimated at £300,560. The actual costs are more in the region of £13,176 per annum. There was also an over-estimation in the non-recoverable administrative cost (see paragraph 5.7) and storage cost to PHAs (see paragraph 5.13).

7.6 The Plastic Kitchenware (Conditions on Imports from China) Regulations 2011 are EU-derived; therefore, options for renewal, removal or replacement are not directly actionable. Nevertheless, the UK wrote to the Commission on 22nd October 2015 inviting discussion and a full review of the EU Kitchenware Regulations at European-level. The UK has asked the Commission to consider:

- Whether the percentage of samples subject to laboratory testing is adequate to assess whether the Regulation has met its intended objectives

- What level of non-compliance should be necessary to suspend or amend the current measures
- Whether other measures, such as risk- based controls, could protect consumers while imposing less regulation on industry and enforcement authorities.

**All comments and views should be sent to
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Responses are requested by: Tuesday, 12 April 2016