EN

Case No COMP/M.3796 – OMYA/HUBER PCC

Only the English text is authentic.

REGULATION (EC) No 139/2004 MERGER PROCEDURE

Article 8 (2)
Date: 19/07/2006

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 19/VII/2006

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PUBLIC VERSION

COMMISSION DECISION

Of 19/VII/2006

declaring a concentration to be compatible with the common market and the functioning of the EEA Agreement

(Case No COMP/M.3796 – Omya/Huber PCC)

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(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings[1], and in particular Article 8(2) thereof,

Having regard to the Commission's decision of 23 September 2005 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

After consulting the Advisory Committee on Concentrations[2],

Having regard to the final report of the Hearing Officer in this case [3],

WHEREAS:

(1) On 4 April 2005, the Commission received a request for referral pursuant to Article 22(1) of Regulation (EC) No 139/2004 ("the Merger Regulation") from the Finnish Competition Authority, subsequently joined by the competent authorities of Sweden on 22 April 2005, Austria on 26 April 2005, and France on 28 April 2005, to

1 OJ L 24, 29.1.2004, p. 1
2 OJ C ...,...200. , p....
3 OJ C ...,...200. , p....

investigate a proposed concentration by which the undertaking Omya AG ("Omya", Switzerland) proposes to acquire within the meaning of Article 3(1)(b) of the Merger Regulation sole control of the worldwide precipitated calcium carbonate business of J.M. Huber Corporation (hereafter "Huber"), currently controlled by J.M. Huber Corporation (USA), by way of purchase of shares and assets. Omya and Huber signed an Acquisition Agreement to this effect on 18 January 2005 and notified the proposed transaction to the Finnish Competition Authority on 9 March 2005.

(2) The Commission found that the proposed operation constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation. The Commission further considered that the request for referral, which was made within the time limit foreseen in Article 22(1) of the Merger Regulation, meets the requirements laid down in Article 22(3) of that Regulation and paragraphs 42-45 of the Commission Notice on Case Referral in respect of concentrations.[4]

(3) Therefore, the Commission decided to accept jurisdiction and to examine the concentration pursuant to the Merger Regulation. On 18 May 2005 it adopted decisions pursuant to Article 22(3) of the Merger Regulation addressed to Finland, Sweden, Austria and France to that effect. The referring Member States dispatched the documentation at their disposal to the Commission. This information was subsequently completed by Omya submitting a notification on 4 August 2005.

(4) In the first phase of the investigation, the Commission informed Omya on 29 August 2005 that the notified operation raised serious doubts as regards its compatibility with the common market. By letter of 2 September 2005, Omya offered commitments to remove the Commission's doubts. The proposed commitments were tested with relevant market participants. Following its assessment, the Commission considered the package of remedies insufficient to remove its serious doubts. By decision of 23 September 2005, the Commission adopted a decision pursuant to Article 6(1)(c) of the Merger Regulation, initiating an in-depth second phase investigation.

(5) For the purpose of obtaining further information, the Commission adopted a number of decisions pursuant to Article 11(3) of the Merger Regulation addressed to Omya and dated 11 October 2005, 9 November 2005, 23 November 2005, 9 December 2005, and 8 March 2006 respectively. Those decisions suspended the proceedings between 11-19 October 2005, 4-17 November 2005, 22-29 November 2005 and 8 December 2005-21 March 2006 respectively.

(6) After an in-depth investigation, the Commission concluded that the notified operation raises concerns as to its compatibility with the common market.

(7) The possible anti-competitive effects of removing Huber as a potential competitor were set out in the Commission's Statement of Objections sent to Omya on 2 May 2006. Omya replied by letter of 16 May 2006. A non-confidential version of the Commission's Statement of Objections was made available to two interested parties, Speciality Minerals Inc. ("SMI") and Imerys s.a. ("Imerys"), who submitted written comments.

(8) An oral hearing took place on 18 May 2006 at the request of Omya, which attended the hearing together with Huber. Both Imerys and SMI were present at the hearing as

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4 OJ L C 56, 5.3.2005, p. 2.

well as representatives from Belgium, Germany, Finland, France, Ireland, Italy, Spain, Sweden, and the United Kingdom.

(9) For the purpose of affording Omya sufficient time to consider remedies, the Commission adopted decision pursuant to Article 10(3) of the Merger Regulation on 17 May 2006, extending the deadline for submission of remedies by two working days.

(10) In order to remove the horizontal competition concerns regarding the effect of the proposed transaction in the market for coating calcium carbonates, Omya and Huber submitted a package of commitments to the Commission on 23 May 2006.

I. THE PARTIES

A. Omya

(11) Omya is a family-owned company active in the production and sale of industrial minerals, including calcium carbonates[5] (that is both precipitated calcium carbonate, "PCC", and ground calcium carbonates, "GCC") used in a variety of industries, namely paper, paints, plastic, steel, glass, and agriculture. Sales to the paper industry account for approximately [a large proportion]* of Omya's revenues. Omya is also the most important supplier of coating calcium carbonates.

(12) In the filling PCC business for the paper industry, Omya operates two on-site[6] filling PCC plants and two merchant[7] filling PCC plants in the EEA.[8] In recent years, one of Omya's on-site plants also made off-site[9] sales of filling PCC in the EEA.

B. Huber

(13) Huber is engaged in the supply of engineered materials, natural resources and technology-based services to the paper and energy business. At the European level, it is active in the trade of kaolin, PCC, precipitated silicas and silicates (PSS). The Huber subsidiaries which are the subject of this transaction comprise Huber's

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5 For the purpose of this decision, the term "calcium carbonates" encompasses both precipitated calcium carbonate ("PCC") and ground calcium carbonates ("GCC") and the term "industrial minerals" includes, *inter alia*, calcium carbonates (GCC and PCC), kaolin (clay), talc, titanium dioxide, gypsum, bentonite, alumina trihydrate (ATH) and silicates .

* Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets and marked with an asterisk.

6 For the purpose of this decision, the term "on-site plant" or "satellite plant" is used to designate some PCC production plants. It means that the paper mill's PCC needs are manufactured at the same location of the paper mill, i.e. on the same geographical site. The PCC factory and the paper mill are usually connected by a pipeline. This contrasts with other paper mills which have their PCC delivered from a distant site on a regular basis by truck or by other means.

7 For the purpose of this decision, the term "merchant plant" describes mineral production facilities that are not attached to any host paper mill and are not located in the same site. Such mineral plants ship minerals to their customers by road, ship, rail or a combination of these.

8 Omya's filling PCC business is located in Austria (Golling and Hausmening), Hungary (Szolnok) and the Netherlands (Moerdijk).

9 For the purpose of this decision, the term "off-site sales" or "off-site supply" means sales from on-site plants which are sold to other customers than the host paper mill. The term "merchant sales" or "merchant supply" encompasses both "off-site sales" as well as sales from plants which are not attached to a host paper mill, also referred to as "merchant plants".

worldwide business in the field of production and supply of on-site PCC to the paper industry.

(14) The acquired business consists of twelve PCC on-site plants world-wide, six of which are located in the EEA and one in Russia close to the Finnish border. Huber's PCC plants in the EEA are situated in Finland (three plants), Sweden, France and Portugal.[10] The remaining plants are situated in the United States (three plants), Canada, Brazil and Russia.

II. THE OPERATION AND THE CONCENTRATION

(15) Omya intends to acquire control of Huber through the purchase of all the shares of the following subsidiaries of Huber: J.M. Huber France S.A.S., J.M. Huber Finland Oy, J.M. Huber Sweden AB, J.M. Huber (Portugal) – Produtos Minerais, Lda., and J.M. Huber Denmark ApS. In addition to the subsidiaries in the EEA, Omya will acquire J.M. Huber Paper Pigments Inc, USA, J.M. Huber Canada Corp. and J.M. Huber Brasil Ltd.

(16) All subsidiaries to be acquired by Omya are active in the supply of filling PCC from on-site plants located at the host paper mills, except for the Danish subsidiary which is an administrative centre. Following the proposed transaction J.M. Huber Corporation will not hold any interests in the PCC business for paper applications.

(17) Once the proposed transaction is fully implemented, Omya will hold 100% of the shares in each of the eight subsidiaries of Huber.

(18) In the light of the above, the proposed transaction, whereby Omya acquires sole control over Huber constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

III. RELEVANT MARKETS

A. INTRODUCTION

(19) The proposed transaction concerns the sector of production and supply of industrial minerals to the paper industry for paper filling and paper coating purposes. Other applications for industrial minerals are found in a variety of industries, including plastic, paints, steel, iron, glass, environmental and agricultural industries.[11]

(20) In the course of its investigation, the Commission has constructed and refined an extensive mineral shipment database ("shipment database") which includes, *inter alia*, all major competitors' annual shipments of PCC and GCC for paper filling and coating purposes to customers in the EEA for the years 2002, 2003 and 2004. The shipment database contains data by mineral type, originating mineral plant, destination paper mill, paper type the mineral was used for, distance shipped, shipment volumes, price per dry metric tonne ("dmt"),[12] transportation mode and cost, and other characteristics

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[10] Huber's filling PCC businesses in the EEA are located in Finland (Imatra, Kuusankoski and Veitsiluoto), in France (Clairefontaine), Portugal (Portucel), Sweden (Nymölla).

[11] Sources: *Fine-Ground and Precipitated Calcium Carbonate*, Chemical Economics Handbook, September 2003, p. 4; *The Economics of Ground Calcium Carbonate 2005*, Roskill Report, 2nd edition (May 2005), submission of Omya of 27 October 2005 (hereafter "Roskill GCC Report 2005"), p. 275-340.

[12] The common measurement unit for minerals is the dry metric tonne ("dmt").

of the product shipped, as well as information on the capacity of production plants during this period. The shipment database has been extensively used by the Commission in assessing the relevant product markets, the relevant geographic markets and in the competitive assessment.

(21) The following sections will briefly analyse the various industrial minerals used for paper filling and paper coating purposes, their raw materials and production processes, the development of the industry sector and current trends. Industrial minerals used for applications other than the paper industry are excluded from this analysis, as the proposed transaction will not alter the present situation for other industries since the target company is only active in the provision of PCC to the paper industry. Analysis of the relevant product markets is set out in section B below.

1. Advantages of using industrial minerals in paper filling and coating

(22) Industrial minerals are a key component in paper manufacturing where they are used for two purposes, paper filling and paper coating. Industrial minerals have been used in paper manufacturing for over a century because of their quality enhancing properties and the cost advantages that they bring about.[13] The physical properties of the mineral affecting paper performance include particle size and shape, particle size distribution and the aspect ratio.[14]

(23) One of the main advantages of using industrial minerals is achieving properties which are not achievable by using only wood pulp fibres. Such properties relate primarily to the optical characteristics of the paper (the brightness, opacity and gloss) and to the paper's printability (its ink receptivity, the print gloss and the low print show-through to the opposite side of the paper). In this respect, industrial minerals contribute to increased paper quality: they allow the production of paper at lighter weights but with added bulk as well with better brightness and opacity.

(24) The other main advantage of using industrial minerals is cost related. Industrial minerals are significantly less expensive than wood pulp or recycled pulp. Wood pulp, the raw material for paper can be three to four times more expensive than most of the mineral pigments. Cost savings may therefore be achieved by increasing the level of pigment loading[15] in the paper and thereby decreasing the amount of the more expensive pulp used.[16] There is a clear incentive for the papermaker therefore to use more minerals in the production process. It is estimated that in Western Europe, the inducement to substitute more fibre with industrial filler is greater due to the higher cost of pulp fibre in Europe and the lower availability of fibre. Therefore, the filler loading levels in paper are generally higher in Europe, reaching 25–28% compared with 12–18% in the United States.[17]

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13 Source: *Industrial Minerals Magazine*, June 2000, p. 30.

14 Source: Roskill GCC Report 2005, p. 118.

15 The practice of replacing pulp in papermaking is sometimes called "loading".

16 Sources: *The Economics of Precipitated Calcium Carbonate 2005,* Roskill Report, 6th edition (May 2005), submission of Omya of 27 October 2005 (hereafter "Roskill PCC Report 2005"), p. 116; *Industrial Minerals*, June 2000, p. 30.

17 Source: *Fine-Ground and Precipitated Calcium Carbonate*, Chemical Economics Handbook, September 2003, p. 5, 48.

1.1. Advantages of paper filling

(25) In filling applications, the mineral is added to the cellulose slurry before it is formed into the sheet. The filler is therefore distributed through the sheet thickness.[18]

(26) The main advantages of paper filling include improvements to the surface characteristics (printing grades), whiteness, opacity, brightness and colour of the paper as well as an increase in its dimensional stability and bulkiness. Techniques exist to overcome disadvantages which relate to the use of fillers, such as the reduction in the mechanical strength and the increase in surface abrasiveness.[19]

(27) Paper opacity, or the extent to which paper is opaque, refers to its ability to prevent the transmission of light. Opacity occurs in paper when light striking the paper surface is either reflected, absorbed, or scattered internally. The more the light is scattered, the more opaque the paper. Opacity is a desirable quality that minimizes or eliminates show-through of the printed image. A sheet with 100% opacity would allow absolutely no light through the sheet, and therefore have no show-through of the printed image.[20] In general, the lower basis weight of the paper, the less the opacity. The whiteness and brightness of the filler, its particle structure and size, its refractive index and filler loading are all factors which determine the opacity of the paper.[21]

(28) Brightness is a measurement of a paper's light-reflective qualities that affect contrast and halftone reproduction. There appears to be a considerable difference between the brightness level achieved by kaolin (from approximately 80 to 90 on the ISO brightness scale) and that achieved by calcium carbonates (GCC more than 90 and PCC 90–95). Consequently, only PCC and GCC are suitable as paper fillers for paper grades exceeding 90 on ISO brightness scale.[22]

(29) From a customer's perspective, the higher the bulkiness of paper, the higher the quality. Selling paper at different bulk (or "caliper") levels gives the user the feeling of having "more paper" in the hand which gives it "higher value".[23] GCC and PCC (especially the scalenohedral type) offer higher bulk than kaolin.[24] More bulk means using less pulp which in turn translates into savings for the paper producer.

1.2. Advantages of paper coating

(30) In coating applications, the mineral is mixed with binders (latex and starch) and applied to the surface of the base fibre sheet.[25]

(31) Coating applications are used for a variety of paper types, for example, high-quality magazine papers, financial brochures, high-end books, consumer packaging, high-quality copy papers and specialized paper to reproduce digital images.[26]

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18 Sources: Roskill PCC Report 2005, p. 116; *Industrial Minerals*, June 2000, p. 30.
19 Source: Roskill PCC Report 2005, p. 116.
20 Sources: http://www.friesens.com and http://www.cjpw.com.
21 Source: http://www.omya.com.
22 Source: Roskill GCC Report 2005, p. 10, figure 3.
23 Source: Form CO, p. 32, submission by Omya of 4 August 2005.
24 Source: Roskill GCC Report 2005, p. 243.
25 Source: *Industrial Minerals*, June 2000, p. 30, 33.
26 Source: Submission by Omya of 26 October 2005, p. 2.

(32) The purpose of coating is to provide an ideal smooth and ink-receptive surface. Coating is either carried out as a part of the paper making process (on-machine) or as a second stage (off-machine). Coating was initially only performed off-machine due to the slower speed of the coating plant machinery but technological advances have led to the development of faster coating machines which now allow coating to be done on-machine. These advances have decreased the production cost of coated paper, lowered the price of coated papers and have led to a considerable increase in demand for coated papers and therefore for coating pigments.[27]

(33) The main advantages of paper coating are the improvements in the receptivity of the surface to printing, masking the original surface characteristics, upgrading the texture of the paper, applying a moisture-resistant or moisture-proof layer, reducing abrasion and increasing surface strength.[28]

2. Industrial minerals

(34) Industrial minerals used in the paper industry include, *inter alia*, calcium carbonates (GCC and PCC), kaolin (clay), talc, titanium dioxide, gypsum, bentonite, alumina trihydrate (ATH) and silicates.

(35) It is estimated that, globally, the paper industry consumes industrial minerals as follows: GCC 39%, kaolin 33%, PCC 18%, talc 8% and others 2%. In Europe, however, the proportion of GCC used is higher due to the fact that there is more high quality GCC raw material available in Europe than, for example, in North America. The growth in the use of PCC commenced later in Europe and growth has also been slower than in North America where there are fewer sources of raw materials for GCC for the paper industry.[29] The general trend from kaolin towards GCC and PCC as paper fillers seems to continue as paper manufacturers continue to move away from an acid-based method to an alkaline-based one.[30]

2.1. Kaolin (clay)

(36) Kaolin is a clay which is mined and refined into a variety of grades. It is commonly referred to as "China Clay" because it was discovered at Kao-Lin in China.[31]

(37) In addition to the paper industry, kaolin is also used in rubber products, paints, plastics, adhesives, sealants, sanitary-ware, table-ware, tiles and fibreglass. Kaolin is further used in combination with other clay types in what are called refractory applications.[32] Such applications include products that are used to withstand high

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27 Source: Roskill PCC Report 2005, p. 117.

28 Source: Roskill PCC Report 2005, p. 117.

29 Sources: Form CO, p.17, submission by Omya of 4 August 2005; Roskill PCC Report 2005, p. 110.

30 Historically paper was made using an acidic process. Uncoated papers made this way were prone to discolouration. Papers made using an alkaline-based process tended to last longer and are therefore better suited for archiving purposes. Moving to an alkaline-based process was prompted by customer demand for brighter uncoated papers (such as office stationery). In uncoated papers, the only paper pigment used is the pulp-replacing filler. Whereas kaolin as a coating pigment is used for adding gloss, as a filler it does not achieve the brightness levels of the carbonates (cf. Roskill GCC Report 2005, table 157). Carbonates do not react well in acidic conditions and so this hastened the move to alkaline.

31 Source: http://www.ima-eu.org.

32 Sources: Commission decision in case *IV/M.1381 – Imetal/English China Clays*, of 26 April 1999, paras. 6-7; http://www.ima-eu.org.

temperatures and range from the simple to the sophisticated: from fireplace brick and kiln linings to re-entry heat shields for the space shuttle. However, the two largest applications for the use of kaolin are paper coating and the production of high grade ceramic products.[33]

(38) The main kaolin production centres around the globe are in the USA, Brazil, China and the United Kingdom.[34] Kaolin is usually mined in open pits; only very few underground mines are left.[35] The mineral is then crushed, milled, refined, purified and, sometimes, subjected to thermal treatment ranging from drying to high temperature calcining. Due to its very fine nature, kaolin is often mixed with water and transported in tanks as liquid slurry. The product may be transported to the customer by truck, train or ship. Kaolin as a paper-making ingredient can travel great distances.[36] In paper applications, kaolin is used both as a filler and as a coating pigment.

(39) In the past, kaolin was the most widely used pigment in paper manufacturing. Kaolin remains chemically inert over a wide pH range and can therefore be used not only in acid but also in alkaline paper production processes. However, during the past two decades the proportion of kaolin in paper applications has declined significantly as it has gradually been replaced by calcium carbonates (GCC and PCC) both in filling and in coating applications.[37] This change coincided with the conversion from acid to alkaline paper making and with the demand for brighter and bulkier paper.[38] In a paper machine running an acid-based system, kaolin cannot be replaced by calcium carbonates as GCC and PCC cannot be used commercially in acid processes because of their natural reaction with acid. However, in alkaline paper-making conditions kaolin may be substituted by GCC and by PCC.[39]

2.1.1. Kaolin for filling applications

(40) Kaolin is used as a paper filler for the same reasons that other pulp-replacing minerals are used: cost savings and optical properties. It is non-abrasive, has a low heat and electrical conductivity and offers brightness and opacity.

(41) Kaolin is used as a filler primarily in supercalendered papers which are used as newspapers, magazines, catalogues, supplements, inserts and advertising material. Kaolin may also be used as a filler in papers that have multiple coats. However, in uncoated papers where brightness matters, kaolin cannot match the calcium carbonates (GCC and PCC).

(42) Kaolin has a brightness in the range of 80–90 whereas the calcium carbonates attain a brightness level of up to 95.[40] The difference is noticeable to the naked eye.

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33 Source: http://www.ima-eu.org.

34 Source: *Industrial Minerals Magazine*, August 2003.

35 Source: http://www.ima-eu.org.

36 Omya is the selling agent in Europe for Huber's U.S. deposits of kaolin. The kaolin is shipped from [outside Europe]* and distributed to European customers by Omya.

37 Source: *The Economics of Kaolin*, Roskill Report, 11th edition.

38 Source: Roskill PCC Report 2005, p. 243.

39 Source: Commission decision in Case *IV/M.1381 – Imetal/English China Clays*, of 26 April 1999, paragraph. 10.

40 Source: Roskill GCC Report 2005, p. 243.

2.1.2. Kaolin for coating applications

(43) In the paper industry, coating is the largest application for kaolin.[41] Paper coating is the largest kaolin market in Europe, consuming 2.2 million tonnes in 2002.

(44) In Europe in the late 1990s, unlike North America, GCC had overtaken kaolin as the most popular paper coating mineral.[42] Kaolin remains the mineral of choice in coating applications for high quality papers and can be expected to remain so even as its use as a filling mineral in papers continues to fall in most countries.[43]

2.2. Ground calcium carbonate (GCC)

(45) The chemical formulation $CaCO_3$ refers to a raw material that is commonly found in nature throughout the world. In spite of the plentiful deposits, only some of the deposits are of sufficiently high quality to provide the raw material for industrial and agricultural applications other than the construction and road building industries.[44]

(46) The main types of $CaCO_3$ used for producing ground calcium carbonate (GCC) are sedimentary (limestone or chalk) or metamorphic (marble), which are mined by both opencast and underground methods. Subsequently, in a screening process, mud and contamination such as coloured silicates, graphite and pyrites are removed. When the screening has been completed, the raw material goes through a further crushing and grinding process until the particle size is suitable for the particular application. Alternatively, marble chips can be sold without further processing from deposits of high quality to where GCC plants are located.[45]

(47) In the EEA, GCC is generally produced in separate production facilities from which the product is transported as a slurry to customers by truck, train or ship.

(48) The original rhombohedral crystal shape of GCC remains intact during the production process and the main modification is the difference in particle size obtained through grinding. Thus the calcium carbonate is not modified chemically during the manufacturing process.

(49) According to Omya, there are differences in attributes and quality of GCC due to the difference in grades (fine versus coarse), raw materials used for the production, and difference in steepness.

(50) In particular, Omya explained that "*GCC is refined into a variety of grades. […] The industry categorises GCC according to the type of use into filling GCC and coating GCC. Both types of GCC are further classified according to different grades, namely fine and coarse, depending on the particle size of the product [(finer grades of coating GCC undergo a longer grinding process)]. The decisive parameter for the distinction between fine GCC and coarse GCC is whether the amount of particle with a particle size of smaller than 2 µm is below or above 60%. In other words, GCC is regarded as coarse where 60% or less of the particles are smaller than 2 µm and as fine where*

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41 Source: *Industrial Minerals Magazine*, August 2003.

42 Source: http://www.paperloop.com.

43 Source: *The Economics of Kaolin*, Roskill Report, 11th edition.

44 The earth's crust contains more than 4% of calcium carbonate. Source: IMA Europe, *Industrial Minerals*.

45 Source: Roskill GCC Report 2005, p. 17-18.

more than 60% of the particles are smaller than 2 µm. […] As the amount of fine particles is increased, the paper will have a better gloss, therefore fine GCC leads to better paper gloss than coarse GCC."[46]

(51) The finer grades of GCC are mainly used in the manufacture of paper, plastics, paint, sealants and rubber, which together account for the bulk of the demand for GCC.[47] The coarser grades are used to manufacture raw material for carpets and consumer products. In the EEA, however, most of the GCC produced is intended for applications in the paper industry.[48]

(52) GCC derived from different sources (limestone, chalk, marble) shows a wide range of brightness. Marble is generally the preferred choice of the paper industry where a high brightness is required. Limestone and chalk can also be used but with resulting lower brightness.[49] In paper applications, GCC is used both as a filler and as a coating pigment but to a larger extent in coating. Over the past twenty years, production of GCC has increased significantly, mainly due to the switch from acid to alkaline/neutral paper production process resulting in the replacement of filling and coating kaolin by GCC and PCC.

(53) New trends involve both the development of new grades of GCC with levels of brightness comparable to PCC and the growth in the use of GCC/PCC blends.

(54) The production of steep/engineered GCC involves limiting the particle size distribution of GCC so that it has similar characteristics to coating PCC. As PCC is made under controlled conditions, the size distribution of its particles is narrow. GCC, which is made by grinding rock, has a more random particle size distribution. To achieve a narrower size distribution, it is necessary to eliminate, by mechanical means, the larger and the smaller particles leaving a product with the narrow size distribution required. The larger particles can be recycled back into the grinding process. The smaller particles have to be disposed of. This can be done either by adding them in small quantities to larger quantities of standard filling or coating GCC (in which case there is a limit to the proportion that can be added before the quality of the standard product is affected) or by dumping which can give rise to environmental problems.

(55) It also appears that the combination of PCC and GCC may be beneficial in solving particular problems related to the use of GCC or PCC alone. At present, GCC can be blended with PCC for coating purposes and for filling purposes.

(56) In 2004, the total demand for GCC for all paper filling and coating applications in the EEA amounted, according to Omya, to [6 to 7 million]* tonnes per year.[50] In the EEA, six countries (Austria, France, Germany, Norway, Italy and Spain) account for 80% of

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46 Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005 (general introduction part).

47 Fine grade has a particle size of 3-10 microns and ultra-fine 0.5-3 microns. Source: Roskill GCC Report 2005, p. 21.

48 Source: Roskill GCC Report 2005, p. 3.

49 Source: Roskill GCC Report 2005, p. 9-10, 13.

50 Source: Form CO, p. 53, 58, submission by Omya of 4 August 2005.

the European GCC production capacity. Main producers of GCC in the EEA include companies such as Omya, Imerys, Reverté and Provencale.[51]

2.2.1. GCC for filling applications

(57) Filling GCC ranges from 40–75% of particles which are smaller than 2μm.[52] Following the trend of moving from acid paper production processes to alkaline/neutral processes, GCC has displaced kaolin as the leading filling pigment. Filling loading levels using GCC are between 20–25%, thereby replacing the more expensive pulp. It is expected that there will be more GCC/PCC blends in filling applications in the future.[53]

(58) The market investigation has revealed that the weighted average delivered price[54] of filling GCC in the EEA is approximately EUR [95-115]* per dmt. In 2004, the total demand for filling GCC for all paper applications in the EEA amounted to [700,000-1,300,000]* tonnes per year according to Omya, of which Omya supplied [65-80]*%.[55]

2.2.2. GCC for coating applications

(59) While GCC is an important paper filler, its main application in the EEA is as a paper coating pigment.[56] According to Omya, "*[description of coating GCC characteristics]**."[57]

(60) At present, GCC can be blended with PCC especially for coating purposes to achieve specific product characteristics.[58]

(61) In 2004, the total demand for GCC coating for all paper applications in the EEA amounted to [5 to 6 million]* tonnes per year according to Omya, of which Omya supplied [70-85]*%.[59] The market investigation has revealed that the weighted average delivered price of coating GCC in the EEA is approximately EUR [115-135]* per dmt.

2.3. Precipitated calcium carbonate (PCC)

(62) Industrial calcium carbonate (industrial $CaCO_3$) is produced in two ways: by extracting and grinding the natural ore (i.e. ground calcium carbonate, GCC) and by

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51 Source: Roskill GCC Report 2005, p. 27, 44-45.

52 Source: Response to the request pursuant to Article 11 of the Merger Regulation ("Article 11 request") of 30 September 2005, as clarified in the decision pursuant to Article 11 of the Merger Regulation ("Article 11 decision") of 11 October 2005, received 18 October 2005 (general introduction part).

53 Sources: Roskill GCC Report 2005, p. 3; Roskill PCC Report 2005, p. 17; *Industrial Minerals*, June 2000, p. 5.

54 The weighted average delivered price per dry metric tonne of GCC for filling applications is obtained in three steps. First, for each shipment of filling GCC, its volume and its delivered price per dmt are multiplied when both are available. Second, all these products are summed. Third, this sum is divided by the sum of all volumes of filling GCC (for which both volume and delivered price are available).

55 Source: Form CO, p. 52, submission by Omya of 4 August 2005.

56 Source: Roskill GCC Report 2005, p. 247.

57 Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005 (general introduction part).

58 Sources: Roskill GCC Report 2005, p. 3; Roskill PCC Report 2005, p. 17; *Industrial Minerals*, June 2000, p. 5.

59 Source: Form CO, p. 53, submission by Omya of 4 August 2005.

chemical precipitation (i.e. precipitated calcium carbonate, PCC). PCC is a synthetic industrial mineral manufactured from burnt lime or its raw material, limestone.

(63) In paper manufacturing, which is the largest industry sector using PCC, the mineral is used both as a filling and as a coating pigment. In addition to the paper industry, PCC is used in plastics (particularly PVC), rubber, paints, adhesive, sealants, pharmaceuticals and cosmetics.

(64) The most commonly used method of manufacturing PCC is by the carbonation process. The carbonation process requires the use of high quality limestone and carbon dioxide gas (CO_2). The required carbon dioxide gas can be obtained from the flue gases of the steam generating plant or the mill recovery system, if the carbon dioxide gas content has a purity of at least 10%.[60] Alternatively, in the absence of such a source of carbon dioxide gas, liquid carbon dioxide can also be used.

(65) The limestone and carbon dioxide gas are first purified separately. The burnt lime is subsequently mixed with water to produce calcium hydroxide (hydration or slaking). Cooled and purified carbon dioxide gas is then bubbled through the lime in a reaction vessel known as a reactor or carbonator. The gassing process continues as a batch process until all the calcium hydroxide has been converted to PCC. When this has been completed, the product is screened (or sieved) to further purify the PCC. Potential impurities tend to be coarser than the particle size of the required PCC. The end result is PCC in a slurry form (15–25% solid content). After a final screening, this slurry is ready to be fed into the paper mill for use as a filler.[61] The slurry may be further thickened to a solid content of 35–40%. A concentration of 65–70% may be achieved by more filtration, drying and re-dispersion. In addition to the carbonation process, PCC is also produced using the Solvay, Lime-soda and CalciTech processes.

(66) PCC is delivered either by transporting it from a merchant plant (often hundreds of kilometres away) or by piping it from a dedicated on-site plant to an adjacent host paper mill (on-sites plants and in-house plants).

(67) On-site plants are PCC production facilities that are built on the site of, or immediately adjacent to, a host paper mill. They are owned and operated by a PCC operator and based on a long term contract (lasting typically 7 to 10 years) during which the supplier recuperates their capital investment. Usually, the host paper mill provides the on-site plant's essential support, such as waste water facilities, energy and carbon dioxide gas (carbon dioxide is a by-product of the pulp-making process). Most dedicated on-site plants produce PCC largely or exclusively for filling applications. The solid content of PCC produced in an on-site plant varies between 15% and 25%. In-house plants are similar to on-site plants in so far as their output is largely or exclusively dedicated to a particular host paper mill. Therefore, their supply is largely captive. The main difference compared to on-site plants is that they are owned, operated and maintained by the paper mill, without a PCC supplier's continuous assistance.

(68) Merchant plants are self-sufficient production facilities that commercially sell and deliver PCC to customers. Merchant PCC generally has a higher solid content (around

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60 Source: Roskill PCC Report 2005, p. 7, 9.

61 Source: Roskill PCC Report 2005, p. 7, 10.

[40-60]*%[62] for merchant filling PCC and [60-80]*% for merchant coating PCC) compared to on-site PCC. This is due to the need to ship PCC more efficiently by reducing the amount of water transported in the slurry. In addition, merchant PCC needs additives: dispersants which are necessary in order to stabilise the higher solid content during transportation and biocides which prevent the formation of bacteria.

(69) Overall demand for PCC is forecast to rise from 7.75 million tonnes in 2004 to 9.7 million tonnes by 2010, an average rise of around 4.4% per year, most of which is estimated to reflect the increased demand from the paper industry.[63]

2.3.1. PCC for filling applications

(70) Unlike other industrial minerals, PCC is a synthetic product that can be shaped and modified to offer differing properties to the paper produced. The physical form of the PCC may be varied considerably inside the reactor. The variable factors include: the reaction temperature, the speed at which carbon dioxide gas is introduced and the agitation rates. These variations affect the PCC's particle size and shape, its surface area and surface chemistry as well as its size distribution. The particle size of commercially available PCC ranges in general from 0.05–5.0 microns. The particle shapes vary from rhombohedral to acicular, either in clustered or in single form. Calcitic PCC commonly has a rhombohedral, prismatic or scalenohedral shape, whereas aragonitic PCC is usually acicular or tabular in shape.[64]

(71) The use of scalenohedral PCC allows the paper manufacturer to adjust the brightness, opacity, bulk, sizing, and loading of the paper produced and thus offers control over different properties of the paper. Presently, this type of PCC is the most commonly used filling PCC. Rhombohedral PCC can increase the brightness, strength and filler loading of the paper as well as improve the runnability and sizing of the paper. Rhombohedral PCC consists of single or aggregated calcite crystals. The more prismatic forms of PCC allow improvements both in the dry strength of the paper and in productivity. PCC technology further allows the combination of different PCC morphologies and consequently allows control of different paper properties.[65]

(72) Despite the many benefits brought about by using PCC to control the characteristics of the paper (i.e. the higher brightness, opacity and bulk achieved in comparison to GCC), PCC can reduce the fibre strength to a point which limits the filler loading levels. The crystal morphology can result in limited slurry-solid ratios which, in turn results in poor retention, drying and flow of paper coatings. Finally, the speed of the paper machine during the production process is lower when using PCC compared to using GCC. However, the industry has developed techniques to overcome such disadvantages.[66]

(73) According to Omya, it is estimated that, in 2004, the paper industry consumed [4-7]* million tonnes of PCC which accounted for [60-80]*% of worldwide consumption. More than [80-100]*% of the PCC consumed by the paper industry is used for filling

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62 Source: Form CO, p. 21, submission by Omya of 4 August 2005.
63 Source: Roskill PCC Report 2005, p. 108-109.
64 Source: Roskill PCC Report 2005, p. 14.
65 Source: Roskill PCC Report 2005, p. 15.
66 Source: Roskill PCC Report, p. 16-17, 116.

applications and less than [5-20]*% for coating applications.[67] In the same year, the total volume of PCC used for paper filling applications in the EEA amounted to [over 1 million]* tonnes according to Omya.[68] The market investigation has revealed that the weighted average delivered price of filling PCC in 2004 in the EEA was around EUR [115-135]*.

2.3.2. PCC for coating applications

(74) PCC is also used in paper coating but the amounts used are small compared to those used in paper filling. Paper coating applications require a much higher solid content and therefore further processing of the PCC is necessary. Coating grade PCC can be concentrated to a 70% solid before use.[69]

(75) As a coating pigment, PCC is used mostly to impart good ink receptivity and brightness. Until recently most of the PCC used has been rhombohedral to reduce coating porosity. There are indications that non-agglomerated aragonite PCC has also been used for coating purposes. The main reason why PCC is not used more widely in coating is because of its tendency to reduce gloss and also to have a high viscosity of coating colour (i.e. the coating mixture) which can lead to operating problems and streaking.[70]

(76) According to Omya, the total volume of PCC used for paper coating applications amounted to [over 100,000]* tonnes in the EEA in 2004.[71] However, coating PCC has been forecast to undergo strong growth.[72] The market investigation has revealed that the average weighted price of coating PCC in 2004 in the EEA was approximately EUR [175-195]*. SMI is the leading supplier of coating PCC.

(77) Table 1 summarises the general properties of kaolin, GCC and PCC.

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67 Source: Form CO, p. 20, submission by Omya of 4 August 2005.
68 Source: Form CO, p. 58, submission by Omya of 4 August 2005.
69 Source: Roskill PCC Report 2005, p. 53.
70 Source: http://www.paperloop.com.
71 Source: Form CO, p. 52, submission by Omya of 4 August 2005.
72 Source: Roskill PCC Report 2005, p. 2, 117.

Table 1. Comparison between properties of kaolin, PCC and GCC in paper production

Property	Kaolin	GCC	PCC
Brightness	80–90	90+	90–95
Particle size	Naturally 2 microns	Requires grinding	Manufactured fine
Opacity	Excellent	Moderate at high load	High at low load
Loading levels	20–30%	20–30%	Limited to 20%
Sheet strength	Good	Excellent	Moderate
Bulking	Moderate	Good	Good
Absorption	Low	Low	High
Chemical reactivity	Inert	Unstable in acid environments	Unstable in acid environments[73]
Flexibility	Filling / coating	Alkaline only filling / coating	Filling and coating
Processing	Extensive	Grinding / sizing	Energy intensive
Availability	Restricted	Geologically plentiful	On-site or merchant
Price	Low (N. America)	Low (Europe)	Based on cost effectiveness

Source: Roskill GCC Report 2005, p. 243.

3. Paper types using mineral pigments

(78) Paper is classified according to its fibre composition, end use, printing method or surface treatment. Paper is made from pulp and most pulp is made from trees. Wood is converted into pulp using two main methods[74]:

(a) the mechanical method which is often called "wood-containing" or "ground mechanical" pulp; and

(b) the chemical method which is also called "woodfree" pulp.

3.1. Mechanical or "wood-containing" paper

(79) Mechanical or "wood-containing" paper is manufactured by separating the cellulose wood fibres using a predominantly mechanical means. Wood logs are ground against a rough surfaced roller rotating at very high speed. Mechanical pulp is a lower grade material which still contains lignin[75] and other impurities. The uncoated mechanical paper may then be given a finish by passing it through a series of rotating, polished, metal rollers called calenders where the surface is smoothed. The paper is then wound onto a reel. Uncoated mechanical paper grades made from mechanical pulp include the newsprint and supercalendered categories. Newspapers, newspaper inserts and advertising flyers are classed as newsprint paper. Newsprint paper weighs between 45–49g/m^2 and sells in the range of EUR 455–495 per tonne.[76]

(80) Supercalendered paper is a premium grade, mechanical pulp paper with exceptional smoothness, opacity, brightness and strength. The raw material pulp is sometimes

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73 Acid tolerant PCC is now available.

74 Source: Form CO, p. 23, 25, submission by Omya of 4 August 2005.

75 Lignin is a complex chemical compound especially common in woody plants. It binds the fibres together and gives the necessary rigidity to the tree.

76 Source: http://www.paperloop.com, October 24-28 2005.

mixed with a large proportion of re-cycled paper pulp. It can be produced in either an acid or an alkaline (neutral) process and also contains a mineral filler. The mineral filler options available are GCC, PCC, kaolin or talc.[77] Supercalendered paper is, by definition, an uncoated paper. Once the base paper emerges from the papermaking machine, it undergoes further processing on off-line stand-alone supercalendering machines. It ends up with a non-glare finish that gives printed results that offer reader-friendly images and text in magazines, catalogues and other types of printed materials. Its printed results are comparable to light-weight coated paper[78] (see recital 83). Supercalendered paper is produced either for rotogravure or offset printing and is used in magazines, catalogues, supplements and inserts. It weighs between 56–60g/m^2 and sells in the range of EUR 580–620 per tonne.[79]

(81) Coating means applying a mineral surface treatment to the base paper sheet. A coating surface may be applied on one or on both sides of the paper and may consist of more than one layer. Mechanical and woodfree papers may be either coated or uncoated.

(82) Coated mechanical papers fall into the following categories: (i) light-weight coated ("LWC") and (ii) medium-weight coated ("MWC").

(83) LWC paper is coated on both sides to increase its smoothness and gloss. This paper is intended for printing applications in which high information capacity is needed, for example magazines with a high advertising content. It weighs between 45–80g/m^2 and sells in the range of EUR 680–760 per tonne.[80]

(84) MWC paper (sometimes called double-coated mechanical) is a medium-weight coated paper with a medium thickness coat. The double coat gives it a consistent surface texture and the smoothness necessary for high gloss colour printing. It is most suitable for speciality magazines and advertising articles where the quality demands are very high. It weighs between 80–115g/m^2 and sells in the range of EUR 700–760 per tonne[81].

3.2. Chemical or "woodfree" paper

(85) Chemical (or "woodfree") pulp is made by using chemical agents to separate the lignin from the cellulose fibres. Papers made from chemical pulp are generally stronger with higher brightness which protects from yellowing. The industry terms these paper types as "woodfree" although they are, in fact, lignin free.

(86) Being uncoated, the filler now becomes an important source of brightness and opacity and it is in this type of paper that the calcium carbonate fillers perform better than kaolin. Uncoated woodfree papers are used in books, writing papers, direct mailing advertising and office paper. The term "office paper" includes stationery such as letter paper, envelopes, customised forms, and office reprographic papers (A3 and A4 paper

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77 Source: Response by Omya to Article 11 request of 18 November 2005.
78 Source: http://www.sccouncil.org.
79 Source: http://www.paperloop.com, October 24-28 2005.
80 Source: http://www.paperloop.com, October 24-28 2005.
81 Source: http://www.paperloop.com, October 24-28 2005.

for photocopying and printing). The industry standard weight for uncoated woodfree paper is 80g/m^2 and it sells in the range of EUR 640–840 per tonne.[82]

(87) Coated woodfree papers, the highest quality of printing papers, are used for corporate annual reports and high-end catalogues and magazines, and promotional material. In this paper type, a lot of the filler content comes from what the industry terms "coated broke". Coated broke is waste paper which comes from the paper production process and is re-cycled to extract the filler it contains, which is used to reduce the amount of primary filler needed.[83] Coated woodfree paper weighs between 80–100g/m^2 and sells in the range of EUR 690–910 per tonne.[84] Table 2 summarises the different characteristics of the various paper types.

Table 2. Characteristics of the different paper types

Paper types	Fibre raw material	Filler loading	Coater loading	Examples of end uses
Newsprint	De-inked pulp and/or Mechanical pulp	Filler loading up to 12% which comes from de-inked pulp		Newspapers, newspaper inserts, advertising flyers
Specialty Newsprint Books, Papers (high brightness) Telephone Directories	De-inked pulp and/or mechanical pulp	Filler loading of less than 10% (speciality pigments may also be used).		Newspapers, newspaper supplements, books, telephone directories, advertising.
Supercalendered papers SC A+, SC A and SC B	Mechanical and chemical pulp	Up to 36%		Magazines, catalogues, supplements, inserts, advertising material
Coated Mechanical Papers	Mechanical and chemical pulp	Up to 10%	Up to 35%	Magazines, catalogues, supplements, books, advertising material
Uncoated Woodfree Papers	Chemical pulp	Up to 25%		Office paper (for printing, photocopying), writing papers, envelopes, books, advertising materials
Coated Woodfree Papers	Chemical pulp. It is possible to use some CTMP[85]	Up to 8%	Double / Triple coating	Magazines, brochures, direct mail, annual reports, books, advertising materials
Speciality Papers	Chemical pulp	Filler loading depends on the grade	Coater loading depends on the grade	This category includes labels, food wrapping, packaging, cigarette papers and filter papers, as well as gypsum liners and special papers for waxing, insulating, roofing, asphalting, and other specific applications or treatments[86]

82 Source: http://www.paperloop.com, October 24-28 2005.

83 Source: Roskill GCC Report 2005, p. 248.

84 Source: http://www.paperloop.com, October 24-28 2005.

85 Chemo-Thermo-Mechanical Pulp is mechanical pulp produced by treating wood chips with chemicals (usually sodium sulphite) and steam before processing mechanically.

86 Source: http://www.paperonline.org.

Kraft Papers[87]	Chemical pulp			Wrapping, packaging, sacks, bags, wrapping & packing envelopes

Source: Roskill PCC Report 2005 and Roskill GCC Report 2005; Omya's response to the Article 11 request of 18 November 2005, received 25 November 2005.

(88) Omya submits that printing and writing paper (uncoated woodfree) is by far the most important application within the paper industry in terms of mineral additives.[88] Printing and writing paper may be sub-divided into mechanical (or "ground") wood containing paper, both coated and uncoated, and woodfree[89] (or chemical) paper, both coated and uncoated.

(89) According to Omya, filling PCC is mainly used in uncoated woodfree paper, which accounts for [80-100]*% of all PCC sales to the paper industry in the EEA. Photocopying paper is a typical example of this paper type. Omya states that uncoated wood containing (supercalendered paper[90]) accounts for [0-20]*% of all PCC sales to the paper industry in the EEA. GCC filler is predominantly used for uncoated woodfree paper and to a smaller extent for supercalendered paper. Nevertheless, it appears from the market investigations that both PCC and GCC can be used for a much wider range of paper grades.

4. Structure of supply and demand

4.1. Mineral suppliers to the paper industry

(90) The main suppliers of PCC and GCC to the paper industry in the EEA include companies such as SMI, Huber, Omya, Imerys, Schäfer Kalk GmbH & Co KG ("Schäfer Kalk"), Solvay s.a. ("Solvay") and SA Reverté ("Reverté"). Technological developments are not always achieved solely by the mineral suppliers. Typically they work with selected paper makers to develop new filling and coating products. Technological advancement very often requires collaboration with a paper company because the pre-marketing trials can involve protracted testing periods which include not only laboratory work but pre-planned paper machine testing time and ultimately production scale trials.

(91) SMI, a subsidiary of New York based Mineral Technologies Inc. ("MTI"), is the largest operator of PCC plants in the world. MTI is a resource and technology based company that develops, produces and markets a broad range of specialty mineral, mineral-based and synthetic mineral products and related systems and services worldwide. SMI pioneered the concept of on-site PCC plants. At present, the company is by far the largest operator of on-site plants in the world. The company has a total PCC capacity of approximately 4.1 million tonnes per year (tpy) and operates 51 on-

87 Kraft paper is a paper of high strength made from sulphate pulp. Kraft papers vary from unbleached Kraft used for wrapping purposes to fully bleached Kraft used for strong Bond and Ledger papers.

88 Source: Form CO, p. 24, para. 4.2.1, submission by Omya of 4 August 2005.

89 Woodfree paper (chemical pulp) results from using chemical agents to separate the cellulose fibres and other components. The term woodfree means that the paper is free from lignin, and not that the paper does not contain any wood pulp.

90 Super calendered paper (SC) is uncoated wood containing paper of which the surface has been polished by passing it through a supercalender. The TV-guide supplements in daily newspapers are typical super calendered products.

site plants world wide. Ten on-site plants, having a Community-wide total capacity of approximately 686,000 tpy,[91] are located in the EEA (Finland, France, Germany, Portugal, Poland and Slovakia). In addition, the company operates four merchant PCC plants in the EEA (Belgium, Finland, Germany and United Kingdom). MTI is also active in GCC in North America.

(92) SMI is also active in the development and supply of coating grade PCC. By early 2005, the company was supplying this grade of PCC to around forty machines at twenty groundwood paper mills around the world. Most of SMI's satellite plants produce filling PCC and fourteen produce coating PCC.

(93) Huber operates twelve on-site filling PCC plants world-wide, six of which are located in the EEA (Finland, Sweden, France and Portugal). All of these plants provide PCC for paper applications. In addition, Huber supplies kaolin to European customers in the paper industry through Omya.

(94) Omya is active in the production and sale of industrial minerals, including GCC, PCC, talc and dolomite which are used in a variety of industries. The company is [the largest][*] supplier of GCC with seventeen merchant GCC slurry plants in the EEA. It accounts for approximately [70-85][*]% of the shipments of GCC in the paper industry in the EEA.[92] In addition, it has a total of seven PCC plants world-wide, four of which are located in the EEA. In Europe, Omya operates two on-site filling PCC plants (Hausmening in Austria, Szolnok in Hungary) and two merchant filling PCC plants (Golling in Austria and Moerdijk in the Netherlands). Omya is the selling agent in Europe for Huber's kaolin. The kaolin is shipped from [outside Europe][*] and distributed to European customers by Omya.

(95) Imerys is a worldwide supplier of minerals, headquartered in France. In Europe, Imerys supplies white pigments, primarily kaolin, for various manufacturing industries, in particular the paper industry. In 2005, Imerys won its first on-site contract to supply both filling and coating PCC to the Swedish plants of M-Real, a major European paper producer based in Finland. This contract saw Imerys' entry into the European market segment for the supply of PCC. The company operates altogether twelve PCC on-site plants worldwide. Imerys is the leading kaolin supplier and the second largest supplier of GCC in the EEA. The company also supplies minerals to so-called "specialty" industries (ceramics, paint, plastics, rubber, adhesives etc.) as well as to manufacturers of building materials, refractories, and abrasives.[93]

(96) Schäfer Kalk is a German company supplying limestone, calcium oxide and calcium hydroxide as well as fillers and pigments to various industries. The company operates four PCC plants, two of which are located in Germany and one each in Austria and Malaysia. Two of these plants are on-site filling PCC plants (Neidenfels in Germany and Wattens in Austria).

(97) Solvay is a multinational pharmaceutical and chemical company with revenue of almost EUR 8 billion in 2004. Solvay operates six PCC plants in the EEA and one in the US. One of the European plants is an on-site plant for paper applications (located

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91 Source: Form CO, p. 38, submission by Omya of 4 August 2005.

92 Source: Form CO, p. 58, submission by Omya of 4 August 2005.

93 Source: Roskill GCC Report 2005, p. 57.

at Quimperlé in France) supplying filling PCC to Papeterie de Mauduit. The other six plants, five of which are located in Europe (in Austria, France, Germany, Italy, and the United Kingdom) supply merchant PCC.[94]

(98) S.A. Reverté Productos Minerales is a company based in Spain, which produces GCC from calcite and white marble. It has a production facility in Castellet i la Gornal near Barcelona and a factory in Albox near Almería. Both plants have their own quarries and mining concessions. Reverté supplies GCC for use in a range of products such as paper, paints, ceramics, sealants, synthetic marble and high density polyethylene ("HDPE") compounds for bottle blowing.[95]

4.2. Customers in the paper industry

(99) The European paper industry accounts for approximately a third of global paper production capacity. Europe has been the leader, followed by Asia and North America, in manufacturing printing and writing papers, which account for some 30% of all paper and board production.[96]

(100) During the past decade the European paper industry has gone through a consolidation, which has reduced the number of companies, paper mills[97] and paper machines in Europe, yet at the same time production capacity has increased significantly.[98] It is estimated that, in 2003, the ten largest paper producers accounted for approximately 28% of the world-wide paper and board production.[99] The turnover of the European paper industry reached approximately EUR 70 billion in 2004.[100]

(101) Customers in the paper industry consist of large paper manufacturers, such as Stora Enso Group, International Paper, UPM-Kymmene Group, Svenska Cellulosa (SCA), M-Real, Exacompta Clairefontaine Group, Sappi, and Myllykoski Paper, and a large number of smaller paper manufacturers. Paper manufacturers typically have a global sourcing strategy and negotiate their mineral requirements at a corporate level. The following recitals set out a brief description of some of the larger paper manufacturers.

(102) Stora Enso Group ("Stora Enso") is an integrated company active in paper, packaging and forest products. It is the leading producer of printing paper in the world. The company has an annual production capacity of approximately 16 million tonnes of paper and board. The company has over 30 mills producing paper in nine countries (Finland, Sweden, France, Belgium, The Netherlands, Germany, Canada, USA, China). In the EEA, the company has three on-site filling PCC plants.[101]

(103) International Paper ("IP") is the second largest producer of paper, packaging and wood products in the world with an annual production capacity of 17 millions tpy, including 2 million tpy in Europe. In printing papers, the company has a production

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94 Sources: Form CO, p, 39, submission by Omya of 4 August 2005; http://www.solvay.com.

95 Source: http://www.reverteminerals.com.

96 Source: Roskill PCC Report 2005, p. 122.

97 In 2003, there were 1,283 mills in Europe. Source: Roskill PCC Report 2005, p. 120.

98 Source: Roskill PCC Report 2005, p. 119-120.

99 Source: Roskill PCC Report 2005, p. 126.

100 Source: CEPI (Confederation of European Paper Industries) 2004 Annual Report.

101 Sources: Roskill PCC Report 2005, p. 126-128; Form CO, p. 42-43, submission by Omya of 4 August 2005.

capacity of 10 million tpy of which 1.5 million tpy in Europe. In the EEA, it has on-site filling PCC plants in France and Poland.[102]

(104) UPM-Kymmene Group ("UPM") is the third largest paper producer world-wide with paper and paperboard output of approximately 11 million tpy in 2004. The company focuses on magazine papers, newsprint, fine papers and specialty papers. UPM has 22 paper mills in eight countries (Finland, Austria, France, Germany, the United Kingdom, USA, Canada, China). The company has three on-site filling PCC plants in the EEA, in Finland, France and Germany.[103]

(105) SCA is a Swedish paper company supplying hygiene products, packaging solutions and publication papers. The company has a total capacity of 1.7 million tpy in publication papers. The paper mills are located in Austria, Sweden and the United Kingdom.[104]

(106) M-Real Corporation ("M-Real") is a one of Europe's leading suppliers of paperboard, coated and uncoated fine paper and coated magazine paper. The company has 20 production plants in the EEA: 14 paper mills, three board mills, two carton plants and one pulp mill.[105] The company has three on-site filling PCC plants in the EEA, in Finland, France, and Sweden.[106]

B. RELEVANT PRODUCT MARKETS

(107) As indicated in recital 19, the proposed transaction concerns the sector for production and supply of industrial minerals to the paper industry.[107] The Huber businesses to be acquired are active only in the supply of PCC to the paper industry. Omya on the other hand supplies a wide range of minerals to a range of industries.[108]

(108) The minerals supplied to the paper industry differ both in their technical characteristics and in their presentation. Minerals for the paper industry are ground more finely than for other industrial applications such as plastics and paints.[109] Furthermore, preparation of minerals for the paper industry, unlike those for other applications, usually involves a wet grinding process in order to achieve the small particle size required. Paper industry products are delivered to customers as slurries of varying concentrations. Therefore, the analysis below is restricted to industrial minerals for use in the paper industry.

(109) For filling applications, Omya takes the view[110] that the relevant product markets in this case are, firstly, the market for the operation of on-site PCC plants for filling

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102 Sources: Roskill PCC Report 2005, p. 128-129; Form CO, p. 43, submission by Omya of 4 August 2005.

103 Sources: Roskill PCC Report 2005, p. 129-130; Form CO, p. 43, submission by Omya of 4 August 2005.

104 Source: http://www.sca.se.

105 Source: http://www.m-real.com.

106 Source: Form CO, p. 43, submission by Omya of 4 August 2005.

107 Industrial minerals include, *inter alia*, calcium carbonates (ground calcium carbonate "GCC" and precipitated calcium carbonate "PCC"), kaolin (clay), talc, titanium dioxide, gypsum, bentonite, alumina trihydrate (ATH) and silicates.

108 Other industrial applications for pigments are found in plastics, paints, adhesives and sealants, rubber, pharmaceuticals, and food industries. Sources: *Fine-Ground and Precipitated Calcium Carbonate*, Chemical Economics Handbook, September 2003, p. 4; Roskill PCC Report 2005, p. 275-340.

109 Source: Roskill GCC Report 2005, p. 21, table 11.

110 Sources: Form CO, section 6.C, p. 28, submission by Omya of 4 August 2005.

applications and, secondly, the market for merchant supply of filling PCC or filling minerals. Omya considers the question whether merchant filling PCC forms part of a wider merchant filling minerals market (including filling PCC, filling GCC and filling kaolin) can be left open.

(110) For coating applications, Omya takes the view,[111] firstly, that PCC for filling applications and PCC for coating applications are not in the same product market, secondly, that there is a high degree of supply-side substitutability between coating PCC and coating blends and, thirdly, that it could be argued that some competition takes place at least between coating PCC and certain grades of coating GCC, such as engineered GCC. Omya considers that the question whether or not steep GCC and coating GCC/PCC blends forms part of a wider separate product market can be left open. Omya raises doubts with respect to the supply-side substitutability between GCC for filling applications and GCC for coating applications, but considers that this point can be left open.

(111) The following section analyses the various industrial minerals used in the paper industry for filling and coating applications.

1. Kaolin, talc, titanium dioxide and other minerals

1.1. Kaolin

(112) Kaolin was the mineral of choice when most paper was made using an acid based technology. Calcium carbonates are not generally used in an acid environment as they react with the acid and can no longer fulfil their intended roles. The industry has seen a trend away from kaolin towards carbonates over the last decade. This is recognised by Omya in their response to the Statement of Objections.[112] This trend has been induced by factors such as the demand for brighter paper, product developments in PCC, for example, enabling greater use of PCC in paper coating applications and production processes for mechanical printing papers and the increased recycling of paper which requires brighter pigments such as carbonates.[113]

(113) In its decision in the case *Imetal/English China Clays*[114], the Commission assessed the markets for kaolin and GCC in the paper industry and found it appropriate to consider kaolin as a separate market from GCC and, additionally, to further distinguish kaolin for filling and kaolin for coating purposes.[115] In the same decision, the Commission also found that kaolin offers certain specific advantages which are impossible to achieve using any substitute product. In particular, kaolin offers specific gloss, fibre coverage and printability qualities required by some paper grades that are not available from alternative pigments.[116]

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111 Sources: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, section III.B, p. 13-15.

112 Ibid.,

113 Source: Third party's submission received 23 August 2005, para. 5.7.

114 Commission decision in Case *IV/M.1381 – Imetal/English China Clays*, of 26 April 1999.

115 Source: Commission decision in Case *IV/M.1381 – Imetal/English China Clays*, of 26 April 1999, paras. 8-15, 48-49.

116 Source: Commission decision in Case *IV/M.1381 – Imetal/English China Clays*, of 26 April 1999, paras. 10-11.

(114) Omya takes the following views.[117] Firstly, filling kaolin "*is mostly used for super calendered paper [where filling PCC and filling GCC are viable alternatives] but not for uncoated woodfree paper [for which filling PCC and filling GCC are predominantly used]*."[118] Secondly, kaolin and GCC are generally considered to be substitutable for coating applications. Thirdly, kaolin, GCC and PCC are now increasingly being used in combination, that is to say, in blends, for coating purposes. Omya however considers that the precise scope of calcium carbonate coating market can be left open in this case.

(115) Omya's view that kaolin and GCC are generally considered to be substitutable for coating applications has to be rejected for the following reasons. Kaolin and the carbonates exhibit different properties and are used in a complementary manner in paper applications rather than as substitutes. For example, calcium carbonate produces a product with a "flat" finish so kaolin can be added as a glossing agent to improve the finish of the product.[119] Also, kaolin adds less brightness[120] to paper than calcium carbonates do. Moreover, in its response to the Statement of Objections, Omya quotes a third party's submission which describes coating recipes (i.e. blends of kaolin, GCC and PCC) as containing inputs, each of which plays a distinct complimentary role.[121]

(116) The Commission's market investigation confirmed that kaolin and calcium carbonates are mostly used in combination rather than in substitution one for another for both filling and coating applications.[122] This is especially true for super calendered paper for filling applications. According to Omya, "*due to the laminar form of the kaolin, it is not possible to totally replace it from the super calendered paper formulations in alkaline systems [which must comply with a certain degree of porosity…]. [Description of Omya's opinions on the substitutability between PCC and kaolin, and between GCC and kaolin in various applications.]*[*]"[123] These constraints limit the extent of substitution between kaolin and calcium carbonates. PCC and GCC are most likely to compete together to be blended with kaolin.

(117) In its website, Omya also points in the same direction where it states the following: "*Currently three different classes of minerals are used in paper filling and paper coating: Kaolin, calcium carbonate and talcum. Their functional properties are multiple. Physical shape, optical appearances and chemical behaviour differ between the classes*."[124]

(118) Furthermore, as regards the geographic market for kaolin, the scope of the market is wider. Kaolin is shipped dry and then made into a slurry before being used in the paper making process. Because it is shipped dry, it can be shipped over greater distances. Kaolin used in Europe is shipped from the United States. Omya is the agent

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117 Sources: Form CO, p. 26, submission by Omya of 4 August 2005; Response to the Statement of Objections of 2 May 2006, received 16 May 2006, section III.B, p. 15.

118 Source: Form CO, p. 26, submission by Omya of 4 August 2005.

119 Source: Roskill PCC Report 2005 p. 111.

120 Source: Roskill GCC Report 2005, p. 10, figure 3.

121 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 15.

122 The conclusion the Commission has arrived at is based on its assessment made on the third parties' responses to the Article 11 request of 10 August 2005, received on 19, 22, and 23 August 2005. This conclusion is also corroborated by Imerys' submission of 29 June 2006.

123 Source: Form CO, p. 33, submission by Omya of 4 August 2005.

124 Source: *"The contribution of Minerals in the Paper Value Creating Chain"*, Omya website: http://www.omya.com/lit/papier/e/pe1.pdf.

for Kaolin from Huber.[125] Huber ships its paper coating kaolin from [outside Europe]* to two Omya facilities in Germany for slurrying and onward distribution throughout Europe.[126]

(119) The Commission therefore does not consider kaolin and calcium carbonates to be in the same product market either for filling applications or for coating applications. In addition, Omya has no kaolin production of its own and acts as sales agent for Huber's kaolin products in Europe. Thus, the proposed transaction would not change the market situation as the parties' activities in relation to kaolin are already combined.

1.2. Talc

(120) Talc is used to improve the print quality of uncoated papers by reducing porosity but it has very different attributes from those of the calcium carbonates. A premium priced talc for the control of wood pitch is used to improve paper runability. However, it has significantly lower brightness and light scattering properties than calcium carbonates.

(121) The Commission's market investigation showed that kaolin is the closest substitute to talc.[127]

(122) The Commission therefore does not consider talc and the calcium carbonates to be in the same product market.

1.3. Titanium Dioxide

(123) Titanium dioxide offers high opacity, light scattering power and brightness but it costs several times as much as the calcium carbonates and is therefore not used in standard filling or coating applications. It is used in the production of small volume, high quality papers such as Bible paper.

(124) The Commission therefore does not consider titanium dioxide and the calcium carbonates to be in the same product market.

1.4. Others

(125) A number of other minerals are used for various small scale applications. These include gypsum, bentonite, alumina trihydrate (ATH) and silicates. These products are used marginally. All other minerals account for approximately 3% of pigment use in the paper industry.

(126) Furthermore, other minerals tend to be used for particular purposes which the bulk products, i.e. the calcium carbonates, kaolin and talc cannot meet. For instance, bentonite is used to improve drainage, flock formation, and fibre/filler retention.

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[125] Source: Article *"Filling the gap – A Review of European GCC"*, Industrial Minerals Magazine September 1999.

[126] Source: Article *"Omya affirms PCC commitment"*, Industrial Minerals Magazine March 2005.

[127] Sources: Third party's response to the Article 11 request of 10 August 2005, received 19 August 2005; Third party's response to the Article 11 request of 23 March 2006, received 5 April 2006 (following a response received 29 March 2006).

(127) The Commission therefore does not consider these other minerals and calcium carbonates to be in the same product market.

1.5. Conclusion

(128) The Commission considers that for the above mentioned reasons kaolin, talc, titanium dioxide and other minerals, as mentioned above, can, for the purposes of market definition, be distinguished from calcium carbonates for applications in the paper industry.

(129) In the light of the foregoing, the assessment of the proposed transaction focuses on the supply of calcium carbonates, that is to say, both PCC and GCC as stand-alone products or in blends, for filling and for coating applications in the paper industry.

2. Substitution patterns between calcium carbonates for coating and for filling applications

(130) In a previous decision relating to kaolin for filling and coating applications, the Commission assessed the markets for kaolin in the paper industry and found it appropriate to consider kaolin for filling applications and kaolin for coating applications as two separate product markets.[128] The main arguments for the distinction were, firstly, the existence of different grades, filling grades being "*a basic type of kaolin, which needs basic processing to be produced*" and coating grades being "*a much more value-added and refined product, for which further stages of processing are necessary*" and, secondly, the differences in price and cost of production, as well as trade pattern between products for each application.

(131) During the Commission's investigation, a competitor[129] has taken the view that all calcium carbonates for filling and coating applications belong to the same relevant product market. However, as will be explained in sections 2.1, 2.2 and 2.3 below, the Commission reached a different conclusion following an examination of demand and supply-side considerations.

2.1. Demand-side substitution between filling and coating calcium carbonates

(132) In the case of calcium carbonates, evidence from the market investigation shows that, from a demand-side perspective, there are significant limitations to the interchangeability between calcium carbonates for filling applications and calcium carbonates for coating applications.

(133) Because filling and coating applications do not serve the same purpose, filling and coating calcium carbonates do not have the same characteristics. According to Omya, "*[f]iller PCC and coating PCC have different specifications. Filler PCC (which is used to make paper bulkier) is a [10-30]*% suspension with a medium particle of […]* microns. Coating PCC, by contrast, (which is used to improve the paper surface) is a [50-80]*% suspension with a much smaller medium particle size (between […]* to […]* microns).*"[130]

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[128] Source: Commission decision in case *IV/M.1381 – Imetal/English China Clays*, of 26 April 1999, paras. 14-15.

[129] Source: Response to the Article 11 request of 1 September 2005, received 7 September 2005.

[130] Source: Response to question 13 of the Article 11 request of 20 October 2005, received 26 October 2005.

(134) Similarly, GCC for coating applications also has different characteristics from GCC for filling applications. According to Omya, "*the main difference [between filling GCC and coating GCC] is the fineness of the material, i.e. the surface structure. A finer structure is required for coater than for filling GCC.*"[131] This has been confirmed by the market investigation.[132] Thus, as summarized by a third party, "*coating grades and filling grades of calcium carbonate cannot normally be substituted from the demand-side perspective. Specifically, coating products are composed of smaller calcium carbonates particles, while filler grades contain larger calcium carbonate particles with a higher proportion of water.*"[133]

(135) The Commission's investigation further confirmed that GCC and PCC prices for filling and coating applications reflect the difference in usage. The price of calcium carbonates is significantly higher for coating applications than for filling applications. According to the shipment database collected by the Commission, the weighted average delivered price[134] of PCC for coating applications in the EEA is about EUR [175-195]* per dmt, whereas it is about EUR [115-135]* per dmt for filling applications. For GCC, the weighted average delivered price is around EUR [95-115]* per dmt for filling applications and EUR [115-135]* per dmt for coating applications in the EEA.

(136) Therefore, the Commission considers that the lack of demand-side substitutability between calcium carbonates for filling applications and calcium carbonate for coating applications points to separate markets for calcium carbonates for filling and coating purposes.

2.2. Supply-side substitution between GCC for filling and coating applications

(137) The Commission notice on the definition of the relevant market states[135] that "*[s]upply-side substitutability may also be taken into account when defining markets in those situations in which its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy.*"

(138) The Commission's market investigation showed that different calcium carbonate solutions are provided for filling applications and for coating applications, and the ability of suppliers to switch production between products for filling applications and products for coating applications is different for each solution.

(139) As regards GCC, it is "*mined as a stone (marble, limestone or chalk) and then crushed until the particle size is suitable for the relevant application. In this way, GCC is refined into a variety of grades. [...] The production processes of filler and coating GCC are broadly similar. However, as coating GCC is mostly finer than*

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131 Source: Response to question 8 of the Article 11 request of 20 October 2005, received 26 October 2005.

132 Sources: Response to the Article 11 request of 1 September 2005, received 14 September 2005 (following a submission received 7 September 2005); response to the Article 11 request of 10 August 2005, received 29 September 2005 (following a submission received 19 August 2005).

133 Sources: Response to question 5 of the Article 11 request of 10 August 2005, received 29 September 2005 (following a submission received 19 August 2005).

134 The weighted average delivered price per dry metric tonne of PCC for coating applications is obtained in three steps. First, for each shipment of coating PCC, its volume and its delivered price per dmt are multiplied when both are available. Second, all these products are summed. Third, this sum is divided by the sum of all volumes of coating PCC (for which both volume and delivered price are available).

135 OJ C 372, 9.12.1997, paragraph 20.

filling GCC, coating GCC undergoes a longer grinding process."[136] According to Omya, GCC production costs are approximately EUR […]* per tonne for filling applications, whereas it costs EUR […]* per tonne for coating applications.[137]

(140) The costs associated with switching supply between GCC filling and coating products may vary according to the customers' needs. According to Omya, "*in general the same production facility can be used for the production of filling GCC and coating GCC [… which] only differ in terms of the technical settings of the machine concerning the power of the machine, the speed of the slurry going through the machine and the mixing of additives.*"[138] For customers who are already supplied by a mineral plant, the sunk costs of the new adjustment of the machine are approximately EUR500 for each adjustment, and they can be recouped quickly.

(141) Nevertheless, in some cases, the costs for switching can be significantly higher, i.e. in the range EUR 20,000–50,000. According to Omya, "*these high switching costs occur with respect to the production of high-end coating products to satisfy specific customer needs, for example, as a result of a significant change in demand,*"[139] that is typically for steep coating GCC. Omya raises doubts about the magnitude of supply-substitutability between GCC for filling applications and GCC for coating applications, but considers that this point can be left open.[140]

(142) A third party confirms that a GCC supplier producing a commodity-grade of a filling GCC would already be able to produce basic coating grades but would require additional equipment, such as superior grinding equipment, in order to produce high end coating grades. In contrast, a supplier of high end coating grades is able to produce filling grade GCC.[141]

(143) In its analysis of the supply-side substitutability between filling and coating GCC, the Commission has to assess not only the technical costs incurred by suppliers wishing to switch, but also the opportunity cost suppliers face when they consider moving capacity away from one product to the other. For example, following a significant and non-transitory price increase for coating calcium carbonates, suppliers of filling GCC would have an incentive to switch filling GCC capacity to coating GCC production. Irrespective of whether or not there are some costs associated with such a switch of capacity, switching will take place only to the extent that the margin in the coating market is higher than in the filling market. A hypothetical monopolist in the coating market is thus constrained by supply-side substitution in its ability to profitably raise prices only up to the point where margins in the filling market realign with margins in the coating market. At this point, however, prices in the candidate relevant market may remain way above the relevant threshold (for example, 10%). In summary, the extent of the competitive constraint brought by the supply-side substitutability

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136 Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005 (general introduction part).

137 Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005, p. 9.

138 Source: Response to question 13 of the Article 11 request of 20 October 2005, received 26 October 2005.

139 Source: Response to question 13 of the Article 11 request of 20 October 2005, received 26 October 2005.

140 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, section III.B, p. 15.

141 Source: Response to the Article 11 request of 1 September 2005, received 14 September 2005 (following a submission received on 7 September 2005).

between filling GCC and coating GCC depends on the competitive constraints faced by suppliers on each of these markets.

(144) With regard to the proposed transaction, the Commission has to assess the horizontal effects of the transaction on both filling and coating applications. Therefore, the Commission cannot presume the extent, and thus the effects, of supply-side substitution between filling and coating GCC independently of the assessment of both filling and coating applications.

(145) Therefore, the Commission has not reached any conclusion as to the effects of supply-side substitutability between filling GCC and coating GCC in this section on relevant markets. Furthermore, the issue of whether GCC filling and GCC coating belong to the same market does not have any effect on the distinction between fillers and coaters, for the reasons explained at recital 234.

2.3. Supply-side substitution between PCC for filling and coating applications

(146) As regards PCC, there are, according to Omya, "*two ways of using PCC for coating purposes. The first application (which may be referred to as the "traditional approach") typically consists of replacing 100% of coating carbonates using PCC. The second application consists of mixing PCC with the other pigments including Kaolin and GCC which can be referred to as the "additive [or blend] approach". In such cases, PCC accounts for a maximum of [25-35]*% to [35-45]*% of the total coating pigment in the formulation.*"[142]

(147) The market investigation confirmed that, in general, the production and delivery of PCC for coating applications require a higher level of knowledge and know-how than PCC made for filling applications, which constitutes a barrier to switching from the production of filling PCC to the production of coating PCC for a supplier only active in the production of filling PCC.

(148) More precisely, "*[f]ollowing the reactor process, the precursor of the coating product is screened, as is the case with filling PCC, and then stored in tanks that feed the de-watering system. Coating PCC dewatering systems are typically made up of three steps, namely i) filtration to remove the majority of the water; ii) dispersion to re-slurry the filter cake; and iii) evaporation to remove the majority solids levels.*"[143] Omya notes that "*[t]he main difficulty in the production of any coating PCC by a satellite filling PCC plant lies in the de-watering process required to increase the volume content of PCC from [0-20]*% to as high as [60-80]*%*"[144] and it states that de-watering costs and associated technology[145] can be a barrier to switching. The existence of such barriers is confirmed by third parties.[146]

(149) Once a supplier has the knowledge and know-how, it still has to make significant investment to upgrade a plant producing filling PCC to allow for the production and delivery of coating PCC. Such additional investment varies, according to Omya, from

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142 Source: Response to a request of information of 8 March 2006, received 26 March 2006.

143 Source: Response to question II.1.iii of the Article 11 request of 30 March 2006, received 13 April 2006.

144 Source: Response to a request of information of 8 March 2006, received 26 March 2006.

145 Mainly technology associated with water removal and water treatment.

146 Sources: Response to request of information of 27 and 28 February 2006, received 19 April 2006 (following a response received 3 March 2006); response to Article 11 request of 4 April 2006, received 13 April 2006.

EUR [25-40]* million for merchant production facilities of 100,000 dmt of coating PCC capacity, to EUR [30-50]* million for an on-site production facility of a similar size.[147] As a consequence, there are significant barriers to switching for filling PCC plants not yet equipped to produce and deliver coating PCC.

(150) Finally, there are also limitations to the extent to which a coating PCC production plant can switch to the production of filling PCC. There is a significant price difference between coating PCC and filling PCC. The weighted average ex-works price[148] of coating PCC is, according to the shipment database compiled by the Commission, 45–55% higher than that of filling PCC. Given this significant price difference, and the necessary investment already incurred to produce coating PCC, a supplier is more likely to be reluctant to switch significant amounts of its PCC production capacity from coating PCC to filling PCC in production plants where both products can be produced.

(151) To summarise, when a supplier does not have the necessary knowledge and know-how to produce coating PCC, there are high barriers to switching from filling PCC to coating PCC. When a supplier does have the technology and practice, there remain significant costs associated with switching production for mineral plants that are not equipped with the required facilities. Finally, plants that are equipped to produce and deliver only coating PCC or both products also face barriers to switching.

(152) Therefore, the Commission considers that supply-side considerations regarding PCC indicate that filling PCC and coating PCC do not belong to the same product market.

2.4. Conclusion

(153) Three main elements have been assessed to delineate competitive constraints exerted between calcium carbonates for filling applications and calcium carbonates for coating applications. Firstly, calcium carbonates for coating and for filling applications are not substitutes from a customer's perspective. Secondly, the analysis of supply-side substitutability between GCC for coating and for filling applications is not conclusive at this stage. The issue of whether GCC filling and GCC coating belong to the same market does not affect the distinction between fillers and coaters, for the reasons explained at recital 234. Thirdly, there is no supply-side substitutability between PCC for filling and PCC for coating applications which, thus, do not belong to the same relevant market.

(154) Given the lack of demand-side substitution between filling and coating calcium carbonates, the following sections will address the question whether, from a customer's perspective, all filling calcium carbonates (filling PCC, filling GCC, and blends of filling PCC and GCC) belong to the same market, as well as whether all coating calcium carbonates (coating PCC, coating GCC, and blends of coating PCC and GCC) belong to another product market.

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147 Source: Response to question 13 of the Article 11 request of 20 October 2005, received 26 October 2005.

148 The term "ex-works" is part of a standard called Incoterms. Incoterms are internationally accepted commercial terms defining the respective roles of the buyer and seller in the arrangement of transportation and other responsibilities and clarify when the ownership of the merchandise takes place. "Ex-works" prices refer to the price that the supplier charges when it sells its products at the premises of its production plant, all other transportation costs and risks being assumed by the buyer.

3. Calcium carbonates for filling applications

(155) From the customers' point of view, calcium carbonates used for filling applications encompass filling GCC, with coarse and fine grades, and filling PCC, used either with or without filling GCC. The function of these calcium carbonates is to improve the paper's characteristics while decreasing the amount of the more expensive pulp used for paper making.

3.1. GCC, PCC and GCC/PCC blends for filling applications

3.1.1. GCC for filling applications

(156) As described in the introductory section III.A., the Commission found that different grades of GCC are used for filling applications, reflecting the particle size of the product and the raw material they are made from (that is to say, from lower-quality chalk-based GCC to higher-quality marble-based GCC).

(157) The market investigation has shown that there is no significant perceived difference in quality between suppliers producing filling GCC.

(158) According to one paper group, "*there is no significant difference in basic GCC grades [supplied by different suppliers]*."[149] Another paper group, among other paper groups, went along the same line, stating that "*all [GCC suppliers] can deliver technically good products*."[150]

(159) The market investigation has also shown that, in principle, switching from one filling GCC product to another does not require additional investment in equipment for the paper mill or for the paper machine.

3.1.2. PCC and GCC/PCC blends for filling applications

(160) The market investigation has shown that most filling PCC products are essentially commodity products, manufactured using widely known and common technology so that no supplier enjoys any particular competitive advantage in manufacturing standard filling PCC.

(161) The market investigation has then shown that, in principle, switching from one filling PCC product to another does not require additional investment in equipment for the paper mill or for the paper machine.

(162) Moreover, customers do not perceive any major differences in the quality of filling PCC from the various suppliers and there is no significant perceived difference in quality between suppliers producing filling PCC. For example, one major paper group "*use[s] SMI, Huber and Omya [filling] PCC any way successfully in [their] fine- and mechanical paper production.*"[151] Another major paper group, among other paper

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[149] Source: Third party's response to questions 31 and 32 of the Article 11 request of 26 October 2005, received 11 November 2005.

[150] Source: Third party's response to question 17 of the Article 11 request of 26 October 2005, received 14 November 2005.

[151] Source: Third party's response to questions 31 and 32 of the Article 11 request of 26 October 2005, received 11 November 2005.

groups, went along the same line, stating that there is "*no difference in the quality [of filling PCC supplied by different suppliers]*."[152]

(163) PCC and GCC can be blended together for filling applications. Between 2002 and 2004, Omya was the only supplier shipping blends identified by the Commission in the shipment database. The total tonnage of GCC/PCC blends represents a relatively small percentage of Omya's entire annual filler shipment, namely less than [0-10]* % of Omya's shipments in 2004 by volume or by value. Therefore, for the purpose of assessing the relevant product markets for filling applications, it is not necessary to conclude whether or not there are one or more separate markets for GCC/PCC blends used for filling applications in the paper industry.

3.1.3. Demand-side substitutability between calcium carbonates for filling applications

(164) Omya claims that filling PCC and filling GCC belong to two different relevant product markets, while some competitors have argued that the two filling calcium carbonates actually belong to the same relevant product market.

(165) In order to establish whether or not filling PCC and filling GCC exert any competitive constraints on each other, the Commission sent questionnaires to customers of all suppliers of calcium carbonates and conducted phone interviews as well as site visits.

(166) The market investigation provided contrasting evidence on the substitutability between PCC and GCC for paper filling applications. Although filling GCC and filling PCC generally have similar attributes relative to other pigments, the degree of perceived substitutability between filling PCC and filling GCC depends to a large extent upon the depth of experience of the paper mill, the type of paper produced and the type of machines used.

(167) Many customers view PCC and GCC as very similar products for paper production. For example, several paper mills have stated that PCC could be an alternative to GCC and vice versa. One major paper group, among other paper groups, stated that "*yes, all papers can be produced using PCC and GCC as a filler*".[153] Another major paper group also confirmed this view that "*for all paper grades we produce, PCC can be an alternative for GCC and visa versa*". Nevertheless, that group also stated that " *the quality of the paper will be influenced by such a changeover.*"[154]

(168) In evaluating the quality of various filling pigments, many customers consider PCC and GCC to be similar, even though some admit that there are some differences between the products. Some paper mills acknowledge that they would switch from one calcium carbonate to another should there be a significant and permanent price increase in respect of either calcium carbonate. However, there is also a general view that switching may not be possible in the case of certain paper machines. As summarized by one major paper group, "*in theory yes [PCC and GCC for filling*

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[152] Source: Third party's response to question 17 of the Article 11 request of 26 October 2005, received 14 November 2005.

[153] Source: Third party's response to question 17 of the Article 11 request of 26 October 2005, received 8 November 2005.

[154] Source: Third party's response to question 17 of the Article 11 request of 26 October 2005, received 24 November 2005.

applications can be used to produce a given type of paper,] but the practice says many time no".[155]

(169) So, switching from one PCC product to another or from one GCC product to another does not require, in principle, additional investment in equipment for the paper mill or for the paper machine. However, switching from one calcium carbonate to another would entail some costs. For example, it would require an alteration to the technical parameters of the production process as well as trial periods in order to evaluate the technical properties of the final paper product. As a result, a paper machine may have to stop production for one to several weeks in order to enable it to be adapted to the new pigment. In practice, these costs are difficult to assess, and vary from one paper machine to another, as they are highly dependant on the details of each calcium carbonates customer's paper making process.

(170) There is evidence of paper mills switching from filling GCC to filling PCC. A third party submission includes a number of examples of customers making such a change in the mid-1990s and also more recently.[156] Customers' replies to the Commission questionnaire also reveal additional switching from filling GCC to filling PCC. For example, one major paper group responded that several of its paper mills have switched from filling GCC to filling PCC. However, in its market investigation, the Commission has not found indications of customers switching from filling PCC to filling GCC. Because filling PCC was introduced after filling GCC in the paper industry in Europe, the trend has been to replace GCC with PCC for filling applications. This evidence suggests that the supply of filling PCC has exerted some competitive constraint on GCC suppliers.

(171) The Commission conducted an econometric study to estimate the substitution patterns between merchant filling GCC and merchant filling PCC products of the major producers of calcium carbonates in the EEA.[157] The results of this study, are consistent with the conclusions of the market investigation.

(172) Using shipment data for the year 2004, the Commission applied several variants of a discrete choice model assuming that the probability of a paper mill selecting a primary supplier of merchant filling calcium carbonates follows the logit formula.[158] The

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155 Source: Third party's response to question 17 of the Article 11 request of 26 October 2005, received 14 November 2005.

156 Source: Third party's submission received 16 February 2006.

157 The database contains shipment data gathered during the period 2002-2004, including the sales of 21 on-site mineral plants to their host paper mill as well as to remote customers, with their corresponding prices and details. On the one hand, the price of on-site delivery to the host paper mill is usually negotiated at the beginning of the contract negotiation. Annual price changes depend on a cost indexation formula, usually reflecting changes in the lime price, wages, energy cost and inflation. Thus, prices of on-site filling PCC shipments to host paper mills collected in the shipment database are more likely to reflect competitive forces present at the time when the contract is negotiated, and not necessarily at the time when the shipment occurs. Details on market conditions at the time when most of these contracts were signed are not in the database and the investigation did not convey sufficient information so as to provide a comprehensive understanding of alternative sources of supply at the time. On the other hand, very few on-site mineral plants have been constructed after 2000 (2 out of 19 active plants from 2002 to 2004, and 2 plants built during this period in the EEA and active after 2004). As a result of these two limitations, on-site PCC supply to host paper mills are not part of the econometric analysis which focuses on merchant filler calcium carbonates.

158 The Commission adopted a random utility model (RUM) to derive the probability that a customer will choose its primary supplier of filling calcium carbonate. Each customer selects a primary supplier of

discrete choice model enables the Commission to estimate the probability that a customer would select another mineral plant should its current supplier raise its price. This allows the Commission to identify the substitution patterns between the various producers of filling calcium carbonates for the paper industry.

(173) For each paper mill in the shipment database that used filling PCC or filling GCC in 2004, the Commission identified a set of realistic alternative mineral plants that could supply the paper mill's calcium carbonate requirement. The selection of this set was based on distances between each mineral plant and the paper mill locations, as discussed below in section III.C. on the relevant geographic markets.

(174) The results of the study are presented in Table 3.

Table 3. Weighted semi-elasticities with respect to filler price

1% price increase by:	Effect of the 1% price increase in the probability of selecting:				
	Omya GCC	Omya PCC	Huber PCC	Imerys GCC	SMI PCC
Omya GCC	**- 0.1948**	0.0225	0.0296	0.0630	0.0296
Omya PCC	0.0952	**- 0.1762**	0.0092	0.0296	0.0540
Huber PCC	0.0325	0.0505	**- 0.1090**	0.0422	0.0421
Imerys GCC	0.1304	0.0114	0.0046	**- 0.1867**	0.0390
SMI PCC	0.0599	0.0188	0.0115	0.0060	**- 0.1080**

Source: Commission's market investigation.

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filling calcium carbonate among a set of plants located within certain distances. These distances are in line with the distances set out in the relevant geographic markets section. The econometric model is an additional empirical tool used by the Commission to supplement the results of the market investigation. The model assumes that each customer will choose the plant that provides the highest utility. The utility that a paper mill derives from each alternative depends on the price of each realistic alternative, the distance between the paper mill and each alternative plant, a set of dummy variables that identify the raw material used if the shipment is related to filling GCC, a set of dummy variable that identify each supplier and an unobserved portion of utility. The specification of the utility function warrants further comments. First, ex-works prices, i.e. prices at the seller's premises, were observed in the original dataset only for actual transaction. The ex-works price of alternatives for which there is no observed transaction was predicted using the coefficient estimates of an ordinary least squares (OLS) regression of actual observed prices of filling GCC and filling PCC on customer's volume requirements, the type of calcium carbonate, the type of paper, and a set of dummy variables for each plant. The predicted prices are then added to the dataset. Second, because transportation costs were not available for all customers and transactions, distance is taken as a proxy for these costs. Finally, the unobserved components of utility are assumed to be independent and identically distributed according to a "type I extreme value" probability distribution function. In this case, the probability that a customer selects a particular alternative takes a logit probability formula. Because of the assumption of independence of the random terms, the logit model may produce unrealistic substitution patterns. That is, in the present case, should the price of filling PCC increase, the probability that a particular customer would choose another filling PCC plant or a filling GCC plant instead increases in equal proportion. The Commission uses instead a nested logit specification to relax this assumption, grouping all filling PCC alternatives and filling GCC alternatives separately. The coefficient estimates of the price variable and the parameters estimated for each nest are then used to compute the semi-elasticities. Further explanations regarding the econometric study have been provided to Omya on 27 June 2006.

(175) Table 3 sets out the change in the probability of selecting a supplier given a price increase of 1% by an existing supplier. The probability change is an average weighted by the quantity requirements of each customer supplied by the calcium carbonate provider imposing a 1% price increase. The probability change must be understood as being valid for customers who are currently supplied by the supplier in the leftmost column and who also have, in their set of realistic supply alternatives, a plant belonging to the alternative supplier identified in the respective column.

(176) The [diagonal] figures indicated in bold in Table 3 represent own weighted semi-elasticities and should be negative. As a supplier raises its price, the probability that its current customers stay with that same supplier logically declines.

(177) For example, the first cell indicates the change in the probability of customers selecting Omya for filling GCC following a 1% price increase of filling GCC sold by Omya. That is, for all filling GCC customers who are currently supplied by Omya, the probability that these customers would keep selecting Omya's filling GCC would decrease by 0.1948.

(178) These results indicate that filling PCC plants are most likely not as attractive as filling GCC plants for actual GCC customers. When all Omya's plants selling filling GCC increase their price, the probability that Omya's customers, on average, select an Imerys filling GCC plant increases by 0.0630. This result is provided in the first row and fourth column of the table shown above. This probability change is computed for Omya's filling GCC customers who have an Imerys filling GCC plant in their realistic choice set.[159] In the same row, the elasticity results show that the probability of Omya's existing filling GCC customers switching to Huber or SMI filling PCC following the same price increase, provided they have such an alternative in their choice set, is 0.0296. That probability of switching is less than half of that for Imerys filling GCC. The same pattern is observed for Imerys' filling GCC customers. If Imerys raises its filling GCC price, its customers are more likely to switch to Omya GCC than other PCC alternatives. The probability of selecting Omya GCC increases by 0.1304. Instead, when SMI is part of the realistic choice set, the probability that Imerys' customers would switch to SMI's filling PCC increases by 0.0390.

(179) Thus, the results of the econometric study suggest that it cannot be excluded that some PCC plants provide a realistic alternative for existing filling GCC customers, and therefore provide some competitive constraint to filling GCC suppliers, even though the main competitive constraint for existing filling GCC suppliers comes from alternative filling GCC suppliers.

(180) The results also shed some light on the substitution patterns for customers of filling PCC suppliers. Omya's GCC plants, which are the most available alternatives in customers' choice sets, appear to be the preferred alternative for Omya's and SMI's filling PCC customers instead of other PCC suppliers. But both Omya's and SMI's filling PCC customers still have, as a second best choice, another PCC supplying plant (SMI for Omya's filling PCC customers with increased probability of 0.0540 and Omya for SMI's customers, with increased probability of 0.0188). These results are

[159] The semi-elasticities presented are computed for all customers supplied by the supplier indicated in each row but that have as an alternative at least one plant from the supplier indicated in each column. It follows that because the semi-elasticities are weighted averaged over different subset of customers, the rows do not sum up to zero.

shown in the second and fifth rows of Table 3. For the customers of these two PCC suppliers, the results indicate that Omya's filling GCC plants represent a significant competitive constraint.

(181) Furthermore, in row 3, the results also indicate that for Huber's customers, GCC plants are also a likely alternative although in this case the most preferred alternative remains Omya's filling PCC. However, to explain the switching behaviour of actual Huber's filler PCC customers after a 1% price increase, a further explanation is required. The semi-elasticity of 0.0505 is a weighted average computed for all of Huber's filling PCC customers in the dataset who are located within the EEA and who have at least one Omya filling PCC plant in their realistic choice set. The market investigation has shown, firstly, that Huber's merchant filling PCC customers are located only in Finland and Sweden[160] and, secondly, that Imerys' plant at Husum, in Sweden, which could be argued to be a suitable alternative for some Finnish and Swedish PCC customers, has started activity later than 2004. The econometric estimation does not take into account this new entry in Sweden. As a consequence, the semi-elasticity result presented in the third row between Huber's and Omya's filling PCC, although valid for 2004, does not reflect present substitution patterns.

3.1.4. Conclusion

(182) To summarise, the market investigation revealed that because of their very similar attributes, many customers view filling PCC and filling GCC as being in principle substitutable, although the presence of a number of technical and economic obstacles may limit the customers' ability and incentives to substitute filling PCC for filling GCC. The evidence from the market investigation and from the econometric study shows that the supply of filling PCC exerts some competitive constraint on the supply of filling GCC and that the supply of filling GCC also constitutes a constraint on PCC.

3.2. Supply of PCC for filling applications

(183) Omya claims that the on-site supply of filling PCC constitutes a distinct market due to the lack of demand substitution with merchant filling PCC. The parties cite a list of necessary attributes that characterise on-site supply and paper mills for which on-site supply is technically and economically possible. These attributes are a long contract duration, technical requirements (e.g. access to suitable carbon dioxide), significant cost advantages, high volume of consumption, more consistent quality of the on-site product and security and flexibility of supply.[161]

(184) In assessing Omya's arguments, the Commission examined two categories of paper mills: firstly, paper mills which supply their filling PCC requirements on a merchant basis and secondly, paper mills which supply their filling PCC requirements with an on-site solution. Such a distinction is necessary because of the nature of on-site contracts. Taking these elements into consideration, the Commission first investigated whether on-site supply of filling PCC exerts a competitive constraint for the first category of paper mill. The Commission then considered whether merchant supply exerts a competitive constraint for the second category of paper mill.

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[160] Svetogorsk, a Russian paper mill located at the border with Finland, has been supplied several years by some Huber's plants in Finland.

[161] Source: Form CO, p. 29-30, submission by Omya of 4 August 2005; submission by Omya of 19 December 2005, "*An analysis of market definition in relation to the proposed Omya/Huber transaction*".

3.2.1. Characteristics of potential on-site customers for the supply of PCC for filling applications

(185) In its decisions in Case *M.3314 – Air Liquide/Messer Targets* and Case *M.1630 – Air Liquide/BOC,*[162] concerning on-site delivery of industrial gases, the Commission concluded that the on-site supply of industrial gases constituted a separate relevant product market. In those decisions, the conclusion was mainly driven by the clear segmentation of the supply alternatives (on-site supply, or tonnage supply, on the one hand and bulk supply and cylinder supply on the other hand) with respect to the customers' requirements, as volume was the most important dimension delineating sets of customers.

(186) In this case, the market investigation[163] yielded contrasting views with respect to Omya's claims. Firstly, on-site contracts are of a long duration, typically from seven to ten years in order to counterbalance the significant risk related to the up front customer-specific capital investment made by the on-site supplier. Paper mills which are unable to commit to long term contractual agreements and high volumes of consumption would generally not regard on-site supply as a viable option. Thus, paper mills with a low annual consumption of filler or which are not able to commit to long term contractual agreements and consumption volumes would not generally have the alternative of the on-site method of supply of filling PCC. The consequence of not being "on-siteable" is that their calcium carbonate choice set includes, *a priori*, merchant filling GCC and merchant filling PCC located within the corresponding relevant geographic market.

(187) Secondly, the market investigation revealed that not all host paper mills have the technical characteristics that are, according to Omya, *a priori* required to supply filling PCC on-site. For example, the absence of suitable carbon dioxide from an adjacent pulp mill has led to the use of liquid carbon dioxide.

(188) Thirdly, the market investigation confirmed the magnitude of transportation costs in the final price charged to the paper mills. On average, according to the shipment database compiled by the Commission, transportation adds [15-30]*% to the price of the merchant filling ex-works PCC. For coating GCC, transportation adds [30-45]*%, on average. Moreover, transportation costs represent more than half of ex-works prices for [0-15]*% of merchant filling PCC shipments and for [10-25]*% of coating GCC shipments.

(189) Fourthly, on-site supply's main cost advantages lie in the elimination of transportation costs and in economies of scale. As a result, the delivered price of on-site filling PCC should be lower than that of merchant filling PCC to reflect these gains. The market investigation revealed that, in 2004, volumes above 25,000 dmt per year were priced between EUR [60-140]* per dmt, whereas volumes below 25,000 dmt per year were priced between EUR [60-250]* per dmt. By comparison, merchant shipments above 25,000 dmt per year were priced between EUR [120-180]* per dmt, whereas volumes below 25,000 dmt per year were priced between EUR [100-400]* or even more expensive. Thus, volumes tend to have a more systematic effect on prices of on-site

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[162] Commission decision of 15 March 2004 in Case *M.3314 – Air Liquide/Messer Targets* and Commission decision of 18 January 2000 in Case *M.1630 – Air Liquide/BOC*.

[163] For reasons explained in the presentation of the econometric study, in a previous section, questions related to on-site supply of filling PCC has not been addressed by the econometric study.

supplies than on those of merchant supplies and economies of scales are more likely to materialize substantially for volumes above 25,000 dmt per year.

(190) The market investigation has shown that there are a number of large paper mills that are currently purchasing calcium carbonates on a merchant basis, which would most likely be, *prima facie*, "on-siteable". According to the shipment database, there are 5–10 paper mills with annual individual filling PCC shipments in the range of 20,000–56,000 dmt per year.

(191) To summarise, there are existing merchant customers for whom on-site supply solutions are technically and economically possible alternatives while for others, merchant supply is the only realistic alternative.

3.2.2. Competitive constraint exerted by on-site supply of PCC for filling applications

(192) The market investigation revealed that paper mills regularly evaluate their supply solutions for filler and that, during this process, they review all supply options. There are examples of negotiations for the provision of on-site filling PCC having been abandoned because merchant supply solutions turned out to be most cost effective for the paper mill. These examples confirm the view that paper mills' specificities, related to both their own characteristics and their merchant environment, are key in understanding the constraints on-site supply solutions exert on merchant supply solutions.

(193) Some paper mills are not technically suited for on-site supply of filling PCC and it is very likely that a small but significant non-transitory increase in the merchant filling PCC price will not make them change their supply method. In such circumstances, on-site filling PCC supply solutions are unlikely to exert a significant competitive constraint on merchant filling PCC supply solutions.

(194) Moreover, on-site suppliers will have to offer a competitive solution which is likely to depend in part on the transportation and the logistic costs incurred by the best alternative merchant solution. Because the best merchant alternative is specific to each paper mill, it is difficult to assess in a systematic way the competitive constraint exerted by on-site solutions.

(195) Nevertheless, it cannot be excluded that for some paper mills with large and foreseeable volumes, the availability of cost effective on-site solutions makes them switch to on-site supply following a small but significant non-transitory increase in the price of merchant supply solutions.

3.2.3. Competitive constraint exerted by merchant supply of PCC for filling applications

(196) The Commission investigated whether existing on-site filling PCC customers would consider switching to a merchant solution.

(197) Firstly, the Commission, during the market investigation, found contractual clauses in one on-site supply agreement that based interim price negotiations upon competing merchant minerals bringing better benefit to the host paper mill. Such clauses indicate

that merchant prices can exert some degree of competitive constraints on already agreed on-site prices.[164]

(198) Secondly, the market investigation has revealed that the size of the economies of scale involved is likely to limit the number of alternative merchant solutions. This is likely to be the case for paper mills with large filling PCC consumption volumes, for example. above 25,000 dmt.

(199) Price variations of most on-site supply contracts are only related to input costs. An arbitrary small but significant non-transitory price increase cannot be imposed by a hypothetical sole supplier during the on-site contract period. Thus, merchant supply alternatives can represent a potential competitive constraint not only at the time of choosing an on-site filling PCC supply solution, but they can also represent a potential competitive constraint at the end of an on-site contract.

(200) When the supply contract comes to an end, the paper mill has to decide on how to source its future calcium carbonate requirements. At that time, the paper mill has to choose between several alternatives. Firstly, the host paper mill may opt to extend the current agreement for the supply of filling PCC. Secondly, it may select another on-site supplier of filling PCC or, alternatively, buy or replace the plant itself. Thirdly, depending on the availability and opportunity of merchant solutions, it may turn to a merchant plant for its filling requirements using either PCC or GCC. Whether merchant supply is a viable alternative depends upon the specifics of each situation. Thus, the effect of a small but significant and non-transitory price increase of on-site filling PCC has, in theory, to be assessed on a case by case basis at the end of each contract.

(201) The market investigation has nevertheless revealed two common features of on-site supply contracts. Firstly, when the contract comes to an end, it is common knowledge between the PCC plant operator and the paper mill that most of the fixed costs have been written off, so that the average cost of producing filling PCC is expected to decline if input prices remain unchanged. Secondly, if an on-site contract is not renewed, the plant operator in principle has to remove the on-site facility at its own expense.

(202) Should a hypothetical monopolist of on-site filling PCC impose a small but significant and non-transitory price increase, it is more likely than not that the paper mill will be reluctant to abandon the on-site solution, especially when it benefits from significant economies of scale without constraining merchant solutions. However, the outcome of the negotiations for the renewal of an on-site solution would then depend on the specifics of each situation, and in particular the location of the next best merchant alternatives. As a result, it is difficult to establish in a systematic manner whether a merchant solution will successfully constrain the hypothetical monopolist.

3.2.4. Conclusion

(203) The market investigation has identified several sets of customers who are supplied with PCC for filling applications. In the first place, the Commission has identified two distinct groups of paper mills according to their current method of supply of filling

[164] This clause appeared in one PCC agreement on-site contract.

PCC: those which have an on-site filling plant, and those supplied on a merchant basis.

(204) On the one hand, paper mills supplied by an on-site filling PCC plant have already signalled their preference for this supply solution, meaning that the constraints associated with this type of contracts are more than offset by the benefits provided by economies of scale and/or transportation costs. Therefore, it is more likely than not that paper mills that are already supplied by an on-site filling PCC plant can be distinguished for the purpose of the market definition from other paper mills.

(205) On the other hand, the market investigation also revealed that merchant customers do not all have an effective on-site supply solution. Accordingly, merchant customers should be split into two sub-groups depending on whether they are "on-siteable" or not. The distinction between these two sub-groups is not clear-cut because the magnitude of the potential benefits of an on-site supply solution is likely to depend on both the paper mill's characteristics and the effective merchant alternatives to the on-site supply solution and, ideally, the competitive assessment

(206) For the purposes of the assessment of this transaction, however, it is not necessary reach a conclusion with respect to whether or not the on-site method of supply forms a distinct market as the proposed operation will not give rise to competition problems under any reasonable product market definition.

3.3. General conclusion on calcium carbonates for filling applications

(207) The investigation has shown that it is more likely than not that filling calcium carbonates, that is to say, filling PCC, filling GCC and blends of filling GCC/PCC, belong to the same relevant product market. For the purpose of the assessment of the proposed operation, however, it is not necessary to reach a conclusion with respect to whether or not the on-site and merchant methods of supply constitute separate markets. Under any reasonable product market definition, the proposed operation will not give rise to any competition concerns for filling applications.

4. Calcium carbonates for coating applications in the paper industry

(208) Calcium carbonates used for coating applications encompass coating GCC, with different grades including steep GCC, and coating PCC, used either with or without GCC coating grades. The function of these calcium carbonates is to improve the paper's characteristics, particularly the brightness and its receptivity to ink.

(209) The major producers of calcium carbonates have until now adopted different strategies to maintain or develop their positions in the coating market, where Omya supplies most paper mills' requirements in the EEA with coating GCC grades. Omya recently started to supply GCC/PCC blends from […]*. SMI has concentrated on supplying coating PCC marketed as a stand-alone product (the "traditional approach"). Imerys has developed coating PCC essentially for blends and recently won a major contract at Husum. Both Solvay and Schaefer Kalk also supply coating PCC. Huber has been developing coating PCC and for a time worked with […]* to develop blends. In 2004-2005, before the notification of the proposed transaction, Huber was in the last stages of developing coating PCC products to be used as an additive in GCC/PCC blends. Finally, Omya has also developed enhanced GCC called steep/engineered GCC.

4.1. GCC, PCC and GCC/PCC blends for coating applications

(210) Omya takes the view[165] that it could be argued that some competition takes place at least between coating PCC and certain grades of coating GCC, such as steep GCC. It considers, however, that the question whether or not steep GCC and coating GCC/PCC blends forms part of a wider separate product market can be left open.

4.1.1. GCC for coating applications

(211) The Commission found that a range of different grades of GCC are used for coating applications, reflecting the diversity of coated papers, including high quality top coatings at the higher end of the range and certain low quality pre-coating pigments at the lower end of the range. Accordingly, different grades of GCC are produced and marketed by suppliers.

(212) As already mentioned in the introduction to the relevant markets, section II.A., GCC is refined into a variety of grades (fine and coarse) and "*GCC coating pigments range between 50–100% of particles which are smaller than 2 µm (with pre-coating in the range of 50–75% and top coating in the range of 75–100%). As the amount of fine particles is increased, the paper will have a better gloss, therefore fine GCC leads to better paper gloss than coarse GCC.*"[166] A further development has been steep/engineered GCC which has similar characteristics to coating PCC.

(213) The market investigation showed that customers do not perceive major differences between products produced by different suppliers and that there are no major barriers or costs associated with switching production from one grade to another for most GCC grades. This is confirmed by evidence of switching between grades of GCC coating as well as between suppliers of GCC coating. This is also the view of Omya: "*Switching costs are low, in particular with regard to me-too products,*[167] *which represent more than 80% of the GCC products. Here, no trials are necessary, the customer just need to empty its tank and can fill in the me-too product.*"[168]

(214) According to the shipment database, the weighted average ex-works prices of coating GCC are EUR [75-100]* for coarse grades and EUR [90-115]* for fine grades. Fine grades are, on average, [25-40]*% more expensive than coarse grades. Nevertheless, prices are relatively different, for each grade, depending on the raw material they are produced from (i.e. chalk, limestone or marble). For example, when computed for identical raw material, weighted average ex-works prices of fine grades lie in the range EUR [75-125]*. Thus, there is a significant price difference between the two main grades of coating GCC, but there is no clear-cut segmentation of products with respect to price.

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165 Sources: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, section III.B, p. 13-15.

166 Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005 (general introduction part).

167 The term "me-too product" refers to "*products of different suppliers which are 1:1 exchangeable from a technical point of view.*" Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005, p. 16.

168 Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005, p. 16.

(215) Despite the price difference between coating GCC grades, the market investigation[169] showed that customers tend to view the different grades of coating GCC as partly substitutable from a demand-side perspective, even if they have different physical characteristics. Typically, in response to a small but significant non-transitory 5–10% price increase for coarse GCC, there are indications that customers of coarse GCC are more likely to switch first to fine GCC. There are also indications that a similar price increase for fine GCC is more likely to make customers of fine GCC switch first to PCC. Finally, in response to a small but significant non-transitory 5–10% price increase for steep GCC, customers of steep GCC are likely to switch to PCC or fine GCC.[170]

(216) Given these indications that the different grades of coating GCC are, at least to some extent, viewed as substitutes by paper mills, the Commission regards all coating grades of GCC, including steep GCC, as interchangeable or substitutable to some extent.

(217) Nevertheless, for the purpose of the assessment of this transaction it is not necessary to reach any conclusion with respect to whether or not there are distinct markets for the different grades of coating GCC, as Omya is the [main][*] coating GCC supplier for the affected customers identified in the assessment for coating applications.

4.1.2. PCC and GCC/PCC blends for coating applications

(218) The PCC used for coating is different in a number of respects from filling PCC, though from a supply-side point of view both can be made in the same reactors. Coating PCC is normally rhombohedral whereas filling PCC is usually scalenohedral in form. However, other morphologies are also used, depending on the targeted application. Furthermore, it is usually delivered in slurries containing over 70% dry material as opposed to 18–20% for filler. Coating PCC therefore requires an additional dewatering stage. As a consequence, the cost of producing coating PCC is significantly higher than filling PCC or GCC.

(219) Coating PCC offers some technical advantages, particularly increased brightness, opacity and gloss, close control of particle size distribution and specific morphology, over GCC and other materials such as kaolin, such benefits depending mainly on the morphology and particle size distribution of the PCC coating grade. PCC coating is used for the same purpose as GCC coating and allows papermakers to either improve their product or achieve cost savings. Typically, the introduction of coating PCC either replaces the coating GCC grades used before or allows for the use of lower quantities of cheaper GCC coating grades. A blend of PCC and GCC coating also tends to resolve some of the technical difficulties related to using coating PCC.

(220) Market participants confirm that coating blends, and in particular blends of coating GCC and coating PCC, are the best placed alternative to improve coating calcium carbonate performance in coating applications and that competition takes place at least between coating PCC and certain grades of GCC: "*the segment of so-called "engineered [or steep] GCC" is in direct competition with PCC due to the performance (opacity, coating holdout, brightness) in paper making.*"[171] Omya has a

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169 Source: Responses to question 20 of the Article 11 request of 5 August 2005.

170 Source: Responses to question 20 of the Article 11 request of 5 August 2005.

171 Source: Response to the Article 11 request of 10 August 2005, received 23 August 2005.

long-term R&D project on blending.[172] According to the shipment database, in 2004, Omya made limited shipments of coating PCC/GCC blends from […]*. Imerys' new on-site PCC plant at Husum (in Sweden) produces both filling and coating PCC. It will also supply coating PCC to be used in blends with GCC supplied from its Tunadal plant.

(221) Coating PCC is supplied to customers either blended with coating GCC or as a stand-alone product that is then mixed by the customer with other ingredients. The physical mixing is a low-tech, low-cost production step that can be carried out by either the pigment producers or the paper mills. The recipes for blending are handled with great confidentiality by the pigment producers and the customers. The Commission's investigation showed that in some cases, it was the pigment producer who marketed its product directly as a replacement to another pigment, thus having carried out the product development and product tests itself. In other cases, the paper mills have themselves carried out the necessary developments and tests either in cooperation with the pigment producer or alone.

4.1.3. Demand-side substitutability between calcium carbonates for coating applications

(222) Direct competition between coating steep GCC and coating PCC has been acknowledged during the market investigation by both suppliers and customers. Typically, in response to a small but significant non-transitory 5–10% price increase for steep GCC, consumers of steep GCC are likely to switch to PCC or fine GCC.[173]

(223) There is evidence of customers switching, both ways, between coating GCC and coating PCC. This suggests that coating PCC exerts some competitive constraint on coating GCC and that coating GCC exerts some competitive constraint on coating PCC. Third parties submitted the following recent examples:[174]

- In 1995, a paper mill in Finland switched from using coating GCC to using coating PCC;
- In around 2003, a paper producer in Finland switched from using coating GCC to using coating PCC;
- In 2004, a paper mill in Germany partially switched from using steep GCC in its coatings to coating PCC;
- In 2004, a paper mill in Finland switched from steep GCC supplied by Omya to a blend of PCC/GCC, where the PCC is now supplied by a competitor ;
- One third party understands that it is the current intention of a paper mill in the USA to partially replace its filling and coating GCC with PCC;

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[172] Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005, p. 25.

[173] Source: Responses to question 20 of the Article 11 request of 5 August 2005.

[174] Sources: Third party's submission, received 8 March 2006 (following a submission received 16 February 2006), section 2; Response to question I.1 of the Article 11 request of 4 April 2006, received 18 April 2006.

- In 2005, some Swedish plants agreed to switch from coating GCC supplied by Omya to a GCC/PCC coating blend supplied by a competitor;

- At the end of 2005, a competitor lost its pre-coat coating PCC business with a paper mill in Germany. The business was won by Omya, supplying GCC;

- In 2006, a competitor lost its topcoat PCC business at a paper mill in Germany. Prior to 2003, Omya supplied GCC to this paper mill, but then lost this customer to a competitor, supplying PCC. At the beginning of this year, Omya won back this customer supplying GCC. A third party believes that Omya has gained the volume by offering a substantial discount on steep GCC to replace the PCC;

- Recently, a paper mill in Finland (which produces paper board) has switched from using a competitor's coating PCC to GCC from Omya for the same application.

4.2. Supply of PCC for coating applications

(224) Coating PCC production plants can be distinguished into two groups along the same line as filling PCC production plants. Firstly, on-site plants produce coating PCC for their host paper mill and/or produce and ship coating PCC for other paper mills. Secondly, merchant plants, which are not attached to a host paper mill, produce and ship coating PCC to their customers.

(225) However, on-site PCC coating supply solutions appear less likely than filling PCC.

(226) Firstly, because of the higher solid content of coating PCC, it is likely to be shipped further than filling PCC. Such ability to ship further makes merchant plants more likely to be economically viable.

(227) Secondly, if GCC/PCC blends prove to be the product of the future, the amount of PCC required for coating will be less than when pure coating PCC was the customer's choice because blends contain between 20% and 40% of PCC. This implies that only very large requirements of GCC/PCC blends would sustain an on-site coating PCC plant. This is most likely to be the case for Husum, which used to buy more than [>50,000]* dmt of Omya's coating GCC in 2004, before selecting Imerys' on-site plant supply solution.

(228) Thirdly, even though a paper maker may opt for filling PCC with an on-site supply solution, this does not mean that it will also choose coating PCC. This will depend on the type of paper it produces.

(229) Therefore, the number of customers in the EEA (and in particular in Finland, Sweden, France and Austria) for which the supply of on-site coating PCC would be an economically viable option is likely to be rather small. Thus, coating PCC on-site supply solutions are more likely than not to exert limited competitive constraint on merchant solutions.

(230) In any event, given that customers which are likely to be supplied PCC by an on-site supply method are a small minority, it is not necessary for the assessment of the present transaction to reach a conclusion with respect to whether merchant and on-site supplies of PCC for coating constitute two distinct product markets.

4.3. Conclusion on calcium carbonates for coating applications

(231) Based on the above, the Commission regards all types of coating PCC and some grades of coating GCC to be interchangeable or substitutable. Moreover, given the indication that all grades of coating GCC are, to some extent, also interchangeable or substitutable, the Commission regards all coating calcium carbonates, (i.e. coating PCC and coating GCC, including steep GCC and blends of GCC and PCC) as interchangeable or substitutable to some extent.

(232) Therefore, the Commission will assess the impact of the present transaction on the market for the supply of calcium carbonates for coating applications in the paper industry.

(233) In their reply to the Statement of Objections and at the Hearing on 18 May 2006, Omya stated that were the Commission to assume supply-side substitutability between filling and coating GCC, the absence of assessment of demand-side substitutability between filling GCC and filling PCC was fatal for the Commission's substantive analysis of the competitive assessment on the coating applications. The argument was the following. Demand-side substitution between coating calcium carbonates together with supply-side substitution between coating and filling GCC should lead the Commission to define a relevant product market including coating calcium carbonates as well as filling GCC suppliers, and the corresponding capacity of production. Then, Omya continued to argue that if filling GCC and filling PCC are substitutes from the customers' perspective, then the relevant market should encompass all calcium carbonates for filling and coating applications.

(234) The Commission disagrees with the conclusion reached by Omya. Consider the existence of supply-side substitution between filling GCC and coating GCC. A hypothetical monopolist controlling the supply of both coating PCC and coating GCC products would not profitably raise coating prices, as independent filling GCC suppliers would consider switching some of their production capacity to sell coating GCC. Filling GCC supplying plants must then be included in the relevant market. However, a hypothetical monopolist controlling the supply of filling GCC, coating GCC and coating PCC may profitably increase the price of coating GCC without being constrained by the supply of filling PCC. The hypothetical monopolist has no incentive to switch production capacity from filling GCC to coating GCC. As a result the price of filling GCC remains unchanged, and no customers substitute filling GCC with filling PCC.

(235) Therefore, the Commission considers that the views expressed by Omya in this respect are not correct and that calcium carbonates for filling applications and calcium carbonates for coating applications do not belong to the same market.

C. RELEVANT GEOGRAPHIC MARKETS

(236) The Commission's notice on the definition of the relevant market states that "*the relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be*

distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas."[175]

(237) The market investigation has revealed that, from the perspective of the customer, i.e. paper mills, there are two main factors that primarily determine the choice of supplier of calcium carbonates: the effects of the proposed calcium carbonate on the quality of its final products and the calcium carbonate's delivered price given, *inter alia*, the transportation costs. In order to secure a commercial relationship, a producer must deliver its calcium carbonate to the customer's paper mill gate at a reasonable price relative to that of its competitors, and for a given quality level of the final product.

(238) The market investigation has shown that, when supplied on a merchant basis, PCC and GCC are bulky products with high transportation costs. For example, according to the shipment database,[176] transportation costs add, on average, [15-30]*% to the ex-works price of filling PCC and [30-45]*% for coating GCC.

(239) On-site supply solutions are located adjacent to their host paper mills and ship the mineral to the host paper mill via pipeline, at the lowest possible transportation cost. According to the shipment database, the weighted average (delivered) price[177] of on-site filling PCC is EUR [95-115]* per dmt, whereas the corresponding delivered price of merchant filling PCC is EUR [155-175]* per dmt. Merchant filling PCC is thus on average [45-55]*% more expensive than on-site filling PCC for the paper mill. The market investigation showed that customers do not seem to have strong preferences for one or another existing on-site filling PCC supplier in the EEA, despite some perceived differences between them. Furthermore, for paper mills that have the possibility to host an on-site filling PCC plant, the relevant geographic market may appear wider (at least EEA-wide) than for paper mills not having such possibility, as they can source filling PCC not only from merchant suppliers who are within the radius of realistic merchant supplies, but also from suppliers who can build an on-site PCC plant. However, for the reasons explained in recitals 206 and 230 above, it is not necessary for the assessment of the present transaction to come to a conclusion with respect to whether merchant and on-site supplies of PCC (for filling or coating applications) constitute distinct product (and therefore geographic) markets.

(240) Thus, the set of effective supplying alternatives for each customer is limited by two major factors: firstly, the magnitude of transportation costs from calcium carbonates production plants; secondly, the possibility of an on-site delivery solution. The remainder of this section studies the geographic scope of merchant supplies of calcium carbonates for filling applications and for coating applications, bearing in mind that the geographic scope of the market appears wider to customers who have the alternative of sourcing their requirements from both a hosted on-site plant and merchant plants, than to customers who do not have, for technical or economic reason, such an alternative.

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175 OJ C 372, 9.12.1997, paragraph 8.

176 The figures are based on shipments for which the Commission has details on both delivered prices and transportation costs, which represent almost 80% of all calcium carbonates shipments provided by the suppliers in response to a Commission's request for information.

177 The weighted average (delivered) price per dry metric tonne of on-site PCC for filling applications is computed in three steps. First, for each shipment of on-site filling PCC delivered to the host paper mill, its volume and its (delivered) price per dmt are multiplied when both are available. Second, all these products are summed. Third, this sum is divided by the sum of all volumes of on-site filling PCC shipped to host paper mills (for which both volume and delivered price are available).

1. Calcium carbonates for filling applications

(241) Omya has claimed that filling PCC produced by merchant plants can be transported economically over distances of [300-500]* km or more,[178] whereas filling PCC produced by on-site plants can be transported "over very short distances."[179] Omya has also claimed that filling GCC can be transported over distances of [300-500]* km by road and further by rail, barge and sea vessel.[180]

(242) The market investigation confirmed the presence of limitations in shipping filling PCC, regardless of whether it is produced by merchant or on-site plants.[181] Filling PCC is transported in a slurry form with high water content and this makes it expensive to ship. Secondly, PCC has a limited shelf life which restricts the duration of its transportation. Long travel times and storage can result in deterioration of the quality of the product as bacteriological growths may develop and sedimentation may occur. These effects can be counteracted by the addition of chemical biocides and dispersants which add to the costs.

(243) The market investigation also confirmed, however, that merchant filling PCC plants, which are dedicated to shipping calcium carbonates to remote customers, can ship further than on-site filling PCC plants because filling PCC generally has a higher solid content when it is produced in merchant plants than when it is produced in on-site plants. For a given dry metric tonne requirement, this means a saving on water transported and thus on transportation cost. Merchant PCC plants also often benefit from better location and logistics as opposed to on-site plants which are located next to the host paper mill they primarily supply and usually have to ship via truck to other customers.[182]

(244) With regard to GCC, the market investigation showed that, unlike PCC, GCC does not suffer from a limited shelf life and it can be transported over longer distances. In fact, most GCC grades are made from crushed and ground sedimentary and metamorphic rock[183] and do not result from a chemical process.

(245) Given the magnitude of transportation costs, production plants have a limited scope within which their calcium carbonate can be shipped whilst maintaining an attractive delivered price. Moreover, the market investigation has revealed that, given the importance of transportation costs and the location of GCC and PCC plants, paper mills cannot typically be supplied by many production plants.

(246) The market investigation confirmed that merchant transactions between suppliers and customers are governed by contracts of 1 to 3-years duration. The terms and conditions of each contract are negotiated between the mineral supplier and the paper company or the group to which it belongs and remain confidential. A producer will

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178 Source: Form CO, p. 29, section 1.2.3, submission by Omya of 4 August 2005.

179 Source: Form CO, p. 21, submission by Omya of 4 August 2005.

180 Source: Response to the Article 11 request of 30 September 2005, as clarified in the Article 11 decision of 11 October 2005, received 18 October 2005 (section 7.6, p. 12).

181 The term "merchant PCC" covers both PCC sold by a merchant plant to any paper mill as well as PCC sold from an on-site plant to customers other than the host paper mill. Source: Responses to question 34 of the Article 11 request of 5 August 2005.

182 Husum, despite being an on-site PCC plant, also benefit from extensive dewatering capabilities. As a consequence, it is likely that Husum can ship PCC further than other on-site plants.

183 Source: Roskill GCC Report 2005, p. 6.

negotiate with each customer on the pricing conditions, but generally the investigation confirms that there is no uniform pricing policy within a country or a region, that is paper mills located in the country or region do not pay the same price. Prices will depend not only on the costs of delivering the product and the cost of producing, but also the bargaining between customers and suppliers, which is determined in part by the ability of each customer to turn to a credible alternative for its mineral requirements.

(247) The conditions of competition may not be sufficiently homogeneous within a country for the Commission to determine that the national boundaries form a relevant geographic market. Let us assume, for example, that two paper mills are located in different areas, even in the same country. If, both can be supplied by exactly the same two PCC plants and two GCC plants, then the Commission understands that they are likely to belong to the same relevant geographic market. If, on the contrary, one of them can only be supplied by one of the two PCC plants, then the Commission understands that the two paper mills are likely to belong to two different relevant geographic markets because their sets of realistic supply alternatives are different.

(248) For the assessment of this transaction, the Commission therefore considers that the number of realistic alternatives each paper mill has, for each type of calcium carbonate, i.e. PCC and GCC, is likely to influence the conditions of competition. As described above, a production plant is likely to be considered as a realistic alternative for one paper mill depending on how much it costs to ship its products to this paper mill, for a given mean of transportation and for a given type of calcium carbonate.

(249) The market investigation has shown that three main elements are likely to affect the magnitude of transportation costs from one supplier to its customers: first, the means of transportation used to ship the mineral, second, distances between the production plant and the paper mill and, third, the percentage of water in the volume shipped for a given dry metric tonnage.

(250) In order to define the relevant geographic markets in this transaction, the Commission has carried out an analysis of these three proxies for transportation costs for each PCC and GCC production plants. More precisely, the Commission used the shipment database compiled during the investigation to analyse likely maximum distances shipped by each production plant (i.e. PCC or GCC), for type of production plant (i.e. on-site or merchant), for each mean of transportation (i.e. rail, road, ship, and a combination thereof) and, finally, the nature of the application (i.e. filling or coating). The analysis was twofold.

(251) Firstly, for the purpose of the assessment of this transaction, the Commission has set a "maximum reasonable distance" beyond which it is rather unlikely that any shipment will take place. That maximum distance is set so that it contains at least 80% of all observed shipments of the same type. The results of this analysis are presented in Table 4.[184]

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[184] These radiuses should be understood to be the more likely maximum distance a supplying plant can ship to supply a paper mill through a path that takes into account natural obstacles in transportation, such as mountains. Some radiuses are given as ranges instead of precise figures. This is related to the fact that the shipment database does not contain many instances using some shipment modes. The range given is such that the percentages of shipments travelling a distance below each of its bounds are the closest to 80%.

Table 4. Shipment distances (in km) below which production plants have supplied 80% of their filling calcium carbonates between 2002 and 2004

Shipment mode	Shipment of filling PCC from on-site plant	Shipment of filling PCC from merchant plant	Shipment of filling GCC
Rail	(almost nil)	[600-1,000]* km	[500-900]* km
Rail/Ship	(nil)	(nil)	[1,300-2,000]* km
Road	400 km	680 km	[400-500]* km
Road/Ship	(nil)	[1,000-1,500]* km	[900-1,300]* km
Ship	(nil)	[1,500-2,000]* km	[1,500-2,000]* km

Source: Commission's market investigation.

(252) For example, almost all merchant shipments supplied by on-site plants are transported by road. The statistical analysis of the database shows that 86% of all shipments are shipped up to 400 km. Thus, the Commission considers that, in the absence of further information, an on-site plant is able to ship by road merchant filling PCC to a paper mill located 400 km away.

(253) Some results in the table are not figures but ranges. This is related to the fact that, in some cases, there are few shipments in the database and, as a consequence, it is not possible to select one distance that represents a percentage close to 80%. For example, there are very few instances of filling GCC shipped by a combination of rail and ship: 63% of these shipments are below [1,300-1,700 km]* and 100% below [1,600-2,000 km]*. This explains the range.

(254) The analysis of the shipment database reveals that calcium carbonate production plants can ship significantly further than the corresponding distances indicated in Table 4. For example, [an]* on-site PCC plant ships filling PCC up to [600-700]* km by road, meaning that this plant exerts some competitive constraint further than 400 km, as indicated in Table 4.

(255) Secondly, as a result of this observation, the Commission investigated what were, in 2002, 2003 and 2004, the maximum distances shipped on a regular basis by each production plant, for each means of transportation, for filling PCC and filling GCC.

(256) The analysis of the shipment database reveals that there are examples of production plants which do not ship as far as the distances computed in Table 4. The fact that such plants did not sell calcium carbonates to customers far away does not mean they cannot do it but simply, for example, that other plants already provide some significant competitive constraints, or that there are no such remote customers. For these plants, the distances indicated in Table 4 are most likely good proxies of the geographic scope in which they exert some competitive constraint.

(257) The results of the analysis are presented in Table 5: experienced shipments are written in regular font and maximum reasonable distances are in italics. For presentation purposes, the table presents the results of the analysis only for production plants to which the competitive assessment refers.

Table 5. Shipment distances (in km) up to which production plants have supplied on a regular basis, between 2002 and 2004, or can supply, filling calcium carbonates

	Available mode of transportation				
	Rail	**Rail/Ship**	**Road**	**Road/Ship**	**Ship**
Huber					
Clairefontaine (PCC, France)	–	–	*400*	–	–
Imatra (PCC, Finland)	–	–	*400*	–	–
Kuusankoski (PCC, Finland)	–	–	[350-550]*	–	–
Nÿmolla (PCC, Sweden)	–	–	[550-750]*	–	–
Portucel (PCC, Portugal)	–	–	*400*	–	–
Veitsiluoto (PCC, Finland)	–	–	*400*	–	–
Imerys					
Husum (PCC, Sweden)	–	–	*no data*	*no data*	*no data*
Köping (GCC, Sweden)	–	–	*[400-500]**	–	–
Lixhe (GCC, Belgium)	–	–	[400-600]*	–	–
Mareuil (GCC, France)	–	–	[500-700]*	–	–
Tunadal (GCC, Sweden)	–	–	[450-650]*	–	–
Villers (GCC, France)	–	–	[500-700]*	–	–
Omya					
Burgberg (GCC, Germany)	*[500-900]**	–	[450-650]*	–	–
Emden (GCC, Germany)	–	–	[500-700]*	–	[1,500-1,900]*
Förby (GCC, Finland)	–	–	*[400-500]**	[900-1,300]*	–
Lappeenranta (GCC, Finland)	–	–	*[400-500]**	–	–
Moerdijk (PCC, the Netherlands)	–	–	*680*	[1,100-1,500]*	[1,600-2,000]*
Molde (GCC, Norway)	–	[1,700-2,100]*	[1,700-1,900]*	[1,400-1,800]*	[1,600-2,000]*
Persberg (GCC, Sweden)	–	–	*[400-500]**	–	–
Stevns (GCC, Denmark)	–	–	[1,300-1,500]*	*[900-1,300]**	[1,700-2,100]*
SMI					
Äänekoski (PCC, Finland)	–	–	*400*	–	–
Alizay (PCC, France)	–	–	*400*	–	–
Docelles (PCC, France)	–	–	*400*	–	–
Figueira da Foz (PCC, Portugal)	–	–	*400*	–	–
Hermalle (PCC, Belgium)	–	–	[1,2000-	–	–

Table 5. Shipment distances (in km) up to which production plants have supplied on a regular basis, between 2002 and 2004, or can supply, filling calcium carbonates

	Available mode of transportation				
	Rail	**Rail/Ship**	**Road**	**Road/Ship**	**Ship**
			1,400]*		
Lappeenranta (PCC, Finland)	–	–	*680*	–	–
Myllykoski (PCC, Finland)	–	–	*400*	–	–
Saillat (PCC, France)	–	–	*400*	–	–
Tervakoski (PCC, Finland)	[<200]*	–	*400*	–	–

Source: Commission's market investigation. Figures in italics represent the maximum reasonable distance under which 80% of all shipments are shipped for each transportation mode and plant type.

(258) Omya[185] as well as a third party[186] have argued that, in general, such a geographic market definition does not take into account the fact that most paper mills belong to paper groups that negotiate their calcium carbonates supply contracts at a corporate level. In such a case, suppliers do not appraise each merchant sale on a stand-alone basis, but rather as part of a global package negotiated with each paper group. In practice, this means that sales from some merchant plants could be contracted outside what could be identified as the normal geographic scope of these plants. Nevertheless, it must be recalled that the distances identified in Table 5 result from real sales, which reflect such global negotiations between suppliers and paper groups. Therefore, the Commission believes that distances computed in order to define the relevant geographic markets do take such possibility into account.

(259) The Commission considers that transportation distances for each calcium carbonate (as expressed in Table 5, that is to say for each production plant and each transportation mode) can be used as a proxy to determine whether or not each production plant belongs to the set of realistic supply alternatives for a paper mill. Then, the Commission considers that paper mills which have identical sets of realistic supply alternatives are likely to face homogeneous conditions of competition and, thus, are likely to belong to the same relevant geographic market.

(260) Given the specific circumstances of the present transaction, the use of market shares is neither a good proxy for existing market power nor for the change in market power that may result from the proposed transaction. Each customer situation is specific, and the ability of the merging parties to raise prices will, in particular, depend on the availability of filling pigments from other sufficiently close suppliers of calcium carbonates.

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185 Sources: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, section III.C.2, p. 16.

186 Source: Third party's submission received 8 March 2006 (following a submission received on 20 February 2006).

2. Calcium carbonates for coating applications

(261) *Mutatis mutandis*, merchant supply of calcium carbonates for coating applications shares the same features as fillers. Thus, both geographic market definitions follow the same logic. The market investigation showed that merchant sales of coating calcium carbonates occur in the vicinity of the production plants, and that location plays an essential role in determining the competitive constraint one production plant exerts on others for some customers. The Commission thus considers transportation distances as a proxy to determine whether or not each production plant belongs to the set of realistic supply alternatives for a paper mill. As for fillers, the distance shipped depends mainly on the nature of the calcium carbonate (PCC or GCC), the nature of the production plant (on-site or merchant) and the method of shipment that can be used by the production plant (road, rail, ship or a combination thereof).

(262) In the case of PCC for coating applications, the Commission was not able to properly infer a maximum reasonable transportation distances from the shipment database, as there are few such shipments.

(263) The market investigation revealed that coating PCC is usually produced with a higher percentage of solid content, that is to say less water, than filling PCC even when produced by a merchant plant. Thus the difference between shipment distances from on-site and merchant plant is most often not significant.

(264) Between 2002 and 2004, according to the shipment database, all economically viable shipments of coating PCC and of coating GCC/PCC blends provided to the Commission were made within 500 km by road. Although it cannot be excluded that merchant plants using trucks can deliver coating PCC to mills located farther than 500 km, a maximum distance of 500 km for shipping coating PCC by road appears to be a reasonable benchmark for the purpose of the geographic market definition.

(265) Coating GCC is transported either by truck or by sea vessel. The Commission has recorded hundreds of transactions which took place between 2002 and 2004 and which provide some useful information about distances and the mode of transportation. It must be noted that Imerys has no history of using sea vessels to ship coating GCC or GCC/PCC blends during this period. The maximum reasonable distances for coating GCC production plants are the following: [400-800]* km by rail; [1,700-2,100]* km by a combination of rail and ship; [400-500]* km by road; [1,000-1,400]* km by a combination of road and ship; and [2,700-3,100]* km by ship.

(266) Table 6 gives the distances from each production plant in the affected geographic markets identified in the competitive assessment for coating applications.

Table 6. Shipment distances (in km) up to which production plants have supplied on a regular basis, between 2002 and 2004, or can supply, coating calcium carbonates

	Available mode of transportation				
	Rail	**Rail/Ship**	**Road**	**Road/Ship**	**Ship**
Huber					
Kuusankoski (PCC, Finland)	–	–	*500*	–	–
Imerys					
Husum (PCC, Sweden)	–	–	*no data*	*no data*	*no data*
Köping (GCC, Sweden)	–	–	*[400-500]**	–	–
Tunadal (GCC, Sweden)	–	–	[450-650]*	–	–
Omya					
Förby (GCC, Finland)	–	–	*[400-500]**	–	–
Lappeenranta (GCC, Finland)	–	–	*[400-500]**	–	–
Molde (GCC, Norway)	[1,500-1,900]*	[1,700-2,100]*	[1,700-1,900]*	[2,200-2,600]*	[2,700-3,100]*
Persberg (GCC, Sweden)	[500-900]*	–	*[400-500]**	–	–
SMI					
Äänekoski (PCC, Finland)	–	–	*500*	–	–
Walsum (PCC, Germany)	–	–	*500*	–	–

Source: Commission's market investigation. Figures in italics are maximum reasonable transportation distances for coating GCC, and a reasonable benchmark for coating PCC.

IV. COMPETITIVE ASSESSMENT

(267) In point 110 of its decision pursuant to Article 6(1)(c) of the Merger Regulation the Commission concluded that,

> *"Consequently, the Commission has serious doubts as regards the compatibility of the concentration with the common market. It cannot at this stage be excluded that the concentration significantly impedes effective competition in the common market or in a substantial part of it, in particular as a result of: (i) the creation of a dominant position for Omya for filler PCC and filler GCC for paper industry in the EEA, (ii) the creation of a collective dominant position for Omya and SMI for filler PCC and coating PCC for paper industry in the EEA, or (iii) the creation or strengthening of a dominant position for Omya in carbonates for the paper industry in the EEA."*

(268) The subsequent investigation has determined that filling and coating carbonates fall into separate markets and respondents to the Commission's market investigation have expressed concerns that the proposed concentration will significantly impede competition in that it will eliminate Huber as an actual competitor in the supply of filling calcium carbonates and as a potential competitor in the supply of coating

calcium carbonates to the paper industry. As a result, Omya's position as the already dominant supplier of coating calcium carbonates would be strengthened.

(269) In view of these concerns, the Commission carried out a detailed assessment of the impact of the proposed transaction on the markets for filling calcium carbonates and for coating calcium carbonates. As will be explained, the proposed concentration raises competition concerns in the near future only in the market for calcium carbonates for coating applications for customers in the South of Finland.

A. Non-coordinated effects on the market for filling applications

1. Barriers to expansion

(270) The Commission's investigation has shown that barriers to the expansion of existing filling GCC and filling PCC production facilities are typically not significant. In other words, in the case of a non-temporary but significant increase in demand, suppliers of both GCC and PCC will not face significant obstacles to increasing their production capacity within a reasonable amount of time.

(271) Expanding the production of GCC depends firstly upon the availability of high quality raw materials. These raw materials (chalk, limestone, marble etc.) can be shipped over long distances to GCC production facilities, and at the present time major GCC producers (Omya and Imerys) do not face shortages of such raw materials. It is possible to ship marble chips from Turkey to Europe. Omya has access to raw materials throughout Europe.

(272) The production process of GCC is capital intensive, using heavy machinery that crushes and grinds the raw material into small particles. Increased capacity would require additional heavy machinery that in principle does not constitute large sunk costs. The grinding machines that produce GCC particles of different sizes are similar to those that are also used to make GCC for other sectors. As a result, machinery dedicated to the production of GCC for the paper industry may in principle be used to produce GCC for other purposes.

(273) Expanding an existing PCC production facility requires the installation of additional reactors, storage facilities and ancillary equipment. According to the results of the market investigation, such an expansion could, in principle be completed within nine to twelve months. Depending on the national environmental regulations of the country where the plant is located, the administrative hurdles to obtaining authorisation for the planned expansion may take several months.

(274) The market investigation has revealed that incremental expansion of on-site PCC production plants is affordable and is a reality. For example, one on-site PCC plant obtained regulatory approval to double its production capacity within two years. Capacities can be increased with respect to the flue gas, the PCC produced and the storage facilities which are used as a buffer to cater for any irregular consumption. Such expansion has involved re-cycling old tanks from closed plants.

(275) Access to raw materials for PCC is generally not considered to be an obstacle. Both lime and burnt lime are readily available. Operators of PCC plants may use their own lime or it may be shipped to them. The majority of plants use lime purchased from third parties which are encouraged to compete against each other thus helping to keep PCC raw material costs down. Omya's […]* plant in […]* is one of the few in Europe

that has its own source of lime.[187] The size of the Finnish paper industry means it is one of the largest consumers of paper pigments and coating minerals in the world. In Finland, PCC is mainly produced using quicklime derived from French and Norwegian limestone.[188] SMI has operated a PCC coating plant at Walsum, the burnt lime for which is brought in from sources in France and Germany which are under 300 km away. The finished product is a slurry containing high solid content that can be transported to customers by rail, road and water.[189] In Sweden, Imerys has signed a ten-year agreement for the supply of burnt lime to its Husum plant.[190]

(276) The Commission has identified several recent expansions of PCC plants. In 2005, a supplier expanded the capacity of several plants.[191] The reason for the increased capacity was a request by the host mill for increased production and off-site sales to a third party. [Details of Omya's future plans to increase/decrease production capacities in some of its plants][*].[192]

(277) The Commission has also identified several recent expansions of GCC plants. Between 2002 and 2005, Omya expanded the capacity of several plants. […][*].[193] During the same period, Imerys also expanded the capacity of many of its plants.[194] Between 2003 and 2004, Reverté significantly expanded the capacity of its plant.[195]

(278) It is concluded that barriers to the expansion of existing production plants of filling GCC and filling PCC are not significant. As a result, the presence of competing production facilities may provide sufficient constraint to the pricing of the merged entity.

2. Competition and non-coordinated effects

(279) As explained, the geographic market is smaller for customers which do not have the possibility to be supplied by on-site PCC plants. For these customers, transportation costs limit the delivery distances for both GCC and PCC. As a result, the Commission considers that each customer has a restricted set of realistic alternatives that consists of the industrial mineral plants located within a certain distance of a particular paper mill. These distances have been set out in the relevant geographic markets section. Because barriers to the expansion of existing plants are not significant, the location of each mineral plant is a key determining factor in the competitive analysis.

(280) The Commission considers that competitive pricing of GCC and PCC hinges upon the location of each customer's next best alternative. When the merging parties have competing plants with overlapping sales areas, the merger may cause prices to rise. That is, when one of the merging parties' customers' next best alternative is one of the

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187 Source: Roskill PCC Report 2005, p. 10.

188 Source: Roskill PCC Report 2005, p. 51.

189 Source: Roskill PCC Report 2005, p. 62.

190 Source: Roskill PCC Report 2005, p. 86.

191 Source: Third- party's response to the Article 11 request of 14 November 2005, submission received 21 November 2005.

192 Source: Submission by Omya of 28 November 2005.

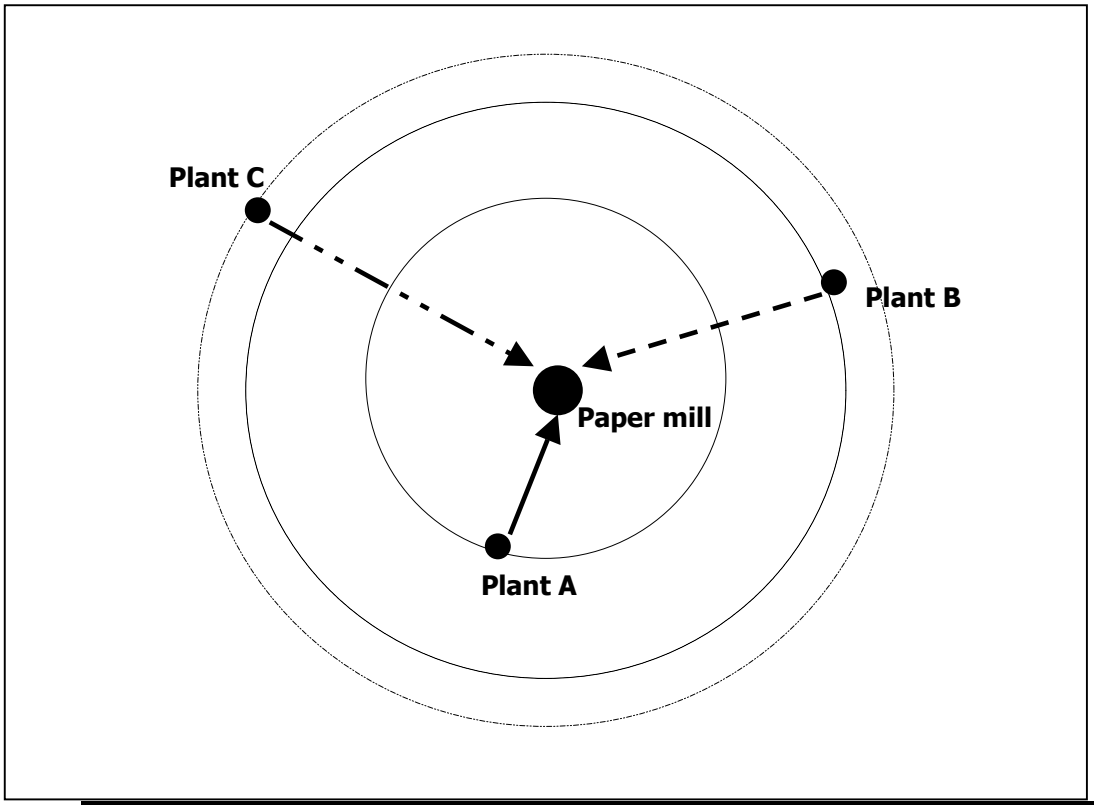
193 Source: Submission by Omya of 28 November 2005.

194 Source: Third party's response to the Article 11 request of 14 November 2005, received 21 November 2005.

195 Source: Third party's response to the Article 11 request of 14 November 2005, submission received 25 November 2005.

other merging parties' mineral plants, the merged entity will have the ability and the incentive to raise prices. However, when a rival plant to the merged entity is sufficiently close to the customer location, the presence of this alternative is likely to provide a sufficient competitive constraint such that the price effect will not materialise. The principles of this analysis are illustrated in Figure 1 below. The mineral plant A supplies the paper mill, but its pricing is constrained by the presence of two other mineral plants, B and C. In Figure 1, plant B represents the next best alternative for the paper mill. As a result, the price that plant A can charge to its customers depends on the location of B. The further away B is from the customer, the higher the transportation cost, and the higher the price that A can charge. When the owners of plants A and B merge, plant B will no longer provide a competitive constraint to plant A, and in the absence of other rival plants the price charged to the paper mill may rise. However, the presence of plant C may provide a sufficient competitive constraint so that the price of A will not significantly increase. Whether plant A can increase its price is likely to depend on the location of the rival plant C. When plant C is closer to the paper mill than B, then it is unlikely that A can impose a price increase on its customer. Plant C, instead of B, is likely to represent the next best alternative for the paper mill. However, when C is further away than B as represented in Figure 1, B may be the next best alternative. In this case, a merger between A and B will eliminate plant A's closest competitor, which will enable the merging parties to raise prices. The magnitude of the price increase is likely to depend on how much farther away C is from the paper mill than B. In principle, the lower the difference between the distance from C and B to the paper mill is, the smaller the price increase.

Figure 1.



(281) For the purposes of its competitive assessment, the Commission examines the location of Huber's and Omya's plants throughout the EEA. When Huber's and Omya's plants are part of a customer's realistic choice set, it cannot be excluded that prices for that

customer are likely to rise as a result of the proposed transaction. However, the presence of rival plants may be sufficient to countervail such a price increase.

(282) A third party submits that on-site PCC plant participation in the merchant market is conditional upon the authorization of the host mill. The Commission's investigation reveals that in principle, an on-site plant is primarily dedicated to supplying the host mill. However, the investigation shows that on-site plants have made off-site sales to third party customers, and it is rare for on-site operators to experience a refusal.

(283) A third party[196] also submits that corporate and group discount policies would distort the Commission's analysis and that focusing only upon the purchasing options available to any individual paper mill would lead to significantly flawed conclusions. The Commission understands that group or corporate discount policies may be an inducement for a customer to purchase from one plant instead of another, as the discount could make one of the realistic alternatives a more attractive option. The Commission has taken these considerations into account in its investigation. The data collected by the Commission represents shipments that include effects of any such discounting. Whereas some paper companies may elect to purchase their filler requirements because of global discounting, transportation costs still make it uneconomical for plants to ship filling calcium carbonates to customers located very far away. On the basis of actual shipments, the Commission has observed that shipments travel no further than certain distances.

(284) Furthermore, the discount policy may make an alternative plant more attractive to a customer than other plants located within a reasonable distance. However, these alternative plants still provide a realistic option to customers. The merger is then likely to raise competition concerns when Huber is the next best alternative to customers enticed by Omya's discount policy. The location of Huber's plant and that of rival firms still remain an important consideration to determine the extent of the unilateral effect post-merger.

(285) For the purpose of assessing the impact of the present transaction, the Commission has identified two broad categories of customers. The first category consists of paper mills that are currently supplied on a merchant basis. The second category is made up of the paper mills that are currently supplied on-site. The Commission will focus most of its competitive assessment on the actual (merchant and on-site) customers of the merging parties.

(286) For customers who are currently supplied by a merchant mineral plant, the competitive analysis may be further complicated by the fact that they could also have the possibility of hosting an on-site filling PCC plant. For this category of customers, the geographic market may appear wider, as they could source filling PCC not only from merchant suppliers who are within the radius of realistic merchant supplies, but also from suppliers who can build an on-site PCC plant.

(287) As will be apparent from the analysis below, however, the competitive assessment does not change irrespective of whether or not the Commission takes into account on-site filling PCC as another realistic alternative for this category of customers.

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[196] Source: Third party's submission received 8 March 2006 (following a submission received 20 February 2006).

(288) In the light of the above, the competitive assessment will not focus on market shares, because for filling calcium carbonates the use of market shares is neither a good proxy for assessing the existing market power nor for assessing the change of market power that would result from the proposed transaction. Each customer situation is specific, and the ability of the merging parties to raise prices will, in particular, depend on the availability of filler pigments from other suppliers of calcium carbonates.

(289) In the following recitals, the Commission will assess the effects of this transaction in the market for filling carbonates in the following Member States: Austria, Finland, France and Sweden.

3. Current merchant filling PCC customers of Omya

(290) In general, for customers that are supplied by merchant plants, the Commission considers that a mineral plant located within a certain distance of a paper mill constitutes a realistic option for either filling PCC or filling GCC. Because logistics are an important factor which determines the viability of each alternative, the Commission considers that there are restrictions on the transportation radiuses.

(291) According to the shipment data provided by the parties, between 2002 and 2004 Omya's merchant plant at Golling (in Austria) supplied customers located in [several Member States][*]. None of Huber's plants have supplied an off-site customer located in any of these Member States. Huber's plants in Finland, Portugal and Sweden are located too far away to supply customers in these Member States.

(292) However, Huber owns an on-site plant at Clairefontaine, in the East of France, which has a current capacity of [20,000-50,000][*] tonnes a year and is operating at [70-100][*]% utilisation rate for the sole purpose of its host paper mill. The question arises as to whether this Huber plant constitutes the next best alternative for some of these customers.

(293) The presence of SMI's plants in Belgium, France and Germany provides numerous realistic alternatives for filling PCC for the current customers of Omya's plant at Golling. In fact, Huber's plant at Clairefontaine is situated adjacent to SMI's plant at Docelles. Although this on-site SMI plant does not appear to sell filling PCC on a merchant basis, it has a merchant activity for coating PCC. SMI owns also an on-site plant at Saillat, in France, and a merchant plant at Hermalle, in Belgium. The latter can ship filling PCC over a very long distance by de-watering PCC up to 70% dry content. In terms of location, Huber does not appear to hold any competitive advantage over SMI for any customer. As a result, Huber does not provide any more competitive constraint than SMI to Omya's plant at Golling in the supply of filling PCC in [several Member States][*].

(294) According to the shipment data provided by the parties, between 2002 and 2004 Omya's merchant plant at Moerdijk (in the Netherlands) supplied customers located in[the United Kingdom, Scandinavia as well as other Western European countries][*]. However, Huber's plant at Clairefontaine is unlikely to provide a significant constraint on Omya for its customers in [these countries][*].

(295) However, the Huber on-site plant at Nymölla, in southern Sweden, has sold filling PCC to customers located in Sweden and could constitute an alternative for Omya's Moerdijk customers in Sweden. Between […][*] and […][*], Omya's Moerdijk plant supplied two M-Real paper mills at Husum and Wifstavarf. However, these two paper

mills no longer purchase filling PCC from Omya. In 2005, Imerys won a tender to operate an on-site plant that will not only supply the Husum paper mill but will also supply Wifstavarf. The proposed transaction will therefore have no significant impact for these customers.

(296) Omya's sales from its two on-site filling PCC plants, Szolnok in Hungary and Hausmening in Austria, are limited to customers in Hungary and Austria, where Huber does not provide a realistic alternative.

(297) In conclusion, the proposed transaction will not result in economic harm for current merchant filling PCC customers of Omya.

4. Current merchant filling PCC customers of Huber

(298) For current merchant filling PCC customers of Huber, the proposed transaction is also unlikely to result in economic harm. Between 2002 and 2004, Huber's merchant customers were located in Finland, Sweden, and Russia. The only Omya PCC plant that could supply Huber's customers in Sweden would be the Moerdijk plant. Because of their geographical locations and the consequent logistical hurdles, none of the other Omya PCC plants represent a viable alternative for Huber's customers in either Sweden or Finland. Omya also supplies GCC all over Europe, and some of its plants in Northern Europe could provide realistic filler alternatives for Huber's customers in Sweden and Finland. In examining this, the Commission has analysed the availability of filler pigments from other suppliers of calcium carbonates and has conducted an econometric study to determine the extent to which Omya's supply of GCC provides a competitive constraint upon Huber. The market investigation has shown that suppliers of filling PCC are viewed as interchangeable and that GCC and PCC are not perfect substitutes for one another. The extent of the substitution between these two products has been assessed with the support of an econometric study that enabled the Commission to determine whether the supply of GCC by Omya is sufficiently constraining Huber.

4.1. Customers located in Sweden

(299) Huber's on-site plant in Nymölla, Sweden, sends off-site shipments to a handful of customers located in that country. When an Omya filling PCC plant is the second best alternative, the merger could result in a significant price increase for these customers. Because Omya's plant at Moerdijk (near Rotterdam, in the Netherlands) can transport large quantities of filling PCC by ship over long distances ([1,200-2,000]* km), and has in the past supplied M-Real's paper mills at Husum and Wifstavarf (both in Sweden) for a number of years, it does appear that Omya constitutes a realistic alternative to Huber's Nymölla.

(300) However, in 2004, Imerys won a tender to establish an on-site PCC plant to supply M-Real's Swedish paper mills at Husum and Wifstavarf. In 2005, after winning the tender, Imerys entered the filling and coating PCC segment and will therefore provide an alternative to Huber's customers in Sweden and Finland. The plant's total capacity is […] tonnes, of which a significant proportion is filling PCC.[197] Although the plant is dedicated primarily to fulfilling the requirements of the two M-Real mills, the

[197] Source: Third party's response to the Article 11 request of 14 November 2005, received 21 November 2005.

Husum plant is expected to have a spare capacity of […] tonnes in 2006.[198] Despite the fact that Imerys would need the authorization of M-Real to sell PCC to third party customers, the Commission considers that Imerys will have the ability and incentives to sell filling PCC to other paper mills should the opportunity arise.[199] Moreover, Husum has high dewatering capabilities and it is likely that this plant can ship PCC further than other on-site plants. Because Husum is closer to Huber's Swedish customers than Moerdijk, it is more likely than not that it will become the best alternative for filling PCC for these customers.[200]

(301) The question remains whether GCC alternatives would be better placed in terms of locations than filling PCC plants. Omya could possibly supply Huber's Swedish customers from its Persberg plant in Sweden, but also from its Stevns plant in Denmark and from its Molde plant in Norway. In the latter two cases, GCC could be transported by sea or by road over fairly long distances. But rival Imerys also has two GCC plants in Sweden, at Köping and Tunadal. The Tunadal plant has expanded recently.[201] Although the expansion reflects additional volumes that Imerys has agreed to sell to M-Real at its Husum plant, free capacity appears to be available for merchant sales. The location of these two plants makes them possible alternatives for Huber's customers in Sweden. As a result, the presence of Imerys in Sweden provides a competitive constraint to the merged entity which is more likely to prevent a post-merger price increase.

4.2. Customers located in Finland

(302) Huber's on-site plants in Finland also supply merchant PCC to [some]* other Finnish paper mills: […]*. [Description of Huber's merchant customers and supplies in Finland.]* Huber's merchant sales of filling PCC represented [0-10]*% of total filling calcium carbonates (GCC and PCC) sold in Finland in 2004.

(303) The distances between Huber's […]* Finnish merchant customers, and Omya's Moerdijk plant in the Netherlands, are [1,700-2,100]* km and [1,800-2,200]* km.[202] Such distances are beyond the maximum distance established in the section on relevant geographic markets, i.e. [1,600-2,000]* km by ship, and, as a result, Moerdijk is not likely to be a realistic alternative for these […]* Huber filling PCC merchant customers.

(304) On the other hand, SMI has several filling PCC plants in Finland, which are close to some of Huber's filling PCC plants. SMI's plant at Lappeenranta is located 36 km away from Huber's plant at Imatra; and SMI's plant at Myllykoski is located 25 km away from Huber's plant at Kuusankoski. Both plants had some excess capacity in 2005 that would allow them to supply the merchant customers supplied by the neighbouring Huber plants**.** A third party claims that SMI's capacity at Lappeenranta is tied up. However, SMI would have an incentive to satisfy new customer requirements either by freeing up capacity at Lappeenranta for merchant use or by expanding its existing capacity. To summarise, for paper mills that can be supplied by

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198 Source: Third party's response to Article 11 request of 1 September 2005, received 7 September 2005, p. 7.

199 Source: Third party's submission received 14 December 2005.

200 A customer also mentioned the option it had to re-start its own on-site filling PCC plant.

201 Source: Roskill GCC Report 2005, p. 91.

202 Source: LECG Memorandum, received 28 November 2005.

Huber's plants at Imatra and Kuusankoski, Huber is not likely to hold any substantial advantage in terms of distance and logistics with respect to SMI's plants at Lappeenranta and Kuusankoski.

Finally, the only Finnish merchant customer supplied by [one Huber's plant]* is […]* paper mill at […]*, located [250-350]* km away. This paper mill is located [250-350]* km away from SMI's plant at Äänekoski, which therefore does not appear to hold any disadvantage with respect to Huber's plant. Moreover, Äänekoski appears to have the necessary spare capacity to supply at least part of [the customer mill's]* filling PCC requirements.[203]

(305) Huber's customers in Finland could also switch to Omya for the supply of GCC instead of filling PCC. Currently, [one paper mill]* also purchases GCC from Omya's plant in Stevns, in Denmark. In this case, GCC is shipped via sea and transported by trucks to the […]* plant. Omya also has two plants at Förby and at Lappeenranta which could constitute an alternative for Huber's customers. However, these two plants do not have a competitive advantage in terms of proximity over SMI's plants as Omya at Lappeenranta is [50-150]* km away from [another paper mill]* while Omya at Förby is [400-500]* km away. There are, in fact, four SMI plants producing PCC that could supply [this second paper mill]* and one of these facilities is at Lappeenranta. [The first paper mill]* could also turn to Omya's plant at Lappeenranta which is [400-500]* km away, but, again, Omya does not appear to have any competitive advantage in terms of logistics over SMI's plants, especially the one located at Äänekoski.

(306) Finally, evidence suggests that customers are less likely to switch from PCC to GCC for filler pigments than the other way round. Third party's submissions and customers' replies do not mention switching from filling PCC to filling GCC. The results of the econometric study show a similar pattern for Huber's merchant filling PCC customers. According to the estimation results presented in Table 3, Huber's merchant PCC customers are, on average, more likely to turn to SMI than to Omya GCC. The semi-elasticity of SMI with respect to Huber is 0.0421, while the semi-elasticity of Omya GCC with respect to Huber is lower, 0.0325. These results suggest that, from the perspective of Huber's customers, the competitive constraint exerted by merchant filling GCC suppliers is likely to be less than that exerted by merchant filling PCC suppliers to other merchant filling suppliers.

(307) It is therefore concluded that it is very unlikely that the current merchant filling PCC customers of Huber would be adversely affected by the proposed transaction.

5. Omya's GCC customers

(308) Omya's GCC customers located in Austria, France, Sweden and Finland could arguably turn to Huber's PCC plants for their mineral filler requirements. However, as will be explained below, because other realistic alternatives exist, it is unlikely that the removal of Huber as a competitor would significantly impede effective competition in these Member States.

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[203] Source: Third party's response to the Article 11 request of 14 November 2005, received 21 November 2005.

5.1. Customers located in France

(309) Omya supplies a large number of paper mills with filling GCC in France. The question arises as to whether Huber constitutes the next best alternative for these customers. Imerys has a GCC plant at Lixhe, in Belgium. Imerys also has two GCC plants located in France. Huber's only plant that can supply some customers in France is the on-site plant at Clairefontaine. As already explained in recital 294 for the case of Omya's PCC customers, Huber's plant at Clairefontaine does not hold any substantial competitive advantage in terms of distance and logistics with respect to SMI's on-site plant located 50 km away at Docelles.

5.2. Customers located in Austria

(310) Omya supplies a large number of paper mills with filling GCC in Austria. The question arises as to whether Huber constitutes the next best alternative for these customers. Huber's closest plant to Austria is that at Clairefontaine in the East of France. However, that plant does not appear to hold any competitive advantage over the SMI plants in Belgium, France and Germany. Imerys also has a GCC plant in Belgium and two in France that would constitute no less realistic alternatives for Omya GCC customers than Huber's plant at Clairefontaine.

5.3. Customers located in Sweden

(311) For Omya's GCC customers in Sweden, it is unlikely that Huber constitutes the next best alternative. Omya supplies several paper mills from its GCC plants at Molde (in Norway), Persberg (in Sweden), and Stevns (in Denmark). Huber's only plant that is likely to supply Swedish paper mills is located at Nymölla, in Sweden. The market investigation showed that this plant supplies filling PCC to [several]* merchant customers and could supply some of Omya's customers. [Details on capacity utilisation.]*

(312) However, Imerys' presence in Sweden also constitutes a realistic alternative to Omya for the provision of filling GCC. Imerys has a GCC plant in Köping, which is not located very far from the Persberg plant and could supply the same customers. Persberg is a [200,000-400,000]* dmt facility that was running at [70-100]*% utilisation rate in 2004. In addition, the recent expansion of Tunadal in the North of Sweden increases the immediate ability of Imerys to make merchant GCC sales in Sweden.[204]

(313) The results of the econometric study (see Table 3) tends to confirm the view that Huber is, on average, not the next best alternative for Omya's GCC customers. In fact, when an Imerys GCC plant is also part of the customer choice set, which is the case for Swedish customers, then Imerys constitutes a more likely alternative than Huber. This is all the more the case for customers supplied from Stevns, in Denmark, because the material supplied is [chalk-based GCC, i.e. a different]* quality of filling GCC,

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[204] A customer also mentioned the option it had to re-start its own on-site filling PCC plant. Omya also supplied another customer with a filling GCC/PCC blend. In its response to a request of 8 March 2006, received 30 March 2006, Omya states that this blend […]*.

which is the most distant substitute for filling PCC. Omya's GCC customers are more likely, on average to turn first to Imerys' plants for filling GCC.[205]

5.4. Customers located in Finland

(314) Using trucks, Omya currently supplies several customers from its Förby plant located in the South of Finland. [List of these customers.][*]

(315) From its GCC plant at Lappeenranta, located in the [South][*] part of Finland, Omya supplies [several][*] paper mills at […][*]. These paper mills are also located in the South of Finland.

(316) Omya has also supplied [a paper mill][*] from its Molde plant by truck over a very long distance. Omya [also supplies a paper mill][*] from […][*] Förby plant […][*]. This paper mill is also located near the South coast of Finland.

(317) For all of Omya's customers of GCC located in the South of Finland, Huber's PCC plants at Imatra and Kuusankoski do not appear to be a better alternative than the three SMI plants at Lappeenranta (36 km away from Imatra), Myllykoski (25 km away from Kuusankoski) and Äänekoski (a closer alternative for customers located in the centre of Finland). These plants have some capacity available so that they can exert at least the competitive constraint equivalent to that of Huber for Omya's filling GCC customers. As a result, should Omya's customers decide to switch from GCC to PCC, they could most likely turn to one of the SMI plants.

(318) Omya has, from its GCC plant at Stevns, in Denmark, also supplied [several paper mills][*]. Omya supplied these paper mills by ship from its GCC plant at Stevns, in Denmark. In each case, the distances covered were particularly long, [>1,300 km][*].[206]

(319) In the Northern part of Finland, Huber has a plant that is located at Kemi/Veitsiluoto. The paper mills mentioned in the previous recital could arguably turn to Kemi/Veitsiluoto should they wish to use filling PCC instead. However, Huber is not, on average, the next best alternative for Omya's GCC customers (see Table 3). In the case of Stevns, the material supplied is [chalk-based GCC, i.e. a different][*] quality of filling GCC, which is the most distant substitute for filling PCC. Moreover, the Imerys plant at Tunadal, that produces GCC, can also constitute a realistic alternative for these customers. Because Tunadal has access to some port facilities, and is closer to these paper mills, Imerys can also ship GCC to customers located in the North of Finland.

(320) Therefore, it is concluded that the proposed transaction does not raise competitive concerns for customers of filling calcium carbonates supplied with a merchant supply solution.

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[205] This semi-elasticity measure presented in Table 3 is an average computed only for Omya's GCC customers that have at least one Huber's plant as a realistic alternative in their choice set. This average is calculated for customers located not only in Sweden and Finland but also from customers located in France and Germany where Huber's plant at Clairefontaine could constitute an alternative.

[206] Distances submitted by Omya.

6. Current on-site customers of filling PCC

(321) As regards the current on-site customers of filling PCC and irrespective of whether their provider is Huber or Omya, the proposed transaction has no immediate effect. On-site filling PCC suppliers have, in general, exclusive long term contracts with the host paper mills lasting for between seven to ten years which guarantee a minimum volume for the PCC plant. A price formula with a base price negotiated at the beginning of each contract, determines the annual price change over the entire contract duration. This formula usually depends on cost factors such as the costs of limestone, electricity, wages and inflation. Such factors are not affected by the proposed transaction.

(322) At issue is whether the proposed transaction would have an adverse effect on these customers when the long term contract expires. In the EEA, Omya operates two on-site plants: one in Austria and one in Hungary. Huber operates six on-site plants, three in Finland, one in Sweden, one in Portugal and one in France. […]*. The investigation has shown that the proposed transaction is very unlikely to have a significant impact on the renewal of current on-site filling PCC contracts.

(323) At the renewal stage, it is common knowledge that most of the capital cost invested in setting-up the on-site facility has been written off. The actual plant operator has a cost advantage over alternative suppliers as it no longer incurs financing or depreciation charges. The customer is also aware of this advantage and expects a lower price. In case of disagreement, the host paper mill always has the option of launching a new tender to replace the existing on-site facility. Should a new on-site supplier be selected, the outgoing on-site operator is generally required under its contract to remove its production facility at its own expense. In this context, it is expected that the actual plant operator would pass on part of the reduction in costs to the host paper mill.

(324) The customer will obtain a price reduction only if, afterwards, the customer has a sufficient number of credible alternatives. The Commission investigation shows that, in theory, a host mill can purchase the on-site plant, rely on other on-site operators to take over the plant or build a new one or rely on the merchant segment for filling PCC or GCC.

(325) As discussed in the section on relevant product markets, on-site paper mills are less likely to switch to merchant supply of calcium carbonates at the end of their on-site contract than to continue to be supplied by an on-site solution. Host mills are most likely either to buy the plant or to rely on other on-site PCC suppliers. There was one bidding contest organised for the renewal of an on-site PCC plant in the EEA in 2002.[207] This concerned the SMI plant at Saillat, in France, where the host paper mill is owned by International Paper. SMI retained the right to operate that plant, but Imerys, Omya and Huber all submitted bids. It appears that the organisation of a bidding contest between on-site PCC suppliers is a real option for customers at the end of an on-site contract.

(326) Post-merger, the number of suppliers that have the ability to fulfil the requirements of paper mills for on-site filling PCC should be sufficient to enable customers to replace the existing plant operator. The market investigation has shown that customers do not

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[207] Source: Third party's submission received 27 February 2006.

perceive any major differences in the quality of filling PCC from the various suppliers. This is because most filling PCC products are essentially commodity products, manufactured using widely known and common technology so that no supplier enjoys any particular competitive advantage in manufacturing standard filling PCC.

(327) In principle, SMI, the world leader of PCC production, is able to provide similar products to those of the merging parties, and would have an incentive to do so should price rise above competitive levels. SMI operates 55 satellite plants and 5 merchant plants throughout the world.[208] In addition, Imerys, who is currently engaged in supplying filling PCC as well as a blend of GCC and PCC for coating at Husum, would not only be capable of bidding for new filling PCC on-site operation, but would also have an incentive to do so should prices rise above competitive levels. Although Imerys did not operate any on-site PCC plants in the EEA before 2005, it operates eight satellite plants and three merchant plants throughout the world.[209] Despite the fact that it may not have had an established reputation within the EEA as on-site PCC operator, in 2004 Imerys won a major bid to operate an on-site PCC facility at Husum, in Sweden. The new plant is scheduled to supply two M-Real paper mills at Husum and Wifstavarf. According to the shipment database for the year 2004, these two paper mills represented a significant share of M-Real's total requirements of filling PCC within the EEA. Imerys cannot be considered as a newcomer to the on-site filling PCC segment. Finally, Schaeferkalk and Solvay also operate on-site filling PCC for specialty papers within the EEA. Although these two firms have a limited presence in the market for filling minerals for the paper industry, they would also have an incentive to increase their participation should prices rise above competitive levels.

(328) Finally, paper mills located in regions where competing firms operate mineral plants within a reasonable distance have the option of purchasing their mineral requirements from these plants. Given the high volumes, these shipments could benefit from economies of scale in transportation, but they may also require a longer term deal with a merchant plant should the merchant plant need to expand its facilities to satisfy the requirement of the paper mill. Huber's on-site customers in Finland could also turn to SMI's merchant plants for their requirements of filling PCC, while the M-Real paper mill at Nymölla in Sweden now also has the option of contracting with Imerys at Husum. However, the Commission does not have to examine in detail each case as the number of potential suppliers of on-site filling PCC is sufficient to conclude that the proposed transaction is unlikely to generate a price increase.

(329) Therefore, it is concluded that the proposed transaction does not raise competitive concerns for customers of filling calcium carbonates supplied with an on-site supply solution.

7. Possible future on-site PCC plant customers

(330) For paper mills currently supplied by merchant PCC or GCC suppliers but for which the on-site supply of filling PCC provides a realistic alternative, the proposed transaction removes one supplier with a proven ability to manage and run projects for on-site supply of filling PCC in the EEA. Nevertheless, the investigation indicates that

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[208] Source: Roskill Report 2005.

[209] Source: Roskill Report 2005.

the proposed transaction would not lead to significant changes in prices for these customers.

(331) Six customers have replied to the Commission questionnaires regarding their tendering experience in selecting an on-site filling PCC operator. Recent bidding contests have included bids not only from Huber and Omya but also from SMI and Imerys. Although the number of tenders organised every year is quite small, only one or two a year, Huber has not won a single bidding contest within the EEA in the last few years. In fact, Huber did not win the bidding contest to operate the Kymi/Kuusankoski, Imatra and the Kemi/Veitsiluoto on-site plants in Finland. These plants were inherited in 1998 by Huber with the acquisition of Faxe Kalk. The last bid Huber won of all bidding contests organised worldwide was in Russia in 2003.[210]

(332) A close examination of recent bidding contests within the EEA shows that SMI, Imerys and Omya have recently won significant tenders.[211] SMI won a bid in France in 1998 in which Huber participated. In 1999, SMI was selected to operate an on-site PCC plant in Germany. There were no other bidders. SMI also won the 1999 tender to operate an on-site PCC plant in Portugal in competition with Huber and Omya. In the same year, Omya won the tender to operate an on-site plant in Hungary in competition with SMI, Imerys and Huber. In 2000, Omya won the right to operate an on-site plant in Austria where SMI also competed. In the same year, SMI won a tender in France in competition with Omya, Huber and Imerys. Finally, the tender for the Husum plant in 2004 was won by Imerys who competed against SMI, Omya and Huber.

(333) In addition, several tenders were organised for the right to operate on-site PCC plants for specialty paper. Huber participated unsuccessfully in two contests in Germany and France. Omya participated in the latter contest. Solvay was awarded the right to operate the on-site plant in France, and Schaefer Kalk won the bidding contest organised in Germany.

(334) Because the number of bidding contests is very small and they concern exclusive long term contracts for between seven to ten years for a substantial portion of the filler requirement of a customer (for example the Husum contest), participants have an incentive to bid aggressively. As the number of credible suppliers of on-site filling PCC solutions, that is Imerys, Omya, SMI and possibly Schaefer Kalk and Solvay, appears sufficient to exert competitive pressure on the actual supplier of these customers.

(335) Finally, coating PCC on-site solutions normally occur in conjunction with filling PCC. Because all suppliers also have coating PCC expertise, the number of credible suppliers of on-site PCC solutions appears sufficient to exert competitive pressure on the actual supplier of these customers.

(336) Therefore, it is concluded that the proposed transaction does not raise competitive concerns for the supply of calcium carbonates on-site solutions.

8. Conclusion

(337) In the light of the foregoing, it is concluded that the proposed transaction is very

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[210] […]*.

[211] Source: LECG Memorandum, received 25 November 2005.

unlikely to significantly impede competition as regards suppliers of filling GCC and filling PCC to paper mills in Austria, Finland, France and Sweden.

B. Non-coordinated effects on the market for coating applications

(338) In the notification of the proposed transaction on 4 August 2005, Omya maintained that the market for paper coating would not be affected by the transaction because Huber was currently not active in this market. However, in the market investigation most large Finnish customers and the two major competitors have made it clear that they consider Huber to be a potential competitor in the market for calcium carbonates used in paper coating applications, because, Huber is understood to be developing a suitable PCC for use in GCC/PCC coating blends and had made offers for PCC coating products.[212]

(339) As explained below, the market investigations confirmed, first of all, that Huber is a potential competitor on the market for calcium carbonates used for paper coating applications that, in the absence of the proposed transaction, would be very likely to grow into an effective competitive force. Secondly, the investigation confirmed that there is not a sufficient number of actual or potential competitors on that market to maintain sufficient competitive pressure on Omya's behaviour after the proposed transaction.[213]

1. Development of coating calcium carbonates

(340) Calcium carbonates for paper coating applications have undergone rapid growth in the paper industry over the last 35 years. In 1970 virtually no calcium carbonates were used in the paper industry as the paper making technologies of the time were predominantly acid based. By contrast, in 2004 the EEA paper industry was using 5.6 million tonnes of calcium carbonates for coating, almost four times the amount used for filling purposes (1.5 million tonnes).

(341) The first coating calcium carbonate applications were using GCC, which still remains the predominant mineral for coating purposes, representing some 97% of the total calcium carbonates used for coating in the EEA paper industry (volumes 2004). After the introduction of PCC for filling applications attempts were made to apply this technology to paper coating applications. Although coating PCC has been available in the EEA for over twelve years it is not yet very widely used. In 2004 the sales of coating PCC represented less than [0-10]*% of all the sales of calcium carbonates for coating applications in the paper industry in the EEA. This slower development has been due to its relatively high costs and early technological challenges that needed to be overcome. Notwithstanding this, in the USA PCC dominates paper coating as suitable GCC grades are not as readily available.

(342) Paper coatings are engineered to fulfil the specific requirements of many different applications and paper types. The Commission found that there is a spectrum of different quality grades of paper coatings, including high quality top coatings at the

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212 Source: Responses to the request of information of 10 April 2006, as summarized in document 9,895, p. 25,610 of the case file.

213 See also paragraph 60 of the Commission's "Guidelines on the assessment of horizontal mergers".

higher end of the spectrum and certain lower quality pre-coating pigments at the lower end of the spectrum. Prices of these coating grades and the input pigments vary accordingly.

(343) To achieve enhanced paper coating qualities at lower costs, mineral companies have followed two distinct paths. One is to imitate the particle size distribution of PCC (it is very narrow) by screening GCC carefully. The oversize faction is recycled into the grinding process, while the undersize faction has to be disposed of either by dumping it or by mixing it into a much larger quantity of normal GCC where it will change the size distribution to a limited extent.

(344) The second main alternative is to develop GCC/PCC blends. Such blends are either directly provided by the pigment producer (which is only possible for Omya and Imerys in Europe). Alternatively, it is the pigment producer or the customer, that is to say. the paper mill, which mixes the separate GCC and PCC inputs into a blend, together with other ingredients, such as kaolin clay etc. The actual physical mixing process is a low-tech, low-cost production step that can be carried out by either the pigment producers or the paper mills. The recipes for blending are handled with great confidentiality by the pigment producers and the customers. The Commission's investigation showed that, in some instances, it was the pigment producer who marketed its product directly as a replacement to another pigment, thus having carried out most of the product development itself. In other cases, the paper mills have carried out the necessary development and tests either in cooperation with the pigment producer or alone.[214]

(345) In 2004, EEA paper companies consumed approximately [5-6]* million tonnes of coating calcium carbonates of which about [10-20]*% ([500,000-1,500,000]* tonnes) was steep/engineered GCC and less than [0-10]*% ([over 100,000]* tonnes) was coating grade PCC. The [75-85]*% remainder was ordinary grade, that is to say less fine ground coating GCC.

(346) The market for GCC coating has experienced high rates of growth as GCC coating has a good brightness and performs well in terms of runnability on higher speed paper machines.[215] The amounts of PCC used in paper coating applications remain small compared to those of paper filling. However, it is estimated that paper coating grades of PCC will undergo strong growth.[216] Growth is in particular expected in the use of PCC and GCC in blends, especially for coating.[217] This market segment of GCC/PCC blends for paper coating applications can thus be considered still at an early stage of its market development.

2. Structure of supply in the EEA and Finland

(347) At present, Omya is the major supplier of coating calcium carbonates in the EEA and Finland. In addition to its dominant coating GCC offering, Omya has also developed a […]* blend outside Finland which it has […]*.[218] With respect to the proposed

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214 Source: Customers' response to a request of information of 21 April 2006.

215 Source: Roskill GCC Report 2005, p. 3.

216 Source: Roskill PCC Report 2005, p. 2.

217 Source: Roskill PCC Report 2005, p. 5.

218 Source: Omya's response to the Article 11 request of 10 April 2006, received 20 April 2006, Annexes 17 to 21.

transaction Omya has announced that it "*[…] believes in the combination of PCC with natural ground carbonates (GCC) in form of multidimensional pigments. These compositions will yield a wide range of products with novel attributes.*"[219]

(348) SMI is the current technology leader in the supply of coating grade PCC in Europe. It has focused on supplying coating PCC for top-coating applications, supplying a fine particle coating PCC product to Finnish customers most of whom use it in a blend with other pigments, such as clay, or with GCC.[220]

(349) Imerys has developed coating PCC mainly for GCC/PCC blends which, however, it has not been able to sell in Finland due to high transport and logistics costs. It has recently built an on-site plant in Husum, Sweden, providing both filling and coating grade PCC.

(350) Both Schaefer Kalk and Solvay supply coating PCC in relatively small quantities, but only in Germany and Austria. Provençale, another GCC producer, accounts for a very small amount of shipments from its plant at Espira de l'Agly, France, from which it supplies two small paper mills close by.

3. Omya is the dominant supplier of coating grade calcium carbonates for most customers in Europe and Finland

(351) In 2004, Omya supplied approximately [70-85]*% of all supplies of coating calcium carbonates to the paper industry in the EEA.[221]

(352) Omya owns or controls the access to a very large portion of the EEA reserves of white marble and high brightness limestone which is necessary for the production of coating grade GCC. Omya can supply paper mills all over the EEA from its marble based coating GCC mineral plants in Norway (Molde), Sweden (Persberg), Austria (Gummern), Italy (Avenza), Förby and Lappeenranta (Finland). Omya also supplies coating GCC based on bright limestone from plants in France (Orgon), Germany (Burgberg) and Spain (Arboc, Belchite, Purchena).

(353) The combined capacity of these mineral plants is much larger than those of its distant rival Imerys. Imerys is the only other supplier of GCC in the EEA. It has only limited access to suitable raw materials and in fact imports marble chips from as far afield as Malaysia. The difficulty of locating and securing sufficient supplies of suitable raw materials means that new entry in GCC is extremely unlikely in the EEA.

(354) Given its dominant position and its control on raw material supplies, Omya is an unavoidable trading partner for paper mills which need to purchase coating calcium carbonates in Europe, and in particular in Finland. In fact, Omya holds an uncontested position for most of these customers, which, consequently, cannot apply countervailing buyer power to constrain Omya's competitive behaviour. […]*.

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219 Sources: Press release of 4 February 2005 from Omya, ; Huber's reply of 25 April 2005 to the Commission information request of 31 March 2006, Annex 28.

220 One Finnish customer has reported, in its response to a request of information of 21 April 2006, received 25 April 2006, that it is planning to use a GCC/PCC blend and has used SMI's coating PCC in pilot trials. Customer's response to a request of information of 21 April 2006, received 25 April 2006.

221 Source: Form CO, p.52-53, Tables 6.7 and 6.8, submission by Omya of 4 August 2005.

(355) As far as customers in Finland are concerned, in 2004, Omya supplied coating GCC to Finnish paper mills from its two plants in the South of Finland, Lappeenranta and Förby, which are located very close to many paper mills. Because the coating requirements of Finnish paper makers exceed the current production of Förby and Lappeenranta, Omya also imports coating GCC from its plant at Molde, Norway, to supply [some]* Finnish paper mills located […]* in the North and in the South of Finland using sea vessels.

(356) A third party strongly argues that access to appropriate raw material deposits for GCC in Finland are limited in scope and Omya has secured all commercially viable deposits, which forms a barrier to entry for its competitors, placing its competitors at a disadvantage when it comes to supplying Finnish customers with GCC at a competitive price.[222] The market investigation confirmed that Omya exploits the two main commercially viable deposits in Finland, Lappeenranta and Förby, and that it has also secured control of two other deposits which are not yet exploited.[223] According to the Geological Survey of Finland (GSF), there are other deposits that are open for tender but they are of a smaller scale and of lower quality.[224] Therefore, production of GCC in Finland by a competitor of Omya is not likely.

(357) Furthermore, Imerys has no GCC production sites close to Finnish customers. It supplies coating GCC based on marble deposits mainly from four plants: Tunadal and Koping in Sweden, Lixhe in Belgium and Massa in Italy. Imerys also supplies limestone based coating GCC from two other plants: Mareuil, in France, and Avezza, in Italy. The difficulty of locating and securing sufficient supplies of suitable raw materials sufficiently close to customers implies that Imerys bears higher transportation and logistics costs than its rival Omya. The cost disadvantage handicaps Imerys and other potential entrants. This implies that new entry of coating GCC is extremely unlikely within the EEA, and in particular in the South of Finland.

(358) As far as steep GCC is concerned, potential suppliers would not only face the same difficulties in securing raw materials but would also have to deal with the additional problem of disposing of the unwanted fine residue. Omya has the possibility of disposing of this fine residue, which its competitors do not have. [Description of how Omya produces steep GCC]*. This gives Omya an advantage over actual or potential suppliers of steep GCC. Furthermore, the […]* micronisers available to Omya […]* capable of micronising material that is [very high]*% $CaCo_3$ […]* and can produce [a significant number of]* different grades of calcium carbonate if required.[225] In practice Omya is virtually the only company supplying steep GCC in the EEA. Imerys is the only other supplier but with negligible sales.

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222 Sources: Third party's submission "*Key issues*", received 8 March 2006 (following a submission received 27 February 2006), p.12-13 in particular; third party's submission "*New evidence and analytical commentary*", received 8 March 2006 (following a submission received 16 February 2006), p. 13; third party's response to the Article 11 request on "*Raw materials*" of 15 March 2006, received 5 April 2006; third party's submission, received 29 September 2006 (following a submission received 14 June 2005), p. 3-4, 8, 12, 14, 16; third party's response to the Article 11 request of 10 August 2005, received 23 August 2005 (following a response 19 August 2005), p. 48.

223 Source: Roskill GCC Report 2005 p. 52-54.

224 Source: GSF's response to the Article 11 request of 29 March 2006, received on 6 April 2006. See also third party's response to the Article 11 request on "*Raw materials*" of 15 March 2006, received 5 April 2006.

225 Source: Roskill GCC Report 2005, p. 83.

(359) For customers of coating calcium carbonates in the EEA, it is therefore unlikely that Omya's behaviour would be constrained by actual or potential suppliers of GCC including steep GCC. High logistics costs as well as the lack of free capacity of rival GCC mineral plants hamper their ability to compete for most of Omya's customers.

4. The use of coating grade PCC in paper coating applications

(360) Having established that GCC supplies are dominated by Omya and that entry barriers are high because of the difficult access to economical raw material supplies, the Commission assessed the extent to which coating grade PCC could constrain the supply of coating grade GCC. As explained in the section on market definition, coating grade PCC can be used for very similar purposes as coating grade GCC. It is a product at the higher end of the quality spectrum, superior to and usually more expensive to produce than standard coating GCC, but comparable in price and quality to high quality GCC, i.e. steep or engineered GCC. To date, coating grade PCC has mainly been used in top coating applications where the finer grades of PCC are used and can readily replace steep or engineered GCC. Unlike GCC, where the production of finer grades requires extra processing and thus engenders higher costs, producing the fine grades of PCC is the technologically proven concept and represents the most common use.[226] This is the reason why PCC has been little used in pre-coating applications where less fine and less expensive particles are sufficient.

(361) The supply of raw material for coating PCC and indeed for all PCC, lime or burnt lime, is not dominantly controlled by Omya in Europe or in Finland. PCC suppliers thus do not experience significant constraints on their ability to supply.

(362) SMI, which apart from Huber is the only other supplier of PCC in Finland, has been offering coating grade PCC for 12 years. Compared to all coating calcium carbonates (GCC and PCC) sold in Finland, SMI's sales represented less than [0-10]*% (2004 turnover figures). The coating grade PCC produced by SMI comes from its plant at Äänekoski, situated in the middle of Finland.[227] SMI has focused its production on the supply of fine particle coating PCC for use in top coating applications.[228] As confirmed by paper mills, the main reason for the limited use of coating grade PCC is its high price.

(363) Considering SMI's product offering[229] it is concluded that coating grade PCC can replace Omya's steep GCC in paper coating applications, in particular for coating product components at the higher end of the quality and price spectrum, such as steep GCC.

(364) In addition, coating grade PCC can also replace coating grade GCC when used in GCC/PCC blends. Such GCC/PCC blends seem promising to a number of customers as regards their quality/cost ratio. Different formulations are currently being studied in the market, with PCC contents of such GCC/PCC blends going up to 35%, which is the amount of coating grade GCC that is replaced. The Commission notes that in its reply to the Statement of Objections Omya did not raise any objections as regards the

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226 Source: UPM's response to the Article 11 request of 27 April 2006, received 28 April 2006.

227 SMI also produces smaller quantities in plants located at Kwidzyn, in Poland, and at Hermalle, in Belgium.

228 Source: Responses to the Article 11 request of 10 April 2006.

229 See also: http://www.mineralstech.com/specialty.html.

conclusion that the GCC/PCC blend replaces part of Omya's GCC. This replacement is also confirmed by UPM.[230]

(365) As pointed out, coating grade GCC/PCC blends are expected to experience significant growth in the future. The increased use of such PCC/GCC blends can thus be regarded as the most significant constraint on Omya's GCC coating which would be likely to constrain the commercial behaviour of Omya.

(366) Coating formulations or recipes are usually composed of a number of inputs which are usually not substituted one to one, but in variable formulations. Thus, the replacement of expensive components by PCC may engender a new formulation or recipe where significant parts of the GCC components are also replaced. Moreover, Huber was developing a novel formulation for use in pre-coating.[231]

(367) The Commission's investigation led to the conclusion that GCC/PCC blending technology requires a considerable amount of know-how and research and development efforts.[232] Firstly, the general feasibility of the blend (or additive) needs to be proven for the different PCC and GCC input products, in particular as regards the physical properties of the resulting paper coating, for example, gloss. Secondly, the success of a blend (or additive) depends on the production technology used for commercially viable, that is to say large, production volumes, and thus needs location-specific adaptation to the particular plant conditions where it is used by the customer paper mill. While the first type of R&D can be carried out by the coating pigment producer itself, the plant specific large-scale tests and trials have to be carried out in collaboration with a customer.

(368) GCC/PCC blends can be delivered in two ways. Companies that produce both products, such as Omya and Imerys can develop their own proprietary products. This option is not open to SMI and Huber who only produce PCC. In Finland SMI and Huber would either be dependent upon Omya or Imerys for the supply of the GCC blending component or could develop GCC/PCC blends in conjunction with paper makers who would directly procure the required GCC, for example as part of their company wide GCC purchasing practice.

(369) The increased use of such GCC/PCC blends by competitors of Omya could thus place a significant constraint on Omya's behaviour in the supply of coating grade GCC.

(370) As Huber has a history in the production of coating PCC and was developing GCC/PCC blends together with a major customer, the Commission assessed whether there was a significant likelihood that Huber would, in the absence of the proposed transaction, grow into an effective competitive force, which would be lost if the proposed transaction was implemented.

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[230] In its reply to the Commission's request for information of 27 April 2006, UPM states that "*[some of Omya's coating products would have been replaced by Huber's coating PCC]*[*]."

[231] UPM confirmed in its reply to a request for information of 27 April 2006 that "*[c]ommercial coating PCC is available in Finland, but it is mainly used in top-coating solutions*" while UPM was developing a pre-coating product: "*[o]ur aim is in the first place to use coating PCC in the pre-coating.*"

[232] Source: Omya's response to the Article 11 request of 10 April 2006, received 20 April 2006.

5. Huber's past involvement in coating PCC and coating GCC/PCC blends

(371) When Huber acquired the assets of Faxe Paper Pigments in October 1998, it acquired Faxe's global activities in coating PCC, which was a key driver of the operation. Huber and its predecessor commissioned four PCC plants which were designed fully or partially to produce coating PCC. According to Huber the operational results of these plants were not satisfactory and it withdrew from the production of coating PCC by dismantling the smallest plant in Portugal (1999/2000), selling two plants in the USA to Imerys (1999) and selling the remaining plant in Belgium to SMI (2002).[233]

(372) More specifically, as regards the Belgian plant, according to SMI, at the time of the sale, the Huber plant was equipped with the infrastructure necessary to support the development and manufacture of [10-30,000]* tonnes a year of coating grade PCC. Hermalle's existing ability to produce a substantial quantity of coating products as well as the possession of much of the infrastructure necessary to increase its coating output within a relatively short period of time [factored significantly into]* SMI's acquisition decision. This clearly shows that in 2002 Huber had already acquired the necessary know-how to produce coating grade PCC. SMI upgraded the plant and is still operating it with significantly increased PCC coating capacity.

(373) Therefore, Huber has been active in the production of coating grade PCC and GCC/PCC blends for paper coating applications in the past. Furthermore, in 2001, Huber began developing PCC solutions and entered into a general development agreement for PCC coating products with […]*. This co-operation was obviously aimed at developing GCC/PCC paper coating blends. […]*.[234]

6. Huber has developed the ability to enter the paper coating market with its coating PCC Additives technology

(374) More recently, Huber has been developing a "PCC Additives technology" and has had trials with the major Finnish paper companies.[235] According to Huber these activities have now stopped. Omya has argued that the discontinuation is proof of Huber's failure in this market. However, from the information gathered from the parties, competitors, and customers it becomes apparent that, in the absence of the concentration, Huber would be considered by all leading paper companies and competitors in Finland (except Omya) to be a viable potential supplier of coating grade PCC to be used for the production of GCC/PCC blends for paper coating.[236]

(375) When assessing the likelihood that Huber would grow into an effective competitive force, the Commission considered, in particular, the evidence concerning Huber's plans to enter the relevant market. The Commission assessed, in particular, the extent to which (1) Huber's PCC Additives technology would be ready for commercialisation, (2) Huber believed in the commercial viability of its proposition on a larger scale, and (3) Huber could make sufficient production capacity available to

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233 Source: Huber's response to the Article 11 request of 31 March 2006, received 5 April 2006, cover letter, p. 2, 3.

234 […]*.

235 […]*.

236 Source: Responses to the request of information of 10 April 2006, as summarized in document 9895, p. 25,610 of the case file.

enter the market. The Commission's analysis also considered Huber's sunk costs in entering the market for calcium coating carbonates.

(376) Huber has been developing its PCC coating GCC/PCC blends as an additives technology mainly in co-operation with UPM Kymi at Kuusankoski, whereby some coating grade PCC was mixed with coating grade GCC supplied by […]* to produce a pre-coating GCC/PCC blend.[237]

(377) On 20 November 2002, Huber made its first estimates of the financial investments needed to develop such a PCC coating technology on a commercial basis.[238] By 27 February 2003, Huber considered that the PCC Coating Additive project would be a way for Huber to grow and that developing this market would be an opportunity for Huber and an integral part of its strategy to expand its PCC business.[239] A preliminary launch plan was already agreed at that stage and the commercial reaction of Omya was strategically evaluated by Huber.

(378) At about the same time (February 2003), Huber filed patent applications for this PCC Additives coating technology.[240] An addendum of 30 June 2005 to the original patent report of 18 November 2003 registers the validation of two full scale trials that delivered the expected pigment performance.[241] It is important to note that Huber considered that such PCC Additives technology could be produced at any of its filling plants.[242] It is concluded that by November 2003, Huber already considered itself technically capable of producing PCC Additives coatings.

(379) This finding is confirmed by the fact that in February 2003 Huber also participated in the bidding to provide an on-site filling PCC and coating PCC production plant at Husum, Sweden, to supply the M-Real paper mill. In the bidding documents, Huber refers to its new PCC Additives technology and estimates a cost saving for coating pigments of up to [10-20]*%.[243] What is more, the bidding documents include a price quotation of […] per tonne of coating material. Huber did not win the bid.[244] The Commission considers that these facts demonstrate that Huber believes in the commercial viability of its PCC Additives coating proposition on a larger scale.

(380) Huber subsequently carried out final product development activities to move to production stage coating grade PCC Additives in its Finnish plant at Kuusankoski.[245] For this purpose, Huber carried out extensive trials with its customer UPM. These activities were suspended at the beginning of 2005, that is to say, around the time when takeover talks started with Omya. According to Omya and Huber, negotiations and offers between Huber and UPM have not led to any commercial contracts and the suspension of the development activity is due to the lack of commercial progress. However, minutes of a meeting between Huber and UPM of 25 February 2005 state

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237 Source: Omya's response to the Article 11 request of 10 April 2006, received 20 April 2006, Annex 17.

238 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 3.

239 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 29, 30.

240 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 30.

241 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 4.

242 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 30.

243 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 41.

244 According to a statement by Huber in the State-of-Play meeting of 31 March 2006, Huber may have not won the bid due to the unproven coating technology.

245 Source: Omya's response to the Article 11 request of 10 April 2006, received 20 April 2006, Annex 17.

that a "*final commercial agreement for implementation of Huber's coating PCC […] will have to await clarification of ownership of Huber's PCC business*",[246] that is to say, the outcome of the merger transaction under investigation.[247] From this and further information provided by the customer UPM to the Commission[248] it is obvious that Huber and UPM not only carried out product trials of Huber's coating PCC Additives at mill level, but that commercial negotiations were ongoing, including price quotations and target dates.

(381) These elements corroborate the conclusion that until takeover talks started with Omya, Huber had clearly pursued its plans to enter the Finnish market for coating grade calcium carbonates and had incurred considerable sunk costs in R&D and production tests to bring a coating grade calcium carbonate product to market. Huber and the customer each continued tests during 2005 and 2006,[249] which proves that Huber's PCC Additives technology was not abandoned for technical or commercial feasibility reasons.[250] Huber also pursued a parallel coating PCC Additives project with a customer in […]*.

(382) In its reply to the Commission's Statement of Objections, Omya indicates that additional steps would be required to make Huber's entry into the calcium carbonate market likely. In particular, Omya points to remaining technological barriers, remaining necessary investments in production, and outstanding commercial issues with UPM.

(383) As regards the technological barriers Omya underlines that full qualification at mill level would have required further tests which might have lasted for another six months.[251] In the Commission's view, however, a period of six months does not constitute a technological barrier to entry.

(384) As regards the remaining necessary investments, Omya and Huber have stated that outstanding investments in dewatering, dispersion and mixing, screening and storage technology for the full spare capacity of [40,000-70,000]* tpa at Kuusankoski would cost around EUR [3-7]* million and that the necessary time to recover the investments would be at least [4-7]* years, while the Kuusankoski on-site agreement comes to an end [before 2007-2010]*.[252] The Commission notes that the co-operation partner UPM has estimated much lower costs, thus substantially reducing the estimated depreciation

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246 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 27.

247 In its response to an information request of 27 April 2006, received 2 May 2006 (following a response received 28 April 2006), UPM stated: "*[t]he solution is technically ready. Testing has not been continued after Huber told their intention to sell their PCC business to Omya.*"

248 In its response to the request for information of 12 April 2004, received 20 April 2006 (following a response received 20 April , UPM stated: "*we got written commercial offers from Huber for coating PCC in June 2003 and in April 2004*).."

249 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006.

250 Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annexes 33, 34. A Huber internal memo of 16 January 2006 even notes that the meeting with the customer supplied to "*[…] [a]gree on the path forward in our joint coating project*". Source: Huber's response to the Article 11 request of 31 March 2006, received 25 April 2006, Annex 42.

251 Source: Omya's reply to the Statement of Objections, p. 25, 27. Huber's testimony in the Hearing on 18 May 2006.

252 Sources: Response to the Statement of Objections of 2 May 2006, received 16 May 2006; Statements of Huber during the Hearing on 18 May 2006.

time.[253] Considering that negotiations stopped in February 2005, in the absence of the merger, even considering a lead time of six months (as confirmed by Omya and Huber), the remaining contract length would have been almost [2-4.5]* years which might have been sufficient to warrant an agreement between the two sides and allow for an economical depreciation of the plant when considering possibly lower investment costs.[254] It is not excluded, therefore, that Huber and UPM would have reached an agreement. This is so, even without taking into account the economic advantage of higher capacity use for both sides, confirmed by Huber and UPM and Omya, which are expected to offset some of the investment costs.

(385) Omya has also argued that UPM would have refused to extend the on-site contract by [4-7]* years from [2007-2010]* until [2011-2016]*. The Commission believes that this is not proof that a more limited extension would not have been feasible. If investment costs had been correctly estimated at EUR [3-7]* million and the investment would be depreciated over [4-7]* years, and even if the two sides only reached an agreement today, the current on-site contract would only have to be extended until 2006 + [4-7]* years= [2010-2013]*, that is to say, for [<4]* years, and not until [2011-2016]*. The Commission has not found any evidence that a more limited extension of the contract, for example, by 2 or 3 years, would not have been in the economic interest of both parties. These findings are confirmed by internal documents of Huber reporting on the negotiations with UPM, where UPM agreed to the Huber rationale of having a long-term contract.[255] On the contrary, the economic incentives on both sides (as explained below) suggest the opposite. The Commission concludes that negotiations only failed because, pending the takeover talks, Huber was not willing to take any major investment decisions and UPM wanted to keep its flexibility until the ownership of Huber was clarified. The Commission finally notes that Huber rented the necessary equipment for the trials, which may indicate that it may not even be necessary to incur the entire upfront investment cost to start production as soon as possible.

(386) To enter the market for coating calcium carbonates, Huber needed to incur the costs of the R&D and the investment costs. From the information available to the Commission it appears that Huber had already incurred the majority of its R&D costs in its product development at the Kuusankoski site. At the Hearing on 18 May 2006, Huber maintained that it was unable to provide an estimate of the precise costs of the R&D at Kuusankoski but stated that it was about [20-40]*% of Huber's R&D resources which would represent less than […]* people. The Commission considers that such spending is not negligible. Additional parts of the overall development costs were covered by the on-site paper mill. As regards the status of the project, UPM has stated that the

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253 In its reply to the Commission's information request of 27 April 2006, UPM estimates that investment costs of […] would be needed to upgrade the plant for a coating capacity of […], which would translate into costs of […] for the full capacity. This lower figure would respectively reduce depreciation costs from 5 years to […] years.

254 Indeed, even as of today, July 2006, the on-site contract has a remaining duration of about [1-3.5]*years.

255 In Annex 24 (and Annex 27) to Huber's response to the Article 11 request of 31 March 2006, received 25 April, p.2 reports of a meeting where Huber and UPM: "*[UPM] also touched the Huber request for [4-7]* years extension of the on-site PCC contract from expiring earliest in [2007-2010]* to expiring earliest in [2011-2016]* with the message that this is too long a period… he could agree to the rationale of having long-term contract to secure the needed quantities, but contract length of [4-7]* year extension is too long.*"

GCC/PCC blend was technically ready.[256] The Commission concludes that most of the R&D costs had already been incurred by Huber.

(387) As regards the remaining investment costs to start production and enter the market for coating calcium carbonates in a relatively short period of time, the Commission considers it very likely that the remaining necessary sunk costs would be incurred because of the specific cost situation at the Kuusankoski plant. As Omya confirmed in its reply to the Statement of Objections, UPM has an economically "strong incentive"[257] to make Huber start production of coating PCC as early as possible at its site, given that at the moment UPM not only cannot benefit from quantity discounts from Huber, but it even has to pay compensation charges to Huber for the unused capacity of Huber's plant.[258] This, and the fact that UPM had already contractually agreed to the off-site supply by Huber from its Kuusankoski plant,[259] suggests that UPM also had an economic interest in the extra production and would thus, from an economic perspective, have contributed to the outstanding investment costs, irrespective of the possibility of renting equipment.

(388) In its reply to the Commission's Statement of Objections, Omya indicates that there were outstanding points in the commercial negotiations between Huber and UPM, as regards duration, price and whether Huber or UPM would mix the blend. As regards the price, the indicative prices which Huber submitted were not regarded as being competitive by UPM who had benchmarked Huber's prices against coating PCC in continental Europe through discussions with SMI. The Commission notes that pricing negotiations as well as technical trials were still ongoing, which is obvious from the fact that only "indicative prices" were exchanged.[260] As regards the mixing of the blends, this is a comparatively low tech process that can be done by either party and an outstanding agreement on this issue cannot be regarded as a significant obstacle to Huber's entry into the PCC coating market.

(389) In its replies to the Commission's market test of the commitments proposed by Omya to respond to the Commission's concerns about the proposed transaction, UPM has stated that it considers the transfer of the Kuusankoski plant to a suitable purchaser feasible and that it would resolve the competition concerns as regards the supply of coating carbonates to the paper industry in the South of Finland. Indeed, UPM stated that it considers, on the basis of the assets and technology to be divested, that the purchaser of the PCC plant and technology would be able to establish a position in the supply of coating PCC to customers in the South of Finland, subject to certain limitations. The Commission takes these replies as an indication that UPM is willing to co-operate with a suitable purchaser of the Kuusankoski PCC plant to supply coating PCC to customers in the South of Finland.

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256 Source: UPM's response of 2 May 2006 to the information request of 27th April 2006 states: "*The solution is technically ready. Testing has not been continued after Huber told their intention to sell their PCC business to Omya.*".

257 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 26.

258 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 26, footnote 90.

259 An Annex to the Kuusankoski site contract lists a number of companies to which Huber was allowed to supply, as long as this would not impact on the ongoing PCC supplies to UPM. In addition, Huber was supplying at least one of its other plants, […]*, with calcium carbonates.

260 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 28.

(390) Finally, the Commission also notes that the Huber Engineered Materials website lists at least two PCC products for coating, Hubercarb grades R and S. This is further evidence that the Huber group believes that it has all the technology and know-how necessary to successfully produce and market coating grade PCC.

(391) As another element of Huber's ability to enter the market for coating grade calcium carbonates, the Commission assessed Huber's unused capacity at its UPM on-site filling PCC plant which already supplies merchant filling PCC to third parties and would thus, from a logistics point of view, be able to supply significant volumes of coating grade PCC to plants other than the UPM on-site customer. The plant had a large spare capacity at the end of 2004, most of which was scheduled to be used for PCC coating purposes. Omya informed the Commission that Huber's spare capacity at Kuusankoski available for the production of coating PCC would be [40,000-70,000]* tpa which would represent more than [10-30]*% of the entire coating calcium carbonate market in the South of Finland.[261]

(392) Considering that this plant alone would be able to produce a large tonnage of coating PCC, the Commission considers that Huber would be able enter in a significant way into the market of coating grade calcium carbonates and therefore constrain Omya's competitive behaviour in the South of Finland.

(393) In its assessment of Huber's ability to enter the PCC coating market, the Commission also took into account statements by the seven biggest European and Finnish papermaker customers,[262] according to which, in the absence of the concentration Huber would constitute a credible supplier for coating grade PCC or GCC/PCC blends. The customer […]* stated that "*based on [its]* laboratory work with Huber, [it]* is confident that they have the competence and ability to meet its requirements.*"[263]

(394) It is concluded that prior to engaging in merger talks with Omya, Huber was planning to enter the paper coating market in a significant way and would have been able to do so with its coating PCC Additives technology in a timely manner, that is to say in six months or less.

7. Kuusankoski will be a credible alternative for many Finnish customers

(395) Huber has researched, developed, and tested its PCC coating additive at its plant at Kuusankoski where its on-site filling PCC plant supplies two paper-machines of UPM-Kymmene. The development of the coating product with the cooperation of UPM, the largest European paper maker, could persuade UPM, which is currently supplied [with]* coating GCC, to purchase Huber's new product for its paper production at Kuusankoski. Indeed, under the current contract it is likely that both partners would have an economic incentive to carry out the remaining investment required to upgrade the facility and use the spare capacity in order to achieve lower unit costs for the supply of Huber's on-site PCC, provided that a minimum length of contract could be agreed upon.

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261 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 29.

262 Source: Responses to the Article 11 request of 10 April 2006, including UPM Kymmene, Myllykoski, and SCA Munksund.

263 Source: [Customer's]* response to the Article 11 request of 14 March 2006. […]*.

(396) The location of the Kuusankoski plant would also enable Huber to supply a number of [other]* customers located in the South of Finland. These customers, who currently source their coating calcium carbonate supply from […]*, may consider obtaining at least part of their supply from Huber's Kuusankoski plant.

(397) Considering the location of the Kuusankoski plant and given the definition of the relevant market (in particular its geographic scope), Huber's plant at Kuusankoski is unlikely to be able to supply customers which are located in the North of Finland.

(398) In terms of logistics the Kuusankoski site would thus compete with Omya's GCC sites at Lappeenranta and Förby. Kuusankoski is 94 km away by road from Lappeenranta and 281 km from Förby. Table 7 presents a list of seven customers for which Huber's plant at Kuusankoski is the next best alternative in terms of location to Omya's paper coating plants because it is significantly (25% or more) closer than the plant of any competitor. The highlighted rows represent the actual transactions (all with Omya) in 2004. For each paper mill, Table 7 provides the distance to Huber's Kuusankoski plant, as well as the distances to the plants of Omya and of the only other plausible competitors in the market, namely SMI's plant at Äänekoski and Imerys' plant at Husum, Sweden. For the latter, the logistics would involve a combination of truck and ship. The distance in parenthesis represents the number of kilometres from the paper mills to the nearest port.

Table 7. Seven affected customers in the South of Finland, for which Huber's Kuusankoski plant is more than 25% closer than the next plant of SMI or Imerys

Customer's plant	Supplier	Supplying plant	Distance (km)	Mode of Shipment	Quantity (dmt)
Kuusankoski/UPM	Omya	Lappeenranta	94	Road	[…]*
	Huber	Kuusankoski	0	Road	[…]*
	SMI	Äänekoski	228	Road	[…]*
	Imerys	Husum	653 (62)	Road/Ship	[…]*
Kaukas/UPM	Omya	Lappeenranta	0	Road	[…]*
	Huber	Kuusankoski	94	Road	[…]*
	SMI	Äänekoski	268	Road	[…]*
	Imerys	Husum	944 (109)	Road/Ship	[…]*
Kirkniemi/M-Real	Omya	Molde	1340	Road/Ship	[…]*
	Huber	Kuusankoski	205	Road	[…]*
	SMI	Äänekoski	380	Road	[…]*
	Imerys	Husum	705 (30)	Road/Ship	[…]*
Myllykoski	Omya	Lappeenranta	108	Road	[…]*
	Huber	Kuusankoski	37	Road	[…]*
	SMI	Äänekoski	260	Road	[…]*
	Imerys	Husum	870 (35)	Road/Ship	[…]*
Kaukopää/Stora Enso	Omya	Lappeenranta	36	Road	[…]*
	Huber	Kuusankoski	127	Road	[…]*
	SMI	Äänekoski	296	Road	[…]*
	Imerys	Husum	978 (143)	Road/Ship	[…]*
Inkeroinen/Stora Enso	Omya	Lappeenranta	108	Road	[…]*
	Huber	Kuusankoski	37	Road	[…]*

	SMI	Äänekoski	260	Road	[…]*
	Imerys	Husum	870 (35)	Road/Ship	[…]*
Tainionkoski/Stora Enso	Omya	Lappeenranta	36	Road	[…]*
	Huber	Kuusankoski	127	Road	[…]*
	SMI	Äänekoski	296	Road	[…]*
	Imerys	Husum	760 (525)	Road/Ship	[…]*

Source: Commission's market investigation.

(399) From Table 7 it is apparent that for seven large customers, Huber's PCC plant at Kuusankoski would be the geographically significantly closer commercial alternative to Omya's products. For these customers, the planned transaction would therefore eliminate the geographically closest substitute to Omya's dominant paper coating products.

(400) In its reply to the Statement of Objections, Omya has argued that the Commission overestimated the importance of transportation costs and ignored other more important factors, such as technological advantage, economies of scale and capacity, and reputation and experience.[264] Based on the information provided by Omya[265] and assuming an ex-works price of EUR [170-190]* for the coating product, the Commission estimates an average cost advantage of Huber as compared to the closest competitor of about [0-15]*% for these six customers.

(401) The cost advantage for the customer UPM at Kuusankoski would be significantly greater because it would save all of the transportation costs, including loading and unloading etc., and not just the cost differential resulting from different distances. Based on the data on average coating PCC transportation costs in the shipment database, and Omya's information in its reply to the Statement of Objections, the Commission calculates that UPM would enjoy a transportation cost saving in the order of [5-20]*% of the final product price. As, according to Omya, UPM will be using [10,000-45,000]* tpa, this means that [2-12]*% of all coating calcium carbonate consumption in the South of Finland could benefit from a significant price advantage over SMI.

(402) Omya argued that there are counter examples of cases where transportation costs would matter less and contends that group purchasing arrangements may diminish the relevance of transportation costs. The Commission considers that such singular examples do not affect the significance of its finding that transportation costs may provide a significant cost advantage to Huber when delivering coating grade PCC out of its Kuusankoski site. These findings were confirmed by written statements from the customers concerned to the effect that the difference in transportation costs when comparing supplies either from Äänekoski or from Kuusankoski would play a significant role in their decision-making process.[266]

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[264] Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 32 and following pages.

[265] Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 32 and following pages.

[266] Source: Response to the Article 11 request of 16 June 2006.

(403) As regards the "other important factors", the Commission assessed the alleged technological advantage of SMI's product and came to the conclusion that although SMI is considered the technology leader in the field of coating PCC, SMI has so far sold its coating only for top-coating applications, while Huber is developing a novel coating PCC for use in pre-coating GCC/PCC blends.[267]

(404) As regards the argument concerning the importance of economies of scale and capacity, the stated [20,000-80,000]* tpa production capacity for coating PCC at Kuusankoski[268] would be in addition to the very sizeable filling PCC production already in place at the site. Indeed, the Kuusankoski PCC plant is significantly bigger than SMI's plant at Äänekoski.[269]

(405) Finally, as regards reputation and experience, the Commission relies on the declarations of most large Finnish customers and the two major competitors, which state that Huber is considered a possible supplier of coating grade PCC or of PCC coating blends.[270] Such a reputation would have certainly been reinforced, if Huber had started to supply UPM with PCC coatings additives.

(406) The Commission's analysis revealed that for another three customers, Huber's PCC plant at Kuusankoski is closer to the customer than SMI's coating PCC plant at Äänekoski, but that the difference is not so great, that is to say transportation distances from Äänekoski are less than 25% longer than from Huber's plant at Kuusankoski.[271]

(407) Once Huber had successfully established its new product on the market place, it may have been able to expand production to its Imatra site in the South of Finland to start producing and selling its coating PCC solutions.[272]

(408) It is concluded that Huber would most likely have had the economic incentive to compete for customers currently supplied by Omya for their coating calcium carbonate requirements, namely […]* a number of […]* large customers in the South of Finland. In 2004, these […]* paper mills represented some [30-40]*% of all coating calcium carbonates purchased in Finland, and about [0-10]*% of all coating calcium carbonates sold within the EEA.[273] It is therefore concluded that the proposed transaction would affect a substantial part of the common market.

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267 Source: Responses to the Article 11 request of 21 April 2006 by all Finnish PCC customers of SMI.

268 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 29.

269 Huber's Kuusankoski PCC plant is […]* PCC plant in Finland.

270 Source: Responses to the request for information of 10 April 2006, as summarized in document 9,895, p. 25,610 of the case file.

271 Rauma, Tako, Kyrö. The Commission notes that there are further customers in the South of Finland which, despite the transportation cost, may be affected by this transaction: Anjalankoski, Jämsänkoski, Kauttua, Pankakoski, Simpele, Varkaus.

272 Moreover, while customers in the South of Finland would be most immediately affected by the loss of potential competition resulting from Huber not being available to offer its coating PCC Additives technology as an alternative to Omya's dominant coating GCC offering, in the medium to long term, supposing that Huber's coating PCC Additives technology would be commercially successful, and supposing that Huber would implement its new coating PCC technology also in other European plants, other customers may also be affected by the loss of this potential competition by Huber.

273 The Roskill PCC Report 2005, p. 51, states that production of paper and paper board in Finland is amongst the highest of any country in the world with 13 million tons produced in 2003. The Finnish paper industry is one of the largest consumers of paper pigments and coating minerals, including PCC, in the world.

8. Huber would be an effective competitive force that would be very likely to significantly constrain Omya's behaviour on the market for paper coating calcium carbonates

(409) The Commission assessed whether, in the absence of the proposed transaction, Huber could become a significant competitive constraint in respect of Omya's behaviour on the market for paper coating calcium carbonates.

(410) In its reply to the Statement of Objections, Omya has argued that Huber would not be an effective competitive force because the Kuusankoski plant would not offer sufficient spare capacity, which Omya estimates to be around [40,000-70,000]* tpa. Omya has estimated the total size of the coating calcium carbonates market in the South of Finland to be [200,000-500,000]* tpa.[274]

(411) The Commission notes that one customer alone, […]*, which so far sources all of its coating carbonates requirements from Omya, would, according to Omya's estimates, purchase [10,000-45,000]* tpa of Huber's PCC Additive, which represents some [0-12]*% of Omya's estimate of total demand for coating calcium carbonates market in the South of Finland.[275] In addition, some further [15,000-35,000]* tpa would remain for sale to the merchant market, which is another [0-12]*% of total market demand. Overall, the spare capacity of the Kuusankoski plant thus represents [10-20]*% of total market demand.

(412) Therefore, in view of the quasi-monopolistic structure of the market and the fact that the only other competitor, SMI, remains small in terms of market share and has locational disadvantages, the Commission considers it to be very likely that Huber's capacity at Kuusankoski would significantly constrain Omya's calcium carbonates coating offering for the identified Finnish customers. Moreover, even without considering the transportation cost advantage, for all customers in the South of Finland the presence of an additional alternative potential competitor would significantly improve these customers' bargaining position in the face of the dominant supply position of Omya. In any event, certainly for UPM Kuusankoski, the presence of its supplier Huber - still independent from Omya - would significantly enhance UPM's bargaining position, which at Kuusankoski alone represents roughly [5-15]*% of the calcium carbonate coater market in the South of Finland.

(413) In its reply to the Statement of Objections, Omya has further argued that UPM would object to the sale of PCC Additives out of the additional capacity to the merchant market to competitors of UPM.[276] Omya has also argued that the R&D co-operation between UPM and Huber at Kuusankoski would be subject to confidentiality agreements, meaning that UPM's consent would be required for Huber to supply the developed coating product to any competitor.[277] In particular, Omya argues that if it were the case that Huber's coating product had a competitive edge in terms of price and/or quality, it would be inconceivable that UPM would grant its consent to such a supply. The Commission considers it likely that the economic incentives of reduced unit prices to UPM resulting from the higher capacity usage would prevent UPM from

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274 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 29.
275 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 29.
276 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 29.
277 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 29.

denying its consent[278] and notes that UPM had already contractually agreed to the off-site supply by Huber from its Kuusankoski plant earlier.[279]

(414) As regards the sale to the identified merchant customers in the South of Finland, Omya maintains in its reply to the Commission's Statement of Objections that Huber does not have a sufficiently well established track record and little credibility in the coating sector.[280] This is so because Huber lost the bid for the on-site plant at Husum in 2004, has no track record in selling merchant coating PCC from its on-site plants and because its previous withdrawal from the production of coating PCC (as well as its agreement with Omya to sell all of its PCC business) has clearly signalled to the market that Huber is no longer and will not be, in the near future, a player in coating PCC. The Commission has verified these contentions with most large Finnish customers and the two major competitors and must conclude from their written statements that, in the absence of the proposed transaction, all see Huber as a possible candidate for the supply of coating grade PCC.[281] Furthermore, Huber's reputation would certainly be reinforced, if it started to supply UPM with PCC coatings additives.

(415) Lastly, in its reply to the Statement of Objections, Omya submitted that Huber would face a significant cost disadvantage for its coating PCC additives which, generally, would be significantly more expensive than either SMI's coating solutions or Omya's coating GCC offering.[282] In a subsequent paragraph Omya admits that as far as Kuusankoski was concerned, this cost disadvantage could be balanced, to some extent, by the fact that there was unused spare capacity and transportation cost savings. As regards other customers in the merchant market, Omya states that "*without the specific advantages of Kuusankoski, it is hard to see how Huber could compete successfully against other coating calcium carbonate suppliers.*"[283] The Commission notes that the claims regarding higher alleged costs of Huber's PCC additives solution are not substantiated by Omya by any facts or further explanation and have no foundation in any results of the market investigation.

9. Assessment of the competitive pressure by other competitors after the merger

(416) The Commission has assessed the extent to which other suppliers of coating PCC could act as a constraint on Omya's coating calcium carbonate products in the future. The best placed candidate would be SMI as it is the only other PCC supplier in Finland. The market investigation confirmed that SMI has been providing coating grade PCC to a limited number of customers, all of which use it as a high quality top coating product. This contrasts with Huber's development of pre-coating GCC/PCC

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278 Omya confirms in its reply to the Statement of Objections, p. 26, that "*[d]ue to Huber's overcapacity at Kuusankoski to supply UPM's on-site needs, UPM has a strong incentive to achieve lower unit costs for the supply of Huber's on-site PCC*". Footnote 90, p. 26, continues: "UPM therefore has a significant incentive to purchase PCC from Huber, even at prices that would be uneconomical on the merchant market."

279 An Annex to the Kuusankoski site contract lists a number of companies which Huber was allowed to supply, as long as this would not impact on the ongoing PCC supplies to UPM. In addition, Huber was supplying at least one of its other plants, […]*, with calcium carbonates.

280 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 29, 30.

281 Source: Responses to the request of information of 10 April 2006, as summarized in document 9,895, p. 25,610 of the case file.

282 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 30.

283 Source: Response to the Statement of Objections of 2 May 2006, received 16 May 2006, p. 30.

blends. However, with [0-10]*% market share SMI is a very small competitor when compared to Omya and has grown only slowly in the past.

(417) Assuming that in the future, despite their apparently different marketing and strategic focus at this time, SMI's and Huber's products would directly compete, the Commission found that due to the significance of transportation costs for the on-site customer UPM as well as a number of other customers, SMI's coating products would most likely not be the next best alternative constraining Omya's coating products in the same way as Huber's products would.

(418) However, even for customers who would, for reasons of location and/or for price or other reasons, consider Huber's and SMI's product fully substitutable, the presence of an additional alternative potential competitor would significantly improve their bargaining position in the face of the dominant supply position of Omya. In any event, the presence of its on-site supplier Huber still independent from Omya, would certainly improve the bargaining position of UPM at Kuusankoski, which alone represents about [5-15]*% of the calcium carbonate coater market in the South of Finland. In this way, as long as Huber remained a potential competitor, it would constrain Omya's commercial behaviour in the market for calcium carbonate coating products.

(419) It is therefore concluded that for UPM at Kuusankoski, six further customers relatively close to Kuusankoski and some other customers in the South of Finland, the planned transaction would remove Huber as a potential competitor constraining Omya's product offering as SMI would not be able to constrain Omya's coating offering in the same way as Huber would.

(420) Imerys could potentially supply both GCC and PCC from its Swedish plant at Husum to meet Finnish demand for coating calcium carbonates. However, it has no access to raw materials for GCC production in Finland.[284] This was confirmed by the Finnish Geological Survey, which submitted that Omya owns or controls the rights to the suitable mineral deposits in the country.[285] Imerys has access to some deposits in Sweden.[286] However, these are not of sufficient quality and marble is imported from far away to be added to improve the product quality.

(421) The difficulty of locating and securing sufficient supplies of suitable raw materials, sufficiently close to Finnish customers implies that Imerys bears substantially higher transportation costs than its rival Omya. This cost disadvantage handicaps Imerys and other potential entrants. In this situation, Imerys is unlikely to be able to supply either coating GCC or steep GCC to the Finnish customers that are close to Kuusankoski. It is concluded that new entry of coating GCC is unlikely, in particular in the South of Finland, where the Huber plant at Kuusankoski is located.

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284 Source: third party's response to the Article 11 request on "*Raw materials*" of 15 March 2006, received 5 April 2006.

285 Source: GSF's response to the Article 11 request of 29 March 2006, received 4 May 2006 (following a response received 6 April 2006).

286 Its closest calcium carbonate production plants are the GCC plant at Tunadal in Sweden and the PCC plant at Husum, Sweden. The Tunadal plant has recently been expanded and the Husum plant has just begun production of mostly filler PCC for the M-Real mills.

(422) To date, Imerys has never sold coating products in Finland. Imerys would need to incur significant transportation and other logistics costs in order to transport the calcium carbonates from Sweden to Finland. By contrast, Omya's GCC assets are located close to a large number of Finnish paper mills in the South of Finland. Accordingly, the logistics costs which the combination of Omya and Huber would incur in supplying these customers would be much lower. Therefore, Omya and Huber, by being geographically close to the Finnish customers would enjoy significant cost advantages relative to Imerys' Swedish production facilities. As a result, it is unlikely that Imerys' would be able to offer the same degree of competitive constraint to the combination of Omya and Huber, absent the proposed transaction.[287]

(423) In its reply to the Commission's Statement of Objections, Omya has not provided any further reasons why Imerys would, despite its locational disadvantage, be able to supply customers in the South of Finland.

(424) The significant cost disadvantage stemming from the additional transportation costs would affect Imerys' supplies irrespective of whether it tried to offer pure coating grade GCC, coating grade PCC, or a coating grade GCC/PCC blend to the affected customers in the South of Finland.

(425) It is concluded that, if Huber disappears, SMI and Imerys would not be able to maintain sufficient competitive pressure on Omya with regard to customers in South of Finland.

10. There are no other potential competitors that could maintain sufficient competitive pressure in the South of Finland.

(426) The Commission considered the likelihood that another potential competitor or entrant could install a PCC coating plant in the proximity of the affected customers in the South of Finland to mount a significant rival offer of coating grade PCC.

(427) Until now, PCC for paper coating is only used in relatively small quantities. In order to achieve the necessary economy of scale, PCC plants would have to supply both filler demands and coater demands, at least until the PCC coater market had substantially grown in volume. However, customers in the South of Finland are already faced with overcapacity by PCC suppliers, for example, the substantial unused capacity in Huber's PCC plant in Kuusankoski. In these circumstances, the Commission considers it unlikely that any other supplier would set up new PCC production capacity in the catchment areas of the affected customers in the South of Finland.

(428) Furthermore, since paper machines are very sensitive to changes in the quality of input materials, customers require a proven track record, meaning that only established market participants receive larger volume contracts.

(429) The Commission therefore considers it extremely unlikely that any other potential competitor could create or maintain sufficient competitive pressure after the merger.

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[287] Source: Imerys' submission received 8 March 2006.

11. Potential response to Huber's entry by the incumbent Omya

(430) The Commission also assessed whether the potential response of Omya could inhibit the constraining effect that Huber would have on Omya, in particular Omya's ability to charge higher GCC prices to customers who would use the GCC in a GCC/PCC blend.

(431) Omya's economic consultant, in both the response to the Commission's Statement of Objections and in the presentation he made at the Hearing, put forward the view that the Statement of Objections' theory of harm was logically inconsistent. His argument runs as follows. "*The [Statement of Objections] says that Huber would be likely to exert significant competitive constraint on Omya's [coating] GCC prices by developing a product (a PCC/GCC) blend. But to produce this blend Huber needs Omya's GCC. Huber would not be able to produce its blend if it had no access to Omya's GCC*". He argues that if there were alternatives to Omya's GCC in the South of Finland then the additional constraint from Huber's blends would be minimal and that, therefore, the competition concerns set out in the Statement of Objections would not be justified.

(432) From this it follows that the market price of any blend marketed by Huber would be, in part, a function of the price charged by Omya to Huber or to Huber's partner. Omya could therefore raise the price of its GCC and thus increase the cost of Huber's blend and the price at which the product could be offered to customers.

(433) As the Commission considers that there are no alternative sources of GCC in the South of Finland, neither Huber nor its partner could defeat a price increase by switching supplier. The only other possibility would be to change the blend recipe. This, according to the consultant, is unlikely to be commercially feasible due to the resulting changes in paper quality. Such a change would either not be acceptable to customers or would require extensive and costly testing.

(434) To summarise, Omya could make Huber's blend more expensive by raising the price of its coating grade GCC. This explains why the theory of harm in the Statement of Objections is flawed. Huber cannot be a significant competitive constraint on Omya because Omya can determine the price and thus the commercial viability of Huber's PCC/GCC blends.

(435) The Commission notes that this argument is built on a number of fallacies. Firstly, it ignores the evidence from central Finland where SMI supplies coating PCC for both stand-alone use and for blends. Omya has been unable to increase the price of GCC to SMI's customers.

(436) Omya may have the possibility of discriminating in the prices it would charge to Huber. Huber's orders would be easily identifiable as Huber does not purchase and would not purchase GCC for other purposes. However for Huber's paper making partners the situation is more complex. These customers in the South of Finland are large, generally multi-national paper companies and buy a range of GCC products from Omya. Usually, their orders at plant level, which is where the GCC would be need for the blends, are governed by multi-plant or group-wide purchasing agreements which would make it difficult for Omya to raise the price for certain coating GCC grades in certain plants.

(437) Thus, it would be difficult for Omya to identify which of its GCC products were to be used for blends. The product in question could be used for other purposes elsewhere where Omya pricing behaviour is constrained. In fact, developing blends incorporating widely used grades of GCC would be an effective strategy by Huber and its paper company partner to ensure that Omya could not price discriminate. Huber and its partners also have the ability to optimise their recipes. The same end result can be achieved by using different recipes.

(438) Any new carbonate product, including blends would require testing. New blends developed by Huber are, in this respect, no different from any other carbonate product, meaning that any costs incurred would be part of the normal expenses associated with introducing a new product.

(439) It therefore seems very unlikely that Omya would be able to raise prices for Huber and its partners to such an extent as to render the Huber blends unsaleable. This is borne out by the evidence of the parallel situation of SMI which has sold PCC for blends for a number of years.

12. Conclusion on customers in Finland

(440) Given the above considerations, the Commission considers that Huber is a potential competitor in the market for calcium carbonates used for paper coating applications that, in the absence of the proposed transaction, would very likely grow into an effective competitive force. The Commission also considers that there is not a sufficient number of actual or potential competitors which could maintain sufficient competitive pressure, after the proposed transaction, in such market for customers in the South of Finland.

(441) Moreover, as an independent supplier to the market, Huber would have incentives to carry out further research and development, while if acquired by Omya, as the dominant supplier of coating calcium carbonates, fewer such incentives to develop and innovate would be left as this would cannibalise its own sales of GCC coating. Even if research and development efforts were to continue, customers would probably not benefit, as the combined entity would have no incentive to pass on the benefits to them. The envisaged concentration would thus reduce the benefits of innovation on the developing market of calcium carbonate coating GCC/PCC blends and additives.

(442) For the above reasons, it is concluded that the proposed transaction would significantly impede competition, in particular through the strengthening of Omya's dominant position in the markets for coating calcium carbonates for affected customers in the South of Finland.

13. Possible effects of the proposed transaction on customers in Sweden, France and Austria

(443) As regards Sweden, Huber has one plant in Nymolla, Sweden, that currently produces and sells filling PCC to Swedish paper-mills. The Commission cannot exclude the possibility that once Huber's coating PCC Additives technology as developed in Kuusankoski were commercially successful, Huber would - in the medium to longer term - expand this technology to its Nymolla production site to begin producing coating PCC in Sweden and selling that product to Swedish customers. However, unlike Kuusankoski, Huber's Nymolla plant does not have […]*, and Huber and the customer mill may not have the economic incentives to incur the investment costs to

start production in the short term. The Commission therefore considers that such an effect of the concentration on customers in Sweden is not sufficiently likely and therefore concludes that the proposed transaction would not create any significant impediment on effective competition on customers in Sweden.

(444) As regards France, Huber has a smaller plant at Clairefontaine. However, for the same reasons as in Sweden, the Commission considers that the effect of the concentration on customers in France is not sufficiently likely and therefore concludes that the proposed transaction would not create any significant impediment on effective competition on customers in France.

(445) As regards Austria, Huber currently has no PCC plants in Austria, and it is unlikely to supply Austrian customers from its French plant. Huber would therefore first have to invest in a new facility that would be able to supply Austrian customers. The Commission considers that because of the considerable investment costs that would have to be incurred, the effect of the concentration on customers in Austria is not sufficiently likely and therefore concludes that the proposed transaction would not create any significant impediment on effective competition on customers in Austria.

C. Coordinated effects

(446) The Commission's investigation reveals that the proposed transaction is unlikely to increase the likelihood of firms being able to coordinate their behaviour with the effect of raising prices above competitive levels.

(447) Asymmetry between the major producers of calcium carbonates for both filling and coating applications does not facilitate coordination. These producers handle a different number of customers. The investigation has revealed that Omya has many more customer accounts than its rivals, SMI and Imerys. These two firms would have more to gain by undercutting Omya to steal its customers than by accepting the current status quo. In fact, the recent tender won by Imerys with M-Real at Husum in 2004 suggests just that. Imerys' aggressive bidding strategy made M-Real switch from Omya to Imerys.

(448) The specificities of each situation also make coordination difficult to establish. Each customer would face a different competitive landscape depending on the location of the next best alternative. As a result, because the producers' margin will vary from one situation to another, it may be difficult for calcium carbonate producers to find a common understanding on what is the best course of action that lead to higher profits for everyone.

(449) The small presence of other current competitors in the production of PCC makes it unlikely that they participate in any current or future coordination. In particular, both Solvay and Schaeferkalk would have more to gain by increasing their presence in calcium carbonates for both filling and coating applications should prices rise above competitive levels. These two European firms could readily expand their capacity to supply paper mills, and in turn defeat any attempt at coordination by the current major players on this market. As a result, any form of coordination that could be envisaged in this market is unlikely to be effective.

(450) It is therefore concluded that the proposed transaction is not likely to give rise to any coordinated effects.

D. Conglomerate effects

(451) In the course of its investigation, the Commission found that Omya, Omya, supplied some of its customers with […]* covering all its calcium carbonate products. Accordingly, Omya's discount policy was […]* applied to certain calcium carbonate products combined.

(452) Third parties have claimed that such discounting practices jeopardized their ability to compete against Omya. This is because when proposing the sale of a single calcium carbonate product to a single paper mill, they cannot offer the same savings to the mill as compared to an additional discount applied across all calcium carbonate products supplied by Omya.

(453) The Commission takes note of Omya's repeated statement that it "*has recently changed and simplified its pricing policy in relation to calcium carbonate products*."[288] "*Previously, certain agreements contained rebate or discounts clauses. [Description of Omya's discount policy.]**"[289] Following the modification, "*Omya will no longer have a general policy of granting rebates and/or discounts*."[290]

(454) Moreover, the proposed transaction is very unlikely to strengthen any anti-competitive effect such a discount policy could have had. Huber supplies PCC customers either through long-term on-site contracts or through shorter-term merchant agreements. Both types of customers chose Huber prior to the proposed transaction at a time when they could not benefit from a discount policy over all calcium carbonates as Huber only supplies PCC. Therefore, it is very unlikely that the extension of such discount policy to the Huber PCC business would change the competitive landscape of current Huber customers.

V. ASSESSMENT OF THE COMMITMENTS

1. Procedure

(455) In order to remove the horizontal competition concerns on the market for coating calcium carbonates, Omya and J.M. Huber Corporation submitted a package of commitments to the Commission on 23 May 2006. The package contained two alternative proposals for commitments.

(456) On 29 May 2006, the Commission launched a market test on the first alternative commitment proposal in order to assist it in its assessment of the ability of this commitment to restore effective competition. The Commission assessed the proposed second alternative remedy and considered that it did not adequately address the competition concerns raised by the Commission and thus it was not made subject to a market test.

(457) The Commission carefully reviewed the responses to the market test from market participants, both competitors and customers, and concluded that the first alternative

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[288] Source: Submission by Omya of 27 January 2006.

[289] Source: Omya's response to question 15 of the Article 11 request for information of 28 October 2005, received 6 November 2005. The part added between brackets comes from Omya's introduction to its responses to section II of the same questionnaire.

[290] Source: Omya's response to question 15 of the Article 11 request for information of 28 October 2005, received 6 November 2005.

commitment proposed was, subject to certain improvements, sufficient to remove the competition concerns raised by the Commission in the context of the proposed transaction.

(458) On 12 June 2006, the Commission provided Omya with a set of non-confidential versions of the responses from third parties to the market test of the first alternative commitment. On 14 June 2006, a meeting was held where the results of the market test were discussed with Omya and Huber. Subsequently, on 3 July 2006, Omya and Huber submitted a revised package of commitments which are set out in the Annex to this Decision.

2. Description of the commitments

(459) The original package of commitments is comprised of two alternative proposals.

(460) The first alternative comprises the divestiture of Huber's on-site PCC plant in Kuusankoski, Finland, as well as the divestiture of Huber PCC coating and PCC coating additive technology (Divestment Business and Divestment Technology).

(461) The second alternative commitment comprises only the divestiture of Huber PCC coating and PCC coating additive technology (Divestment Technology).

(462) In addition, the proposed commitments contain provisions about a suitable purchaser, the preservation of viability, marketability and competitiveness of the Divestment Business as well as a hold-separate obligation and clauses on ring-fencing, non-solicitation, due diligence, reporting and trustees.

(463) The original commitments can be summarised as follows:

2.1. Divestment Business

(464) Divestment Business consists of Huber's on-site PCC plant in Kuusankoski, Finland (Kuusankoski Paper Mill, FIN-45701 Kuusankoski), to be divested to a single, independent industrial purchaser. The purchaser must have, *inter alia*, the financial resources, proven expertise and incentive to maintain and develop the divestment package as a viable and active competitive force in competition with Omya and other competitors. In the first alternative commitment proposed, the purchaser of the on-site PCC plant should be the same as for the divested technology.

(465) The contract partner at the Kuusankoski on-site PCC plant is Kymi Paper Oy.[291] The current Kuusankoski PCC Agreement[292] provides for the delivery of PCC in sufficient volumes so as to cover all of the host mill's requirements for PCC, corresponding to a guaranteed annual minimum capacity of [more than 130,000]* dmt. The term of the agreement is fixed for […]* years starting in 1999.

(466) The proposed divestiture includes: (a) all tangible and intangible assets necessary to ensure the viability and competitiveness of the Divestment Business; (b) licences, permits and authorisations issued for the exclusive benefit of the Divestment Business; (c) contracts, leases, commitments, customer orders and records of the

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[291] Kymi Paper Oy belongs to UPM.

[292] Kuusankoski PCC Agreement between Kymi Paper Oy and (originally) Faxe Paper Pigments (Finland) Oy of […]*, Annex 3 to the Commitment.

Divestment Business; (d) certain key personnel; and (e) the current arrangements whereby Huber supplies products or services to the Divestment Business for a transitional period or 2 months. The Divested Business is described in detail in Schedule 1 of the commitment.

(467) […]*. Omya is subject to a restriction not to acquire direct or indirect influence over the whole or part of the divested on-site PCC plant for a period of ten years unless the Commission finds that circumstances have sufficiently changed. It may also not compete for the supply and operation of an on-site filler PCC plant in Kuusankoski in the first bidding following the expiry of the existing agreement between Huber and Kymi Paper Oy.

2.2. Divestment Technology

(468) The Divestment Technology consists of Huber's Coating PCC Technology and Huber's Coating Additive Technology, to be divested to a single, independent industrial purchaser. The purchaser must have, *inter alia*, the financial resources, proven expertise and incentive to maintain and develop the divestment package as a viable and active competitive force in competition with Omya and other competitors. In the first alternative commitment proposed, the purchaser of the divested technology must be the same as for the divested on-site PCC plant.

(469) Huber's Coating PCC technology comprises of post reactor coating related proprietary engineering diagrams, operating manuals, and target process parameters of Huber subject to existing non-exclusive license in favour of Imerys as well as all related patents and patent applications.

(470) Huber Coating Additive Technology is comprised of all post reactor dewatering and mixing processes, and non-customer specific laboratory and pilot scale application information.

(471) The proposed divestiture includes all Intellectual Property Rights of Huber relating to coating PCC and coating PCC blends/additives. The Divestment Technology is described in detail in Schedule 2 of the commitment.

(472) The proposed commitment […]*. Omya is subject to restriction not to acquire, direct or indirect, influence over the whole or part of the divested technology for a period of […]* years unless the Commission finds that circumstances have sufficiently changed.

3. Market test of the first alternative commitment

(473) To assist it in its evaluation of the proposed remedy package, the Commission decided to market test the first alternative commitment proposal (Divestment Business and Divestment Technology) and sent it to a total of 11 customers and 4 competitors that had been involved in the Commission's investigation of the proposed transaction.[293]

(474) The market test of the proposed divestiture of both the assets and technology produced the following results.

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[293] Questionnaires were sent and replies received from 11 customers and 4 competitors of the parties, which had participated in the Commission's in-depth investigation. In addition, the Finnish Competition Authority submitted a response.

3.1. Customers' responses

(475) The majority of customers[294] responding to the Commission's questionnaire including, in particular, UPM considered that it is possible to change the on-site PCC supplier in the manner proposed in the commitment. Some customers[295] considered that the limited duration of the Kuusankoski PCC contract could have an impact on the commitments but this could be resolved through commercial negotiations. The majority of customers replying, including UPM,[296] took the view that the duration would not affect the effectiveness and functioning of the commitment.

(476) It was a commonly shared view among customers that the exclusion of the current lime supply agreement from the commitment would not have any negative impact on the effectiveness and functioning of the commitment, although some customers[297] raised concerns as to the vagueness of the length of the transitional arrangement (the lime supply would continue for "*a reasonable amount of time*").

(477) As to the potential of the proposed commitment to eliminate the competition concerns raised by the Commission, most of those customers that submitted a response and who own paper mills in the South of Finland, including UPM,[298] appeared satisfied with the commitment and believed that it was sufficient to eliminate the competition concerns identified by the Commission.

(478) The same also applied to the response to the question whether a purchaser of the divested plant and technology would be able to establish a position supplying coating PCC to customers in the South of Finland.[299] This view was shared by UPM. However, the identity of the potential purchaser was indicated to be a decisive factor in evaluating whether such a position could be established and whether competition concerns would be removed.[300] Carbonate suppliers, PCC suppliers and chemical suppliers were mentioned as potential suitable purchasers. Few customers[301] considered UPM a suitable purchaser. Some respondents[302] considered investment by the purchaser in production and distribution logistics and the transfer of filler PCC technology as necessary for the purchaser to establish a position in the South of Finland and to supply customers other than the host mill. Only two customers[303] stated that the proposed commitment does not fully address the competition concerns and proposed certain clarifications.

3.2. Competitors' responses

(479) As regards the responses to the market test by the competitors, the results of the market test were largely different.

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294 Source: Responses by customers to the market test, received 1 June 2006, 5 June 2006, 6 June 2006 and 7 June 2006.

295 Source: Responses by customers to the market test, received 6 June 2006.

296 Source: Responses by customers to the market test, received 1 June 2006, 5 June 2006, 6 June 2006 and 7 June 2006.

297 Source: Responses by customers to the market test, received 6 June 2006 and 7 June 2006.

298 Source: Responses by customers to the market test, received 1 June 2006 and 5 June 2006.

299 Source: Responses by customers to the market test, received 1 June 2006 and 5 June 2006.

300 Source: Responses by customers to the market test, received 1 June 2006 and 5 June 2006.

301 Source: Customers' responses to the market test, received 1 June 2006 and 6 June 2006.

302 Source: Customers' responses to the market test, received 6 June 2006.

303 Source: Customers' responses to the market test, received 1 June 2006 and 7 June 2006.

(480) All competitors expressed some reservations as to the scope of the proposed remedy. Only one competitor considered the divestiture as submitted sufficient to eliminate the competition concerns in the South of Finland and to enable the purchaser to establish a position supplying coating PCC to customers in the South of Finland.[304] Two of the parties' four competitors[305] provided the Commission with extensive responses arguing strongly that the scope of the divestiture would need to be enlarged and a number of additional safeguards included for the commitment to sufficiently resolve the competition concerns raised by the Commission.

(481) Reservations expressed by the competitors[306] focused on certain provisions of the submitted commitment which the respondents considered could be improved in order to ensure the viability and effectiveness of the commitment.

(482) Firstly, all but one competitor considered that the limited duration of the Kuusankoski PCC contract would have an impact on the effectiveness and functioning of the commitment.[307] One competitor considered that the limited duration of the Kuusankoski PCC contract would only translate into a lower final selling price of the on-site PCC plant.[308] Some competitors[309] also considered it necessary that the purchaser of the on-site PCC plant enters into a new commercial contract with the host mill or is able to extend the current Kuusankoski PCC contract.

(483) Secondly, some concerns as to the exclusion of the lime supply agreement from the commitment have been expressed in the market test.[310] The quality and price of the supplied lime has been mentioned as an important factor for the potential purchaser.

(484) Thirdly, some competitors[311] raised concerns as to the purchaser's rights to the current PCC technology of the Kuusankoski on-site PCC plant and to all of Huber's PCC coating technology and not merely the "non-customer specific technology". In this context, the transfer of all necessary equipment, technology and IP is considered necessary for the purchaser to be able to produce the products it currently manufactures.

(485) Finally, competitors responding to the market test raised also other issues relating in particular to the personnel of the technology business, the non-compete provisions, and other transitional assistance by the seller to the purchaser.

(486) The market test produced some interest from the market participants to potentially acquire the divested business and technology. A number of competitors[312] do not consider UPM as a suitable buyer of the divested on-site PCC plant and the technology. Such a conclusion was based, *inter alia*, on the difficulty for a paper producer to create the access to the market for its PCC coating products outside its

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304 Source: Competitor's response by to the market test, received 2 June 2006.

305 Source: Competitors' responses to the market test, received 7 June 2006 and 20 June 2006.

306 Source: Competitors' responses to the market test, received 2 June 2006, 7 June 2006, 9 June 2006 and 20 June 2006.

307 Source: Competitors' responses to the market test, received 7 June 2006, 9 June 2006 and 20 June 2006.

308 Source: Competitor response to the market test, received 2 June 2006.

309 Source: Competitors' responses to the market test, received 7 June 2006 and 20 June 2006.

310 Source: Competitor's response to the market test, received 7 June 2006.

311 Source: Competitors' responses to the market test, received 7 June 2006 and 20 June 2006.

312 Source: Competitors' responses to the market test, received 2 June 2006 and 9 June 2006.

core business area. In addition, UPM would supply PCC coating products to paper producers who are its competitors in the paper market, which could raise issues of conflict of interest.

3.3. Conclusion

(487) In the light of the foregoing, it is concluded that, overall, the results of the market test of the first alternative commitment, namely the divestiture of the on-site PCC plant and technology, offered by Omya and Huber, are positive and largely support the view that the first alternative commitment (Divestment Business and Divestment Technology) can adequately address the competition concerns raised by the Commission, given also certain refinements proposed by the parties on 3 July 2006.

4. Assessment of the proposed commitments

4.1. Introduction

(488) As explained in the Commission Notice on remedies acceptable under Council Regulation (EEC) No 4064/89 and under Commission Regulation (EC) No 447/98 ("Commission Notice on remedies")[313], where a concentration could result in a significant impediment to effective competition, the notifying parties may seek to modify the concentration in order to resolve the competition concerns raised and obtain a declaration of compatibility of the concentration with the common market. Where the notifying parties submit commitments, the Commission has to assess whether the commitments will lead to the restoration of effective competition on the relevant markets. In so doing, the Commission assesses both (i) the viability of the divested business on the long term (viability) and (ii) the ability and incentive of the divested business to act as a competitive force on the relevant markets on a lasting basis (competitiveness).

(489) In assessing whether or not the proposed commitment will restore effective competition, the Commission considers, *inter alia*, the type, scale and scope of the proposed remedy by reference to the structure of and particular characteristics of the market in which competition concerns arise and the likelihood of its full, timely and successful implementation.[314]

(490) Where a proposed concentration threatens to significantly impede effective competition, creating the conditions for the emergence of a new competitive entity or the strengthening of existing competitors via divestiture may be an effective way to restore effective competition. The divested activities must consist of a viable business that, if operated by a suitable purchaser, can compete with the merged entity on a lasting basis.[315] Where the viability of the divestiture package depends to a large extent on the identity of the purchaser, the Commission will not approve the concentration unless the parties undertake not to complete the notified operation before having entered into a binding agreement with the purchaser (upfront buyer) approved by the Commission.[316]

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313 OJ C68 of 2.3.2001, pp. 3-11.

314 Commission Notice on remedies, paragraph 7.

315 Commission Notice on remedies, paragraphs 13-14.

316 Commission Notice on remedies, paragraph 20.

(491) As regards the proposed transaction in this case, the Commission takes the view that the notified concentration would remove Huber as a potential competitor in the market for calcium carbonates for coating applications for affected customers in the South of Finland. The aim of the proposed commitments is therefore to re-establish the competitive constraint coming from the development by Huber of its PCC coating technology which would be lost if the concentration were implemented without a modification.

(492) Huber's position as a potential competitor in the market for calcium carbonates for coating applications is due to the combination of two factors. First, Huber had developed its own PCC coating technology. Secondly, Huber was in the specific situation of possessing free production capacity at its Kuusankoski on-site PCC plant, where the new technology was also trialled.

4.2. Assessment of the first alternative commitment

(493) To assess whether the proposed alternative commitments resolve the competition concerns raised by the Commission, the Commission must evaluate whether the divestiture of the on-site PCC filler plant at Kuusankoski together with the technology offered, in the case of the first alternative commitment proposed, would enable a suitable purchaser of the divestiture package to acquire potential competitive force on the market for PCC coating carbonates comparable to that which Huber would have had without the proposed transaction.

4.2.1. Viability of the divested business and technology

(494) The Commission has concluded that the proposed concentration, as notified, would significantly impede competition, in particular through the strengthening of Omya's dominant position in the markets for coating calcium carbonates for affected customers in the South of Finland, as it would eliminate Huber as the most credible potential competitor in the supply of PCC coating additives. Consequently, the Commission considers that creating the conditions for the emergence of a new entrant into Finland or the strengthening of an existing competitor in Finland via divestiture in the South of Finland is the most effective way to restore effective competition.

(495) Pursuant to the Commission's policy on remedies, it is generally considered necessary that the divested activities must consist of a viable business that, if operated by a suitable purchaser, can compete with the merged entity on a lasting basis. Normally a viable business is an existing business that can operate on a stand-alone basis, that is to say, independently of the merging parties as regards the supply of input material other than during a transitory period.[317]

(496) The Commission takes the view that for the effective re-establishment of the, otherwise lost, competitive constraint in the market for coating calcium carbonates in the South of Finland, it is essential for the suitable purchaser to have access to both spare production capacity and the necessary technology. Therefore, the offered divestiture of the Kuusankoski on-site PCC plant, which already operates on a stand-alone basis, which is sufficiently close to customers in the South of Finland, which would ensure the suitable purchaser the close co-operation with the host mill with whom the PCC technology has been developed and trialled, and which has available

317 Commission Notice on remedies, paragraph 14.

spare capacity, would, in the opinion of the Commission, best ensure the viability of the divestiture and the launch of a credible competing product in the market for coating calcium carbonates.

(497) Furthermore, in a divestment commitment, the business to be divested normally consists of a combination of tangible and intangible assets, which can take the form of a pre-existing company or group of companies, or of a business activity which was not previously incorporated in its own right.[318]

(498) The first alternative commitment specifies in paragraph 4 that the divested on-site PCC plant (Divested Business), as more specifically defined in Schedule 1, contains all tangible and intangible assets that are necessary to ensure the viability and competitiveness of the divested business. Paragraph 1 of the Schedule lists the main tangible assets (the building and all the equipment, all supplies, inventory and raw materials etc.). The key personnel is also mentioned in the Schedule. The Commission considers that these assets are in general compatible with the requirements of a sufficient remedy.

(499) In response to concerns raised in the market test, as regards know-how, the commitments after submission of the revised version on 3 July provide that all know-how which the Commission deems necessary for the operation of filler PCC by the Divestment Business, including the production, sale and any ancillary activities, will be transferred to the purchaser. In addition, intellectual property rights, if deemed necessary by the Commission, will be licensed to the purchaser […]*. Thus, the commitments now include intangible assets such that, following approval of the purchaser by the Commission, it will be able to operate the on-site PCC plant, produce products that are currently produced at the on-site plant and continue with the development and bringing to the market the PCC coating product.

(500) As regards the divestiture of Huber's coating technology (Divestment Technology), the commitment, as market tested, referred only to "non-customer specific" technology, omitting all of the technology developed with customers under confidentiality agreements. The Commission considered that the purchaser would only be placed in a position comparable to Huber's current position if the customer specific technology of the Kuusankoski on-site plant was also included in the technology divestiture. In response to these concerns, the parties submitted refinements on 3 July 2006, effectively removing the limitations on the technology to be transferred to the purchaser.

(501) Contrary to the views of some competitors who raised concerns relating to the remaining duration of the Kuusankoski on-site contract, the Commission considers that the divestiture package places the purchaser in a similar position to Huber, including the advantage generally enjoyed by an incumbent supplier who will not need build a new facility in the event that it is successful in bidding for a renewal contract. Therefore, the Commission considers that the remaining contract period, […]*, will be sufficient for the purchaser to establish itself as a supplier and the length of the contract period does not endanger the viability of the divested business.

(502) The Commission also notes that the parties have extended the length of the lime supply contract until […]* to allay concerns raised in the market test. The Commission

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318 Commission Notice on remedies, paragraph 46.

considers that a security of lime supply for […]* will be sufficient for the purchaser to establish itself as a supplier and the length of the lime supply guarantee does not endanger the viability of the divested business.

(503) Finally, a crucial element for the effectiveness of the proposed commitment is the ability of the potential purchaser to have, in addition to the necessary technology, access to spare production capacity in the South of Finland. Without such available capacity, it is likely that the divested business would be a weak and vulnerable competitor on the relevant market, unable to effectively compete with Omya. Therefore, and as Omya has not submitted that the available spare capacity at the Kuusankoski on-site PCC filler plant could physically be separated for the purposes of the commitment, the Commission considers the effectiveness of the commitment would be too uncertain if the current filler PCC capacity is not included in the remedies package. Therefore, although the Commission has raised no concerns in the market for PCC fillers, for the purpose of ensuring the viability of the business and the effectiveness of the remedy, the proposed commitment must unavoidably extend to fillers.

4.2.2. Ability and incentive to be a competitive force on the relevant markets

(504) The Commission considers that the assessment of the ability and incentive of the Kuusankoski on-site PCC plant and the divested technology to continue to act as a competitive force and restore competition on the market (competitiveness) in competition with Omya and other competitors largely depends on the identity of the purchaser.

(505) The Commission therefore came to the conclusion that only a purchaser with financial resources and proven expertise could ensure sufficient certainty as to its ability and incentive to maintain and develop the divestment package as a viable and active competitive force and to restore competition on a lasting basis. Therefore, on the basis of the proposal of the parties, the Commission takes the position that, for the purposes of maintaining and developing the divestment package as a viable and active competitive force on the market, the purchaser should be an industrial purchaser that already has the financial resources and proven expertise in the supply of coating calcium carbonates. This conclusion was strongly supported by the views expressed by market participants in the market test of the remedies that was carried out by the Commission.

(506) The Commission is of the opinion that a proven expertise in the field of precipitated calcium carbonates is crucial in view of the fact that the divested technology relates to a PCC coating product, and more specifically to such a coating product used in blends with GCC. The Commission considers such technology to be mill-specific and requiring significant R&D efforts and close co-operation with the host paper mill. At this stage, the Commission does not exclude any existing supplier of precipitated calcium carbonates to the paper industry in the EEA as a potentially suitable purchaser.

(507) Furthermore, in order for the purchaser to exert a competitive constraint on Omya as a potential competitor for customers in the South of Finland, the purchaser must establish that it has the intention to enter the merchant market in a significant way with a PCC coating product. Such an intention can be demonstrated by an adequate

business plan or another document showing the commercial interest of engaging in such business.

(508) As to whether any paper producer, that is to say a current customer of a minerals supplier, would have such expertise, ability and incentives to develop and maintain the divestment package as a viable and active competitive force and to restore competition on a lasting basis, the Commission considers the following factors to be of relevance from the point of view of the effectiveness of the proposed remedy and of competition policy.

(509) Firstly, it should be recalled that the purpose of the proposed commitment is to re-establish on a lasting basis the competitive constraint arising from the development by Huber of its PCC coating additives technology. Therefore, if a paper producer were to limit its production of PCC coating additives to meet only its own requirements of such a product and thus exclude, or limit, supplies to other paper mills, the divestiture of the on-site PCC plant and related technology to such a purchaser would not address the competition concerns identified by the Commission.

(510) Secondly, even if a paper producer were to supply PCC coating additives on the merchant market to other paper mills in the South of Finland, a relevant consideration from the point of view of viability and effectiveness of the commitment is the uncertainty whether such a paper producer would have the ability and incentives to create, on a lasting basis, the necessary access to the market for its new PCC coating product outside its core business area. This could endanger the effectiveness of the remedy package in restoring competition on a lasting basis.

(511) Thirdly, as a supplier of PCC coating additives to its competitors in the paper market and given the close co-operation between the minerals suppliers and paper mills, including joint R&D efforts, a paper producer as a potential purchaser would have access to confidential information of its competitors on the paper market relating to their development of the qualities of their paper going beyond acceptable relationship between competitors.

(512) With regard to all the above considerations, the Commission has come to the view that a paper producer would not be a suitable purchaser of the divesture package consisting of the on-site PCC plant at Kuusankoski and the related technology as it would not resolve the competition concerns identified by the Commission and could endanger the effectiveness and viability of the divestiture package in restoring competition on the coating calcium carbonate market a lasting basis.

(513) […]*.

(514) Finally, in addition to the importance of the identity of the purchaser, the effectiveness of the proposed remedy on competition will also depend on the timely implementation of the commitment. Ensuring that the divestiture takes place within a relatively short period appears particularly appropriate in this case considering the limited duration of the ongoing on-site PCC contract remaining between the on-site PCC plant and the host paper mill.

4.2.4. Conclusion

(515) In the light of the foregoing assessment, it is concluded that the revised commitments submitted by Omya on 3 July 2006 (Divestment Business and Divestment

Technology) adequately addresses the competition concerns raised by the Commission.

4.3. Assessment of the second alternative commitment

(516) In contrast, as regards the second alternative of the original commitment containing only the divestiture of Huber PCC coating and PCC coating additive technology (Divestment Technology), the Commission assessed the proposed remedy and considered that it does not adequately address the competition concerns raised by the Commission. To assess whether the proposed alternative commitments resolve the competition concerns raised by the Commission, the Commission must evaluate whether the divestiture only of the technology offered in the case of the first alternative commitment proposed, will enable the purchaser to acquire potential competitive force on the market for PCC coating carbonates comparable to that which Huber would have had prior to the announcement of the proposed transaction

(517) The Commission takes the view that the technology cannot be divested without the available spare production capacity as, without the capacity, the purchaser would not be able to supply the affected customers in the South of Finland. Therefore, the divestiture would not create a credible potential competitor in PCC coating products from the perspective of customers and competitors. In addition, the purchaser of the Divestment Technology would not necessarily have a production plant sufficiently close to customers in the South of Finland and the purchaser would therefore be placed in a weaker position than Huber prior to the announcement of the proposed transaction.

(518) Finally, the second alternative remedy is insufficient to eliminate the competition concerns as the divestiture of the technology alone would not necessarily provide an equivalent level of close co-operation with the host mill, which the Commission considers necessary for the development and launch of a credible competing product on the market for coating calcium carbonates.

(519) Therefore, the second alternative commitment was considered clearly insufficient to remove the competition concerns identified by the Commission and to re-establish the equivalent competitive force than that of Huber on the market. The second alternative commitment was therefore not made subject to a market test.

4.4. Conclusion

(520) In the light of the above assessment and taking account of the results of the market test, the Commission concludes that the proposed first alternative commitment, the divestiture of the Kuusankoski on-site PCC plant together with the divestiture of Huber's coating technology, as improved by the parties on 3 July 2006, would restore effective competition on the market for coating calcium carbonates for affected customers in the South of Finland by re-establishing the competitive constraint to Omya's coating calcium carbonates coming from Huber's PCC Additive Technology for affected customers in the South of Finland, which would otherwise be lost due to the concentration, as originally notified.

(521) The Commission therefore concludes that, provided that the first alternative commitment (Divestment Business and Divestment Technology), as improved by the parties on 3 July 2006, is complied with in full, the competition concerns identified by the Commission in relation to coating calcium carbonates for affected customers in

the South of Finland would be removed and the concentration, as modified by the commitment, can be declared compatible with the common market.

VI. CONDITIONS AND OBLIGATIONS

(522) Under the first sentence of the second subparagraph of Article 8(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the common market.

(523) Where a condition is not fulfilled, the Commission decision declaring the merger to be compatible with the common market no longer stands. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 8(5)(b) of the Merger Regulation; the undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2)(a) and 15(2)(a) of the Merger Regulation.

(524) In accordance with that basic distinction, this decision should be subject to the condition of full compliance with paragraphs 1, 2, 3, 14 and 15 of the commitments in the Annex, as improved on 3 July 2006, concerning the divestment of the Kuusankoski divestment business and coating technology.

(525) This decision should be subject to the obligation on Omya to comply in full with paragraphs 4 to 13, and 16 to 49 of the commitments in the Annex, concerning the divestment the Kuusankoski divestment business and coating technology.

VII. CONCLUSION

(526) It is concluded the commitments submitted by Omya AG and J.M Huber Corporation are sufficient to address the competition concerns raised by the proposed concentration. Accordingly, subject to full compliance with the commitments submitted by Omya, the notified operation should not be opposed and should be declared compatible with the common market and the functioning of the EEA Agreement,

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Omya AG acquires sole control of the worldwide precipitated calcium carbonate business of J.M. Huber Corporation within the meaning of Article 3(1)(b) of Regulation (EC) No 139/2004 is hereby declared compatible with the common market and the functioning of the EEA Agreement.

Article 2

Article 1 is subject to full compliance with the conditions set out in paragraphs 1, 2, 3, 14, 15 of the commitments in the Annex concerning the divestment of the Kuusankoski PCC business and Huber's coating technology business.

Article 3

Article 1 is subject to full compliance with the obligations set out in paragraphs 4 to 13, and 16 to 49 of the commitments in the Annex, concerning the divestment of the Kuusankoski PCC business and Huber's coating technology business.

Article 4

This decision is addressed to:

Omya AG
Brohler Strasse 11a
D- 50968 Köln
Deutschland

Done at Brussels, 19.VII.2006

For the Commission
(signed)
Neelie KROES
Member of the Commission

Dated 3 July 2006

NON CONFIDENTIAL VERSION

Omya AG

and

J.M. Huber Corporation

Commitments to the European Commission

Case No COMP/M.3796

Linklaters Oppenhoff & Rädler

Börsenplatz 1
50674 Köln

Telephone (49 221) 2091-0
Facsimile (49 221) 2091-435

Commitments to the European Commission

Pursuant to Article 8(2), of Council Regulation (EC) No. 139/2004 (the "**Merger Regulation**"), Omya and J.M. Huber Corporation (the "**Parties**") hereby offer the following Commitments (the "**Commitments**") in order to enable the European Commission (the "**Commission**") to declare the acquisition by Omya of the PCC Business of J.M. Huber Corporation compatible with the common market and the EEA Agreement by its decision pursuant to Article 8(2) of the Merger Regulation (the "**Decision**").

The Commitments shall take effect upon the date of adoption of the Decision.

This text shall be interpreted in the light of the Decision to the extent that the Commitments are attached as conditions and obligations, in the general framework of Community law, in particular in the light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EEC) No. 4064/89 and under Commission Regulation (EC) No. 447/98.

[REDACTED]

I. Definitions

For the purpose of the Commitments, the following terms shall have the following meaning:

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 Merger Regulation and in the light of the Commission Notice on the concept of concentration under Council Regulation (EC) No 139/2004.

Closing: the transfer of the legal title of the Divestment Package to the Purchaser.

Completion of the Proposed Transaction: the transfer of the legal title of the worldwide PCC Business of J.M. Huber Corporation.

Divestiture Trustee: one or more natural or legal person(s), independent from the Parties, who is approved by the Commission and appointed by Omya and who has received from Omya the exclusive mandate to sell the Divestment Package to a Purchaser at no minimum price.

Divestment Business: the business as defined in Section II A and Schedule 1, that the Parties commit to divest.

Divestment Package: the Divestment Business and the Divestment Technology.

Divestment Technology: the technology, as defined in Section III A and Schedule 2, that the Parties commit to divest.

Effective Date: the date of adoption of the Decision.

First Divestiture Period: the period of [REDACTED] from the Effective Date.

Hold Separate Manager: the person appointed by Omya for the Divestment Package to manage the day-to-day business under the supervision of the Monitoring Trustee.

Huber: J.M. Huber Corporation.

Intellectual Property Rights: intellectual property rights forming part of the Divestment Technology and relating to the research, development, manufacture, sale or use of the Product,

including but not limited to, existing and pending patents, trade secrets, research materials, technical information, inventions, test data and know-how.

Key Personnel: all personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in Schedule 1.

Technical Personnel: all personnel involved to a significant extent in the research and/or development of the Divestment Technology and either remaining at Huber ("Huber Technical Personnel") or transferring to Omya as part of the retained business ("Retained Technical Personnel"), as listed in **Annex 1**.

Technological Support Services: services in support of the operation of the Divestment Business, including the production and sale and any ancillary activities and/or for the development and production and/or sale of the Product at a reasonable cost plus basis.

Monitoring Trustee: one or more natural or legal person(s), independent from the Parties, who is approved by the Commission and appointed by Omya, and who has the duty to monitor Omya's compliance with the conditions and obligations attached to the Decision.

Omya: Omya AG, incorporated under the laws of Switzerland, with its registered office at Baslerstrasse 42, CH-4665 Oftringen and registered with the Commercial Register at Aarau/Switzerland under number CH-400.3.917.212-8.

Personnel: all personnel currently employed by the Divestment Business, including Key Personnel and staff seconded to the Divestment Business.

Product: Coating PCC and Coating PCC blends/additives.

Proposed Transaction: Omya's planned acquisition of the worldwide PCC Business of J.M. Huber Corporation.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business and the Divestment Technology in accordance with the criteria set out in Section IV A.

Trustee Divestiture Period: the period of [REDACTED] from the end of the First Divestiture Period.

II. The Divestment Business

Section A. Commitment to Divest

1. Omya commits to divest, or procure the divestiture of the Divestment Business by the end of the Trustee Divestiture Period as a going concern to a Purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 29. To carry out the divestiture, Omya commits to find a Purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Business within the First Divestiture Period. [REDACTED] If Omya has not entered into such an agreement at the end of the First Divestiture Period, Omya shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in accordance with the procedure described in paragraph 38 in the Trustee Divestiture Period. [REDACTED]

2. Omya shall be deemed to have complied with this Commitment if, (i) by the end of the Trustee Divestiture Period, Omya has entered into a final binding sale and purchase

agreement for the sale of the Divestment Business, (ii) the Commission approves the Purchaser and the terms in accordance with the procedure described in paragraph 29 and (iii) closing of the sale of the Divestment Business takes place within a period not exceeding [REDACTED] after the approval of the Purchaser and the terms of sale by the Commission.

3. In order to maintain the structural effect of the Commitments, Omya shall, for a period of [REDACTED] after the Effective Date, not acquire direct or indirect influence over the whole or part of the Divestment Business, unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the common market. Furthermore, Omya shall be barred from competing for the supply and operation of an on-site filler PCC plant at Kuusankoski in the [REDACTED] bidding competition following expiry of the existing agreement for the supply of on-site filler PCC between Huber and UPM.

Structure and definition of the Divestment Business

4. The Divestment Business consists of the on-site PCC plant in Kuusankoski, Finland. The present legal and functional structure of the Divestment Business as operated to date is described in Schedule 1. The Divestment Business, as more specifically defined in Schedule 1, includes

   a. all tangible and intangible assets, which are necessary to ensure the viability and competitiveness of the Divestment Business;

   b. licences, permits and authorisations issued by any governmental organisation for the exclusive benefit of the Divestment Business;

   c. contracts, leases, commitments and customer orders of the Divestment Business; all customer, credit and other records of the Divestment Business (items referred to under (a)-(c) hereinafter collectively referred to as "**Assets**");

   d. the Personnel; and

   e. the benefit, for a transitional period of up to [REDACTED] after Closing (to the extent required by the Purchaser) on a reasonable cost plus basis certain support services (as defined in Schedule 1, Point 9) which Huber currently supplies to the Divestment Business.

Section B. Related Commitments

Preservation of Viability, Marketability and Competitiveness

5. From the Effective Date until Completion of the Proposed Transaction Huber, and from Completion of the Proposed Transaction until Closing, Omya shall preserve the economic viability, marketability and competitiveness of the Divestment Business, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Business. This obligation is without prejudice of the unilateral action which the owner of the paper mill of the Divestment Business may take. The Parties shall not be obliged to proceed with the Closing until and unless Completion of the Proposed Transaction has occurred.

6. In particular, from the Effective Date until Completion of the Proposed Transaction Huber undertakes, and from completion of the Proposed Transaction until Closing, Omya undertakes:

   (i) not to carry out any act upon their own authority that might have a significant adverse impact on the value, management or competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;

   (ii) to make available sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans; and

   (iii) to take all reasonable steps, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Business.

   For the avoidance of doubt, Omya remains entitled to engage in any business activity with any customer other than with respect to the supply of on-site filler PCC plants to UPM at Kuusankoski (to the extent such supply is limited under these Commitments).

Hold-separate obligation

7. Omya commits, from the Completion of the Proposed Transaction until Closing, to keep the Divestment Business separate from the businesses it is retaining and to ensure that Key Personnel of the Divestment Business – including the Hold Separate Manager – have no involvement in any business retained and vice versa. Omya shall also ensure that the Personnel does not report to any individual outside the Divestment Business.

8. From Completion of the Proposed Transaction until Closing, Omya shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable entity separate from the businesses retained by Omya. [REDACTED] shall appoint a Hold Separate Manager who shall be responsible for the management of the Divestment Business, under the supervision of the Monitoring Trustee. The Hold Separate Manager shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by Omya. For the avoidance of doubt, prior to the Completion of the Proposed Transaction, Huber (and not the Hold Separate Manager) will continue to manage the Divestment Business.

Ring-fencing

9. Omya shall implement all necessary measures to ensure that it does not after the Completion of the Proposed Transaction obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Business. This ring-fencing obligation is without prejudice to the information which Omya may have in relation to the conduct of neighbouring activities. In particular, the participation of the Divestment Business in a central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Business. Omya may obtain information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business or whose disclosure to Omya is required by law.

Non-solicitation clause

10. Omya undertakes, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Business for a period of [REDACTED] after Closing.

Due diligence

11. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, the Parties shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:

(i) provide to potential purchasers sufficient information as regards the Divestment Business;

(ii) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

12. Omya shall report in writing and in English to the Commission and the Monitoring Trustee on developments in the negotiations with any potential purchasers within [REDACTED] after the end of every months following the Effective Date (or otherwise at the Commission's request), excluding the first month after the Effective Date.

13. Insofar as any due diligence on the Divestment Business takes place after the Effective Date, the Parties shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and Omya shall submit a copy of an information memorandum (if any) to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

III. The Divestment Technology

Section A. The Divestment Technology

Commitment to Divest

14. Omya commits to divest, or procure the divestiture of the Divestment Technology by the end of the Trustee Divestiture Period to a purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 29. To carry out the divestiture, Omya commits to find a purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Technology within the First Divesture Period. [REDACTED] If Omya has not entered into such an agreement at the end of the First Divestiture Period, Omya shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Technology in accordance with the procedure described in paragraph 38 in the Trustee Divestiture Period. [REDACTED]

15. Omya shall be deemed to have complied with this Commitment if, (i) by the end of the Trustee Divestiture Period, Omya has entered into a final binding sale and purchase

agreement for the sale of the Divestment Technology, (ii) the Commission approves the Purchaser and the terms in accordance with the procedure described in paragraph 29 and (iii) closing of the sale of the Divestment Technology takes place within a period not exceeding [REDACTED] after the approval of the Purchaser and the terms of sale by the Commission. In order to maintain the structural effect of the Commitments, Omya shall, for a period of [REDACTED], not acquire direct or indirect influence over the whole or part of the Divestment Technology, unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Technology is no longer necessary to render the proposed concentration compatible with the common market.

Structure and definition of the Divestment Technology

16. The Divestment Technology consists of Huber's Coating PCC Technology and Huber's Coating Additive Technology. The Divestment Technology, as more specifically defined in Schedule 2, includes all Intellectual Property Rights of Huber relating to the Product.

17. Huber's Coating PCC Technology comprises of post reactor coating related proprietary engineering diagrams, operating manuals, and target process parameters retained by Huber and formerly used by Huber at plants at Muskegen and Somerset, subject to existing non exclusive license in favour of Imerys. It includes patent US6402824 and patent application EP1160201 for PCC coating.

18. Huber Coating Additive Technology comprises of all post PCC reactor dewatering and mixing processes, and specific laboratory and pilot scale applications information (which shall be provided in non-customer specific format).

19. Omya will maintain all intellectual property rights in relation to its own technology for the Product. Nothing provided in these Commitments shall limit Omya's right to develop, manufacture, distribute or sell the Product on the basis of its own technology or to develop, alone or in co-operation with others, any further technology, know-how etc., in relation to the Product.

Section B. Related Commitments

Preservation of Viability, Marketability and Competitiveness

20. From the Effective Date until Completion of the Proposed Transaction Huber shall, and from the Completion of the Proposed Transaction until Closing Omya shall preserve the economic viability, marketability and competitiveness of the Divestment Technology, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Technology. In particular the Parties undertake not to carry out any act upon their own authority that might have a significant adverse impact on the value, management or competitiveness of the Divestment Technology or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy for the Divestment Technology.

21. Omya shall use its best efforts to ensure, in good faith, that, at the request of the Purchaser, [REDACTED]. In addition to, or as an alternative to, [REDACTED] Huber shall make available to the Purchaser Technological Support Services from Huber Technical Personnel

and Omya shall make available to the Purchaser Technological Support Services, at the request of the Purchaser [REDACTED].

Hold-separate obligation

22. Omya commits, from the Completion of the Proposed Transaction until Closing, to ensure that that it has no access to the Divestment Technology and that the Divestment Technology is held separate from the business it is retaining.

23. From Completion of the Proposed Transaction until Closing, Omya shall assist the Monitoring Trustee in ensuring that the Divestment Technology is held separately from the businesses retained by Omya. The Hold Separate Manager shall be responsible for holding the Divestment Technology, under the supervision of the Monitoring Trustee. The Hold Separate Manager shall hold the Divestment Technology independently and with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by Omya. For the avoidance of doubt, prior to the Completion of the Proposed Transaction, Huber (and not the Hold Separate Manager) will continue to hold the Divestment Technology.

Ring-fencing

24. Omya shall implement all necessary measures to ensure that it does not after the Completion of the Proposed Transaction obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Technology. Omya may obtain information relating to the Divestment Technology which is reasonably necessary for the divestiture of the Divestment Business or whose disclosure to Omya is required by law.

Due diligence

25. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Technology, the Parties shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:

(iii) provide to potential purchasers sufficient information as regards the Divestment Technology;

(iv) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

26. Omya shall report in writing and in English to the Commission and the Monitoring Trustee on developments in the negotiations with any potential Purchasers within [REDACTED] after the end of every month following the Effective Date (or otherwise at the Commission's request), excluding the first month after the Effective Date.

27. Insofar as any due diligence on the Divestment Technology takes place after the Effective Date, the Parties shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and Omya

shall submit a copy of an information memorandum (if any) to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

IV. General Provisions

Section A. The Purchaser

28. The Purchaser, in order to be approved by the Commission, must:

(a) be independent of and unconnected to the Parties;

(b) have the financial resources, proven expertise and incentive to maintain and develop the Divestment Package as a viable and active competitive force in competition with Omya and other competitors (i.e. it must be a so-called industrial buyer and not a financial buyer);

(c) neither be likely to create, in the light of the information available to the Commission, prima facie competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed, and must, in particular, reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Package; and

(d) purchase the Divestment Package as a whole (and not just the Divestment Business or the Divestment Technology separately) - (together the "**Purchaser Requirements**").

29. The final binding sale and purchase agreement(s) shall be conditional on the Commission's approval. When Omya has reached an agreement with the Purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), to the Commission and the Monitoring Trustee. Omya shall not be involved in any specific negotiations between the Purchaser and UPM concerning the research and development, production and sale of the Product. Omya must be able to demonstrate to the Commission that the purchaser meets the Purchaser Requirements and that the Divestment Package is being sold in a manner consistent with the Commitments. The Commission shall give its approval after verification that the Purchaser fulfils the Purchaser Requirements and that the Divestment Package is being sold in a manner consistent with the Commitments.

Section B. The Trustees

I. Appointment Procedure

30. Omya shall, upon prior consultation with Huber, appoint a Monitoring Trustee to carry out the functions specified in the Commitments for a Monitoring Trustee. If Omya has not entered into a binding sale and purchase agreement [REDACTED] the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by Omya at that time or thereafter, Omya shall, upon prior consultation with Huber, appoint a Divestiture Trustee to carry out the functions specified in the Commitments for a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.

31. Each Trustee shall be independent of the Parties, possess the necessary qualifications to carry out its mandate, for example as an investment bank or consultant or auditor, and shall neither have nor become exposed to a conflict of interest. Each Trustee shall be remunerated by Omya in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Package, the fee shall also be linked to a divestiture within the Trustee Divestiture Period.

Proposal by the Parties

32. No later than [REDACTED] the Effective Date, Omya shall, upon prior consultation with Huber, submit a list of one or more persons whom Omya proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than [REDACTED] the end of the First Divestiture Period, Omya shall, upon prior consultation with Huber, submit a list of one or more persons whom Omya proposes to appoint as Divestiture Trustee to the Commission for approval. Each proposal shall contain sufficient information for the Commission to verify that a proposed Trustee fulfils the requirements set out in paragraph 31 and shall include:

(a) the full terms of the proposed mandate, which shall include all provisions necessary to enable a Trustee to fulfil its duties under these Commitments;

(b) the outline of a work plan which describes how a Trustee intends to carry out its assigned tasks; and

(c) an indication whether a proposed Trustee is to act as both the Monitoring Trustee and the Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

33. The Commission shall have the discretion to approve or reject the proposed Trustees and to approve the proposed mandate subject to any modifications it deems necessary for the Trustees to fulfil their obligations. If only one name is approved, Omya shall appoint or cause to be appointed the individual or institution concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Omya shall, upon prior consultation with Huber, be free to choose the Trustee to be appointed from among the names approved. Each Trustee shall be appointed within [REDACTED] of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by the Parties

34. If all the proposed Trustees are rejected, Omya shall, upon prior consultation with Huber, submit the names of at least two more individuals or institutions within [REDACTED] of being informed of the rejection, in accordance with the requirements and the procedure set out in paragraphs 30 and 33.

Trustee nominated by the Commission

35. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom Omya shall appoint, or cause to be appointed, in accordance with the mandate approved by the Commission.

II. Functions of the Trustees

36. The Trustee shall assume its specified duties in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or Omya, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

37. The Monitoring Trustee shall:

(i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.

(ii) oversee the on-going management of the Divestment Package with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by the Parties with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:

a. monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Package, and the keeping separate of the Divestment Package from the business retained by the Parties, in accordance with paragraphs 5, 6, 7, 20 and 22 of the Commitments;

b. supervise the management of the Divestment Package as a distinct and saleable entity, in accordance with paragraphs 8 and 23 of the Commitments;

c. (i) in consultation with Omya, determine all necessary measures to ensure that Omya does not after completion of the Proposed Transaction obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Package, and (ii) decide whether such information may be disclosed to Omya as the disclosure is reasonably necessary to allow Omya to carry out the divestiture or as the disclosure is required by law;

d. monitor the splitting of assets and the allocation of Personnel between the Divestment Package and Omya or Affiliated Undertakings;

(iii) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision;

(iv) propose to the Parties such measures as the Monitoring Trustee considers necessary to ensure the Parties' compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Package, the holding separate

of the Divestment Package and the non-disclosure of competitively sensitive information;

(v) review and assess potential Purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process, (a) potential Purchasers receive sufficient information relating to the Divestment Package and the Personnel in particular by reviewing, if available, the date room documentation, the information memorandum and the due diligence process, and (b) potential Purchasers are granted reasonable access to the Personnel;

(vi) provide to the Commission, sending the Parties a non-confidential copy at the same time, a written report within 15 days after the end of every month. The report shall cover the operation and management of the Divestment Package so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers. In addition to these reports, the Monitoring Trustee shall promptly report in writing to the Commission, sending the Parties a non-confidential copy at the same time, if it concludes on reasonable grounds that the Parties are failing to comply with these Commitments;

(vii) within one week after receipt of the documented proposal submit to the Commission a reasoned opinion as to the suitability and independence of the proposed Purchaser and the viability of the Divestment Package and as to whether the Divestment Package is sold in a manner consistent with the conditions and obligations attached to the Decision.

Duties and obligations of the Divestiture Trustee

38. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Package to a purchaser, provided that the Commission has approved both the Purchaser and the final binding sale and purchase agreement in accordance with the procedure laid down in paragraph 29. The Divestiture Trustee shall include in the sale and purchase agreement such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement such customary representations and warranties and indemnities as are reasonable required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of Omya, subject to the Parties' unconditional obligation to divest [REDACTED] in the Trustee Divestiture Period.

39. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Parties.

III. Duties and obligations of the Parties

40. The Parties shall provide and shall cause their advisors to provide the Trustee(s) with all such co-operation, assistance and information as the Trustee(s) may reasonably require to perform its tasks. The Trustee(s) shall have full and complete access to any of the Parties' or the Divestment Business books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the

Commitments and the Parties and the Divestment Business shall provide the Trustee(s) upon request with copies of any document. The parties and the Divestment Business shall make available to the Trustee(s) one or more offices on their premises and shall be available for meetings in order to provide the Trustee(s) with all information necessary for the performance of its tasks.

41. The parties shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. The parties shall provide and shall cause their advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. Omya shall inform the Monitoring Trustee on potential Purchasers, submit a list of potential purchasers, and keep the Monitoring Trustee informed of all developments in the divestiture process.

42. Omya shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale, the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, Omya shall cause the documents required for effecting the sale and the Closing to be duly executed.

43. The parties shall indemnify (each of) the Trustee(s) and its employees and agents (each an "**Indemnified Party**") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to the parties for, any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.

44. At the expense of Omya, (each of) the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Omya's approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under its mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should Omya refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard Omya. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 42 shall apply *mutatis mutandis*. In the Trustee Divestiture period, the Divestiture Trustee may use advisors who served Omya during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

IV. Replacement, discharge and reappointment of the Trustee

45. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a conflict of interest:

a. The Commission may, after hearing the Trustee, require Omya to replace the Trustee; or

b. Omya, upon prior consultation with Huber, with the prior approval of the Commission, may replace the Trustee.

46. If the Trustee is removed according to paragraph 45, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 30 - 35.

47. Beside the removal according to paragraph 45, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section C. The Review Clause

48. The Commission may, where appropriate, in response to a request from Omya showing good cause and accompanied by a report from the Monitoring Trustee:

(i) Grant an extension of the time periods foreseen in the Commitments, or

(ii) Waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments.

Where Omya, after prior consultation with Huber, seeks an extension of a time period, it shall submit a request to the Commission no later than one month before the expiry of that period, showing good cause. Only in exceptional circumstances shall Omya be entitled to request an extension within the last month of any period.

49. The Parties will no longer be bound by the terms of these Commitments in the event of a termination of the Acquisition Agreement between Omya and Huber dated 18 January 2005.

SIGNED by _____

Duly authorised for and on behalf of Omya AG

SIGNED by _____

Duly authorised for and on behalf of J.M. Huber Corporation

Schedule 1

The Divestment Business as operated to date has the following legal and functional structure: the plant in Kuusankoski is currently owned and operated by J.M. Huber Finland Oy which is the party to the sales contract with the host mill.

The Divestment Business includes, but is not limited to:

1. The following main tangible assets: The building and all equipment that comprise the on-site filler PCC plant in Kuusankoski (Kuusankoski Mill, 45701 Kuusankoski, Finland), together with all supplies, raw materials, inventory and other tangible personal property located at the plant.

2. [REDACTED]

3. The operating/environmental license of J.M. Huber Finland Oy for the plant will be transferred if permitted or assistance will be given to the Purchaser in obtaining new licences.

4. All rights and obligations under the sales contract with the host mill for the plant, including all related agreements, such as the real estate lease for the site on which each plant is located.

The contract partner is Kymi Paper Oy. The contract provides for the delivery of PCC in sufficient volumes so as to cover all of the purchaser's requirements for PCC, corresponding to a [REDACTED – a capacity of more than 130,000 dmt]. The purchaser has the obligation to purchase the minimum guaranteed quantities as defined in the agreement. The term of the agreement is fixed for [REDACTED – period of more than 2 years]. [REDACTED]

5. All know-how which the Commission deems necessary for the operation of filler PCC by the Divestment Business, including the production, sale and any ancillary activities, is transferred to the Purchaser. The right to use such know-how will be strictly limited to operation of the Divestment Business, including the production, sale and any ancillary activities, and cannot be used under any other circumstances. However, notwithstanding the above, the right to use such know-how includes the right to develop and/or improve such know-how as well as to use such know-how in the context or as a result of any future bid for the replacement of the Divestment Business by UPM. To the extent deemed necessary by the Commission, should the operation of the Divestment Business require the licensing of any other IP rights transferred from Huber to Omya as part of the Proposed Transaction [REDACTED], Omya would license such IP rights [REDACTED].

6. All books and records for the plant, including all customer records related to the host mill and any merchant customers of the plant;

7. All plant operational personnel working at the plant;

8. The following Key Personnel:

[REDACTED]

9. Omya would provide to the Divestment Business certain support services, namely laboratory services, environment, health, safety and accounting services for a period of up to [REDACTED], to the extent required by the Purchaser, on a reasonable cost plus basis.

Omya would also provide lime supplies [REDACTED] to the extent required by the Purchaser.

A more detailed description of the Divestment Business is enclosed in **Annex 3**. The relevant contract with the host mill is enclosed as **Annex 4**.

The Divestment Business shall not include [REDACTED]

Schedule 2

Following paragraph 4 of these Commitments, the Divestment Technology includes, but is not limited to:

Patents:

1. Patent US6402824 and related worldwide patents; including patent application EP1160201 for PCC coating.

2. Patent US6402824 and related worldwide patent applications demonstrate a unique approach to preparing PCC compositions such that the resulting PCC compositions are endowed with reduced high-shear viscosity in aqueous slurry form at high-solids content and contain PCC particles of a narrower particle size distribution.

Post reactor coating

Post reactor coating related proprietary engineering diagrams, operating manuals (including target process parameters), plant management software programme retained by Huber and formerly used by Huber plants located, subject to existing non exclusive license in favour of Imerys.

3. Proprietary Engineering Diagrams – flow diagrams that demonstrate the principles of the coating process including key equipment and process for raw material addition. (**Annex 5**)

4. Operating Manuals – a description of operating principles, targeted quality parameters, process control, raw material consumption and utility demand. (**Annex 6**)

Huber coating additive technology

Huber coating additive technology comprised of all post PCC reactor dewatering and mixing processes, and specific laboratory and pilot scale applications information (which will be provided in non-customer specific format). Documentation of this technology includes:

5. Defined Operations/Production Process. These pertain to the definition of operation and production processes. (**Annex 7**)

6. Proprietary Engineering diagrams. These include (i) flow diagrams that demonstrate the principles of the additive coating process including key equipment and the process for raw material addition and (ii) PCC coating plant layout for the upgrade of the Kuusankoski Plant. (**Annex 8**)

7. Technical reports and pilot trial data relating to the original Huber proprietary work associated with the additives concept (not including technical reports and pilot data undertaken under secrecy with customers). (**Annex 9**)

8. Overview of Huber's technology and market experience in relation to the coating additive technology. (**Annex 10**)

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EUROPEAN COMMISSION
Competition DG

Policy and Strategic Support
Enforcement Priorities and Decision Scrutiny

OPINION

of the ADVISORY COMMITTEE on CONCENTRATIONS

given at its 141th meeting on 30 June 2006

concerning a draft decision relating to

Case COMP/M.3796 – OMYA / HUBER PCC

Rapporteur : UK

1. a) The Advisory Committee agrees with the Commission that the notified operation, which was referred to the Commission pursuant to Article 22 ECMR, constitutes a concentration within the meaning of Article 3(1)(b) of Council Regulation (EC) No 139/2004, and that

   b) it does not have a Community dimension.

2. The majority of the Advisory Committee agrees with the Commission that for the purposes of assessing the present transaction :

   a) calcium carbonates can be distinguished from other industrial minerals used for applications in the paper industry.

   b) calcium carbonates for coating and filling applications are not substitutes from a customer's perspective.

Calcium carbonates for filling applications

   c) based on supply-side considerations, filling PCC and coating PCC do not belong in the same product market.

   d) i) the market investigation and

   ii) the econometric study support a conclusion that there are degrees of competitive constraint between filling PCC and filling GCC and to a lesser extent, vice versa. A minority of the Advisory Committee disagrees and a minority abstains.

   e) with regard to the supply of PCC filler, which may be carried out by on-site plant or by merchant market supply, it is not necessary to come to a conclusion as to whether or not on-site supply of PCC filler forms a distinct market since the proposed transaction will not give rise to competition concerns under any reasonable product market definition. A minority of the Advisory Committee disagrees.

Calcium carbonates for coating applications

f) it is not necessary to come to a conclusion as to whether there are distinct markets for the different GCC coating grades.

g) all coating calcium carbonates (i.e. coating PCC and coating GCC, including steep GCC and blends of GCC and PCC) are interchangeable or substitutable to some extent for customers.

h) it is not necessary to conclude whether merchant and on-site supplies of PCC for coating constitute two separate markets.

3. The Advisory Committee agrees with the Commission that for the purposes of assessing the relevant geographic markets for calcium carbonates affected by the present operation :

a) for merchant supply (PCC and GCC) the relevant geographic market is as follows :

i) For merchant *filling* calcium carbonates, it will vary between 400 km and up to a maximum of 2,000 km depending on the plant, the product and the mode of transport;

ii) For merchant *coating* calcium carbonates, it will vary between 450 km and 2,900 km

b) For customers capable of having on-site filling supply solutions, the geographic scope is at least EEA-wide.

4. The majority of the Advisory Committee agrees with the Commission that the notified concentration raises no competitive concerns for customers of filling calcium carbonates supplied with either a merchant or (despite the loss of Huber as a potential bidder) on-site supply solution in :

a) Austria
b) France
c) Finland or
d) Sweden.

A minority of the Advisory Committee disagrees on 4c) and a minority abstains on 4a), 4b), 4c) and 4d).

5. The Advisory Committee agrees with the Commission that Huber is a potential competitor on the market for calcium carbonates for paper coating applications and that, absent the merger, Huber would very likely grow into an effective competitive force.

6. The Advisory Committee agrees with the Commission that the merger would reduce the incentives for and benefits of innovation arising from development of coating GCC/PCC blends and additives.

7. The Advisory Committee agrees with the Commission that the notified concentration is likely to significantly impede effective competition, in particular through the strengthening of Omya's dominant position in the markets for coating calcium carbonates for affected customers in the South of Finland.

8. The majority of the Advisory Committee agrees with the Commission that the effect of the concentration on calcium coating customers in Northern Finland, Sweden, France and Austria is not sufficiently likely and therefore that it creates no significant impediment to effective competition in respect of those customers. A minority disagrees.

9. The majority of the Advisory Committee agrees that the undertakings offered, consisting of the divestiture of the Kuusankoski PCC on-site plant and the coating and additive technology, together with a suitable and up-front purchaser, will remove the significant impediment to effective competition arising and will ensure that the purchaser would be placed in a similar position to Huber. A minority disagrees.

10. The majority of the Advisory Committee agrees with the Commission that consequently, the proposed transaction will not significantly impede effective competition in the common market or a substantial part of it, within the meaning of Article 2(2) of the Merger Regulation and can therefore be declared compatible with Article 2(2) and 8(2) of the Merger Regulation and the EEA Agreement. A minority disagrees.

11. The Advisory Committee asks the Commission to take into account all the other points raised during the discussion.

BELGIË/BELGIQUE	**ČESKÁ REPUBLIKA**	**DANMARK**	**DEUTSCHLAND**	**EESTI**
---	---	M. KJÆRGAARD	K. COSTA-ZAHN	---
ELLADA	**ESPAÑA**	**FRANCE**	**IRELAND**	**ITALIA**
---	J.FORNELLS DE FRUTOS	B. ALOMAR	P. GORECKI	F. PAPADIA
KYPROS/KIBRIS	**LATVIJA**	**LIETUVA**	**LUXEMBOURG**	**MAGYARORSZÁG**
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MALTA	**NEDERLAND**	**ÖSTERREICH**	**POLSKA**	**PORTUGAL**
---	---	D. ZEIBIG	---	S. MOURA
SLOVENIJA	**SLOVENSKO**	**SUOMI-FINLAND**	**SVERIGE**	**UNITED KINGDOM**
---	---	H. VÄISÄNEN	P. HANSSON	F. PEÑA

EUROPEAN COMMISSION

The Hearing Officer

FINAL REPORT OF THE HEARING OFFICER IN CASE COMP/M.3796 – OMYA/J.M. HUBER PCC

(pursuant to Articles 15 and 16 of Commission Decision (2001/462/EC, ECSC) of 23 May 2001 on the terms of reference of Hearing Officers in certain competition proceedings – OJ L162, 19.06.2001, p.21)

The draft decision gives rise to the following observations:

Written Procedure

On 4 April 2005, the Commission received a request for referral pursuant to Article 22(1) of Council Regulation (EC) No 139/2004 ("Merger Regulation") from the Finnish Competition Authority, subsequently joined by the competent authorities of Sweden on 22 April 2005, Austria on 26 April 2005, and France on 28 April 2005, to investigate a proposed concentration by which the undertaking Omya AG ("Omya", Switzerland) proposes to acquire within the meaning of Article 3(1)(b) of the Council Regulation sole control of the worldwide precipitated calcium carbonate ("PCC") business of J.M. Huber Corporation ("Huber"), currently controlled by J.M. Huber Corporation (USA), by way of purchase of shares and assets.

Upon examination of the evidence submitted by the referring Member States, the Commission concluded that the concentration met the requirements laid down in Article 22(3) of the Merger Regulation and paragraphs 42-45 of the Commission Notice on Case Referral in respect of concentrations and decided to accept jurisdiction, sending decisions to that effect to the referring Member States on 18 May 2005. This case was the first referral from Member States to the Commission under Article 22 of the new Merger Regulation.

Omya submitted a notification on 4 August 2005. The Commission initiated proceedings on 23 September 2005 pursuant to Article 6(1)(c) of the Merger Regulation on the basis that the proposed concentration raised serious doubts as to its compatibility with the common market. On 3 October 2005, Omya was provided with access to the "key documents" in the Commission file in accordance with the "Best Practices on the conduct of EC merger control proceedings" ("Best Practices"), as determined by the Directorate General for Competition.

Subsequently, the Commission adopted four Article 11(3) decisions addressed to Omya on 11 October 2005, 9 November 2005, 23 November 2005 and 9 December 2005. The proceedings thus were suspended between 11-19 October 2005, 4-17 November 2005, 22-29 November 2005 and 8 December 2005-3 January 2006.

When finalising the draft decision following the in-depth investigation the Commission services found that an earlier submission by the notifying party contained incorrect data. Therefore, on 8 March 2006 the Commission adopted another Article 11(3) decision that again suspended the procedure pending compliance by Omya with the Article 11(3) decision. (This decision was appealed by Omya to the Court of First Instance on 18 May 2006.) The effect of the Article 11(3) decision was to set the merger timetable clock back to

8 December 2005. The clock restarted on 21 March 2006. The Commission's continuing investigation confirmed competition concerns related to the coating market. A Statement of Objections focusing on this market was sent to the notifying party on 2 May 2006, with a deadline for reply of 16 May 2006.

Involvement of Third Parties

I granted two requests from undertakings to be admitted to the proceedings as interested third parties within the meaning of Article 18(4) of the Merger Regulation and Article 11(c) of Council Regulation (EC) No 802/2004. Minerals Technologies Inc. ("MTI") MTI was admitted on 23 December 2005, and Imerys SA ("Imerys") on 23 January 2006. Both undertakings, in addition to responding to requests for information pursuant to Article 11 of the Merger Regulation, made voluntary submissions, both written and in the context of meetings with the Commission.

When they understood that the Commission might not issue a Statement of Objections, both third parties wrote to the Hearing Officer or the Commission services to raise issues about the procedure in the case. Imerys lodged a formal complaint with the Hearing Officer on 23 February 2006, saying that the Commission services had not been transparent enough, nor provided sufficient information at an early enough stage in the proceedings for Imerys to contribute meaningfully to the investigation. I replied that in my view Imerys' legal rights to be heard as an interested third party had been fully respected. The same applied in relation to MTI. In terms of transparency, it might have been possible for these third parties to have been more fully informed. In the event, the third parties continued to be meaningfully involved in the procedure, both before and after the Statement of Objections was sent.

Access to file

In preparation for access to file following issuance of the Statement of Objections, on 27 April 2006 I took a decision pursuant to Article 9 of the Hearing Officer's Mandate[319] This decision required that certain information for which Huber had claimed confidentiality be disclosed to Omya in order to protect Omya's rights of defence.

Access to the file was granted to the notifying party upon issuance of the Statement of Objections. Omya complained, *inter alia*, of "limited and deficient" access to file in its response to the Statement of Objections. The relevant Commission services responded to this issue. Subsequently Omya addressed a letter to the Hearing Officer reiterating some of its concerns about access to the file. Having examined the specific issues raised, I informed Omya that whilst certain deficiencies had been identified, these were subsequently corrected by the Commission services.

Omya raised a further issue with regard to its right to be heard in reference to a document the Commission sent to Omya for comments on 6 July 2006. However, I consider that in view of the fact that Omya provided comments on the document on 11 July 2006, there was still sufficient time for its views to be taken into account before the final Decision.

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[319] Commission Decision 2001/462/EC, ECSC of 23 May 2001 on the terms of reference of hearing officers in certain competition proceedings (OJ No L 162, 19.6.2001, p. 21

Oral Hearing

An oral hearing took place on 18 May 2006 on the request of Omya, which attended the hearing together with Huber. The two third parties, Imerys and MTI, were also present at the hearing.

Conclusions

Omya and Huber submitted a package of commitments to the Commission on 23 May 2006. On 29 May 2006, the Commission launched a market test on the first alternative commitment proposal. The Commission provided Omya with a set of non-confidential versions of the responses from third parties to the market test of the first alternative commitment, followed by a meeting where the results of the market test were discussed with the parties. Subsequently, on 3 July 2006, the parties submitted a revised commitment.

The Commission services have concluded that the first alternative commitment, subject to certain refinements proposed by the parties on 3 July 2006, and provided it is complied with in full, adequately addresses the competition concerns raised by the Commission with regard to effective competition on the market for coating calcium carbonates for affected customers in the South of Finland, and the concentration, as modified by the commitment, can be declared compatible with the common market and the functioning of the EEA Agreement.

No concerns were raised to the Hearing Officer as to the objectivity of the market tests.

In light of the above, I consider that the rights to be heard of all participants to the present proceeding have been respected.

Brussels, 14 July 2006

(signed)
Karen WILLIAMS