

Section 57 of the Competition Act (Cap. 50B)

Grounds of Decision issued by the Competition Commission of Singapore

In relation to the notification for decision of the proposed merger between Holcim Ltd. and Lafarge S.A. pursuant to section 57 of the Competition Act

22 August 2014

Case number: CCS 400/007/14

Confidential information in the original version of this Decision has been redacted from the published version on the public register. Redacted confidential information in the text of the published version of the Decision is denoted by [><]

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I. Introduction

The notification

- On 11 July 2014, Holcim Ltd. ("Holcim") and Lafarge S.A. ("Lafarge") 1. (collectively referred to as the "Parties") filed a joint notification pursuant to section 57 of the Competition Act (Cap. 50B)(the "Act") for a decision by the Competition Commission of Singapore ("CCS") as to whether the proposed 'merger of equals' between Holcim and Lafarge (the "Transaction") will infringe the section 54 prohibition of the Act, if carried into effect.
- In reviewing the Transaction, CCS contacted 16 customers¹ for grey cement 2. and ready-mix concrete who are based in Singapore, as well as six competitors² of the Parties in the grey cement market and nine competitors³ of the Parties in the ready-mix concrete market. CCS also contacted [×], the Building and Construction Authority of Singapore ("BCAS") and the Housing Development Board ("HDB") for information as well as their views regarding the ready-mix concrete and grey cement markets in Singapore. Out of the third-parties contacted, 14 replied and 10 provided substantive responses to CCS's questionnaires. The remaining four parties⁴ have indicated that they have no concerns with the Transaction.
- At the end of the consultation process and after evaluating all the evidence, 3. CCS concludes that the Transaction, if carried into effect, will not infringe section 54 of the Act.

II. The Parties

Holcim

Holcim is a holding company headquartered in Switzerland and listed on the 4. SIX Swiss Exchange in Zurich. Holcim's subsidiaries are involved in the manufacture and supply of cement, aggregates, ready-mix concrete, asphalt, additives, mortar and other pre-cast concrete products.⁵ Its core businesses are the manufacture and supply of cement and the production, processing and

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¹[**%**]

³ [×]

⁵ Paragraph 7.1 of Form M1

distribution of aggregates, ready-mix concrete and asphalt. Holcim also offers consulting, research, trading, engineering and other services.⁶

- 5. Holcim's subsidiary in Singapore, Holcim (Singapore) Limited ("Holcim Singapore") provides products and services in Singapore under the trade name of "Holcim". Holcim Singapore manufactures and supplies ready-mix concrete to customers in Singapore. Apart from ready-mix concrete, Holcim Singapore also manufactures and supplies conwood and dry mix products, such as floorings, mortar for concrete repair and reinforcement and tile adhesives etc. Holcim Singapore also imports grey cement which is used for its ready-mix concrete and dry-mix mortar production. Holcim submits that the imported grey cement is used primarily for its internal consumption and that grey cement may be supplied to third-party customers in Singapore only in limited instances. Holcim Singapore also imports aggregates into Singapore but these are used solely for its ready mix concrete production and are not sold to third-party customers in Singapore.
- 6. Holcim Singapore also operates cement terminals, concrete batching plants and aggregate terminals in various locations throughout Singapore. Apart from Holcim Singapore, Holcim also has four other subsidiaries which are registered in Singapore.⁸
- 7. Global turnover of Holcim was approximately S\$27,714 million in the fiscal year ended 31 December 2013. Turnover in Singapore for the same period was approximately S\$[≫]. 9

Lafarge

- 8. Lafarge S.A. ("Lafarge") is headquartered in France and listed on the Paris stock exchange Euronext. Lafarge is involved in the manufacture and supply of cement, aggregates, ready-mix concrete, additives, mortar, asphalt and other pre-cast concrete products. Lafarge primarily produces and sells cement, aggregates and ready-mix concrete worldwide.¹⁰
- 9. Lafarge's subsidiary in Singapore, Lafarge Cement Singapore Pte. Ltd. ("Lafarge Singapore") provides products and services in Singapore under the trade name of "Lafarge" and "Phoenix". 11 Lafarge Singapore imports and

⁶ Paragraph 10.6 of Form M1

⁷ Paragraph 10.4 of Form M1

⁸ Holcim Investments (Singapore) Pte. Ltd, Geocycle (Singapore) Pte. Ltd, Holcim Trading Pte Ltd and Holcim

⁹ Paragraph 13.1 and 13.3 of Form M1

¹⁰ Paragraph 10.8 of Form M1

¹¹ Paragraph 10.5 of Form M1

supplies grey cement into Singapore. Lafarge Singapore also imports aggregates into Singapore but these are used solely for its ready-mix concrete production and are not sold to third-party customers in Singapore. ¹²

- 10. Lafarge, through its subsidiary Supermix Concrete Pte. Ltd. is party to a tripartite equal shareholding joint venture named Alliance Concrete, together with shareholders Asia Cement (Singapore) Private Limited and SINHENGCHAN Concrete Pte. Ltd. Alliance Concrete manufactures and supplies ready-mix concrete to customers in Singapore and has a network of eight ready-mix concrete plants throughout Singapore. Apart from Lafarge Singapore, Lafarge has three other subsidiaries and associated companies which are registered in Singapore.
- 11. Global turnover of Lafarge was approximately S\$25,502 million in the fiscal year ended 31 December 2013. Turnover in Singapore for the same period was approximately S\$[\$\times].\frac{15}{2}].

Alliance Concrete

12. With regard to Alliance Concrete, the Parties submitted that:

The three shareholders namely - Lafarge, through its subsidiary Supermix Concrete Pte. Ltd., together with shareholders Asia Cement (Singapore) Private Limited and SINHENGCHAN Concrete Pte. Ltd - in Alliance Concrete have joint control in equal shareholding. [×]¹⁶

- a. [**※**]¹⁷
- b. [×]¹⁸; and
- c. $[\times]^{19}$.
- 13. The European Court of Justice has made a finding that there was a single economic entity in cases where shareholders with equal shareholding exercise joint control over a subsidiary.²⁰ It is also notable that the single

¹² Paragraph 10.14 of Form M1

¹³ Paragraph 10.14 and 10.23 of Form M1

¹⁴ LMCB Holding Pte Ltd, Lafarge Marketing Pte Ltd and LCS Shipping Pte Ltd

¹⁵ Paragraph 13.2 and 13.4 of Form M1

Response to CCS Request for Further Information dated 17 July 2014 at paragraph 23.3

¹⁷ Response to CCS Request for Further Information dated 17 July 2014 at paragraph 23.4

Response to CCS Request for Further Information dated 31 July 2014 at paragraph 8.4

Response to CCS Request for Further Information dated 31 July 2014 at paragraph 8.5

²⁰ Case T-314/01 Avebe v Commission [2006] ECR II-3085

economic entity doctrine is not confined to anti-competitive agreements but may also be invoked in the merger clearance context. For example, in the European Commission ("EC") merger decision of *Grupo Vilar Mir/EnBW*²¹ which concerned a merger in the electricity market, the EC raised competition concerns after having considered that one of the acquirors, EnBW was jointly controlled by an energy company EDF and OEW (non-energy company). In particular it is notable that notwithstanding that EDF shared joint control of EnBW with another entity, and that EnBW was a full functioning autonomous company in a joint venture, the EC considered EnBW and EDF as a single economic entity. As such, for the purposes of the merger assessment, the EC took into account the activities of all the companies belonging to the single economic entity.

14. In the same vein, for the purposes of the assessment of the ready-mix concrete market in the present case, CCS has taken the market shares of Alliance Concrete as that of Lafarge as a whole, notwithstanding the fact that Lafarge has only a 33% shareholding in Alliance Concrete.

III. The Transaction

- 15. The Transaction is a 'merger of equals' between Holcim and Lafarge. The merger will be effected by means of a public tender offer by Holcim for the entire issued share capital of Lafarge. Holcim will make a public exchange offer in accordance with the provisions of French tender offer rules to acquire all of the issued and outstanding shares of Lafarge. It is the Parties' intention that each Lafarge share tendered will be exchanged for one registered Holcim share. The Transaction will result in Holcim acquiring Lafarge's entire issued share capital. Holcim will be renamed LafargeHolcim and will continue to be domiciled in Switzerland. LafargeHolcim is expected to be listed in Zurich²² and Paris²³ and will not be controlled by any shareholder or shareholders²⁴. The Parties' current combined sales amounts to approximately S\$53.7 billion and with earnings before interest, taxes, depreciation and amortisation of approximately S\$11 billion.
- 16. Based on the Parties' submission that the Transaction is a 'merger of equals' between Holcim and Lafarge by means of a public tender offer by Holcim

²¹ Case COMP/M.2434 Grupo Vilar Mir/EnBW 26 September 2001 at [31]

²² SIX Swiss Exchange

²³ Euronext

²⁴ None of the shareholders of LafargeHolcim will have 50 per cent. or more of the share capital or voting rights of LafargeHolcim, which will be a publicly-listed company

for the entire issued share capital of Lafarge, the Transaction constitutes a merger pursuant to section 54(2)(a) of the Act²⁵.

IV. Competition Issues

- 17. As set out in the CCS Guidelines on the Substantive Assessment of Mergers, CCS is generally of the view that competition concerns are unlikely to arise in a merger situation unless the merged entity will have a market share of 40% or more or the merged entity will have a market share of more than 20% with the post-merger CR3²⁶ at 70% or more.²⁷
- 18. For this Transaction, the Parties submitted that with respect to Singapore, the Parties overlap in the manufacture and supply of ready-mix concrete, and in the supply of grey cement. However, the Parties also submitted that with regard to the supply of grey cement, Holcim only supplies these to third-parties in limited instances in Singapore. For instance, only [×] tonnes of grey cement were supplied to third-parties in the fiscal year ended 31 December 2013 as compared to the [×] tonnes of grey cement that were used by Holcim for its internal consumption. The Parties further submitted that these are *ad hoc* instances where third-parties had approached Holcim in Singapore for the limited supply of grey cement, and not part of any standing supply relationship. In this regard, CCS notes that the volume of grey cement that was supplied to third-parties as compared to Holcim's internal usage represents [×]%.
- 19. The Parties submitted that while Holcim also manufactures and supplies drymix products, such as façade (plaster and coat for various applications on interior and exterior walls), floorings, concrete mortar for concrete repair and reinforcement (special mortar for rebuilding, resurfacing, repairing and reinforcement of concrete structures), tile adhesives (covering general usage to heavy-duty applications) and conwood²⁹ in Singapore, Lafarge however does not manufacture and supply the same in Singapore.³⁰
- 20. The Parties also submitted that while Holcim and Lafarge overlap in the production and supply of aggregates outside of Singapore and while the

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²⁵ Section 54(2)(a) provides that a merger occurs if 2 or more undertakings, previously independent of one another, merge

²⁶ Paragraph 5.14 of CCS Guidelines on the Substantive Assessment of Mergers. CR3 refers to the combined market shares of the three largest firms

²⁷ Paragraph 5.15 of the CCS Guidelines on the Substantive Assessment of Mergers

²⁸ Paragraph 15 of Form M1

²⁹ Conwood is a wood replacement product made with cellulose fibre and Portland cement. It is used for wood application for home and commercial projects.

³⁰ Paragraph 14.1 of Form M1

Parties do import aggregates into Singapore, such imports are for their own internal consumption for the manufacture of ready-mix concrete only. Holcim also submitted that even so, its import of aggregates is insufficient to meet its own requirements, and Holcim purchases aggregates from other suppliers in Singapore.³¹ Feedback received from third-parties similarly does not suggest that Holcim and Lafarge supply aggregates on a commercial basis to these third-parties in Singapore. 32 While aggregates is an overlapping product imported by the Parties, given that the Parties do not on sell it to customers or third-parties in Singapore and does not plan to in the foreseeable future³³, there would be limited, or no impact to customers of aggregates in Singapore. CCS has also considered whether the Transaction creates buyer power by the Parties in the aggregates market such that it leads to a substantial lessening of competition ("SLC") upstream. CCS similarly notes that the Transaction would have limited impact to suppliers of aggregates in Singapore. Therefore, for the purposes of the merger assessment, CCS will not consider aggregates as a relevant product for this assessment.

- 21. However, with regard to the supply of grey cement, notwithstanding the Parties' submission that Holcim only supplies grey cement to third-parties in limited instances in Singapore, CCS has nonetheless sought the views of third-parties to ascertain the potential impact of the Transaction in this market together with the other overlapping product for the manufacture and supply of ready-mix concrete.
- 22. In evaluating the potential impact of the Transaction, CCS has considered whether the Transaction will lead to coordinated and non-coordinated effects that would substantially lessen competition in these two overlapping markets.

V. Counterfactuals

23. As stated in paragraph 4.6 of the CCS Guidelines on Substantive Assessment of Mergers, CCS will, in assessing mergers and applying the SLC test, evaluate the prospects for competition in the future with and without the merger. In which case the competitive situation without the merger is referred to as the "counterfactual". The SLC test will be applied prospectively, that is, future competition will be assessed with and without the merger.

³¹ Paragraph 17.2 of Form M1

³² See answer to Q5 of response from [X] dated 1 August 2014

³³ Paragraph 17.2 of Form M1

- 24. The CCS Guidelines on Substantive Assessment of Mergers also states that in most cases, the best guide to the appropriate counterfactual will be prevailing conditions of competition, as this may provide a reliable indicator of future competition without the merger. However, CCS may need to take into account likely and imminent changes in the structure of competition in order to reflect as accurately as possible the nature of rivalry without the merger. ³⁴
 - (i) The Parties' submissions
- 25. The Parties submitted that in the absence of the Transaction, the Parties will continue to operate separately and independently. However, there will be a loss in opportunity for the Parties to rationalise and achieve the efficiencies arising from the Transaction.
- 26. CCS is of the view that prevailing conditions of competition would be the likely scenario without the merger and accordingly would be the counterfactual with which the SLC test will be applied to.

VI. Relevant Markets

- 27. The Parties have submitted that the relevant markets for the purposes of this notification are³⁵:
 - (a) the market for the manufacture and supply of ready-mix concrete in Singapore; and
 - (b) the market for the supply of grey cement regionally.

(a) Product markets

Description of Product

(1) Ready-mix concrete

28. Ready-mix concrete is generally supplied to customers in the construction industry which may differ depending on types of construction projects. These could include, for example, commercial properties, private residential properties, public housing, industrial properties, high-rise, piling or infrastructure construction.³⁶

³⁶ Paragraph 19.35 of Form M1

³⁴ Paragraph 4.7 of the CCS Guidelines on Substantive Assessment of Mergers

³⁵ Paragraphs 20.1 and 20.3 of Form M1

- 29. Ready-mix concrete is manufactured by mixing cement with aggregates, water and other additives at a central plant or in a mobile batching plant. One cubic metre of ready-mix concrete consists of approximately 300 kilograms of cement, 150 litres of water, and two tonnes of aggregates.³⁷
- 30. Through various production processes, ready-mix concrete may be designed to meet the needs of customers in Singapore, for e.g. productivity enhancement solutions, architectural and landscape solutions, special applications, green solutions. In this regard, ready-mix concrete could have various features such as ultra-strength properties, self-levelling properties, ultra early strength, decorative features, light-weight properties, temperature control properties and eco-friendly properties, etc. 38
- 31. From a demand perspective, the Parties submitted that that there is no close substitute for ready-mix concrete, and ready-mix concrete constitutes a single distinct product market. In this regard, the Parties have cited authorities such as the EC Case No. Comp/M.1157 Skanska / Scancem, whereby the EC considered whether ready-mixed concrete could be substituted by dry concrete ³⁹ and/or on-site mixed concrete ⁴⁰. The EC found that ready-mix concrete was a distinct product and constituted a separate market on the basis that (i) on-site mixed concrete appears to be of limited economic importance; (ii) there is a significant price difference between ready-mix concrete and dry concrete; and (iii) dry concrete is more likely a complementary product as ready-mix concrete is normally used when large amounts are required.
- 32. The Parties also referred to the EC Case No. Comp/M.4719 *Heidelbergcement / Hanson*, whereby the EC stated in the decision that:
 - "... in previous decisions, the Commission has considered readymixed concrete as a clearly distinguished product market particularly due to its short life-time. The market investigation has confirmed that such market definition should not be modified"

³⁹ Also commonly referred to as dry-mix products. Paragraph 14.1 of Form M1

³⁷ Paragraph 19.2 of Form M1

³⁸ Paragraph 19.3 of Form M1

⁴⁰ On-site mixed concrete refers to concrete that is mixed on-site, at the point of use. The Parties have submitted that this is different from ready-mix concrete as the traditional form of on-site mixed concrete is used for projects where the required volumes are relatively small. A more sophisticated form of on-site mixed concrete is dry concrete, which is prepared according to specific recipes, and to which only water needs to be added. See Parties' responses dated 25 July 2014 to CCS's Request for Information ("RFI") question 30

33. Feedback received from third-parties⁴¹ is consistent with the Parties' submissions and third-parties have indicated that there are no viable alternative substitutes to ready-mix concrete.

(2) Grey cement

- 34. Grey cement, which is a raw material for the manufacture of ready-mix cement, derives from a single intermediate product called clinker. Clinker is produced by firing in a rotary kiln a mixture of crushed limestone and clayey raw material at approximately 1450 degrees Celsius. Clinker is then ground or milled with gypsum or other additives like fly ash or blast furnace slag into a fine powder to obtain grey cement.
- 35. Grey cement can be supplied either in bulk or bagged form. Bags containing roughly 25 to 30 kilograms (for Holcim), and 50 kilograms (for Lafarge) of cement are sold through retailers, whereas bulk cement is used by ready-mix concrete plants and other concrete producers and contractors for large building sites.
- 36. Grey cement may have various compositions depending on the quantities of raw materials used and the production methods chosen though the various types of cement are generally substitutable.
- 37. From a demand perspective, the Parties have submitted that there is no close substitute for grey cement, and grey cement constitutes a single distinct product market, without a need for narrower segmentation. In this regard, the Parties have relied on previous EC's decisions such as in EC Case No COMP/M.2317 Lafarge / Blue Circle (II), whereby the EC considered whether grey cement could be substituted with white cement. It considered that because white cement is used for different purposes, is produced in much more limited quantities and is significantly more expensive, that white cement and grey cement were separate product markets.
- 38. The Parties also submitted that the EC has applied this market definition in several other instances. For instance, in EC Case No. COMP/M.3572 *Cemex / RMC*, the EC stated that:
 - "... in a number of previous decisions, the Commission has considered grey cement and white cement to constitute separate product markets. The results of the market investigation in this case

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⁴¹ See answer to Q3 of response from [**≫**] dated 1 August 2014.

do not suggest that the Commission should deviate from its previous practice."

- 39. The EC has also considered whether the market for grey cement may be segmented in EC Case No. Comp/M.6153 *Anglo American / Lafarge / JV*. However, the EC concluded that while grey cement can be differentiated according to special grades, demand and supply-side considerations suggest that the different grades of grey cement are largely interchangeable, and consequently considered grey cement of all grades to comprise a single relevant market.
- 40. Feedback received from third-parties⁴² with regard to substitute products to grey cement does not indicate anything contrary to the Parties' submissions and positions adopted by the EC in the decisions as cited above.

(b) Geographic Market

41. The Parties submitted that the relevant geographic market is national for ready-mix concrete i.e. Singapore and regionally for grey cement. 43

(1) Ready-mix concrete

- 42. For ready-mix concrete, the Parties relied on the decision of the EC in EC Case No. COMP/M.3572 *Cemex / RMC* that the relevant geographic scope of the market for ready-mix concrete is local due to its perishable nature. Market investigation had showed that the transport possibility of ready-mix concrete is limited in time to around 90 minutes, and that the distances that can be practically covered in this timeframe is the area covered by a radius of 25 to 30 kilometers ("km") from the production site. However, the EC also indicated that the distance may vary depending on the local transport conditions.
- 43. The Parties submitted that due to the geographical size of Singapore (approximately 42 km from west to east and 23 km from north to south), the Parties are able to, and do supply ready-mix concrete nation-wide within the effective transport timeframe of 90 minutes as considered by the EC.

(2) Grey cement

 $^{^{42}}$ See answer to Q3 of response from [X] dated 30 July 2014. See answer to Q3 of response from [X] dated 1 August 2014

⁴³ Paragraphs 20.3 and 20.4 of Form M1

- 44. In relation to grey cement, the Parties submitted that due to the closure of grinding stations in Singapore⁴⁴, there are no cement producers in Singapore and all cement is imported regionally from various countries including China, Indonesia, Japan, Malaysia, Philippines, South Korea, Taiwan, Thailand and Vietnam. The relevant geographic market for the supply of grey cement is therefore regional.
- 45. CCS understands from [≫] that 100% of the grey cement utilised in Singapore are imported from overseas. In 2013, almost 6.4 million tonnes of grey cement was imported into Singapore [≫]. The estimated proportion from the different source countries are: Japan 64%, China 13%, Taiwan 13% and Korea 10%.
 - (i) CCS's assessment
- 46. Based on the Parties' submissions and third-parties comments, CCS is in agreement with the geographic market definition provided by the Parties.
- 47. CCS is therefore of the view that the relevant markets for the purposes of this notification are:
 - (a) the market for the manufacture and supply of ready-mix concrete in Singapore; and
 - (b) the market for the regional supply of grey cement to Singapore.

VII. Market Structure

Process for the supply of ready-mix concrete and grey cement into Singapore

(a) Registration

(1) Ready-mix concrete

48. There is a requirement for suppliers of ready-mix concrete to register with the BCAS before being able to serve the procurement needs of public sector organisations and certain private sub-contractors involved in government projects. The requirements for registration include providing information on the size and nature of the entrant's business. With effect from 1 October

⁴⁴ With the exception of G & W Ready Mix Pte. Ltd., which currently operates a grinding station under a long term lease from the Singapore Land Authority, there are no other grinding stations for the manufacture of grey cement in Singapore. Paragraph 18.3 of Form M1

2010, in order to obtain a Ready-Mixed Concrete Certification⁴⁵ ("RMC Certification") (which is required for the setting up of ready-mixed concrete batching plants), BCAS additionally requires all batching plants to be certified by certification bodies accredited under the Singapore Accreditation Council's accreditation scheme.

49. Such certification and business registration are not, in the Parties view, difficult to obtain. 46

(2) Grey cement

50. The Parties submitted that there are no regulations in relation to the supply of grey cement in Singapore. While the BCAS has recommended standards for grey cement (e.g. Construction Grade EN 197-1 42.5N) on the quality of grey cement, these standards are not strictly regulated. Typically, customers exercise their own choice as what quality of grey cement to purchase based on their own construction requirements and specific purposes. 47

(b) Customers

(1) Ready-mix concrete

51. The Parties submitted that ready-mix concrete are sold directly to customers i.e. contractors in the construction industry and they do not sell ready-mix concrete through intermediaries. The Parties also submitted that customers for ready-mix concrete may differ depending on types of construction and these could include, for example, commercial properties, private residential properties, public housing, industrial properties, high-rise, piling or infrastructure construction.

(2) Grey cement

52. The Parties submitted that Holcim imports grey cement primarily for its own ready-mix concrete and dry-mix mortar production, and supplies grey cement to other concrete producers and contractors i.e. customers in Singapore only in limited circumstances. Lafarge supplies grey cement, in bulk, to third-party customers such as ready-mix concrete plants, dry-mix plants, pre-cast

⁴⁵ RMC Certification is based on the SS EN 206-1 (Concrete – Specification, performance, production and conformity) and SS 544 (Concrete – Complementary Singapore Standard to SS EN 206-1) standards

⁴⁶ Paragraph 18.19 of Form M1

⁴⁷ See Parties' responses dated 25 July 2014 to CCS's RFI question 15

⁴⁸ Paragraphs 18.9, 18.12 and 19.9 of Form M1

⁴⁹ Paragraph 19.33 of Form M1

plants, construction contractors and building material distributors and also sells grey cement, in bagged form, through retailers. 50

(c) Procurement process

(1) Ready-mix concrete

- 53. The Parties submitted that the market for ready-mix concrete is characterised by hundreds of bids which are made in a year. Each construction project may involve multiple requests for quotations made to ready-mix concrete suppliers. The Parties also submitted that there is typically no single winner as a result of the requests for quotations; instead, there would be a few parties who would be on call to supply the ready-mix concrete to the customers, at the most competitive price. Also, whilst the general duration of bid projects is about two years, given that contracts to supply ready-mix concrete are through quotations, a supplier may not be called upon to supply ready-mix concrete for periods of time.
- 54. The Parties submitted that customers typically purchase ready-mix concrete on the basis of price. There is low customer loyalty, such that there is generally switching by customers between alternative suppliers of ready-mix concrete based on the prices quoted by suppliers. ⁵⁴ CCS notes that the Parties submitted a customer survey report, Global Brand Equity and Customer Loyalty Study 2011/2012: Singapore Concrete, prepared by The Nielsen Company which generally supports the Parties' submission. ⁵⁵
- 55. The Parties further submitted that, with respect to ready-mix concrete, firms compete on price and reliability of delivery. Contractors who buy ready-mix concrete for construction projects are the end-customers of the product, but are not the end-users of the construction projects, and accordingly look to purchase ready-mix concrete at the cheapest price available. The Parties also provided an instance where [×]. 57

(2) Grey cement

 $^{^{50}}$ Paragraphs 18.13, 18.14 and 19.10 of Form M1 $\,$

⁵¹ Paragraph 25.1 of Form M1

⁵² See Lafarge' response dated 25 July 2014 to CCS's RFI questions 25 and 26

⁵³ See Lafarge' response dated 25 July 2014 to CCS's RFI question 26

⁵⁴ Paragraph 25.2 of Form M1

⁵⁵ Annex 7 of Form M1

⁵⁶ Paragraph 24.3 of Form M1

⁵⁷ Paragraph 25.3 of Form M1

56. Based on the Parties' submissions, procurement for grey cement also takes place by way of bidding although grey cement can also be sold through intermediaries.

Market shares and market concentration

- 57. The Parties submitted that there is no single source of market share estimates for grey cement and ready-mix concrete in Singapore, and the Parties do not have access to any established third-party reports which analyse market shares. The Parties also do not have available information on the total market size in Asia for grey cement. Nonetheless, the Parties has provided to CCS their respective estimates of total market size for ready-mix concrete in Singapore, and Lafarge's estimates of total market size for grey cement, based on their respective observations and methodologies.
- 58. In particular, the Parties have relied on statistics published by the BCAS, which are publicly available, data published by International Enterprise Singapore ("IE Singapore") on the Singapore Trade Statistics website, which includes grey cement imports to Singapore from countries in Asia generally, port shipping data, the Singapore HDB cement usage based on its tender contract volume, and Lafarge's own internal estimates for grey cement.

Market for the supply of ready-mix concrete

- (i) Parties' Submissions
- 59. The Parties submitted that Lafarge's estimated market share figures for ready-mix concrete in Singapore is that of the joint venture, Alliance Concrete, as a whole and that Lafarge only holds a 33% shareholding in Alliance Concrete. However, CCS is of the view that after consideration of the structure of the joint venture as highlighted in paragraph 13 above, the market share of Alliance Concrete should be taken in its entirety. In this regard, the estimated market shares of the Parties in the market for the supply of ready-mix concrete, by volume, will be approximately [20-30]% post-Transaction with a CR3 of over 70%. CCS notes that this crosses the indicative thresholds set out in the CCS Guidelines on the Substantive Assessment of Mergers. CCS also notes that the pre-Transaction CR3 was [60–70]%, below the CR3 threshold of 70%.

Estimates of market shares (by volume) of the Parties and their competitors in the market for the supply of ready-mix concrete in Singapore from 2011 to 2013^{58}

Competitor	Estimated market shares by volume (per cent.) from Holcim's perspective		volume (p	Estimated market shares by volume (per cent.) from Lafarge's perspective		
	2011	2012	2013	2011	2012	2013
Holcim	[10-20]	[10-20]	[10-20]	-	-	-
Lafarge	-		-	[10-20] ⁵⁹	[10-20] ⁶⁰	[10-20] ⁶¹
Merged entity	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
Pan-United Concrete Pte Ltd ("Pan-United")	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]	[30-40]
Island Concrete Pte. Ltd. ("Island Concrete")	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Samwoh Ready Mix Pte. Ltd.	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]
Sinmix Pte Ltd ("Sinmix")	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]
Top-Mix Concrete Pte Ltd	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]
YTL Cement Singapore Pte Ltd ("YTL Singapore")	[0-10]	[0-10]	[0-10]	[0-10]	[0-10	[0-10]

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⁵⁸ Table 2 of Form M1

⁵⁹ The Parties submitted that these market share figure is the market share for Alliance Concrete as a whole, and Lafarge only holds a 33 per cent. shareholding in Alliance Concrete.

⁶⁰ The Parties submitted that these market share figure is the market share for Alliance Concrete as a whole, and Lafarge only holds a 33 per cent. shareholding in Alliance Concrete.

⁶¹ The Parties submitted that these market share figure is the market share for Alliance Concrete as a whole, and Lafarge only holds a 33 per cent. shareholding in Alliance Concrete.

Star Ready-Mix Pte. Ltd	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]
G&W	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]	[0-10]
Elite Concrete Pte. Ltd. ("Elite")	[0-10]	[0-10]	[0-10]	[-]	[0-10]	[0-10]

60. The Parties submitted that they do not have the estimated market shares by value for all competitors for the supply of ready-mix concrete in Singapore. ⁶²

Market for the supply of grey cement

(i) Parties' Submissions

Market share estimates (by volume) of the Parties and competitors in the market for the supply of grey cement in Singapore in 2011 to 2013

Competitor	Estimates of market shares by volume (per cent.)		
	2011	2012	2013
Holcim	[0-10]	[0-10]	[0-10]
Lafarge	[0-10]	[0-10]	[0-10]
Merged entity	[0-10]	[0-10]	[0-10]
United Cement Pte Ltd Pte Ltd	-	[20-30]	[20-30]
Singapore Cement Manufacturing Company (Private) Limited	-	[10-20]	[10-20]
Engro Corporation Limited	-	[10-20]	[10-20]

⁶² Paragraph 21.10 of Form M1

	Asia Cement (Singapore) Private Limited	-	[0-10]	[0-10]
d	SINHENGCHAN Concrete Pte Ltd	-	[0-10]	[0-10]
	Negeri Sembilan Cement	-	[0-10]	[0-10]
	Industries Sdn Bhd			
	YTL Singapore	-	[0-10]	[0-10]
	G&W	-	[0-10]	[0-10]

61. [×]

- 62. CCS notes that the market shares of the merged entity and the CR3 post-merger do not cross the indicative thresholds set out in the *CCS Guidelines* on the Substantive Assessment of Mergers i.e. the merged entity will not have a market share of 40% or more and that the merged entity will not have a market share of more than 20% with the post-merger CR3 at 70% or more. ⁶³
- 63. However, notwithstanding the above and the Parties' submission that the estimated market share of Holcim in the market for the supply of grey cement is negligible and accordingly the incremental market share is marginal⁶⁴, CCS will go on to consider the competitive effects of the Transaction in both the ready-mix concrete as well as the grey cement market.

Barriers to entry and expansion

64. Entry by new competitors or expansion by existing competitors may be sufficient in likelihood, scope and time to deter or defeat any attempt by the merger parties or their competitors to exploit the reduction in rivalry flowing from the Transaction (whether through coordinated or non-coordinated strategies). 65

⁶⁵ Paragraph 7.2 of CCS Guidelines on Substantive Assessment of Mergers.

⁶³ Paragraph 5.15 of the CCS Guidelines on the Substantive Assessment of Mergers

⁶⁴ Paragraph 18 of Form M1

Ready-mix concrete

- (i) The Parties' submission
- 65. The Parties submitted that the ready-mix concrete market in Singapore is not characterised by significant entry barriers.

Land availability

66. While land available for fixed ready-mix concrete is decreasing due to URA's town planning policies, the market is now characterised by short-term leases of one year as opposed to long-term leases of 15 to 30 years. Accordingly, once such short-term leases expire, the leased land becomes available for new entrants to compete for to enter the market. Entrants may also produce ready-mix concrete using mobile batching plants which do not require large plots of land. 66

Regulation

67. The Parties submitted that there are also no unduly restrictive regulations. While business registration and certification is required from the BCAS, such certification and business registration are not difficult to obtain.

Capital expenditure

68. In terms of capital expenditure, the option of setting up a mobile batching plant provides a low cost option to entry. Holcim estimates a new entrant, or any customer, to require approximately S\$4 million of capital expenditure to set up a mobile batching plant and enter the market for ready-mix concrete in Singapore to gain a five per cent market share (by producing five per cent. of Holcim's estimated total size of the market).⁶⁷

Branding

69. Further, there is no brand-stickiness for ready-mix concrete. Accordingly, incumbent firms will not have advantages over new entrants because of their established position, and a new entrant would be able to compete in the market in Singapore based on price only.⁶⁸

Intellectual property rights

⁶⁶ Paragraph 24.14 of Form M1

⁶⁷ Paragraphs 26.1 and 26.2 of Form M1

⁶⁸ Paragraph 24.4 of Form M1

70. The Parties submitted that intellectual property rights are not a barrier to entry in the market for ready-mix concrete and licensing is not a significant issue for new entry. ⁶⁹ The Parties generally do not own any blocking intellectual property rights preventing entry. Holcim Singapore has sought and/or secured intellectual property protection in limited instances for products developed by the Holcim Singapore Centre of Excellence, which is initiated, and partially-funded, by the Singapore Economic Development Board. [×]. In any event, competitors and the industry generally are able to quickly replicate, or innovate to offer, products of similar, or better quality. Such products are set out below:

	Products for which Holcim Singapore has sought and/or secured intellectual property protection	Description	Percentage of Holcim Singapore revenue for FY2013 (per cent.)	Percentage of Holcim Singapore revenue for ready-mix concrete for FY2013 (per cent.)	Whether competitors have similarly replicated the products
1.	Jetsetcrete Patent secured from the Intellectual Property Office of Singapore ("IPOS")	Structural grade concrete having very high early strength Launched on April 2010	[*]	[%]	Local competitors have similar replicated products
2.	Self- Compacting and Self- Levelling Concrete Patent secured from IPOS	Concrete which can be consolidated without vibration. The concrete is suitable for elements having highly congested reinforcement	[×]	[*]	Local competitors have similar replicated products

⁶⁹ Paragraph 18.15 of Form M1

		Launched on April 2010			
3.	Structural Lightweight Concrete Patent filed in 2014 and is pending with IPOS	Lightweight concrete having oven density less than 2000 kg per cubic metre and 28-day cube strengths greater than 30 MPa This product has not been launched, though there has already been very limited sales (see column to the right)	[*]	[*]	Local competitors unlikely to have similar replicated product
4.	Floatcrete Patent filed in 2014 and is pending with IPOS	A concrete element designed to float on fresh or sea water and has the substantial amount of reserve buoyancy to carry urban greenery or photovoltaic cells for solar power generation This product has not been	[*]	[*]	Local competitors unlikely to have similar replicated product

	launched		

(ii) Feedback from third-parties

71. With regard to barriers to entry and expansion in the ready-mix concrete market, third-parties which CCS had consulted echoed the submissions made by the Parties. In particular, third-parties⁷⁰ have submitted that the capital expenditure needed for an entrant to enter the ready-mix concrete market is not prohibitive. They have estimated, separately, that a new entrant only needs about S\$1 – S\$4 million to set up a mobile or fixed concrete batching plant and this will take about three months. Further, the raw materials needed for the manufacture of ready-mix concrete are easily available in the open market. One of the third-parties also said that new entrants could enter in the near future when 15 plots of land are opened up for tender at the Tuas Concrete Site in end 2014. In terms of branding, customers⁷¹ said that while they generally prefer to work with trusted manufacturers of ready-mix concrete, the quality and price of the ready-mix concrete also play an important part in their decision to purchase.

(iii) CCS's assessment

72. While branding of the ready-mix concrete may pose as a potential barrier to entry, CCS notes that regulation, availability of land, capital expenditure and intellectual property rights do not appear to pose as significant barriers to entry. The use of mobile batching plants with lower capital and land requirements may also further reduce the barriers to entry within the ready-mix concrete market. Accordingly, new players should be able to enter the market without significant difficulties and compete based on the price and quality of its product. Further, CCS notes that there have been several entries into the ready-mix concrete market in the last five years. 72

Grey cement

(i) The Parties' submission

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⁷⁰ See answer to Q18 of response from [\gg] dated 6 August 2014. See answer to Q18 of response from [\gg] dated 8 August 2014. See answer to Q18 of response from [\gg] dated 6 August 2014

⁷¹ See answers to Q10 and 11 of response from [\times] dated 1 August 2014. See answers to Q10 and 11 of response from [\times] dated 8 August 2014

⁷² Paragraph 29.2 of Form M1. The Parties submitted that Sinmix entered the ready-mix concrete market in 2007, YTL Singapore and Samwoh Ready Mix in 2008 and Elite in 2011

73. The Parties submitted that the grey cement market in Singapore is not characterised by significant entry barriers.

Land

- 74. As with ready-mix concrete, the Parties submitted that cement suppliers in Singapore do not own land on which their cement terminals or silos may be built.
- CCS understands Jurong Port lease land to cement companies which will 75. build cement silos to store the cement which are imported into Singapore. CCS also understands that there are no cement production sites available in Singapore. 100% of cement consumption in Singapore is imported. An estimated 95%-99% of cement imported into Singapore comes through by ship and is handled through Jurong Port. The only alternative method for the import of cement will be via road tankers which come through the Causeway from Malaysia. Presently Jurong Port has two common user cement terminals in Singapore, the second terminal being a recent addition last year. Each of these terminals has dedicated berths by which to receive cargo ships carrying cement. These berths and terminals are allocated to cement bearing ships on a first-come first-served basis. Cement which is shipped into Singapore is received by the terminal where equipment such as conveyors and unloaders are deployed to transfer the cement into the cement silos located on Jurong Port. The equipment are owned by Jurong Port and services associated with such operations at the terminals are wholly-run by them as well.
- 76. With regard to the above, [%] the average lease term for the land is for a period of 20 years. The land is demarcated and the plot is leased exclusively to the company during the lease term. The cement companies will build their cement silos of varying sizes on the plots of land.
- 77. The leases on Terminal 1 [] have recently been renewed for a further 20 years whereas Terminal 2 is new and companies, [] have also signed 20 years lease with Jurong Port. CCS understands that the existing two terminals are fully leased and occupied by the cement companies and there is no existing land left on these 2 terminals for additional lessees. []]]]] []] []] []] []] []] [] -

^{73 [%]}

⁷⁴ See Notes of Meeting with [X] dated 8 August 2014

78. In terms of whether the cement silos owned by the cement companies are operating at full or near full capacities, [×] the estimated utilisation of the cement silos is currently at [×]%.

Regulation

79. The Parties submitted that there are no regulations in relation to the supply of grey cement in Singapore. 75

Capital expenditure

80. For grey cement, the Parties estimated that the capital expenditure to set up a cement terminal including cement silos is approximately S\$25.5 million, based on the estimated cost of S\$25 million to set up a new cement silo with a capacity of 44,000 tonnes, and related equipment.⁷⁶

Branding

81. The Parties submitted that with respect to grey cement, firms compete on price as well as on quality of the cement and quality of service.⁷⁷

Intellectual property rights

- 82. The Parties submitted that intellectual property rights are not a barrier to entry in the market for grey cement. The Parties do not own any blocking intellectual property rights preventing entry. Given the maturity of the grey cement industry, the Parties do not possess critical patents or other intellectual property rights that would enable the combined group to restrict the production of grey cement by its competitors.⁷⁸
 - (ii) Feedback from third-parties
- 83. Third-parties⁷⁹ have provided feedback that the availability of land as well as the capital expenditure as significant barriers to entry and expansion in the grey cement market in Singapore. In particular, one third-party commented that the expenditure investment for the building of cement silos could be as

⁷⁵ See Lafarge's response dated 25 July 2014 to CCS's RFI question 15

⁷⁶ Paragraph 26.3 of Form M1

⁷⁷ See Lafarge's response dated 25 July 2014 to CCS's RFI question 20

⁷⁸ Paragraph 18.18 of Form M1

⁷⁹ See answer to Q18 of response from [\times] dated 30 July 2014. See answer to Q8 of response from [\times] dated 8 August 2014. See answer to Q18 of response from [\times] dated 6 August 2014

high as S\$40 million, assuming land is available in the first place and would take about one and a half to two years to construct.

- (iii) CCS's assessment
- 84. CCS notes that availability of land for the construction of cement silos as well as the capital expenditure may pose significant barriers to entry and expansion in the grey cement market in Singapore.

(i) Countervailing buyer power

(i) Parties' submission

Ready-mix concrete

- 85. The Parties submitted that contractors are increasingly moving towards self-supply, by building mobile batching plants in their construction sites. Accordingly, such contractors are able to manufacture ready-mix concrete without leasing land, and will therefore not be constrained by land availability in Singapore. CCS notes that this affords customers an alternative to procuring from ready-mix concrete suppliers in Singapore.
- 86. The Parties also submitted that there are no, or minimal, switching costs involved when a customer decides to switch between suppliers of ready-mix concrete. From the viewpoint of customers, it is not difficult to switch suppliers given the multitude of suppliers present in the market. Suppliers of ready-mix concrete generally operate with spare capacity, and are able to supply to meet the demands of customers. 81

Grey cement

- 87. On grey cement, there is a readily available set of alternative suppliers to purchase grey cement from.
- 88. The Parties submitted that there are no, or minimal, switching costs involved when a customer decides to switch between suppliers of grey cement. Grey cement is generally utilised by ready-mix concrete manufacturers as an input for the production of ready-mix concrete, being a fairly standardised product with little distinguishing factors from supplier to supplier. Given the numerous existing grey cement suppliers in the market, and the fact that

⁸¹ Paragraph 32.1 of Form M1

⁸⁰ Paragraph 32.1 of Form M1

customers do not generally enter into long-term supply contracts, Lafarge has observed that so long as the grey cement meets the requisite BCAS standards and specifications, buyers will easily switch between suppliers. 82

(ii) Feedback from third-parties

89. Third-parties⁸³ have provided feedback that if the volume of ready-mix concrete or cement purchased from the suppliers is sufficiently high, customers would have some buyer power and they would be able to negotiate with respect to the prices of the products. They would also have some bargaining power due to the presence of alternative suppliers. Third-parties have also provided feedback that as customers do not enter into long term contracts, customers are generally able to switch suppliers with minimal switching costs although there might be some inconveniences arising from switching suppliers such as negotiating new terms and conditions.

(iii) CCS's assessment

90. CCS is of the view that customers generally do not have trouble switching suppliers for the ready-mix concrete and grey cement markets. Most customers have indicated that they would have no problem switching to other suppliers if they. On balance, the customers are likely to be able to exercise strong countervailing power to keep the prices at competitive level.

VIII. Competition Assessment

(a) Non-coordinated effects

91. Non-coordinated effects may arise where, as a result of the Transaction, the merged entity finds it profitable to raise prices (or reduce output or quality) because of the loss of competition between the merged entities. 84 Other firms in the market may also find it profitable to raise their prices because the higher prices of the merged entity's product will cause some customers to switch to rival products, thereby increasing demand for the rivals' products. 85

83 See answers to Q15 and 16 of response from [%] dated 3 August 2014. See answers to answers to Q15 and 16 of response from [%] dated 1 August 2014. See answers to Q15 and 16 of response from [%] dated 1 August 2014. See answers to Q15 and 16 of response from [%] dated 4 August 2014. See answers to Q15 and 16 of response from [%] dated 8 August 2014

⁸² Paragraph 32.4 of Form M1

Paragraph 6.3 of CCS Guidelines on the Substantive Assessment of Mergers.
 Paragraph 6.3 of CCS Guidelines on the Substantive Assessment of Mergers.

Ready-mix concrete

- 92. The Parties submitted that despite the estimated market shares of the merged entity and the CR3 that has exceeded the indicative thresholds set out in the CCS Guidelines on the Substantive Assessment of Mergers, this does not indicate that the Transaction may give rise to market power by the merged entity resulting in a substantial lessening of competition in Singapore on the basis of the following factors:
 - a. the absence of market power post-Transaction;
 - b. the multitude of competitors that currently exists in the relevant markets;
 - c. the ability of customers to easily switch between suppliers;
 - d. the absence of significant barriers to entry and the ease and likelihood of entry of potential competitors into the relevant market; and
 - e. the inability to unilaterally affect prices in view of the strong influence of macroeconomic effects.

Existing and potential competitors

93. The Parties submitted that there exists a multitude of competing ready-mix concrete manufacturers in Singapore, and in particular large competitors such as Pan-United and Island Concrete, who will be able to provide substitutable ready-mix concrete products to customers and maintain strong competition for ready-mix concrete post-Transaction. CCS notes that the above two competitors do not procure grey cement, which is needed for the manufacture of ready-mix concrete, from the Parties or their related companies overseas. 86

Ease of switching

94. The Parties also submitted that the competitive strength of the multitude of existing and potential competitors is further enhanced by the lack of customer loyalty, and no, or minimal, switching costs involved when a customer decides to switch between suppliers of ready-mix concrete.

Excess capacity in the industry

95. Globally, overseas suppliers of ready-mix concrete such as YTL are able to enter the market in Singapore, even without a track record in Singapore. Global construction groups have also entered the ready-mix concrete market

⁸⁶ See Parties' responses dated 25 July 2014 to CCS's RFI question 11. See answer to Q3 of response from [≫] dated 30 July 2014. See answer to Q3 of response from [≫] dated 6 August 2014.

- in Singapore by setting up their own ready-mix concrete companies locally. One such example of construction groups which have begun to self-supply is Qingjian Group Co. which set up its local subsidiary, Elite.
- 96. The Parties submitted that there is excess production capacity in the supply of ready-mix concrete in Singapore. In particular, Holcim estimates that the capacity utilisation of ready-mix concrete batching plants ranges from [×] per cent. This is also noted in [×]. Competitors are able to increase their production in a short time in response to market changes. Accordingly any attempts by the Parties to either raise prices, reduce output or decrease quality will be constrained by existing competitors⁸⁷.

Inability to unilaterally affect prices

97. The Parties also submitted that suppliers of ready-mix concrete do not have the ability to unilaterally influence prices. Instead, prices are influenced by macroeconomic factors outside of the Parties' control. Such factors which significantly influence ready-mix concrete prices are closely monitored by each of the Parties separately. Post-Transaction, the merged entity will likewise be subject to such macroeconomic factors; there is no reason to believe that the merged entity would be able to unilaterally affect prices or overcome the strong macroeconomic factors⁸⁸.

Grey cement

98. The Parties submitted that grey cement is a limited part of the business of Holcim in Singapore, and any impact of the Transaction on competition for grey cement in Singapore is negligible. Holcim's grey cement imports into Singapore are mainly for captive use in its production of ready-mix concrete and dry-mix mortar only⁸⁹.

CCS's assessment and conclusion on non-coordinated effects

99. CCS is of the view that while the merged entity would have a market share of [20-30]% in the ready-mix concrete market which crosses the indicative thresholds, feedback from competitors and customers show that the Parties post-Transaction would be constrained in price increases in the ready-mix concrete market due to the existence of many alternative suppliers in the market who are not limited in their capacity to supply. Customers can also

⁸⁷ Paragraph 34.15 of Form M1

⁸⁸ Paragraph 34.18 of Form M1

⁸⁹ Paragraph 34.21 of Form M1

- readily switch to these alternative suppliers without substantial switching costs and therefore would have some form of buyer power.
- 100. In the grey cement market, CCS is of the view that while there are barriers to entry and expansion, the overlap between the Parties in this market is limited, and the Parties are not major players in the grey cement market in the first instance.
- 101. Therefore, it can be concluded that the Transaction would unlikely lead to non-coordinated effects that would lead to competition concerns in both relevant markets.

(b) Coordinated effects

102. A merger may also lessen competition substantially by increasing the possibility that, post-merger, firms in the same market may coordinate their behaviour to raise prices, or reduce quality or output. Given certain market conditions, and without any express agreement, tacit collusion may arise merely from an understanding that it will be in the firms' mutual interests to coordinate their decisions. Coordinated effects may also arise where a merger reduces competitive constraints in a market, thus increasing the probability that competitors will collude or strengthen a tendency to do so. Vertical mergers may facilitate coordination, for example by increasing market transparency. Integration may afford the merged entity better knowledge of selling prices in the upstream or downstream market, thereby facilitating collusion in either of those markets. 91

Ready-mix concrete

- 103. The Parties submitted that coordinated effects will further not arise as a result of the Transaction. This is in view of the following:
 - a. there are numerous competitors of varying sizes such that participating firms are unlikely to be able to align themselves on terms of coordination, and difficulty to monitor compliance;
 - b. the high level of excess capacity and incentives by market players to ramp-up to absorb demand from switching customers; and
 - c. potential for new entry which creates disruptive effects and reduces sustainability of any coordinated behaviour.

⁹⁰ Paragraph 6.7 of CCS Guidelines on Substantive Assessment of Mergers.

⁹¹ Paragraph 8.8 of CCS Guidelines on Substantive Assessment of Mergers.

104. Overall, there are many competitors in the relevant market in Singapore for ready-mix concrete, and customers are able to choose and switch between competing suppliers for different projects. Furthermore, demand is lumpy and projects are awarded via competitive bids, which make coordination between suppliers difficult. 92

Grey cement

105. With regard to grey cement, the Parties again submitted that grey cement is a limited part of the business of Holcim in Singapore, and any impact of the Transaction on competition for grey cement in Singapore in negligible. Holcim's grey cement imports into Singapore are mainly for captive use in its production of ready-mix concrete and dry-mix mortar only. 93

CCS's assessment and conclusion on coordinated effects

- 106. CCS notes that ready-mix concrete and grey cement are largely homogenous products and third-parties have indicated that branding of the products are not important considerations for them. As such, the degree of homogeneity of ready-mix concrete and grey cement may make it easier for the players to align and coordinate their behavior in the relevant markets. 94 CCS also notes that Lafarge is currently involved in a joint venture, Alliance Concrete.
- 107. However, Parties have submitted that there are multiple suppliers in the ready-mix concrete in Singapore and that the customers are able to choose and switch easily. This has been corroborated by feedback from customers. Furthermore, the multitude of smaller players in both the ready-mix concrete and grey cement markets could render coordination ineffective.
- 108. In the grey cement market, CCS notes that the combined market shares of the Parties do not cross the indicative market share thresholds. In the ready-mix concrete market, although the combined market shares of the Parties have a market share between 20% to 40% and that the post-merger CR3 crosses 70%, the barriers to entry in the ready-mix concrete market are not high, as evidenced by the recent new entries into the market of Sinmix in 2007, YTL Singapore and Samwoh Ready Mix in 2008 and Elite in 2011. Third-parties have also indicated that they have spare excess capacity to absorb any increase in demand in both the ready-mix concrete and grey cement markets.

⁹² Paragraph 35.2 and 35.3 of Form M1

⁹³ Paragraph 35.4 of Form M1

⁹⁴ Paragraphs 6.11 of CCS Guidelines on the Substantive Assessment of Mergers.

109. In light of the above, CCS concludes that the Transaction does not raise concerns in terms of coordinated effects on competition.

IX. Efficiencies

- 110. The Parties submitted and CCS notes the following annual synergies as the result of the Transaction:
 - a. incremental synergies of CHF 1.7 billion/ EUR 1.4 billion (approximately S\$2.34 billion), on a full run-rate basis, phased in over three years, with one-third achieved in the first year. Specifically:
 - b. CHF 1.2 billion/ EUR 1 billion (approximately S\$1.66 billion) through best practices, scale and cross-utilisation of innovative products and solutions;
 - c. CHF 240 million/ EUR 200 million (approximately S\$333 million) in financial savings; and
 - d. CHF 240 million/ EUR 200 million (approximately \$\$333 million) in capital expenditure optimisation.⁹⁵

X. Conclusion

111. For the reasons above and based on the information available, CCS assesses that the Transaction is unlikely to lead to SLC concerns and accordingly unlikely to infringe the section 54 prohibition.

Toh Han Li Chief Executive

Competition Commission of Singapore

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⁹⁵ Paragraph 12.2 of Form M1