

**LAFARGE AGGREGATES LIMITED
AND
LAFARGE CEMENT UK LIMITED
("LAFARGE")**

**SUBMISSION IN RESPONSE TO
THE COMPETITION COMMISSION'S
UPDATED STATEMENT OF ISSUES
PUBLISHED ON 26 NOVEMBER 2012**

NON-CONFIDENTIAL VERSION

Submitted Friday, 18 January, 2013

**SUBMISSION IN RESPONSE TO
THE COMPETITION COMMISSION'S
UPDATED STATEMENT OF ISSUES**

1 EXECUTIVE SUMMARY

1.1 The main concern identified by the Competition Commission (“CC”) in the course of its investigation to date focuses on the possibility of coordination in the supply of cement in GB. The central question raised by the CC is how, at a time when demand fell and when suppliers were switching to self-supply models, were domestic producers of cement able to sustain margins and raise prices, particularly in 2008 and 2009.

1.2 This response document will focus on this concern and will address the premises that underpin the CC’s suggestion that, at least in relation to Lafarge, Lafarge’s performance in recent years is indicative of, or a result of, a degree of coordination between domestic cement producers.

1.3 In direct response to the factors listed by the CC in paragraph 98 of the Updated Issues Statement that it contends “*provide supporting evidence for our concerns about coordination in the cement market*” (at paragraph 98), Lafarge considers that, specifically in respect of Lafarge’s own position, none of these provides any evidence of possible coordination:

(a) **Market Share**

(i) Since 2001, Lafarge has lost [X] percentage points of cement production share. It is implausible that Lafarge would have coordinated with other GB cement producers to lose [X] share over a sustained period.

(b) **Pricing Strategy**

(i) Within Lafarge’s customer base, prices are widely dispersed. [X]. Lafarge notes that the [X] (as is illustrated in **Annex 1**).

(ii) Although cement price announcement letters of Lafarge’s competitors may, in the course of business, be disclosed by Lafarge’s customers, Lafarge’s RMX business does not, as a matter of course, pass competitors’ letters on to LCUK. LCUK is managed separately and independently from Lafarge RMX. Since realised prices do not reflect announced prices, price announcement letters cannot form the basis of coordination between cement producers.

(c) **Cross-sales**

(i) Lafarge’s responses to independent decisions by each of Cemex in 2005, and Hanson at the end of 2008, to pursue self-supply strategies

were entirely unilateral, rational and legitimate, as explained further below.

- (ii) Since Q2 2009, Lafarge has had very limited cross-sales with other GB producers. Lafarge pursues a self-supply strategy in order to maintain the integrity of cement supplied to its own downstream RMX business for the production of Lafarge's Value-Added Products. In the future, Lafarge expects that cross-sales will remain limited and, if at all, used only for the purposes of obtaining supply in circumstances of temporary supply difficulties or plant failure.
- (iii) The existence of cross-sales in the past provided no way for GB cement producers to enforce the terms of any purported coordination, as the CC suggests. [REDACTED]
- (iv) [REDACTED] The fall in demand in 2008-2009 was unprecedented. 2006 and 2007 were both very strong periods of activity in the construction industry. Demand was booming [REDACTED]. From about Easter 2008, the recession hit and demand fell dramatically. Simultaneously, costs began to rise. Energy costs, in particular, were spiralling. Oil prices went from \$55 a barrel in early 2007 to \$135 a barrel in June 2008. As outlined below, Lafarge's response was to reduce costs in its control. Heidelberg Cement, having recently entered the UK ready-mixed concrete and concrete products markets through its acquisition of Hanson, reacted logically and sensibly by looking to its in-house cement division, Castle, to supply the internal demand from its downstream business. Hanson's intention to pursue a self-supply strategy had been made public in various reports and analyst calls all made available on its website (to which the CC apparently failed to have regard in any of its analyses). [REDACTED]
- (v) [REDACTED]
- (vi) [REDACTED] Furthermore, given that in this period, prices of cement to Lafarge's customers fell (see Annex 1), the CC has failed to demonstrate how any such putative coordination led to consumer harm or any adverse effects on competition.

(d) **Imports**

- (i) Lafarge has always considered importers to pose a strong competitive threat. This is clearly illustrated in Lafarge's internal documents and switching data (see Annex 2) which shows that wins and losses from and to importers (excluding Aggregate Industries) represented [REDACTED] and [REDACTED] percent respectively of its wins and losses of bulk non-major customer volumes over the 2007-2011 period. Lafarge has sought to retain business by [REDACTED] to customers where they have threatened to switch to competitors, including where that competitor is an importer. Lafarge considers that the CC has not given appropriate weight to the strong external constraint imposed by importers.

- (ii) Lafarge does not recognise the allegations made by the CC in its Updated Issues Statement (at paragraph 86, fourth bullet point) that GB producers – apparently including Lafarge - have taken “*specific steps to undermine the viability of imported cement*”, such as applying “*pressure to cut off cement supplies to independent importers*” and “*purchasing import terminals*”. Lafarge has undertaken no such steps and indeed the CC’s working papers and Updated Issues Statement identify no such action on Lafarge’s part. Lafarge does agree that it offered lower prices to retain customers who threatened to switch to competitors (who may incidentally be importers), but Lafarge considers that this is entirely legitimate, pro-competitive behaviour and does not affect the viability of importers to compete in GB. Lafarge may regularly choose to lower in the face of a threat by a customer to switch to a competitor; whether the competitor is an importer or not is irrelevant in such negotiations. Over the period 2010-2011, Lafarge lowered prices as a result of numerous bulk non-major customer threats to switch volumes to rival cement suppliers, both importers and non-importers alike. Of these, [X] per cent relate to threats to switch to non-major importers. In terms of failed approaches (where Lafarge sought, but failed, to win customers from a rival cement supplier), importers accounted for [X] per cent of volumes¹ (see further **Annex 2**). This behaviour is entirely pro-competitive. The CC has attempted to suggest that such pro-competitive responses to the competitive constraint imposed by importers mean that importers cannot be treated as a sufficiently strong external constraint to undermine any possible coordination. On the contrary, importers have grown to become an important source of supply for non-integrated RMX producers. Lafarge’s unilateral competitive responses to the threat of imports by lowering prices clearly indicate the effectiveness of this external constraint in undermining any possible coordination. Reducing prices in the face of a competitive threat is a pro-competitive, rational and entirely legitimate response. This provides no indication of coordination between domestic cement producers.

(e) **Margins and Profitability**

- (i) Lafarge’s ROCE has been [X] below its cost of capital over a sustained period of time (see below **Table 2 - Lafarge ROCE, 2007-2011**).
- (ii) If the CC nonetheless contends that such returns are still unusually “high”, this is not a result of coordination, but because of Lafarge’s decision to engage in substantial cost cutting. In response to the fall in demand and simultaneous rise in input costs in 2008, Lafarge initiated an extensive cost-cutting project (known as Lafarge’s “**Excellence**” programme). Lafarge set out in its initial submission to the CC the basis on which over the period from 2006 to 2011 Lafarge

¹ *Ibid.*

achieved more than £[X] million of fixed and variable cost savings in the cement business in an effort to improve efficiency. It is a concern to Lafarge that, at this stage in the CC's investigation, there has been no acknowledgement of these efficiencies in any of the working papers. These cost savings are depicted in **Figure 4** and **Figure 5** included in **Annex 3** (updated with forecasts for 2012 performance). To summarise:

- **Fuel:** Lafarge reduced average kiln fuel consumption from [X] to [X] megajoules per tonne of clinker (a [X] per cent decrease).
- **Fuel substitution:** Lafarge increased the use of alternative fuels over fossil fuels, with a substitution rate for alternative fuels increasing from [X] per cent to [X] per cent.
- **Power consumption:** Lafarge achieved a reduction in specific power consumption, cement in silo, from [X] to [X] kilowatt hour per tonne of cement.
- **Raw materials and consumables:** Lafarge increased the use of additions in cement to reduce clinker content and improve the use and efficiency of rail transport between works and depots.
- **Fixed costs:** The closure of the Northfleet and Westbury works in 2008 and 2009 respectively reduced fixed costs by around £[X] million nominal per year, reducing total Lafarge Cement manufacturing costs from £[X] million in 2005 to £[X] million in 2011.
- **SG&A:** Lafarge Cement achieved a significant reduction in its central costs through the creation of a shared service centre for back-office activities for all Lafarge's UK business and by downsizing Lafarge Cement's head office functions by a move to a new location in Solihull in 2007. SG&A (*i.e.*, overhead) total costs fell from £[X] million to £[X] million.

Taken together, these cost reductions had a major impact in supporting Lafarge's overall cement margins, such that without these actions Lafarge Cement margin over total cost - fixed plus variable - **would have fallen from [X] per tonne in 2008 [X] per tonne in 2011**. A key driver of the Lafarge Tarmac JV was the delivery of synergies, estimated at around £[X] per annum, representing [X] percent of combined EBITDA, a substantial proportion of which will benefit customers through logistics savings and enhanced product portfolio.

- (iii) On a historical cost accounting basis, [X] also contributes to improving ROCE.
- (iv) Finally, Lafarge has sought to improve its returns by repositioning its GB business towards higher value bagged (or packed) products in

relation to which Lafarge has developed a highly differentiated range of value-added cement and ready-to-use bagged products utilising plastic packaging. Although routinely pointing out the effects of product mix on prices and returns, Lafarge has not seen any analysis of the effect of Lafarge’s range of Value-Added Products (“VAPs”) by the CC. As outlined in Lafarge’s Overview Submission in April 2012 (see [Annex 4](#)), VAPs form an important part of Lafarge’s strategy to differentiate itself from its competitors. As part of this strategy, Lafarge SA invests a considerable amount of money in research and development (around €150 million annually).

- 1.4 Accordingly, the market outcomes (margins, prices, market shares) that the CC considers provide preliminary evidence of coordination in the supply of cement in GB provide no such support. Apart from identifying apparent or “textbook” features of the market for the supply of bulk cement in GB - concentration, homogeneity,² a degree of market transparency and cost symmetry - which may theoretically be considered to be conducive to coordination, the CC has not identified any market outcome that supports its contention that the market is coordinated for which Lafarge has not provided an alternative rational explanation (*i.e.*, other than coordination). Outcomes that the CC suggests are consistent with coordination can equally well be explained by non-coordinated behaviour. Finally, the CC has failed to give sufficient weight to the importance played by importers in imposing a competitive constraint on GB producers.
- 1.5 To date, the CC’s analysis has failed to elucidate how any alleged coordination has caused any consumer harm. Having already pointed to the fact that prices to non-major bulk customers have sometimes fallen in the relevant periods during which coordination is alleged to have occurred [§], Lafarge considers that none of its customers has experienced any reductions in service levels, product quality or unjustified increases in prices. The CC has not outlined which category of customers - if any - have been harmed by any putative coordination. For example, RMX producers without their own source of cement supply – a channel one would have thought likely to be harmed in the event that coordination among cement producers occurred – have *grown* share against the majors, which is not consistent with them paying inflated prices for cement. The RMX GB share of supply for non-major RMX producers has grown substantially in recent years at the expense of majors (from [§] percent to [§] percent over the period 2007-2010³). Growth by this channel is in part due to the presence of imported cement. Around 90 percent of non-major RMX producers are found within 10 miles of a cement major’s RMX site, demonstrating that the non-majors have gained share at the expense of majors.
- 1.6 The absence of such analysis suggests that consumer harm cannot be shown and underlies the inability of the CC to pinpoint the precise mechanism by which cement

² Lafarge disputes the allegation that the market is homogenous. As outlined in Lafarge’s Overview Submission in April 2012, Lafarge is an innovative company, investing around €150 million annually in research and development of innovative products that deliver lower construction costs for consumers. [§].

³ This finding is even more prominent when including supply from volumetric trucks: share for non-majors grew from [§] percent to [§] percent over the same period.

producers are supposedly coordinating. While the CC has asserted coordination on production share and customer wins and losses, there is in fact substantial variation in both production shares and shares of external sales of bulk cement (*i.e.*, where, according to the CC's theory of coordination, wins and losses should balance out). Further, the main theory of punishment (*i.e.*, repatriation) is easily explained by rational, unilateral decisions, while other theories of punishment are speculative (as is explained further below). Accordingly, there is no plausible theory for the CC's alleged coordination.

2 CEMENT

2.1 Cement: Market definition

- 2.1.1 Lafarge broadly agrees with the CC's preliminary views on cement market definition (paragraph 16 of the Issues Statement), in particular the conclusions that CEM I, II and III are in the same market, that imported cement and domestically produced cement are in the same market, and that bulk and bagged cement are in separate markets.
- 2.1.2 Lafarge agrees that imported cement should be considered within the market for the supply of bulk cement and should not, as the CC did in the Anglo American / Lafarge / JV Inquiry, be characterised as an "out of market" constraint.
- 2.1.3 Lafarge reiterates that the market for the supply of bulk grey cement is cementitious, that is, that additions such as PFA and GGBS should be included since they are directly substitutable for clinker in various proportions according to relevant standards (including those applicable for the production of downstream products).

2.2 Cement: Coordination

- 2.2.1 Lafarge considers that there are substantial barriers to entry in cement supply through a new cement plant. The CC has provided a range of £150-400 million as an estimate of the capital cost of building a plant (paragraph 43 of the Issues Statement). Lafarge considers that the lower end of the range substantially understates the capital costs of building a cement plant, and Lafarge Group's own estimates are £300 per tonne of annual cement capacity. Given that modern cement plants would typically have a capacity of at least 1 million tonnes per annum, Lafarge considers that a more appropriate range would be £[~~150~~] million.

The competitive constraint imposed by importers

- 2.2.2 Lafarge considers that the Issues Statement understates the competitive constraint posed by cement importers. The CC asserts that GB cement producers have a lower average variable ex-works cost than importers' average variable cost and uses this to support two conclusions, namely (a) that GB cement prices are in excess of variable cost, thus indicating coordination; and (b) that importers' higher variable cost compared with that of GB producers materially affects their competitiveness. Lafarge has addressed this issue in its response to the CC's Cement Imports putback working paper.
- 2.2.3 First, prices in a competitive cement market would not be close to or at average variable costs. There are substantial fixed costs of production such that, were GB cement producers to price close to average variable cost, they would incur substantial annual losses. Economic theory indicates that it is entirely consistent for non-coordinated behaviour to give rise to prices substantially in excess of average variable costs to allow for fixed cost recovery, as for example in the textbook one-shot Cournot model. Therefore, the fact that prices are in excess of average variable cost for GB producers is not in itself evidence that GB cement producers are pricing at "high" levels, or that they are coordinating, or indeed that they should be expected

to undercut importers. Lafarge does not recognise the “cost advantage” ascribed to GB producers discussed by the CC in paragraphs 47 and 86 of the Issues Statement.

- 2.2.4 Second, Lafarge stresses that comparing GB cement producers’ average variable ex-works costs with importers’ average variable costs is not an appropriate test. Lafarge also notes that the FOB costs of imported cement discussed by the CC (see paragraph 47 of the Issues Statement and paragraphs 18-20 of the CC’s Cement Imports putback working paper) will typically reflect the ex-works variable costs of producing cement in provenance countries, but – importantly – also a “hidden” margin to the originating cement producer (*e.g.*, to contribute to fixed costs). Consequently, FOB costs and transport costs for importers do not reflect purely variable costs, and a comparison with GB cement producers’ ex-works variable costs would consequently not compare like-with-like. This underlines the importance of considering fixed cost recovery. Furthermore, the consideration of “market” FOB prices is not relevant in considering the variable cost base of an integrated importer (*i.e.*, one who owns the manufacturing unit). Such integrated importers (including CPV, Titan, CRH, Quinn) are an important feature of the GB market.
- 2.2.5 Observed market evidence indicates that importers are demonstrably effective competitors. Despite the claim that importers operate at a cost disadvantage, it is clear that they have successfully gained share of supply to non-major customers, with importers (excluding Aggregate Industries) in 2010 collectively accounting for 18 percent of external bulk sales to non-major customers, *i.e.*, more than Cemex and significantly greater than Tarmac.⁴ The importance of importers on a GB basis also applies across regions. For example, in Yorkshire & Humberside, Lafarge estimates that Titan accounted for around [REDACTED] percent of supply to external bulk non-major customers in 2010, and Dudman accounted for around [REDACTED] percent. By comparison, Cemex represented around [REDACTED] percent. Titan and Dudman combined accounted for [REDACTED] in this region.

Margins

- 2.2.6 At paragraph 87 of the Issues Statement, the CC highlights the failure of margins to decline despite the significant decrease in demand for cement since 2007. If the CC were seeking to infer that the apparent stability of margins reflected coordinated behaviour to “buck the downturn”, this would not be consistent with market facts. The evidence does not suggest that competitive activity weakened in 2009; if anything, it increased. 2009, for example, was a peak year for Lafarge in terms of customer churn and prices of CEM I and CEM II fell in real terms over the period 2009-2011, in particular after Q1 2009.⁵ Lafarge notes that it is important to control for product mix and customer mix when assessing prices (and margins) given that some products exhibit different patterns over time, and that different patterns may also be observed for particular customer groups. Improving customer and product

⁴ Share of *external* sales is the relevant benchmark against which to assess the success of importers – in particular as regards supply to non-integrated users of grey cement that are not in a position to self-supply. Non-integrated customers are (with minor exceptions) the non-major customers.

⁵ See, for example, “Response by Lafarge to Point (i) of the Competition Commission’s Request for Information on Cement Switching in 2009 in the Aggregates, Cement and RMX Market Investigation”, dated 11 October 2012, Figures 3 and 4.

mix has been a key Lafarge strategy in mitigating the effect of declining margins in bulk CEM I and CEM II.

- 2.2.7 According to the CC's theory, if the threat to repatriate could sustain coordination (which Lafarge refutes), it would have to be the case that the large-scale repatriation in 2009 reflected the breakdown of any coordination that existed. Lafarge, for example, had no material scope to repatriate from Q2 2009 and so could not punish a "deviant". Margins in 2009, 2010 and 2011 would thus reflect competitive market behaviour in this thought experiment. If this is the case, however, that is difficult to reconcile with the interpretation of observed variable profit margins noted above.
- 2.2.8 Lafarge acknowledges that the CC's preliminary cement profitability work has been performed on an historical cost basis, and that the CC intends to revise this work using a modern equivalent asset approach. Lafarge stresses – and the CC would appear to agree – that an appropriate basis for calculating ROCE is to calculate the return made on an asset base comprised of the amount of capital required to replace Lafarge's existing cement assets. Such an approach was discussed during Lafarge's Hearing with the CC on 6 December 2012. Assuming that Lafarge is required to replace an amount of capital equal to the annual GB sales of Lafarge in each year 2007-2011, and assuming the replacement cost of each tonne of cement is £[X], the results of a ROCE calculation on a replacement cost basis are similar to the ROCE calculated using an historical asset base which includes goodwill.⁶ Lafarge therefore considers that Lafarge's tangible asset plus intangible asset (*i.e.*, goodwill) base is a reasonable estimate for Lafarge's relevant asset base for the purposes of calculating returns on capital employed.⁷

Focal point for coordination

- 2.2.9 At paragraph 84 of the Issues Statement, the CC states that the main focal points for coordination are likely to be "*one or more of shares of production, shares of sales and/or wins and losses of customers rather than prices*". Lafarge notes that, if production shares were a focal point, then it is important to recognise that, according to the CC's theory, Lafarge would have implicitly agreed to concede around [X] per annum (in today's terms) and lose a [X] percent share to its rivals since 2001, which is unlikely to be a compelling theory of successful coordination.

Win/Loss Data

- 2.2.10 With regard to wins and losses of customers, Lafarge notes that the CC is yet to publish its analyses. Nonetheless, Lafarge submits that observed wins and losses

⁶ Based upon Lafarge's cost assumptions devised when assessing an investment [X]. An indicative figure for expanding an existing site would be approximately £[X] per tonne of capacity for a nominal increase in capacity of 1MT, but the costs associated with building on a brownfield site without any existing infrastructure would be very similar to building on a greenfield site.

⁷ Lafarge also notes that the CC's preliminary approach to calculating ROCE includes CO2 revenues. Lafarge considers that there are grounds for excluding these revenues from its returns. CO2 revenues are earned by cement producers from activities not directly related to the sale of cement to GB customers; consequently, CO2 revenues derived from cement industry regulation are not informative of a given cement producer's ability (or lack of ability) to sustain prices above competitive levels.

understate the true level of rivalry in the cement industry, due to the presence of failed approaches and successful retentions.

2.2.11 During the course of the Anglo American/Lafarge JV investigation, Lafarge collected evidence on bulk non-major customer credible threats to switch over 2010-2011. [REDACTED]

(a) [REDACTED]

(b) [REDACTED]

(c) [REDACTED]

(d) [REDACTED]

2.2.12 This evidence demonstrates that Lafarge was continually seeking to win and retain volumes in 2010 and 2011, [REDACTED]

2.2.13 It also demonstrates that Lafarge had to lower prices to prevent material volumes being switched [REDACTED] – *i.e.*, consistent with non-coordinated behaviour among the putative coordinating group.

2.2.14 Full details of these analyses were included in Lafarge's Overview Submission, submitted in April 2012, and are included again for ease of reference at **Annex 2**.

2.3 Cement: Price Announcements

2.3.1 In relation to price announcements, the CC acknowledges that actual prices are not transparent such that coordination on price is not sustainable (paragraph 84 of the Updated Issues Statement).

2.3.2 Lafarge makes the following additional observations on price announcements, which equally apply to price announcements in aggregates (discussed below at paragraph 3.3).

(a) Similarity in timing or magnitude of announced price rise, to the extent that this has systematically occurred in recent years, cannot by itself imply sustained tacit coordination on *actual* prices. One only has to observe the very substantial price dispersion in actual prices to recognise the difficulty in coordinating on the actual price set.

(b) This dispersion is set out in **Figure 1** below. It is clear that there is a dispersion in excess of £[REDACTED] between ex works prices charged – a substantial amount given the ex works median price of around £70 in 2011.⁸

⁸ In order to give meaningful ranges, outliers are excluded. This is done by reporting the price range between the 10th and the 90th percentiles. That is, if all sales were ranked in order of price, the price range between the 10th and the 90th percentiles would exclude all sales made at the most expensive 10 per cent and the least expensive 10 per cent. The price range is also between the 25th and the 75th percentiles, as well as the median price obtained on individual sales. A conservative approach is taken by focusing only on the narrowest 80 percent of the distribution.

Figure 1 - Ex-works price of bulk CEM I cement sold to non-majors

[✂]

Source: [✂]

- (c) Moreover, if there is an understanding that supplier A will charge a higher actual price if supplier B announces a higher aspirational price, then such a situation cannot be monitored when actual prices cannot be observed.
- (d) Finally, the price that matters to the customer is the price that is actually paid, not the announced price that a supplier would like to charge, as indicated in its price announcement letter. Price announcements do not allow for either the alignment on or monitoring of the *actual prices* paid by customers, and observed market evidence demonstrates that price increases are widely and non-systematically dispersed across customers of a given product and that they are almost always lower than the announced increase (see **Annex 4**).

2.3.3 Price announcements do not represent a credible commitment to a particular price to any individual customer. A price announcement cannot provide a clear signal as to what the price increase should be, or a way for competitors to monitor actual prices charged.

2.4 Cement: Vertical integration and exclusionary behaviour

2.4.1 Vertical integration of RMX into cement does not facilitate coordination in cement. In the Updated Issues Statement at paragraph 117, the CC outlines four methods by which such coordination could be facilitated:

- (a) vertical integration increasing the likelihood of arriving at a coordinated strategy;
- (b) repatriation of cement volumes used in RMX being used as a signal or punishment mechanism;
- (c) a presence in RMX allowing cement producers an additional punishment mechanism by lowering the price of RMX; and
- (d) a presence in RMX allowing cement producers to increase barriers to entry or expansion in cement.

Each of these is addressed in turn below.

2.4.2 **First**, vertical integration is unlikely to increase the likelihood of arriving at a coordinated strategy.

- **No insight gained through RMX.** A presence at the RMX level is likely to provide at best only limited transparency for an integrated GB cement producer since changes in RMX sales volumes are driven by a host of factors other than the price of bulk cement (aggregates, for example, account for a greater share of costs in RMX than does cement). Indeed, reflecting the paucity of information

that observations on RMX market activity provide, Lafarge chooses not to use [REDACTED]

- **No insight through RMX into non-RMX downstream channels.** A presence in RMX provides no insight into competitive behaviour with respect to the supply of bulk cement to producers of concrete products, mortar or other downstream products. Lafarge estimates that these producers account for approximately [REDACTED] **per cent** of all bulk cement sales and [REDACTED] **per cent** of all bulk sales to the external market in GB.
- **No incentive to use RMX to “punish” deviating firms.** At paragraph 117 of the Updated Issues Statement, the CC states that “*where profits from deviating from a coordinated strategy are attained from supplying downstream RMX producers, profits from cheating would be lower in so far as a significant proportion of RMX plants are owned by rival cement producers*”. This would also make punishment less attractive because cement producers with a greater presence in RMX would suffer a negative profit effect in the downstream market by supplying external, non-integrated RMX producers (with which integrated producers compete) with lower priced cement.

2.4.3 **Second**, the CC’s claim that repatriation could give rise to a signalling and/or punishment mechanism (“*by providing scope for small-scale repatriation of cross-sales to be used as a signal between the Majors to indicate dissatisfaction with another Major’s conduct, for example to indicate that deviation from a coordinated outcome has been detected*”⁹) lacks theoretical merit since the harsher punishments allegedly being signalled are not credible. This is because if punishments other than repatriation of small volumes are costly and thus unattractive to the punisher, it is unclear how these costly punishments would become more credible simply because a deviation has been observed and met by “small-scale repatriation”. In any event, Lafarge has not had the ability to repatriate material volumes since Q2 2009 and thus has not had the ability to punish or signal detection of deviation through repatriation since then. [REDACTED]

2.4.4 **Third**, Lafarge does not consider a punishment strategy of lowering RMX prices to be credible.

- **Complexity.** Such a strategy adds substantial additional complexity to a tacit understanding since it would need to cover hundreds of local RMX markets. (As discussed above, the CC itself notes that the complexity of maintaining coordination in multiple local RMX markets “*reduces [the CC’s] concerns about the possibility of coordination in RMX markets*”¹⁰).
- **Costly and ineffective.** This strategy would also be very costly for the punisher without necessarily having a marked impact on the deviant because a deviant’s customers cannot be targeted due to both the transitory (*i.e.*, short-term contract or “jobs”) nature of RMX contracts and the uncertainty over which suppliers bid

⁹ Paragraph 94 of the Issues Statement.

¹⁰ Paragraph 100 of the Issues Statement.

for any given contract. Such a punishment strategy is thus very hard to target on a particular deviant. It would also often punish a member of the coordinating group which did not deviate and thereby potentially destabilise any tacit coordination. The strategy would affect RMX producers outside the coordinating group and thereby risk causing a price cut that is hard to reverse (compounding the reduction in profits for the punisher and making it very difficult to escape from a punishment phase). Moreover, the punishment phase could be triggered by someone outside the coordinating group making coordination unstable.

- **Destabilises any putative coordination.** Finally (even in the unlikely event that a targeted punishment could be achieved), it would provide an additional mechanism by which cheating could occur (*i.e.*, a feature that undermines coordination that would have to be weighed against the enhanced scope to punish). Therefore, coordination which relies on reaching and monitoring the terms of coordination at the RMX level would be undermined by the additional complexity involved, the increased lack of transparency, and also by the strength of independents at the RMX level of the supply chain as well as competition from any major that is outside the coordinating group.

2.4.5 **Fourth**, Lafarge does not consider that barriers to entry/expansion are increased significantly as a result of vertical integration from cement into RMX. The growth of non-major cement players from 2007 onwards would appear to be inconsistent with the view that vertical integration has increased barriers to entry/expansion. For example, the share of bulk cement supplied externally to non-majors by importers (excluding Aggregate Industries) increased from around [§] percent in 2007 to [§] percent in 2010. The fact that barriers to entering RMX are low (as evidenced by the growth in share of independent suppliers) also undermines this suggestion. Moreover, there has been significant entry in cement in recent years, with six new import terminals having been set up (Workington, Blythe, Lowestoft, Southampton, Garston and Montrose), the most recent being in 2012 in Montrose, Scotland, by Dudman.

2.5 **Cement: Absence of coordination and no evidence of consumer harm**

2.5.1 The CC has asserted a theory of coordination which is heavily reliant on the CC's interpretation of the meaning of certain documentary evidence [§]

2.5.2 Additionally, the CC has not outlined how customers have actually been harmed. To the extent the CC considers that the documentary evidence points to attempted coordination [§], the evidence of what actually happened does not support the view that coordination had the effect of harming customers. This evidence is discussed further below.

Focal point for coordination - no coordination over prices or market shares

2.5.3 **First**, Lafarge considers (and the CC appears, at paragraph 84, to agree) that coordination cannot take place over actual cement prices given the very substantial price dispersion in actual prices and the private negotiations which take place between cement producers and customers (as discussed above). The CC considers that the main focal points for coordination are more likely to be shares of production,

shares of sales and/or wins and losses of customers (see paragraph 84 of the Updated Issues Statement). Lafarge notes, however, that there is no evidence of coordination of capacity,¹¹ and yet capacity ultimately determines market share – in particular production shares and total sales shares – especially during periods of high demand.

2.5.4 The CC also cites “*the degree of stability in shares of production over the period 2001 to 2010, at the time of large changes in demand, changes in ownership and significant excess capacity for cement production*” as being consistent with coordination. This statement is misconceived for two main reasons:

- (a) Lafarge has lost [X] percentage points of cement production share from 2001 to 2010.¹² Lafarge does not consider that this could on any definition be described as “stable”.
- (b) Lafarge has not experienced [X] for cement production over the 2001 to 2010 period. It has achieved [X] in each year, except for the initial downturn period of 2009 and 2010. Indeed, Lafarge’s [X]. This is illustrated in the following Table.

Table 1 - Lafarge cement works capacity utilisation, 2009-2011

Cement Works	2009	2010	2011
Aberthaw	[X]	[X]	[X]
Cauldon	[X]	[X]	[X]
Dunbar	[X]	[X]	[X]
Hope	[X]	[X]	[X]

- (c) Market shares are volatile and Lafarge has lost [X] share over the past decade. Such volatile market shares are inconsistent with a tit-for-tat strategy in relation to customer wins and losses being successfully operated on volumes as that would leave Lafarge’s market share stable too.

Margins

2.5.5 Second, on a replacement cost basis, Lafarge’s profits are not excessive. [X]. This is elaborated in **Table 2** below.

Table 2 - Lafarge ROCE, 2007-2011

¹¹ Cement capacity responses to the recession among the putative coordinating group have been asymmetric, [X]

¹² Or [X] percentage points from 2001 to 2011.

	2007	2008	2009	2010	2011
Operating Profit (£ 000s)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
NOPAT (£ 000s)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Capital Employed (£ 000s)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ROCE (CC definition – pre tax)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ROCE (Lafarge definition – post tax)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Lafarge current WACC (post tax)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ROCE (HCA – excluding goodwill)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ROCE (Modern Equivalent Asset Value)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

No consumer harm

2.5.6 **Third**, and critically, if coordination is successful, some sales channels must be suffering by paying higher prices than they otherwise would do. It is unclear from the Updated Issues Statement which channel or channels these might be. Below we consider all possible sales channels for grey cement sold by a hypothetical putative coordinating group [REDACTED]. Cement could be sold to:

- (a) **Non-major (i.e., “independent”) RMX producers.** The non-major RMX sector has been growing share against the majors. More generally, cement importers are an important and growing source of cement supply for the non-major segment as a whole. The RMX GB share of supply for non-major RMX producers has grown substantially in recent years at the expense of majors (from [REDACTED] percent to [REDACTED] percent over the period 2007-2010¹³). Around 90 percent of non-major RMX producers are found within 10 miles of a cement major’s RMX site, demonstrating that the non-majors have gained share at the expense of majors.
- (b) **Aggregate Industries.** Aggregate Industries is not suffering due to its large volume orders and ability to self supply. These features manifest themselves in the [REDACTED]. During the CC’s site visit [REDACTED], Lafarge provided the CC with data showing that [REDACTED]. These data are provided again at **Annex 6**.
- (c) **Tarmac.** There is no suggestion that Tarmac historically paid inflated prices for cement (and Lafarge considers that Tarmac has largely self-supplied its requirements in the past).

¹³ This finding is even more prominent when including supply from volumetric trucks: share for non-majors grew from [REDACTED] percent to [REDACTED] percent over the same period.

- (d) **Bagged cement buyers.** There is no suggestion that bagged cement is sold at inflated prices, which prices being negotiated at a national level with powerful buyers such as B&Q and Travis Perkins.
- (e) **Internal downstream units.** There cannot be coordination on internal sales since transfer prices and volumes supplied internally are not observable. Moreover, coordination on internal sales would in effect be an agreement to restrict internal supplies so as to reduce volumes of RMX (and/or concrete blocks, mortar and other downstream products) supplied. Importantly, Lafarge is not present in the production of concrete products such as concrete blocks, and nor is the JV following completion, in contrast to Cemex and Hanson. This represents a substantial asymmetry which would militate against possible coordination. Ultimately, such a theory of coordination amounts to an allegation that there is coordination at the RMX level – which the CC says is not possible (see paragraph 100 of the Issues Statement) – and would be frustrated anyway by competition from Aggregate Industries, Tarmac, and the non-major RMX producers.

2.6 The impact of the Anglo American/Lafarge/JV and Associated Divestment Remedies

Introduction of a new cement player

- 2.6.1 Lafarge considers that the introduction of a new cement player (“**Hope Construction Materials**”) as a result of the remedies from the CC’s investigation into the Anglo American/Lafarge/JV creates a more competitive player than Tarmac in cement. [REDACTED], and Tarmac’s share of bulk sales to non-majors has been persistently very low (estimated to be less than [REDACTED] percent). Moreover, both the win/loss and customer approaches/retentions evidence of Lafarge indicates that [REDACTED] (as evidenced above for example on customer approaches/retentions and by section 2.4.1 of “*Assessing Competition in the Supply of Bulk Cement: An Economic Response to the Competition Commission’s Proposed Theory of Tacit Coordination*”, dated 27 January 2012, submitted to the CC during the Anglo American/Lafarge JV investigation¹⁴).
- 2.6.2 Lafarge notes that these findings are readily explained by its understanding of Tarmac’s prior business model. [REDACTED]. For this reason, removing the independence of Tarmac’s cement operations cannot materially facilitate transparency, as Tarmac was not a disruptive force that caused share or volume variability as regards supply of cement to non-major customers, or strengthened the scope for coordination.
- 2.6.3 Hope Construction Materials will have greater scope to compete externally than Tarmac. The cement asset to be operated by Hope Construction Materials allows for greater scope to compete externally than Tarmac’s Tunstead plant, as can be seen

¹⁴ For actual wins of non-major bulk customers over 2010/2011, [REDACTED] percent of volumes (*i.e.*, of the [REDACTED] of actual wins) were won from [REDACTED], [REDACTED] percent won from [REDACTED] and [REDACTED] percent won from [REDACTED]. Less than [REDACTED] percent of wins over 2010/11 were gained from [REDACTED]. For actual losses of non-major bulk customers over 2010/2011, [REDACTED] percent of volumes (*i.e.*, of [REDACTED] of actual losses) were lost to [REDACTED] percent lost to [REDACTED], and [REDACTED] percent lost to [REDACTED]. Less than [REDACTED] percent of losses over 2010/11 were lost to [REDACTED]. 2011 volumes are annualised from year-to-July figures.

from **Table 3** below. **Table 3** shows that Hope Construction Materials will have [X] more in grey cement capacity, an increase of [X] percent. Furthermore, Lafarge estimates that Tarmac typically made only [X] of external cement sales per annum, which included logistically-motivated cross-sales to other GB cement suppliers. Focusing only on external cement sales to non-majors, Lafarge estimates that Tarmac made only around [X] of cement sales per annum. By contrast, Lafarge estimates that Hope Construction Materials will have strong incentives to sell externally [X] of cement [X]. Lafarge notes that Hope Construction Materials' cement capacity could be greater than the [X] of cement shown in Table 1, depending upon the cement blending strategy adopted by Hope Construction Materials.

- 2.6.4 Lafarge therefore considers that Hope Construction Materials will represent a significantly larger and more effective cement competitor than Tarmac.

Table 3 - Comparison of Tarmac cement capacity and sales with that of Hope Construction Materials

	Tarmac	Hope Construction Materials	Change
Capacity	[X]	[X]	[X]
External sales during West Thurrock supply agreement	[X]	[X]	[X]
External sales post West Thurrock supply agreement	[X]	[X]	[X]

Source: Lafarge estimates. Notes: [X].

- 2.6.5 Any conclusions that the CC reaches on the likelihood of coordination between GB cement producers and any possible remedies must be cast in light of the impact of the divestments as a result of the Anglo American/Lafarge/JV. Neither the Updated Issues Statement nor any working paper issued by the CC so far considers the likely impact of this radical change to the fundamental structure of the market on the conditions for coordination. Lafarge considers that the creation of an entirely new integrated cement player changes the competitive landscape entirely, introducing a level of uncertainty unseen in GB for some time. Accordingly, the CC must reflect this in its analyses and conclusions.

2.7 Cement: Policy and Regulation

- 2.7.1 The CC's Updated Issues Statement states that the additional incentives created by the European Union Emissions Trading Schemes ("EU ETS") 'partial cessation' rule to encourage imports into GB have been overstated.
- 2.7.2 In addition to the reasons outlined in paragraphs 2.2.2 to 2.2.5 above, Lafarge considers that the CC has failed to appreciate the effect of these incentives for non-GB EU producers of cement to import cement into GB.

- 2.7.3 As Lafarge outlined in its Overview Submission of April 2012, several of the cement importers are international cement companies with tied producing plants (namely CRH, Titan, CPV and Quinn) which provide the import terminals of these firms with a consistent source of supply of cement. Moreover, in some cases (*e.g.*, in Greece, Ireland and Spain), these companies are struggling to secure 100 per cent of their CO₂ allocations, since their domestic demand has fallen below the level where domestic demand allows them to exceed the 50 per cent historic production threshold.
- 2.7.4 Lafarge estimates¹⁵ that, in the Republic of Ireland, historical cementitious demand (a proxy for clinker production) over 2005-2008 had a median of [X]mt, which compares with 2010 cementitious demand of [X]mt. Operating at least 50 per cent of historical activity levels in Ireland, therefore, would equate to demand of [X]mt. Therefore, even reaching 50 per cent of the historical activity levels of clinker (using cementitious demand as a proxy) in the Republic of Ireland would require the export of substantial volumes. Lafarge considers that a similar situation applies in other European countries such as Spain. The incentive to export is high. If CO₂ is priced at €[X] per tonne, a plant with an HAL of 1mt clinker, operating today with a local demand equivalent to say [X]kt clinker would receive an additional [X]kt CO₂ rights by exporting cement with a clinker content of [X]kt to achieve 500kt clinker production equal to 50 per cent of the HAL. If the plant produces [X]kg CO₂ per tonne clinker, it would need to surrender [X]kt of rights, but it would receive 766kt of free allocations, meaning that it could sell [X]kt CO₂ rights for over €[X] million in cash. In other words, the margin on the final [X]kt of production would have been increased by over €[X] per tonne clinker.
- 2.7.5 The substantial levels of excess capacity, coupled with low levels of local demand, mean that the EU ETS will create strong incentives to produce at 50 per cent of HAL and export any production exceeding domestic demand to markets where demand is stronger, such as GB. Lafarge considers that there is substantial excess grey cement capacity outside of the UK. In Spain, estimated demand in 2007 was around 56 million tonnes as compared with Lafarge's estimates of Spanish demand of 20.6 million tonnes in 2011 and 17.5 million tonnes in 2012. This suggests that Spain currently has substantial excess supply and is likely to continue to have excess capacity given no significant reductions in capacity since 2009. Similarly, in Ireland, demand in 2010 was 2.4 million tonnes (based upon CMI figures) compared to estimated capacity of around 7 million tonnes. Indeed, Lafarge estimates that 2012 cement demand is likely to be less than 25 per cent of total capacity.
- 2.7.6 Lafarge considers that the CC has given insufficient weight to the effect of the incentives created by the EU ETS in light of the economic conditions in other EU member states from which cement producers may export to the UK, specifically, Spain, Ireland and Greece.

¹⁵ Figures are estimated from the 'Ireland Inevitability' report using data from several sources including the Cement Manufacturers of Ireland, EU Community Independent Transaction Log and company environmental reports.

3 AGGREGATES

3.1 Aggregates: Market Definition

- 3.1.1 Lafarge broadly agrees with the CC's market definition for aggregates, in particular that different grades of aggregate are in the same market, that there is a single market for all construction aggregates, and that secondary and recycled aggregates should be included in the market definition for construction aggregates (paragraph 14 of the Issues Statement).
- 3.1.2 In terms of end use, Lafarge agrees with the CC that crushed rock and sand and gravel aggregates are close substitutes for RMX and concrete block production. While it may be the case that relatively low percentages of recycled and secondary aggregates are used for the production of RMX and concrete products, Lafarge considers that over time there will be greater use of recycled products for these applications.¹⁶
- 3.1.3 For low-specification construction applications, such as sub-bases and fills, Lafarge agrees with the CC that recycled and secondary aggregates are close substitutes to primary aggregates. Lafarge cited in its submission of 22 November 2012 two recent instances in which Lafarge had lost a contract to a recycled aggregates supplier:
- (a) In April 2012, [REDACTED]. Lafarge quoted to supply primary aggregates.
 - (b) In May 2012, [REDACTED]. Again, Lafarge quoted to supply primary aggregates.
- 3.1.4 With regard to asphalt production, Lafarge would emphasise that secondary and recycled products are not limited to Recycled Asphalt Planings ("RAP"), but also include crushed glass, recycled rail ballast and steel slag. Further, given that virtually all asphalt producers are backwardly integrated into aggregates, and therefore are able to self supply, any potential lack of substitutability between different aggregate types is unlikely to be an issue.
- 3.1.5 With regard to geographic market definition, Lafarge refers the CC to its comments on the CC's catchment area analysis (see for example Lafarge's response to the PCA/EEA putback and Lafarge's response to the catchment area putback). Lafarge remains strongly of the view that the CC's approach to calculating catchment areas is misconceived.¹⁷

¹⁶ Lafarge has used recycled rail ballast and crushed glass in the production of its own RMX. Lafarge has used RMX containing recycled aggregates in a number of projects including at Nottingham Trent University in 2008 for which over 5,000m³ of RMX was supplied. Information on this can be viewed at Lafarge's website: http://www.lafarge.co.uk/wps/portal/uk/3_A_11-CaseStudies and <http://www.lafarge.co.uk/AandCReadyMix/RMX%20Sustainability%20Brochure.pdf>.

¹⁷ First, Lafarge considers that aggregates sites can compete over 30 miles, especially since aggregates do not have a limited time constraint for delivery. Second, the approach adopted by the CC would appear to lead to (some) urban sites not being constrained by non-urban sites despite those non-urban sites competing for the same jobs and despite those non-urban sites being constrained by the urban sites in question (according to the CC approach). Third, aggregates sites located close to each other may anomalously appear to face different competitor sets due to different radial sizes being applied. Fourth,

3.2 Aggregates: Unilateral market power

- 3.2.1 Lafarge notes the CC's finding that over 90 percent of job sites where primary aggregates were delivered in 2011 had a choice of more than five distinct suppliers within the 80 percent catchment distances around those sites (paragraph 26 of the Issues Statement).¹⁸ Lafarge considers that having four competing suppliers is sufficient for a competitive outcome (indeed, three may be sufficient) given that suppliers of aggregates are likely to have spare capacity. Indeed, barriers to expansion in aggregates are not significant. With regard to end use, for RMX and concrete block production crushed rock and sand and gravel aggregates compete with each other and both aggregates sources are characterised by spare capacity in GB. For low-specification construction applications, crushed rock and recycled aggregates compete with each other; crushed rock has spare capacity and recycled aggregates have certain cost advantages (such as typically being located close to the source of demand and not subject to the aggregates levy) and low barriers to entry, and represent a growing constraint over time. For asphalt production, this is largely supplied internally.
- 3.2.2 With regard to the comments on the CC's preliminary PCA/EEA findings, Lafarge refers the CC to its detailed response to the CC's preliminary PCA/EEA analysis for aggregates.

3.2.3 [REDACTED]

3.3 Aggregates: Coordination

- 3.3.1 Lafarge considers that the CC is correct to highlight features of the aggregates industry which are not conducive to coordination. In particular, Lafarge notes that aggregates are characterised by local markets, with different local structures (such as aggregates type, identity of supplier, identity of customer), and aggregate purchases are jobs-based with private bilateral price negotiation, all of which are structural features which would not facilitate coordination.

delivery distances are likely to be affected by "network density effects", *i.e.*, where a supplier has several sites in a given area, there is greater scope to supply the job from the nearest site, hence a firm with a denser plant/site network will tend to deliver within shorter distances than a firm with a less dense network. However, that does not mean that rival competitors with a less dense network and located further away from certain customers cannot exert a competitive constraint on suppliers located closer to those customers. Fifth, that delivery distances are typically lower for sites based in urban areas is likely to reflect the fact that these sites are located close to a source of demand as opposed to some intrinsic difficulty in competing over greater distances. For instance, the source of demand is regularly in urban areas and so sites located in urban areas naturally have lower delivery distances, but this does not mean that the urban site could not compete over the same distance as a non-urban site. Sixth, in terms of data interpretation, Lafarge's results are less indicative of an urban/non-urban split.

¹⁸ Specifically, for primary aggregates deliveries in 2011 made by the three majors analysed by the CC, 94 percent of deliveries had more than 5 distinct primary aggregates suppliers within a 20/28 mile radius (each independent fascia is accounted for separately). For Lafarge deliveries, only the equivalent percentage is [REDACTED] percent. Similarly, for primary aggregates deliveries in 2011 made by the three majors analysed by the CC, [REDACTED] percent of deliveries had more than 5 distinct recycled aggregates plants within a 20/28 mile radius (however, the data used by the CC does not capture all the possible sources of supply of recycled aggregates and so the figures are likely to underestimate the availability of recycled aggregates). For Lafarge deliveries only, the equivalent percentage is [REDACTED] percent.

- 3.3.2 On price announcements, the Commission acknowledges that actual prices are not transparent such that coordination on price is not sustainable (see paragraph 84 of the Issues Statement). Lafarge makes the following additional observations on price announcements, which equally apply to price announcements in cement where these points are discussed in greater detail. Any similarity in timing or magnitude of announced price rise cannot by itself imply sustained tacit coordination on actual prices. One only has to observe the very substantial price dispersion in actual prices to recognise the difficulty in coordinating on the actual price set (see Annex 5).
- 3.3.3 Moreover, it cannot be presumed that a price announcement amounts to a “signal” that strengthens the ability of another supplier to achieve a higher price. There are examples of price rises being announced when prices actually fall. For example, for [X], average actual prices fell both in the quarter of the announced price increase relative to the CC’s base period, and fell in the quarter after the announced price increase relative to the CC’s base period. In addition, [X], average actual prices fell both in the quarter of the announced price increase relative to the CC’s base period, and fell in the quarter after the announced price increase relative to the CC’s base period.
- 3.3.4 Given the very large number of customers in aggregates, Lafarge considers that price announcements letters are the most practical method of communicating a price change.
- 3.3.5 Finally, Lafarge notes that the price that matters to the customer is the price that is actually paid, not the announced price that a supplier would like to charge. Price announcements do not allow for either alignment or monitoring on the *actual prices* paid by customers, and observed market evidence demonstrates that price increases are widely and non-systematically dispersed across customers of a given product and that they are almost always lower than the announced increase. Supporting evidence is included at Annex 5.
- 3.3.6 In summary, price announcements do not represent a credible commitment to any given price to a given customer. A price announcement cannot provide a clear signal as to what the price increase should be, or a way to allow for actual prices charged to any customer to be monitored.

3.4 Aggregates: Vertical effects and exclusionary behaviour

- 3.4.1 Lafarge considers that the CC should not have concerns over vertical integration and exclusionary behaviour with respect to aggregates. Indeed, Lafarge agrees with the CC that the available evidence is inconsistent with widespread foreclosure – both unilateral and coordinated – of independent RMX producers in recent years, in particular the growth in share of supply of RMX by independent producers (see paragraphs 110-113 of the Issues Statement). Moreover, the latter finding applies irrespective of whether supply by volumetric trucks is included or excluded; the growth of volumetric operators adds further evidence that is inconsistent with foreclosure.
- 3.4.2 Furthermore, the CC’s finding that over 90 percent of job sites where aggregates were purchased and delivered in 2011 had a choice of more than five suppliers within the 80 percent catchment distances around those sites shows that aggregates

customers have a wide choice of suppliers, and moreover have a wide choice of suppliers with spare capacity. This finding holds all the more given the CC's overly narrow approach to catchment areas around urban sites (*i.e.*, that a more economically meaningful approach would indicate even greater choice). This suggests that exclusionary conduct through aggregates is unlikely to have occurred in GB.

3.5 Aggregates: Policy and Regulation

3.5.1 The CC considers that the planning system may impact on competition for land-won primary aggregates (see paragraph 119).

3.5.2 Lafarge does not consider that the planning system distorts competition in any significant way and reiterates the following points:

- (a) **Advantages for incumbents and larger companies in the planning system.** Although Lafarge considers that the planning process can take a long time to navigate in order to secure approvals, no special advantages are afforded:
 - (i) to incumbent producers (*i.e.*, companies with existing operational sites) seeking permissions to extend existing sites over new entrants. Lafarge considers that the CC has overplayed the significance of how the planning system treats extensions as opposed to greenfield permissions and that in practice these are often very similar;
 - (ii) to incumbents over new entrants *per se*. The only perceived advantage that might accrue to an incumbent is experience, but such expertise can be obtained from third party consultants;
 - (iii) to larger companies over smaller companies (other than benefits that may accrue to larger companies due to scale). Conversely, smaller companies may benefit from lower levels of overhead costs. To the extent that the planning system is long and costly (which the CC considers that larger companies are better placed to endure and "absorb"), this is not a feature of the market or distortion created by larger aggregates producers. Once again, small and large companies alike can use third party consultants with the necessary expertise to navigate the planning system so as to overcome any possible disadvantage smaller companies may face.
- (b) **"Landbanking"**. Lafarge agrees with the CC's conclusion that MASS does not create incentives for aggregates producers to acquire mineral-bearing land from which aggregates are not produced (akin to "land-banking" as was considered by the CC in the context of the Groceries Market Investigation).
- (c) **Impact of the Aggregates Levy.** The impact of the aggregates levy has been to improve the competitiveness of recycled and secondary aggregates vis-a-vis primary aggregates across the spectrum of possible end use applications. As a consequence of such intense competition from recycled and secondary aggregates, Lafarge has [✂]. As sustainable development

demands more recycled material in the contents of buildings, the use of secondary and recycled material is set to increase, thereby imposing an even greater constraint on primary aggregates producers.

4 READY-MIXED CONCRETE

4.1 **RMX: Market definition**

- 4.1.1 Lafarge broadly agrees with the CC's preliminary view on market definition for RMX (paragraphs 18-20 of the Issues Statement). Lafarge notes, however, that volumetric trucks are increasingly being used to supply larger projects, with Lafarge having [REDACTED]¹⁹. Consequently, volumetric trucks do not only compete for smaller projects.
- 4.1.2 Lafarge also notes that for larger jobs, suppliers are also able to compete by using site plants, and that such jobs are bid for competitively. Specifically, site plants can be rented and rental is not controlled by the majors. Moreover, anyone with the capability of operating a RMX plant has the capability to operate a RMX site plant, and large jobs are attractive to bid for and would attract bids from suppliers not necessarily present in the immediate vicinity. In addition, larger jobs afford purchasers a greater degree of buyer power (larger volume projects being attractive to bid for, as noted). Finally, in many instances, customers demanding large volumes of RMX for a job are also capable of choosing instead to operate their own site plants. With regard to the CC's concern at paragraphs 57, 66 and 101 of the Issues Statement therefore, Lafarge does not consider that there should be a competition issue over larger volume jobs due to the additional constraint imposed by site plants.

4.2 **RMX: Coordination**

- 4.2.1 Lafarge broadly agrees with the CC's preliminary view on the likelihood of coordination in RMX (paragraph 100 of the Issues Statement). Specifically, the CC notes that the lack of barriers to entry and "*the complexity of maintaining coordination in multiple local RMX markets*" reduces its concerns about the possibility of coordination in RMX markets (see paragraph 100 of the Issues Statement).

4.3 **RMX: Vertical integration and exclusionary behaviour**

- 4.3.1 Lafarge considers that the CC should not have concerns over vertical integration and exclusionary behaviour. Indeed, Lafarge agrees with the CC that the available evidence is inconsistent with widespread foreclosure – both unilateral and coordinated – of independent RMX producers in recent years, in particular given the growth in share of supply of RMX by independent producers (see paragraphs 110-113 of the Issues Statement). Growth by volumetric trucks (as noted above) adds further to the evidence against foreclosure.
- 4.3.2 Furthermore, Lafarge submits that vertical integration into RMX does not facilitate coordination in cement. This was discussed in further detail in paragraph 2.4 above.

¹⁹ [REDACTED]

5 CONCLUSION

- 5.1 The main concern identified by the CC in the market investigation is how, at a time when demand was falling and when Lafarge's largest customers were withdrawing their business to pursue self-supply strategies, was Lafarge nonetheless able to raise prices and sustain margins, particularly, in 2008 and 2009. This response has focused on addressing the premises underpinning this concern. Lafarge submits not only that this statement is incorrect, but that, at least in respect of Lafarge's own position, none of the market outcomes the CC relies upon as evidence for coordination provide such proof.
- **First**, Lafarge disputes the CC's contention that it has maintained high levels of profitability or returns. Lafarge's ROCE has fallen [X]. The ROCE levels that Lafarge has been able to maintain were not a result of coordination, but reflected considerable cost saving measures Lafarge implemented in order to reverse declining levels of profitability in the face of rising costs. Without these savings, Lafarge's margins would have fallen even further.
 - **Second**, [X]. Prices to external customers remained broadly flat [X] and declined in real terms [X], once product mix is controlled.
 - **Third**, Lafarge has continued to face intense levels of competition from domestic cement producers and cement importers alike. Lafarge's win-loss data demonstrates that Lafarge has fought hard to retain or win customers, often by lowering prices.
- 5.2 The combination of declines in Lafarge's profitability, declines in achieved transaction prices, and significant levels of "churn" Lafarge's customer base are entirely inconsistent with a coordinated market.
- 5.3 In Hope Construction Materials, the industry has obtained an investor which, unlike Anglo American, is committed for the long-term and has demonstrated a track record in developing a leading world-class business from small beginnings. In the Hope cement works, Hope Construction Materials has a plant that is [X] per cent larger than the Tunstead plant operated by Tarmac, with the ability to sell more than [X] a year to the external market; that is more [X] as ever was supplied externally by Tarmac. Access to an in-house supply of cementitious products and, in particular, to ground-granulated blast-furnace slag, would enable it to expand its output still further. Lafarge believes that the combination of the industry restructuring that has occurred in response to the recession, the creation of the Lafarge-Tarmac joint venture and the ambitions of Hope Construction Materials as a new entrant creates a dynamically different market from the one that existed prior to 2008.

ANNEXES

Annex 1
Ex-works bulk cement prices to independent customers, Lafarge, 2009-2011

Figure 2 and **Figure 3** below present bulk ex-works prices for CEM I and CEM II respectively to non-major bulk cement customers from 2009-2011. [✂]

**Figure 2 - LCUK ex-works bulk delivered CEM I price to independent customers,
2009-2011**
[✂]

**Figure 3 - LCUK ex-works bulk delivered CEM II price to independent customers,
2009-2011**
[✂]

Annex 2
Cement – Switching Data

[✂]

Table 4 - Wins and Losses of Lafarge Bulk Non-Major Cement Customers [✂], (in tonnes)
[✂]

Actual switching data illustrates high level of switching between suppliers which is not consistent with coordination

- [✂]
- [✂]

Switching data illustrates high level of switching involving importers

- [✂]
- [✂]

Evidence of threats to switch demonstrates that observed switching substantially understates actual competitive activity and is not consistent with coordination

- [✂]
- [✂]
- [✂]
- [✂]
- [✂]
- [✂]

Annex 3
LCUK Excellence Savings

Figure 4 - LCUK annual total cost reduction savings delivered [✂]
[✂]

Figure 5 - LCUK Operating Margins (EBIT/Total Sales) with and without cumulative [✂] cost reduction savings [✂]
[✂]

Annex 4
Price Dispersion in Cement

[✂]

Figure 6 - [✂] price implementation date
[✂]

Figure 7 - [✂] price implementation date
[✂]

Annex 5 Price Dispersion in Aggregates

As noted in **Annex 4**, the CC has not yet analysed the dispersion of actual price changes following announced price increases. As with cement, if the dispersion of actual aggregates prices were considered, it would become clear immediately that price announcements cannot act as a clear signal as to which customer will face a price rise of any given magnitude. [✂]

Figure 8 - Price dispersion on external sales – Top 10 aggregates products sold by Lafarge in [✂]
[✂]

[✂]

Figure 9 - Price changes announced and achieved by Lafarge between [✂], aggregates
[✂]

Figure 10 - Price changes announced and achieved by Lafarge between [✂], aggregates
[✂]

[✂]

Annex 6
Prices paid by RMX for CEM I and CEM II for Lafarge's Cement, 2011

**Figure 11 - Prices paid by RMX producers for CEM I (independents and majors)
sold by Lafarge, 2011 (delivered prices)**

[✂]

**Figure 12 - Prices paid by RMX producers for CEM II (independents and majors)
sold by Lafarge, 2011 (delivered prices)**

[✂]