

Section 58 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 completed acquisition by Samwoh Corporation Pte Ltd of Highway International Pte Ltd pursuant to section 58 of the Competition Act

27 January 2011

Case number: CCS 400/004/10

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I. Introduction

The notification

- On 1 April 2010, Samwoh Corporation Pte Ltd ("Samwoh") filed a
 notification pursuant to section 58 of the Competition Act (the "Act"),
 applying for a decision by the Competition Commission of Singapore
 ("CCS") as to whether the acquisition, by Samwoh of control of Highway
 International Pte Ltd ("Highway") (the "Transaction"), will infringe the
 section 54 prohibition of the Act. Samwoh and Highway are collectively
 referred to as "the Parties".
- 2. On 7 June 2010, CCS notified Samwoh of the intention to proceed to a Phase 2 review and highlighted the competition concerns which had surfaced at the conclusion of the Phase 1 review. In the circumstances, Samwoh was requested by CCS to file a Form M2 by 11 August 2010 and was informed that the timeline for Phase 2 review would not commence until CCS received the information contained in a complete Form M2. This was necessary to provide CCS with the information to undertake a thorough and detailed evaluation of the merger. At the M2 submission deadline of 11 August 2010, Samwoh informed CCS that to address the competition concerns raised by CCS and to avoid a lengthy Phase 2 review process, Samwoh would offer a commitment to divest, or otherwise dismantle one of its asphalt manufacturing plants with a manufacturing capacity of 120 metric tonnes per hour ("Divestment Assets"). Samwoh stated that the Divestment Assets did not include the lease of land where the plant was situated as Samwoh would require the land for its remaining asphalt premix manufacturing facilities at the same location¹. This commitment was considered under section 60A of the Act.
- In view of Samwoh's request to consider the commitment in lieu of submitting a Form M2, CCS proceeded to assess the commitment. The views of third parties, including competitors, customers and relevant authorities, were sought during the consultation process.
- 4. At the end of the consultation process and after evaluating all the evidence, CCS has concluded that the Acquisition will not infringe section 54 of the Competition Act (Cap. 50B) (the "Act"). Additionally, having regard to the evidence, it would not necessitate the acceptance of Samwoh's proposed commitment.

Paragraph 5 of Submissions made by Samwoh dated 11 August 2010.

II. The Parties

Samwoh

- Samwoh is involved in the supply of and laying of all types of asphalt premix, the supply of specialized construction materials and products, the trading of construction materials and equipment, as well as pavement consultancy services².
- Following the Transaction, Samwoh currently has 4 asphalt premix plants in Singapore. 3 of the asphalt premix plants in Singapore have a manufacturing capacity of 500 metric tonnes per hour³.
- The Parties submit that the Singapore turnover for Samwoh was [⋈] for the financial year ending 31 December 2009⁴.

Highway

Highway is involved in the supply and laying of asphalt premix in Singapore.
 The Parties submit that the Singapore turnover was [≫] for the financial year ending 31 December 2009⁵.

III. The Transaction

- The notified Transaction is the acquisition of control by Samwoh in Highway through a series of transactions [※]. [※]⁶.
- 10. Samwoh submits that the Transaction will enable the merged entity to achieve production efficiencies through cost reductions through the rationalization of production and research and development ("R&D") efforts, and economies of scale, with cost reductions in turn passed on to customers. The Parties submit that the costs savings have been passed on to customers

² Paragraph 3.1.4 of Form M1 submitted on 1 April 2010 ("Form M1")

Information on Samwoh's operations in "Supply and Lay of Asphalt Premix" as found on Samwoh's website at http://www.samwoh.com.sg/index.php?option=com_content&view=article&id=55&Itemid=74 accessed on 21 January 2011.

⁴ Paragraph 3.1.5 of Form MI

⁵ Paragraph 3,1,6 of Form M1

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- since the Transaction was entered into. Samwoh claims that this is evidenced by the falling asphalt premix prices charged by Samwoh⁷.
- 11. Samwoh also submits that synergies can be achieved in R&D through the combination of the R&D units of Samwoh and Highway to improve the merged entity's production and technological know-how. Samwoh also submits that this will result in an improvement in the quality of the premium asphalt premix produced by the merged entity⁸.
- 12. Samwoh further submitted that the experience of the staff of Samwoh and Highway can be combined to improve the overall quality of production and services to meet customers' requirement. Samwoh further submitted that the merged entity would be able to potentially expand into other geographical markets, e.g. [*], through the increased scale of operations and experience.
- Based on Samwoh's submission that the Transaction is an acquisition of sole control by Samwoh over Highway, the Transaction constitutes a merger pursuant to s 54(2)(b) of the Act¹⁰.

IV. Competition Issues

- 14. Samwoh submits that Samwoh and Highway's activities overlap in the markets for the supply of asphalt premix and the provision of asphalt laying services in Singapore¹¹. CCS has therefore considered whether the Transaction will lead to coordinated and non-coordinated effects that would substantially lessen competition in these markets.
- 15. Further, as Samwoh is vertically integrated and involved in the tendering for large projects as a large civil engineering contractor ("LCEC"), CCS also considered whether the Transaction is likely to result in the exercise of market power across different levels of the market. In particular, CCS examined whether the Transaction is likely to harm the ability of Samwoh's rivals to compete with it for the supply of asphalt premix and provision of asphalt laying services, post-Transaction.

⁷ Paragraph 3.2.1 of Form M1

E Ibid.

Ibid.

¹⁰ Section 54(2)(b) provides that a merger occurs if one or more persons or other undertakings acquire direct or indirect control of the whole or part of one or more other undertakings.

¹¹ Paragraph 3.1.9 of Form M1

V. Relevant Markets

(a) Product market

- Samwoh submitted that the relevant product markets for the purposes of this
 notification are the markets for the supply of all asphalt premix and provision
 of asphalt laying services.
- 17. Briefly, asphalt premix is the main product used for surfacing roads and pavements. Samwoh submitted that other types of surfacing such as concrete and block paving (or paving stones), stone chippings, granite tiles, synthetic rubber and recycled asphalt are also used for road and pavement surfacing in Singapore, but only to a limited extent 12. The provision of asphalt laying services relates to the laying of asphalt as surfacing for roads and pavements 13.

(i) Samwoh's Submissions

- 18. In respect of supply-side substitution, Samwoh has expressed the view that LCECs have the resources and ability to easily and quickly enter into the supply of asphalt premix. Such contractors would already possess the knowhow and equipment used in the handling and transportation of asphalt premix and may quickly modify their operations to supply asphalt premix for their internal use or for distribution to other contractors in the market. To support this, Samwoh has cited the example of [%], an LCEC, who is backed by the experience and expertise of its parent company [%], which is one of [%]¹⁴. Samwoh has submitted that the ability of such contractors to enter the market is evidenced by the interest expressed by [%] and [%] in entering the market for asphalt premix manufacturing. Samwoh has clarified that these observations are made based on market observations ¹⁶.
- 19. Samwoh submits that from the demand perspective, demand for the provision of asphalt laying services is highly specific to the use of asphalt as surfacing of roads and pavements¹⁷.
- From a supply-side perspective, asphalt laying services may be provided by the LCECs themselves or by subcontractors who specialize in such services.

13 Paragraph 6.1,14 of Form M1

15 Paragraph 6.1.7 of Form M1

17 Paragraph 6.1.15 of Form M1

¹² Paragraph 6.1.5 of Form M1

¹⁴ Samwoh also submitted that [※].

Paragraph 16.1 to 16.4 of Response to CCS' request for Further Information dated 8 April 2010.

(ii) CCS' assessment

- CCS agrees with the Parties that they overlap in the supply of asphalt premix and the provision of asphalt laying services. These are the two focal products for competition assessment¹⁸.
- 22. From the demand perspective, in light of feedback received from third parties, CCS agrees that there are no substitutes to asphalt premix as well as asphalt laying services. Asphalt premixes are generally homogeneous and they have very unique characteristics and are intended for very specific functions.
- 23. The market for the supply of asphalt premix is closely related to the market for the provision of asphalt laying services. The demand for asphalt premix and asphalt laying services is derived from the provision of civil engineering works in general, often in the form of subcontracting by LCECs.
- 24. Based on the information submitted by Samwoh and the feedback received from third parties, CCS understands the nature of competition for the provision of asphalt premix and asphalt laying services to be as follows.
 - (i) Tier 1 (Competition among LCECs to provide civil engineering works)

Tier 1 of the supply chain is characterized by competition between LCECs. LCECs compete by bidding for large scale civil engineering projects which are tendered by customers such as [≫] (e.g. expansion of road network, construction of transport facilities etc). When submitting bids for these tenders, the LCECs would obtain quotes from various subcontractors, which may include suppliers of asphalt premix and asphalt laying services, in preparing their bid prices. Samwoh competes at this level with other LCECs in bidding for the civil engineering contracts, but Highway does not.

Although the Parties do not overlap horizontally at Tier 1, CCS has included Tier 1 as a relevant market for the purpose of assessing the vertical effects of the Transaction.

(ii) Tier 2 (Competition among subcontractors to provide asphalt laying services to LCECs)

¹⁸ CCS Guidelines on Substantive Assessment of Mergers, paragraph 5.5

Tier 2 of the supply chain is derived demand from Tier 1 as outlined above. At Tier 2, subcontractors would compete to provide asphalt laying services to the LCECs. Both Samwoh and Highway compete at this level with other subcontractors for these subcontracts where they are not competing for, or has not been awarded, the civil engineering contracts in Tier 1.

Tier 2 constitutes a relevant market for the assessment of both horizontal and vertical concerns.

 (iii) Tier 3 (Competition among asphalt premix suppliers to supply asphalt premix to subcontractors in Tier 2 or to themselves, i.e. 'self-supply')

Where the subcontractors competing in Tier 2 are not vertically integrated and do not have their own source of asphalt premix, they will need to purchase asphalt premix from one of the $[\mbox{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ens$

Tier 3 constitutes a relevant market for the assessment of the horizontal effects of the Transaction and the vertical leverage of such horizontal effects.

Tier 1: Competition among LCECs to supply civil engineering works (e.g. expansion of road network, building of expressways, construction of transport facilities, etc.)

Customers: Government or private entities Suppliers: LCECs (Samwoh competes here.)



Tier 2: Competition among subcontractors to supply asphalt premix and laying services

Customers: LCECs in Tier 1
Suppliers: Subcontractors in Tier 2 (Samwoh competes here.)

^{19 [}X]



Tier 3: Competition among suppliers of asphalt premix (include 'self-supply')

Customers: Subcontractors in Tier 2
Suppliers: Asphalt premix suppliers in Tier 3 (Samwoh competes here.)

- 25. From the supply perspective, CCS does not agree with Samwoh's submission that LCECs (Tier 1) are able to enter the market for the supply of asphalt premix (Tier 3) easily as they already possess the know-how and equipment used in the handling and transportation of asphalt premix and may quickly modify their operations to supply asphalt premix for their own internal use or for distribution to other contractors in the market.
- 26. Feedback received from third parties indicate that in order for LCECs, or any potential new entrant, to commence production of asphalt premix, they will require a specialized asphalt premix manufacturing plant and more importantly, a suitable piece of land to site the asphalt plant. We understand from third parties that where LCECs do not have the facilities for the manufacturing and laying of asphalt premix, these services will be procured from other subcontractors (Tier 2 and Tier 3)²⁰. As a result, these two products are usually purchased or supplied together.
- 27. This is also supported by tender records for public sector projects for roadworks which show that such projects required providers to supply both asphalt premix and asphalt laying services. Also, approximately half of such projects ([≫] out of 20) had been won by vertically integrated contractors who have their own source of asphalt premix.
- 28. CCS is of the view that the Transaction may raise greater competition concerns in the market for the supply of asphalt premix (Tier 3) as compared

^{20 [34]}

with the market for provision of asphalt laying services (Tier 2) for the following reasons:

- While Samwoh is not able to provide estimates of the market shares of the various competitors, CCS notes that there are more than [※] competing suppliers in Tier 2²¹ compared to only [※] players in Tier 3 (viz. [※],[※] and Samwoh/Highway; [※]).
- ii. CCS assesses that the larger number of suppliers in Tier 2 may be due to the relatively lower barriers to entry and expansion in this market. This is supported by the presence of a number of Tier 2 competitors who do not have their own supply of asphalt premix²². Additionally, it is also common for LCECs (in Tier 1) to supply such services. Records of road maintenance projects awarded from 2008 to 2010 examined by CCS also indicated that a variety of contractors of different scales have bidded for the tenders²³.
- iii. Further, although Tier 2 may be an affected market due to the vertical concerns arising from the Transaction, Tier 3 is the affecting market for this concern. This is because asphalt premix forms a necessary input for the asphalt laying services. If the Transaction creates or strengthens the market power of a vertically-integrated undertaking (such as Samwoh) in Tier 3, it could potentially harm its competitors in Tier 1 and Tier 2 through margin squeezing or refusing to supply the essential input. Any potential vertical effect in Tier 2 may be mitigated through addressing the horizontal effects (creation or strengthening of market power) of the Transaction in Tier 3.
- iv. In its consultation process, CCS did not receive any evidence or feedback that suggested competition concerns are likely to arise in the market for the provision of asphalt laying services.

²¹ More than [※] registered contractors are able to compete in this market.

http://dir.bca.gov.sg/bca/AdvSearchList.asp?actual_pg=1&ListAbsolutePage=1 accessed on 21 January 2011.

Samwoh submitted that information relating to market shares in respect of the asphalt laying market is not readily available, and it is not aware of any market sources which provide such estimates. This is due to the fact that asphalt laying services are usually procured, as well as supplied, together with asphalt supply services. Feedback from third parties supported this claim.

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²²A survey of the registered contractors under the CR14 workhead for the supply of asphalt and road marking works show that there approximately 16 registered contractors who are not vertically integrated with their own asphalt supply.

- 29. For the above reasons, although the provision of asphalt premix and the provision of asphalt laying services constitute two separate products, CCS has focused its analysis on the competitive effects of the Transaction on the market for the provision of asphalt premix (Tier 3).
 - (b) Geographic Market
 - (I) Supply of Asphalt Premix (Tier 3)
 - (i) Samwoh's Submissions
- 30. Samwoh submits that the relevant geographic market for the supply of asphalt premix is national, with manufacturers of asphalt premix able to supply asphalt premix to the whole of Singapore²⁴.
- 31. Samwoh submits that based on decisions of the European Commission and the Office of Fair Trading²⁵, the relevant geographic markets for asphalt should be defined by a maximum supply distance of 50 to 100 kilometres from the production centre and a maximum possible transport time of less than three hours²⁶.
- 32. Samwoh submits that given the geographical size of Singapore, the maximum possible transport time allows for the corresponding size of the relevant geographic market to encompass the entirety of Singapore²⁷.
 - (ii) CCS' assessment
- 33. Feedback from third parties indicates that asphalt premix is sourced from suppliers within Singapore and cannot be sourced from suppliers overseas as asphalt has to be transported in such a way that it remains heated for it to be in a state suitable for laying²⁸.
- 34. In view of this, and the fact that current suppliers have demonstrated capability of supplying asphalt premix to the whole of Singapore, CCS agrees with Samwoh's submission that the relevant geographic market is Singapore.

²⁴ Paragraph 6.1.10 of Form M1

²⁵ Case No IV/M.678 – Minorco/Tilcon, Case No COMP/M.1779 – Anglo American/Tarmac and Case No COMP/M.1827 – Hanson/Pioneer and the OFTdecision in the "Decision for the anticipated acquisition by Anglo American plc of Johnston Group plc"

Paragraph 6.1.11 of Form M1
 Paragraph 6.1.13 of Form M1

^{28 [34]}

(II) Provision of Asphalt Laying Services (Tier 2)

- (i) Samwoh's Submissions
- 35. Samwoh has submitted that the relevant geographic market is likely to be Singapore.
 - (ii) CCS' Assessment
- 36. In view of the feedback received that asphalt premix and asphalt laying services are generally supplied and purchased together²⁹, CCS agrees that the relevant geographic market is likely to be Singapore.

VI. Market Structure

- (i) Market shares and market concentration
- Based on information submitted by Samwoh, the market share estimates in the market for the supply of asphalt premix in 2008 and 2009 are as follows.

Market share estimates in the market for the supply of asphalt premix in Singapore in 2008 and 2009^{30}

		Supply of asphalt premix	
		2008	2009
Samwoh	Estimated sales value	[×]	[×]
	Estimated sales volume (units)	[×]	[%]
	Estimated market shares (by volume)	[35% -45%]	[35% -45%]
Highway	Estimated sales value	[%]	[%]
	Estimated sales volume (units)	[%]	[%]
	Estimated market shares (by volume)	[15% - 25%]	[15% - 25%]
Merged entity	Estimated sales	[%]	[%]

^{29 [3&}lt;]

30 Table 1, Form M1

		Supply of asphalt premix	
		2008	2009
	value		
	Estimated sales volume (units)	[%]	[%]
	Estimated market shares (by volume)	[55% -65%]	[55%-65%]
Yun Onn Company (Private) Limited ("Yun Onn")	Estimated market shares (by volume)	[15%-25%]	[15%-25%]
Ley Choon Constructions and Engineering Pte Ltd ("Ley Choon")	Estimated market shares (by volume)	[15%-25%]	[15%-25%]
Pan-United Asphalt Pte Ltd ("Pan-United")	Estimated market shares (by volume)	[%]	[%]
Total size of the market	Estimated sales value	[%]	[%]
	Estimated sales volume	[%]	[%]

- 38. Based on the sales volumes submitted by Samwoh, the size of the market is [≫] in 2009 with an estimated sales volume of [≫] in 2009. However, Samwoh has submitted that market shares of the competitors in the market for the supply of asphalt premix would be more accurately measured based on the manufacturing capacities of the existing competitors in the market.
- 39. Samwoh has submitted that as the supply of asphalt premix is a low margin, price-sensitive volume business, the manufacturing capacity of the competitors is a significant competitive constraint as any increase in prices will result in competitors increasing their headcount and/or production to absorb the demand of customers. Further, Samwoh submits that capacity estimates also take into account that although a [%]competitor, [%], is not producing asphalt premix at this time, it has the production capability to reenter the market at any time to constrain the exercise of market power. On that basis, Samwoh has submitted estimated market share figures based on the estimated annual capacity in the market for the supply of asphalt premix in Singapore.

Market share estimates based on estimated annual capacity in the market for the supply of asphalt premix in Singapore in 2009³¹

		Supply of asphalt premix in Singapore
Samwoh	Estimated capacity	[%]
	Estimated market shares (by capacity)	[35%-45%]
Highway	Estimated capacity	[%]
	Estimated market shares (by capacity)	[10%-20%]
Merged entity	Estimated capacity	[%]
0000	Estimated market shares (by capacity)	[50-60%]
Yun Onn	Estimated capacity	[%]
	Estimated market shares (by capacity)	[10-20%]
Ley Choon	Estimated capacity	[%]
	Estimated market shares (by capacity)	[10-20%]
Pan-United	Estimated capacity	[%]
25 32302	Estimated market shares (by capacity)	[10-20%]
Pre-merger CR3	Estimated market shares (by capacity)	[60-70%]
Post-merger CR3	Estimated market shares (by capacity)	[80-90%]
Total available capacity of the market	Estimated capacity	[%]

40. Samwoh has submitted that the total available capacity of the market to be [

S]. From the above table, the combined market share of Samwoh and Highway is [50-60%] and the post-merger CR3 is estimated to be about [80-90%]. As the merged entity is likely to have a market share of above 40% and the post-merger combined market share of the three largest firms (also known as "CR3") is 70% or more³², in terms of volume, value and capacity, it does not matter which measure CCS uses in assessing competition

31 Table 3, Form M1

³² Paragraph 5.15 of CCS Guidelines on the Substantive Assessment of Mergers

concerns. Moreover, any difference between measuring market shares by volume/value or by capacity will be fully reflected in the assessment of barriers to entry and expansion as set out below.

(ii) Barriers to entry and expansion

The Parties' submission

- 41. Samwoh has submitted that there is an absence of significant barriers to entry as there are no licensing or regulatory requirements for the building of a new asphalt manufacturing plant in Singapore. The land required for the building of a new asphalt manufacturing plant may also be easily leased through the Jurong Town Corporation ("JTC") or obtained by leasing land on sites of existing factories³³. Samwoh further submitted that they had observed that there have been asphalt premix suppliers who had obtained asphalt manufacturing facilities by converting existing factories to asphalt premix manufacturing plants³⁴.
- 42. Samwoh has also submitted that for the expansion of capacity by existing manufacturers, approval for land required for the building of a new asphalt manufacturing plant may be easily obtained from JTC³⁵.
- 43. Samwoh has further submitted that there are no significant sunk costs to enter the market. Samwoh estimated that a new asphalt premix manufacturing plant could be completed in about [three to six months] at a cost of approximately [S\$1.9 to 2.1 million]³⁶.
- 44. Further, it is also feasible and likely for a new competitor to enter the market or an existing competitor to expand its operations by acquiring [≯] asphalt premix plant which may be made operational in [one to three months]³⁷.

Feedback from authorities and industry stakeholders

45. Feedback from respondents suggests that the main barriers are regulatory and that new entrants face significant difficulties in obtaining appropriate pieces of land for the situation of an asphalt plant. The difficulties identified by respondents include the availability of land of approximately 5000 m² to

³³ Paragraph 6.1.8 of Form M1

³⁴ Paragraph 4.8 of Submissions made by Samwoh dated 11 August 2010. The entrants referred to by Samwoh are [※] who have since exited the market for the supply of asphalt premix.

Paragraph 3.2.44 of Form M1
 Paragraph 3.2.46 of Form M1.

Paragraph 3.2.46 of Form M1

10000 m² and the difficulty of obtaining a license for the operation of an asphalt plant. Feedback received has indicated that it would cost approximately \$8 million to \$10 million to establish an asphalt premix manufacturing facility, inclusive of the lease of land, the purchase of the plant and other set up costs³⁸.

- 46. According to information made available by JTC from public sources, there are 3 methods by which a lessor can lease a piece of land from JTC. The first mode of allocation involves the allocation of land to [≫]. Other modes of allocation include Open Land Application Scheme ("OLAS")³⁹ and the Government Land Sale programmes ("GLS")⁴⁰. The sites launched under OLAS typically have tenure of up to 30 years and [≫]. On the other hand, the release of land under GLS via public tender is intended to meet demand arising from economic growth. [≫]. Alternatively, it is also open to industrialists to obtain land via the secondary market⁴¹.
- 47. Based on the information received, while the leasing of land for the establishment of asphalt premix facilities is restricted to lands which are within the Business 2 zone as indicated on the URA master plans, there are no additional requirements for the setting up of an asphalt manufacturing plant.
- 48. Feedback received has indicated that upon the acceptance of the proposal by JTC, such requirements can be incorporated into the plans to set up the facility⁴². Similarly we understand from feedback received from the regulatory authorities that their requirements for pollution control⁴³, intensity of land use⁴⁴, traffic conditions⁴⁵ and water supply⁴⁶, amongst others, are technical requirements that can be met by the applicant implementing the necessary measures in designing the facility.
- 49. Based on the past tenders of B2 land of greater than 5000 m² by JTC over the past year under the OLAS scheme, CCS notes that there had been several

^{38 [3&}lt;]

³⁹ See JTC's website, http://www.jtc.gov.sg/product/IndLLand/LongTenure/olas/pages/index.aspx accessed on 21 January 2011.

⁴⁰ See JTC's website, http://www.jtc.gov.sg/GLSProgramme/GLS/Pages/index.aspx accessed on 21 January 2011.

⁴¹ See JTC's website

http://www.jtc.gov.sg/AboutJTC/Policies/LeaseManagement/Subletting/Pages/index.aspx accessed on 21 January 2011.

^{42 [3&}lt;]

⁴³ NEA

⁴⁴ URA

⁴⁵ LTA

⁴⁶ PUB

parcels put up for tender over the past year for which a new entrant could have submitted a proposal⁴⁷. As the tenders are called on a quarterly basis, a new entrant would have had several opportunities to seek a piece of land for its business.

- 50. Feedback also suggests that it would be difficult for a new entrant to tender for projects that are called by government entities depending on the value of the projects. For instance, under the BCA category for asphalt related work ("CR14"), a new entrant can register in the financial category L1 which has a tender limit of not more than S\$650,000. Feedback received has also indicated that most projects tendered by government bodies tend to require a contractor registered in the L5 category⁴⁸. Based on feedback received, a company could take 3-5 years to accumulate such track records in order to get the BCA grading⁴⁹.
- Presently, Samwoh, Megastone, Highway, Yun Onn and Pan-United are registered in the L6 category which has an unlimited tendering limit for public sector projects⁵⁰. Ley Choon is registered in the L5 category.
- 52. Other projects for which integrated subcontractors can tender for include projects classified under the BCA workhead CW02 which are civil engineering projects which contain asphalt engineering works. Companies registered under the CW02 workhead are able to tender for projects within the tender limits according to the financial category they are registered in. Hence the projects which are under the CR14 and CW02 workhead are open to a larger number of contractors than those in the CR14 L6 category.

CCS' Assessment

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⁴⁸ BCA's Contractors Registry, Terms of Registration, found at:

[[]http://www.bca.gov.sg/ContractorsRegistry/others/Registration_Terms.pdf], Pg 3 Para 2, accessed on 21 January 2011. A contractor in the L5 category would be able to tender for projects of not greater than \$13 million. To upgrade to the L5 financial category, a contractor would require a track record of having carried out projects of a total value of \$\$10 million over three years, of which \$1 million has to be derived from a single project executed solely by the applicant.

⁵⁰ BCA tendering limits found at:

[[]http://www.bca.gov.sg/ContractorsRegistry/contractors_tendering_limits.html] accessed on 21 January 2011

Directory of BCA Registered Contractors and Licensed Builders, Workhead = CR 14, found at: [http://dir.bca.gov.sg/bca/AdvSearchList.asp?actual_pg=1&ListAbsolutePage=1] accessed on 21 January 2011.

- 53. In view of the feedback received from the relevant government authorities and statutory boards and the availability of suitable industrial land via tender by JTC over the past year, CCS deems that regulatory barriers to entry are not significant for a new entrant who wishes to enter the market for the supply of asphalt premix.
- 54. CCS notes that the feedback provided by third parties in relation to the potential difficulties faced by new entrants and incumbent competitors in tendering for public sector projects relate to the situation where suppliers at Tier 3 are also competing in Tier 2 of the market. CCS has reviewed the public sector projects tendered from 2008 to 2010. An examination of the projects tendered from 2008 to 2010 under the CW02 and CR14 workheads have shown keen competition in the tendering process with a minimum of 4 companies tendering for each project. Further, where the projects are tendered under both CW02 and CR14 workheads, contractors with higher tendering limits under the CW02 workhead are able to tender for these same projects.
- 55. CCS notes that the relevance of a BCA grade for the supply of asphalt premix at Tier 3 is dependent on the specifications of the public sector tender or the conditions of the contract between the contractor and the supplier. CCS understands that there are instances where certain BCA grades are required for the purposes of quality assurance by the consumers but it is not a regulatory requirement for the sale of asphalt premix. To this end, while CCS recognizes that it will take a new entrant time to build a track record for registration under a higher financial category with higher tendering limits, CCS is of the view that a new entrant will be able to enter the market in a timely fashion. Further, CCS notes that a currently dormant competitor, [3<], is a registered L6 contractor and will be immediately able to tender for public sector projects of a higher value should they decide to re-enter the market at Tier 2 and provide the necessary quality assurance as a supplier if required.

(iii) Excess Capacity and Ability to Expand Capacity

- 56. Excess capacity of rival firms or the ability of rival firms to expand capacity quickly can act as an important competitive constraint on the merged parties' behavior. Excess capability or ability to expand capacity would allow rival firms to quickly supply customers in the event that the merged parties reduce output. Also, it can make coordination difficult especially if firms have strong incentives to utilize their excess capacity.
- 57. In this regard, Samwoh has submitted that there is significant capacity in the market held by competitors for the supply of asphalt premix which is able to

constrain any increase in market power by the merged entity51. Samwoh has further submitted that in response to price increases, existing competitors can increase their production or restart their production in order to meet the increase in demand of asphalt premix⁵².

CCS' Assessment

- Feedback received by CCS during the consultation process indicates that there is currently excess capacity residing in Samwoh's competitors in the market, in view of the dormant asphalt premix manufacturing facility [%]. $[\times]^{53}$. However, there was feedback that $[\times]^{54}$.
- 59. CCS understands from feedback received that it will take approximately 6 to 9 months for a dormant asphalt facility to be restarted⁵⁵. In this instance, it is possible for a new entrant or for an existing competitor to either enter the market or increase their existing capacity in a timely fashion to meet any increases in demand.

(iv) Countervailing buyer power

Samwoh has submitted that there is strong countervailing buyer power in the market due to the presence of large customers of asphalt premix, such as [X], who are able to discipline supplier pricing by threatening to switch or by conducting competitive tenders for the projects 56.

CCS' Assessment

- 61. CCS has assessed the existence of countervailing buyer power at the different tiers of the market.
 - (i) In respect of Tier 1 of the market where the purchasing customers are government agencies or private sector entities that require services for civil engineering projects and/or projects requiring asphalt works, CCS is of the view that there is strong countervailing buyer power exercised by these buyers due to the competitive tendering process and their ability to switch between various competing LCECs. Feedback received from buyers at this tier of the

⁵¹ Paragraph 3.2,40 of Form M1

⁵² Paragraph 3.2.41 of Form M1

^{53 [}X]

^{54 [*]}

⁵⁶ Paragraphs 3.2.22, 3.2.23 and 3.2.24 of Form M1.

market has indicated that contracts are usually awarded by competitive tender⁵⁷.

- (ii) In respect of Tier 2 of the market where the purchasing customers are LCECs, feedback received has indicated that there would not be significant difficulty in switching subcontractors for provision of asphalt premix and laying services⁵⁸. In particular, a respondent had indicated that they are prepared to sponsor a new entrant for the supply of asphalt premix and laying services if the prices of these product and services increase by greater than 5%⁵⁹. CCS is of the view that customers at this tier of the market are able to exert significant countervailing power.
- (iii) In respect of Tier 3 of the market, CCS has assessed the buyer power of subcontractors in Tier 2 of the market where they do not have their own supply of asphalt premix. Feedback received has indicated that there has not been active switching of asphalt premix suppliers by these subcontractors as the prices between these suppliers are largely pegged to the market 60. CCS recognizes that customers at this tier of the market would need to obtain asphalt premix from any of the three existing suppliers in order to provide laying services, hence they may not able to exercise strong countervailing power. However, these concerns are mitigated by (i) excess capacity of Samwoh's rival firms and the ability of rival firms to expand capacity (see paragraph 58) and (ii) the possibility of new entrants into the market for supply of asphalt premix in the event of price increases. Hence it would be untenable for the existing suppliers of asphalt premix to exercise market power against these subcontractors for a sustained period of time. Also, a sample of the tender records showed that approximately half the public sector projects for roadworks ([\times] out of 20) had been awarded to contractors who did not have their own supply of asphalt premix.

VII. Competition Assessment

(a) Non-coordinated effects

^{57 [3&}lt;]

^{18 [}X] 19 [X]

^(×)

- 62. 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 entities⁶¹.
- 63. CCS is of the view that non-coordinated effects are unlikely to arise in the markets for the supply of asphalt premix and the supply of asphalt laying services as a result of the Transaction for the reasons set out below.
- 64. While the market for the provision of asphalt premix does not currently have a large number of competitors, the barriers to entry and expansion are relatively low. It is possible for a new entrant or for an existing competitor to either enter the market or scale up their production in a timely fashion in the event that the merged entities reduce their output and/or increase prices.
- 65. There further exists strong buyer power for customers in Tier 1 and 2 of the market, given that the key customers of asphalt premix are government entities and LCECs. Feedback received also indicated that as asphalt premix is a homogenous product, there is price transparency due to the customers' knowledge of the cost of inputs. Buyers are able to negotiate prices if suppliers charge excessively high prices⁶². Feedback received from customers indicated that they are able to switch suppliers if Samwoh increases prices significantly⁶³. This coupled with excess capacity by competitors will constrain Samwoh from raising prices. Since the merger was completed in January 2009 (parties only notified CCS in April 2010), the prices of ex-plant asphalt premix have not risen significantly.
- 66. While there appears relatively less buyer power for customers in Tier 3 of the market, this concern is limited by relatively low barriers to entry and expansion in this market. Further, observation of the tender records for LTA projects showed that a considerable number of projects have been awarded to subcontractors who did not have their own supply of asphalt premix.

(b) Coordinated effects

67. A merger may also lessen competition substantially by increasing the possibility that, post-merger, firms in the same market may coordinate their behavior 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

⁶¹ Paragraph 6.3 of CCS Guidelines on the Substantive Assessment of Mergers.

^{62 [34]}

- merger reduces competitive constraints in a market, thus increasing the probability that competitors will collude or strengthen a tendency to do so⁶⁴.
- CCS notes that the post-Transaction CR3 for the supply of asphalt premix is [80-90%], which crosses the indicative threshold of 70% as set out in CCS Guidelines⁶⁵. The conditions in the market for the supply of asphalt premix which may facilitate coordination among competitors are (i) there are few players in the market, (ii) asphalt premix is a homogenous product and (iii) there is a high degree of market transparency.
- 69. Notwithstanding the above, CCS considers that it is unlikely that coordinated effects will arise or be sustainable, in the relevant markets because: (i) there are relatively low barriers to entry and expansion in the market, and (ii) a lack of evidence of the stability of market share of suppliers' of asphalt premix over time. Feedback received indicated that $[\times]^{66}$. If there were a sustained increased in demand or increase in price, it is possible that competitors with capacity may enter the market for the supply of asphalt premix⁶⁷. Further, CCS also notes that feedback has been received that buyers (i.e. those in Tier 1 and Tier 2 of the market) are able to and willing to sponsor new entrants in the event of a price increase⁶⁸.
- 70. In light of low entry barriers and the existence of strong countervailing power, CCS is of the view that these conditions may be sufficient to render coordination difficult.

(c) Vertical Concerns

- 71. Given that Samwoh supplies asphalt premix (in Tier 3 of the market) which is an important input for the provision of civil engineering works in Tier 1 and the provision of asphalt premix and laving services in Tier 2, and that Samwoh also competes in these markets, this raised possible vertical concerns of whether Samwoh would attempt refusal to supply an essential input or attempt to margin squeeze its competitors in Tier 1 and 2 of the markets (i.e. the LCECs and subcontractors).
- 72. From CCS' evaluation of the bids for the open tenders conducted by public sector entities, competition at Tier 1 and Tier 2 of the market is very keen

⁶⁴ Paragraph 6.7 of CCS Guidelines on Substantive Assessment of Mergers.

⁶⁵ Paragraph 5.15 of CCS Guidelines on Substantive Assessment of Mergers,

^{66 [3&}lt;]

^{67 [}X] 68 [X]

with a minimum of [X] bidders for each tender. The tender records show that a significant number of projects are won by other competitors in the market. Also, for the LCECs (in Tier 1 of the market), as these are large entities, they are capable of sponsoring new entry or self supply if Samwoh and other providers of asphalt premix were to raise prices/ reduce output. CCS notes that Samwoh has submitted that asphalt constitutes a small component of large engineering projects, accounting for approximately 1% of the total contract sum69. In relation to the subcontractors (in Tier 2 of the market), there has not been any evidence of a foreclosure effect on the nonvertically integrated suppliers of asphalt laying services. CCS notes that the tender records for LTA projects showed that a considerable number of projects ([×] out of 20) have been awarded to subcontractors who do not have their own supply of asphalt premix. Further, as submitted by Samwoh, prices of ex-plant premix have been falling post-Transaction⁷⁰. Feedback received indicated that apart from higher prices corresponding with higher prices of inputs such as bitumen which is derived from petrol, prices of asphalt premix has largely remained constant⁷¹.

73. Given that the Transaction does not give rise to the creation or enhancement of substantial market power in the merged entity in Tier 3, and that the markets Tier 1 and 2 have been competitive, CCS concludes that the Transaction does not critically give rise to vertical effects at Tier 1 or 2.

(d) Efficiencies

- 74. Samwoh has submitted that the merged entity is expected to achieve efficiencies and cost savings through the rationalization of production and research and development efforts⁷². Further Samwoh has also submitted that they may potentially expand into other geographical market, e.g. [%], through the increased scale of combined operations and experience⁷³. Samwoh has submitted that prior to the Transaction, Samwoh had been exploring the possibility of setting up asphalt premix manufacturing facilities and quarries in [%]. Due to the lack of resources at that time, Samwoh was unable to proceed with the plans⁷⁴.
- Samwoh has submitted that Samwoh has not integrated the production or R&D facilities of Samwoh and Highway post-Transaction due to [≫].

⁷⁰ Diagram 4 and paragraph 3.2.34 of Form M1.

71 [34]

⁶⁹ Paragraph 7.3 of Submissions made by Samwoh dated 11 August 2010.

Paragraph 3.2.53 of Form M1
 Paragraph 3.2.1(v) of Form M1

⁷⁴ Paragraph 5.2 of Response to CCS' Request for Information dated 8 April 2010.

- Samwoh further submits that the integration is pending CCS' decision in relation to this notification 75.
- 76. CCS is of the view that the Transaction could potentially rationalize costs and lead to a more competitive firm post-Transaction. However, as Samwoh has not substantiated these plans for expansion, or the claimed cost savings, CCS is unable to take these claimed efficiencies into account in the assessment of the Transaction.

(e) Proposed Commitments

- 77. Instead of submitting the detailed information required in CCS' Form M2 for an in-depth analysis of the merger, and in order to allay the potential competition concerns highlighted by CCS, Samwoh proposed to divest, or otherwise dismantle one of its asphalt manufacturing plants with a manufacturing capacity of 120 metric tonnes per hour. Samwoh further clarified that the Divestment Assets did not include the lease of land where the plant was situated as Samwoh would require the land for its remaining asphalt premix manufacturing facilities at the same location of the Act that empowers CCS to evaluate commitment under section 60A of the Act that empowers CCS to evaluate commitments proposed by the merger parties for the purpose of remedying, mitigating or preventing the substantial lessening of competition or any adverse effect of the merger.
- 78. CCS consulted industry players and relevant government authorities on Samwoh's proposal. From the period October 2010 to January 2011, CCS has sought feedback from industry players including customers and competitors and relevant government authorities and statutory agencies, including [%].
- 79. At the end of the consultation period, and having regard to the competitive merits of the Transaction, CCS assesses that the commitment, if carried out, will not alter the competitive effects of the Transaction significantly. As such, CCS does not deem it necessary to accept Samwoh's proposed commitment in order to conclude that the merger will not result in a substantial lessening of competition.

Paragraph 5 of Submissions made by Samwoh dated 11 August 2010.

⁷⁵ Paragraphs 1.2 and 1.2 of Response to CCS' Request for Information dated 8 April 2010.

VIII. Conclusion

80. For the reasons above and based on the information available, CCS assesses that the Transaction has not infringed the section 54 prohibition.

Yena Lim

Chief Executive

Competition Commission of Singapore