Gray Portland Cement and Cement Clinker from Japan

Investigation No. 731-TA-461 (Fourth Review)

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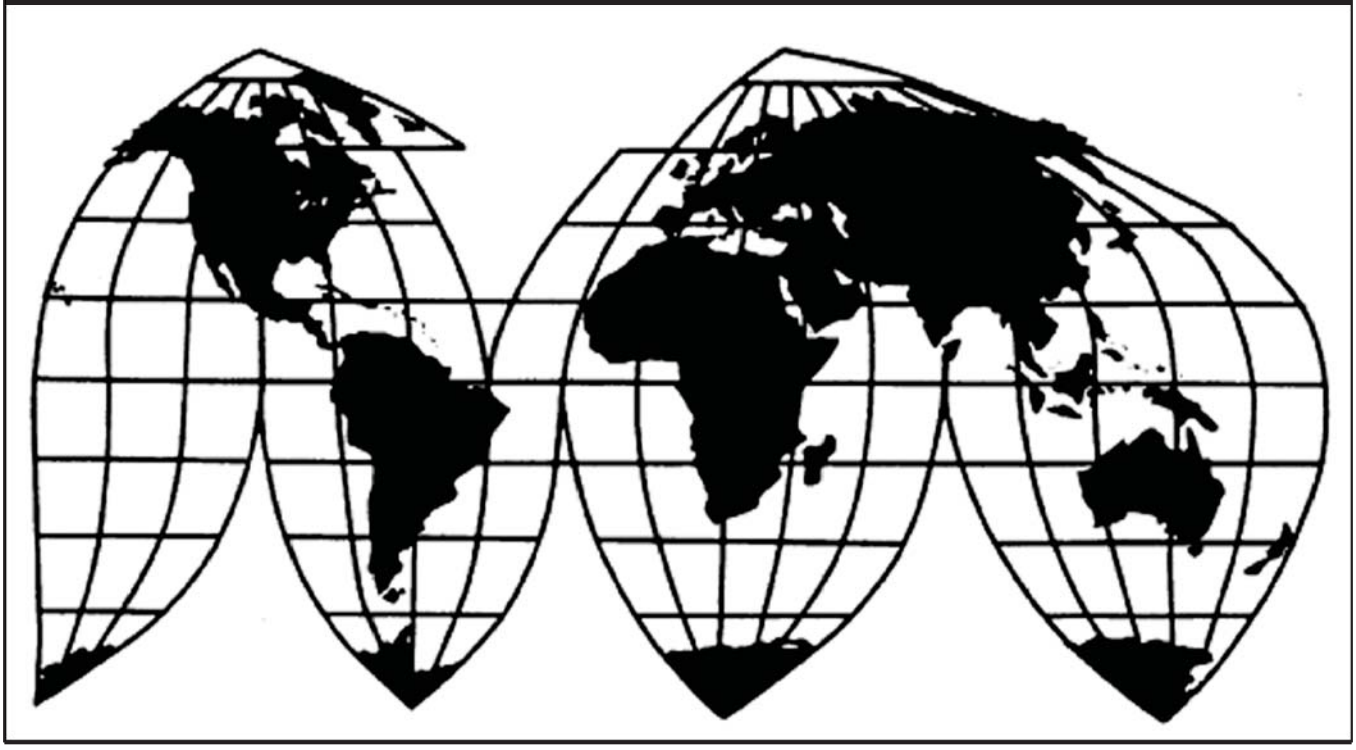
U.S. International Trade Commission



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U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-461 (Fourth Review)
Gray Portland Cement and Cement Clinker from Japan

DETERMINATION

On the basis of the record[1] developed in the subject five-year review, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the antidumping duty order on gray portland cement and cement clinker from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission, pursuant to section 751(c) of the Act (19 U.S.C. 1675(c)), instituted this review on November 1, 2016 (81 F.R. 75848) and determined on February 6, 2017 that it would conduct an expedited review (82 F.R. 12465, March 3, 2017).

[1] The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

Views of the Commission

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping duty order on gray portland cement and cement clinker ("cement") from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

A. Original Determination and Prior Reviews

In 1990, over a period of several months, the Commission instituted separate investigations on cement from Japan, Mexico, and Venezuela. On April 29, 1991, the Commission determined that an industry in the United States was materially injured by reason of imports of cement from Japan sold at less than fair value.[1] In May 1991, the Department of Commerce ("Commerce") issued an antidumping duty order on cement from Japan.[2] In the Commission determination, the Commissioners who made affirmative determinations used the "Southern California" region for their analysis. Two of the three Commissioners who made affirmative determinations cumulated subject imports from Japan with imports from Mexico that were subject to a recent antidumping duty order.[3] The United States Court of International Trade ("CIT") reviewed the determination and remanded the plurality's decision to use a cumulative analysis.[4] On remand, the Commission made an affirmative determination with respect to the Southern California regional industry on a non-cumulated basis, which the CIT affirmed.[5]

In 2000, the Commission conducted a full five-year review of the order on subject imports from Japan. The review was grouped with reviews on cement from Mexico and Venezuela. The Commission made an affirmative determination with respect to subject imports from Japan.[6] It conducted a regional industry analysis, with the pertinent region

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[1] *Gray Portland Cement and Cement Clinker from Japan*, Inv. No. 731-TA-461 (Final), USITC Pub. 2376 at 16-21, 47-50 (Apr. 1991) ("*Original Determination*").

[2] 56 Fed. Reg. 21658 (May 10, 1991).

[3] *Original Determination*, USITC Pub. 2376 at 13-21, 29-36, 47-49.

[4] *Mitsubishi Materials Corp. v. United States*, 820 F. Supp. 608 (Ct. Int'l Trade 1993).

[5] *Gray Portland Cement and Cement Clinker from Japan*, Inv. No. 731-TA-461 (Remand), USITC Pub. 2657 (June 1993) ("*Remand Determination*"); *aff'd*, *Mitsubishi Materials Corp. v. United States*, 918 F. Supp. 422 (Ct. Int'l Trade 1996).

[6] *Cement and Cement Clinker from Japan, Mexico, and Venezuela*, Inv. Nos. 303-TA-21, 731-TA-451, 461, 519 (Review), USITC Pub. 3361 at 43-47 (Oct. 2000) ("*First Review Determination*"). The Commission also made an affirmative determination with regard to cement from Mexico on a non-cumulated basis and terminated the investigation with regard to cement from Venezuela. *Id*. at 18-20, 35-42.

defined as the state of California.[7] It did not cumulate subject imports from Japan with imports from either of the other countries.[8] Commerce issued a notice of continuation of the antidumping duty order on November 15, 2000.[9]

The Commission expedited the second and third reviews of the antidumping duty order on cement from Japan in 2006 and 2011, respectively.[10] In both instances, the Commission used a regional industry analysis and defined the pertinent regional industry to encompass producers in the state of California.[11] The Commission made affirmative determinations in both the expedited reviews.[12]

The Commission instituted this fourth review on November 1, 2016.[13] The sole response to the notice of institution was filed by the Committee for Fairly Traded Japanese Cement ("Committee"), an *ad hoc* association of three domestic producers of cement located in California, and three labor unions representing employees producing cement (collectively, "Domestic Interested Parties").[14] The Commission found each individual response adequate, the domestic interested party group response adequate, and the respondent interested party group response inadequate. In the absence of an adequate respondent interested party

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[7] *First Review Determination*, USITC Pub. 3361 at 9-15, 17-18.

[8] *First Review Determination*, USITC Pub. 3361 at 9-15, 25-28.

[9] *Continuation of Antidumping Duty Orders: Gray Portland Cement and Cement Clinker from Japan and Mexico*, 65 Fed. Reg. 68979 (Nov. 15, 2000).

[10] As with the first review, the Commission instituted the second review on a grouped basis, including the outstanding orders on subject imports from Japan and Mexico. The Commission received an adequate respondent interested party group response for the review on cement from Mexico, but received no respondent interested party response for the review on cement from Japan. Although it determined to conduct a full review on cement from Mexico, it expedited the review on cement from Japan. *See Gray Portland Cement and Cement Clinker from Japan*, Inv. No. 731-TA-461 (Second Review), UISTC Pub. 3856, App. B (May 2006) ("*Second Review Determination*") (explaining that conducting a full grouped review would not achieve administrative efficiency because the prior determinations on cement from Japan and Mexico were based on different regional industries).

[11] *Second Review Determination*, USITC Pub. 3856 at 9-12; *Gray Portland Cement and Cement Clinker from Japan*, Inv. No. 731-TA-461, USITC Pub. 4281 at 8-11 (Dec. 2011) ("*Third Review Determination*").

[12] Commerce issued notices on continuation of the antidumping duty order on June 16, 2006 and December 16, 2011. 71 Fed. Reg. 34892 (June 16, 2016); 76 Fed. Reg. 78240 (Dec. 16, 2011).

[13] *Gray Portland Cement and Cement Clinker from Japan; Institution of a Five-Year Review*, 81 Fed. Reg. 75848 (Nov. 1, 2016).

[14] Domestic Interested Parties' Response to Notice of Institution (December 1, 2016) ("Response") at 2-3. The three California producers are Cemex, Inc. ("Cemex"), Lehigh Hanson, Inc. ("Lehigh"), and National Cement Company of California ("National Cement"). Response, Exh. 1. The three labor unions are the International Brotherhood of Boilermakers ("Boilermakers"); the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("Steelworkers"); and the International Union of Operating Engineers ("Operating Engineers") Response, Exh. 1 & 2.

response or any other circumstances warranting a full review, the Commission determined to conduct an expedited review.[15]

B. Data/Response Coverage

U.S. industry data in this review are based on information provided by Domestic Interested Parties in response to the notice of institution, information from the original investigations and prior reviews, and publicly available data provided by the United States Geological Survey ("USGS"). Domestic Interested Parties are estimated to account for *** percent of the total production of cement in California.[16] U.S. import data and related information are based on official import statistics.[17] No foreign producer, exporter, or importer of cement participated in this review. Foreign industry data and related information are based on information submitted in the original investigation and prior reviews, and by Domestic Interested Parties in the current review, as well as certain publicly available sources.[18]

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."[19] The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."[20] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original

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[15] *Explanation of Commission Determination on Adequacy in Gray Portland Cement and Cement Clinker from Japan*, Inv. No. 731-TA-461 (Fourth Review), EDIS No. 603281 (Feb. 9, 2017). Vice Chairman Johanson and Commissioner Broadbent voted to conduct a full review. *Id.*, n.2.

[16] Confidential Report, Memorandum INV-PP-012 (Jan. 23, 2017) ("CR") at Table I-1; Public Report, *Gray Portland Cement and Cement Clinker from Japan*, Inv. No. 731-TA-461 (Fourth Review), USITC Pub. 4704 (June 2017) ("PR") at Table I-1. This percentage includes CalPortland Co. ("CalPortland"), which is not part of the Committee. However, Domestic Interested Parties state that the workers for two of CalPortland's plants in California are represented by Operating Engineers and Steelworkers. Response at 3, Exh. 4.

[17] CR I-42 to I-10; PR at I-32 to I-36.

[18] These sources include USGS data and Global Trade Atlas. *See generally*, CR at I-53 to I-59; PR at I-37 to I-41.

[19] 19 U.S.C. § 1677(4)(A).

[20] 19 U.S.C. § 1677(10); *see*, *e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

investigation and consider whether the record indicates any reason to revisit the prior findings.[21]

Commerce has defined the imported merchandise within the scope of the order under review as follows:

> The products covered by the order are cement and cement clinker from Japan. Cement is a hydraulic cement and the primary component of concrete. Cement clinker, an intermediate material produced when manufacturing cement, has no use other than grinding into finished cement. Microfine cement was specifically excluded from the antidumping duty order. Cement is currently classifiable under the Harmonized Tariff Schedule ("HTS") item number 2523.29 and cement clinker is currently classifiable under HTS item number 2324.10. Cement has also been entered under HTS item number 2523.90 as "other hydraulic cements." The HTS item numbers are provided for convenience and customs purposes. The written product description remains dispositive as to the scope of the product covered by the order.[22]

Gray portland cement is a hydraulic industrial binding agent manufactured from a proportioned mixture of raw materials that is crushed, ground, and blended into a mill feed and then sintered at about 2,700 degrees Fahrenheit.[23] Cement clinker is the intermediate product resulting from the sintering stage of the production process and has no use other than for the production of cement.[24] Gray portland cement is used predominantly in the production of concrete, which in turn is used almost wholly by the construction industry. The chief end uses are highway construction using ready-mix concrete and building construction using ready-mix concrete, concrete blocks, and precast concrete units.[25] All cement, including subject imports from Japan, generally conforms to the standards established by the American Society for Testing and Materials ("ASTM").[26]

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[21] *See*, *e.g.*, *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

[22] *Gray Portland Cement and Cement Clinker from Japan: Final Results of Expedited Fourth Sunset Review of the Antidumping Duty Order*, 82 Fed. Reg. 12561 (Mar. 6, 2017).

[23] CR at I-7, I-9 to I-10; PR at I-6, I-8.

[24] CR at I-7; PR at I-6.

[25] CR at I-10; PR at I-8.

[26] CR at I-8; PR at I-6.

In the original determination and prior reviews, the Commission defined the domestic like product to be coextensive with Commerce's scope definition.[27] Domestic Interested Parties in this review assert that the Commission should again define a single domestic like product coextensive with Commerce's scope definition.[28]

The record in this review does not indicate that there have been any changes in the product characteristics of cement since the prior proceedings.[29] In light of this and the lack of any contrary argument, we again define a single domestic like product encompassing those domestically produced cement products described by Commerce's scope definition.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[30] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

1. Regional Industry

a. General Considerations

Section 752(a)(8) of the Act provides the Commission a special rule in five-year reviews for regional industries. The statute states that in a five-year review involving a regional industry:

> The Commission may base its determination on the regional industry defined in the original investigation under this subtitle, another region that satisfies the criteria established in section 1677(4)(c) of this title, or the United States as a whole. In determining if a regional industry analysis is appropriate for the determination in review, the Commission shall consider whether the criteria established in section 1677(4)(c) of this title are likely

[27] *Original Determination*, USITC Pub. 2376 at 13; *First Review Determination*, USITC Pub. 3361 at 7-8; *Second Review Determination*, USITC Pub. 385 at 6; *Third Review Determination*, USITC Pub. 4281 at 5. There was no dispute about the appropriate like product definition in any of the prior proceedings.

[28] Response at 55.

[29] *See generally* CR at I-6 to I-17; PR at I-5 to I-13.

[30] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

> to be satisfied if the order is revoked or the suspended investigation is terminated.[31]

Regarding the first sentence of this statutory provision, the Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") clarifies that "the Commission is not bound by any determination it may have made in the original investigation regarding the existence of a regional industry."[32] On the other hand, the SAA appears to contemplate that the Commission have "sufficient evidence" to warrant revisiting its original regional industry determination.[33]

The Commission takes into account any effect that the order or suspension agreement may have had on the marketing and distribution patterns for the subject product in analyzing whether the market isolation and import concentration criteria are likely to be satisfied in the event of revocation or termination.[34] The Commission also takes into account any prior regional industry definition and any product characteristics that support a regional market analysis, and whether any changes in the isolation of the region or import concentration are related to the imposition of the order or acceptance of the suspension agreement.[35]

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[31] 19 U.S.C. § 1675a(a)(8).

[32] SAA, H.R. Rep. 103-316, vol. I at 887 (1994).

[33] Specifically, the SAA states:

> If there is sufficient evidence to warrant revisiting the original regional industry determination, the Commission may base its likelihood determination on: (1) the regional industry defined by the Commission in the original investigation; (2) another regional industry satisfying the criteria of amended section 771(4)(c); or (3) the United States industry as a whole.

SAA at 887.

[34] SAA at 888. The SAA specifically states:

> Given the predictive nature of a likelihood of injury analysis, the Commission's analysis in regional industry investigations will be subject to no greater degree of certainty than in a review involving a national industry. Because the issuance of an order or the acceptance of a suspension agreement may have affected the marketing and distribution patterns of the product in question, the Commission's analysis of a regional industry should take into account whether the market isolation and import concentration criteria in section 771(4)(C) are likely to be satisfied in the event of revocation or termination.

Id.

[35] Specifically, the SAA states:

> The Commission should take into account any prior regional industry definition, whether the product at issue has characteristics that naturally lead to the formation of regional markets (e.g., whether it has a low value-to-weight ratio and is fungible), and whether any changes in the isolation of the region or in import concentration are related to the imposition of the order or the acceptance of a suspension agreement.

(Continued…)

In the original investigation and prior reviews, the Commission took a series of steps in considering whether use of a regional industry analysis was appropriate. First, it examined whether a regional market existed based on the two "market isolation" factors identified in the statute. As a second step, it then considered whether imports were concentrated in any regional market so defined.[36]

The statute, 19 U.S.C. § 1677(4)(c), provides that:

> In appropriate circumstances, the United States, for a particular product market, may be divided into 2 or more markets and the producers within each market may be treated as if they were a separate industry if—
>
> (i) the producers within such market sell all or almost all of their production of the like product in question in that market, and
>
> (ii) the demand in that market is not supplied, to any substantial degree, by producers of the product in question located elsewhere in the United States.
>
> In such appropriate circumstances, material injury, the threat of material injury, or material retardation of the establishment of an industry may be found to exist with respect to an industry even if the domestic industry as a whole, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of that product, is not injured, if there is a concentration of dumped imports or imports of merchandise benefitting from a countervailable subsidy into such an isolated market and if the producers of all, or almost all, of the production within that market are being materially injured or threatened by material injury, or if the establishment of an industry is being materially retarded, by reason of the dumped imports or imports of merchandise benefitting from a countervailable subsidy. The term "regional industry" means the domestic producers within a region who are treated as a separate industry under this subparagraph.[37]

(…Continued)
SAA at 888.

[36] *Original Determination*, USITC Pub. 2376 at 17-21; *First Review Determination*, USITC Pub. 3361 at 13-15; *Second Review Determination*, USITC Pub. 3856 at 10-12; *Third Review Determination*, USITC Pub. 4281 at 8-11.

[37] 19 U.S.C. § 1677(4)(c). The CIT has described the steps taken by the Commission in a regional industry analysis as follows:
(Continued…)

b. The Commission's Original Determination and Prior Reviews

In the original investigation and prior reviews, the Commission found that appropriate circumstances existed to conduct a regional industry analysis. In the original determination, the Commission found that Southern California was the appropriate region for its analysis. It also considered whether the state of California was the appropriate region. A plurality determined that both regions satisfied the market isolation criteria but found the Southern California region to be the more appropriate region for analysis.[38] In the first review, the Commission revisited its regional industry definition, and found that there had been integration of the Northern and Southern California regions. The Commission then found the market isolation criteria satisfied and defined the region as the state of California.[39] In the second and third reviews, the Commission again defined the pertinent regional industry as the state of California.[40]

c. Analysis

For the reasons discussed below, we determine that the record in this review supports a finding of a regional industry, with the pertinent region defined as the state of California. This is the same region that Domestic Interested Parties advocate that we use.[41]

The statutory scheme requires that the Commission take into account its prior regional industry definition in determining whether to conduct a regional analysis in this fourth review. In determining whether to proceed on a regional industry basis, the proper inquiry is not whether the regional industry criteria section 771(4)(c) are presently satisfied, but whether those criteria are likely to be satisfied if the order subject to review is revoked.

(…Continued)

> The statute sets up three prerequisites which must be satisfied before the Commission can reach an affirmative determination under a regional industry analysis. The Commission must determine that there is: (1) a regional market satisfying the requirements of the statute, (2) a concentration of dumped imports into the regional market, and (3) material injury or threat thereof to producers of all or almost all of the regional production, or material retardation to the establishment of an industry, due to the subsidized or dumped imports. The Commission will move on to the next step only if each preceding step is satisfied.

Texas Crushed Stone Co. v. United States, 822 F. Supp. 773, 777 (Ct. Int'l Trade 1993), *aff'd*, 35 F.3rd 1535 (Fed. Cir. 1994) ("the ITC's case-by-case approach represents a 'legitimate policy choice {} made by the agency in interpreting and applying the statute.'").

[38] *Original Determination*, USITC Pub. 2376 at 17-20 (noting that "Southern Californian producers shipped an increasing percentage of their production to destinations in Northern California during the period of investigation.").

[39] *First Review Determination*, USITC Pub. 3361 at 13-15, 17-18.

[40] *Second Review Determination*, USITC Pub. 3856 at 11-12; *Third Review Determination*, USITC Pub. 4281 at 11

[41] Domestic Interested Parties' Final Comments at 4-5 ("Final Comments"); Response at 54-55.

Below we provide an analysis of the market isolation factors. Because this current review and the two most recent reviews were expedited, the most recent detailed information available concerning most of the pertinent market isolation criteria remains that compiled in the first review.

(1) Appropriate Circumstances

In determining whether to conduct regional industry analysis, the Commission must take into account characteristics that naturally lead to the formation of a regional market, such as low-value-to-weight ratio and fungibility.[42] In the original investigation, the Commission found that appropriate circumstances existed for a regional industry analysis. Specifically, the Commission found "{g}ray portland cement and clinker has a low value-to-weight ratio and is fungible. Thus, high transportation costs make the areas in which cement is produced and marketed necessarily isolated and insular."[43] In the first review, the Commission found that appropriate circumstances existed to conduct a regional analysis and emphasized that cement is fungible and possesses a low value-to-weight ratio. The ratio substantially affected transportation costs, which were an important component of cement prices. As a result, the Commission found that most cement was shipped to customers within 200 miles of the production site or import terminal.[44] In the second and third reviews, the Commission found that these conditions had not changed.[45]

Domestic Interested Parties argue that the conditions the Commission used to justify the use of a regional industry analysis in the original determination and the prior reviews have not changed.[46] There is no information in the record of this review to suggest the contrary.[47] We therefore find that there are appropriate circumstances to engage in a regional industry analysis.

(2) Appropriate Region

We now consider whether the market isolation criteria are met. In the original determination, the Commission considered whether the Southern California region, as proposed by the petitioners, or a larger region, the state of California, was the appropriate region. A plurality determined that both regions satisfied the market isolation criteria but found that Southern California was the more appropriate region for analysis because "a smaller

[42] SAA at 888.

[43] *Original Determination*, USITC Pub. 2376 at 16-17.

[44] *First Review Determination*, USITC Pub. 3361 at 12.

[45] *Second Review Determination*, USITC Pub. 3865 at 9; *Third Review Determination*, USITC Pub. 4281 at 9.

[46] Response at 55.

[47] CR at I-33 to I-34; PR at I-27 to I-28.

percentage of Southern California consumption was supplied by producers outside the region than is the case for the state as a whole."[48]

In the first review, the Commission revisited its regional industry definition because it found increased integration of the Southern and Northern California markets since the original investigation.[49] It also found that the market isolation criteria were satisfied for the state of California region because: (1) cement producers in California shipped 80 to 85 percent of their domestic shipments within the state during the period of review; and (2) U.S. producers outside the state only supplied 3 to 6 percent of state of California regional consumption during the period.[50] Accordingly, having found that the two market isolation criteria were satisfied, the Commission determined that a regional industry existed for the state of California in the first review.[51]

In both the second and third reviews, the Commission again defined the pertinent regional industry as the state of California.[52] In both reviews, the Commission found that nothing in the record suggested that the patterns observed in the original investigation or first review with regard to the market isolation criteria had changed or would change within the reasonably foreseeable future.[53]

In this current review, the record contains neither information additional to that provided in the first review nor any indication that the patterns observed in that review and the original investigations have changed.[54] Accordingly, we find that the market isolation criteria are again satisfied based on information available, as we did in the second and third reviews, and define the pertinent regional industry to be cement producers in the state of California.

(3) Concentration of imports

In the next step of the regional industry analysis, the Commission determines whether the statutory requirement of concentration of imports within the pertinent region is satisfied. In the first review, the Commission found that the statutory criterion concerning subject import concentration in the region was satisfied. Although the volume of subject imports from Japan was very small during the period of review, the percentage of the volume of subject imports from Japan to the United States entering the state of California was 70 percent in 1998 and 97 percent in 1999. Based on these data and the information from the original investigation, the

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[48] *Original Determination*, USITC Pub. 2376 at 17-20. In making this finding, the Commission majority noted that "Southern Californian producers shipped an increasing percentage of their production to destinations in Northern California during the period of investigation." *Id*. at 19.

[49] *First Review Determination*, USITC Pub. 3361 at 14.

[50] *First Review Determination*, USITC Pub. 3361 at 14-15.

[51] *First Review Determination*, USITC Pub. 3361 at 14-15.

[52] *Second Review Determination*, USITC Pub. 3856 at 11-12; *Third Review Determination*, USITC Pub. 4281 at 11

[53] *Second Review Determination*, USITC Pub. 3856 at 10; *Third Review Determination*, USITC Pub. 4281 at 9-10.

[54] *See* Response at 55 and Final Comments at 5.

Commission concluded that upon revocation, subject imports from Japan would be concentrated in the state of California.[55]

In the second review, the Commission found that subject imports into the United States were virtually nonexistent during the period of review but that at least 50 percent of annual subject imports from Japan entered the state of California. It concluded that, based on the shipping patterns observed during the original investigation, the first review, and that review, subject imports from Japan would likely be concentrated in the state of California if the order was revoked.[56]

In the third review, the Commission found that subject imports from Japan were minimal and the volume never reached 0.1 percent of apparent consumption nationally or in the state of California. While at least 60 percent of subject imports from Japan were shipped to the state of California in 2006 and 2007, there were no subject imports from 2008 to 2010. Since the subject import data for that period of review were too small and sporadic to indicate any change in shipping patterns observed in the original investigation, the Commission consequently found that subject imports from Japan would likely be concentrated in the state of California if the order was revoked. [57]

The record in this review indicates minimal subject imports. In 2015, the volume of subject imports was below 0.05 percent of apparent consumption nationally and in the state of California.[58] The annual volume of subject imports from Japan into the United States fluctuated between 2011 and 2015, but it never exceeded 2,000 tons, and the annual volume of subject imports entering the state of California never exceeded 500 tons in any of those years.[59] Since the volume of subject imports during the period of review has been minimal and sporadic, nothing in the record indicates that any change from the shipping patterns observed during the original investigation would be likely in the event of revocation.[60] Consequently, we find that subject imports would likely be concentrated in the state of California if the order was revoked, based on information available. In light of this, we conclude that it is appropriate to proceed with a regional injury analysis for the state of California region.

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[55] *First Review Determination*, USITC Pub. 3361 at 17-18.

[56] *Second Review Determination*, USITC Pub. 3856 at 10. The Commission observed that during the original investigation, the ratio of subject imports from Japan within California to total subject imports from Japan ranged between 67.5 percent and 79.2 percent. The ratio of subject imports from Japan to consumption within California ranged between 3.3 percent and 13.1 percent; the ratio of subject imports from Japan to consumption outside the state of California region was less than 1.0 percent in each year examined in the original investigation. *Id.* at 11.

[57] *Third Review Determination*, USITC Pub. 4281 at 10.

[58] CR/PR at Tables I-11 and I-12.

[59] CR/PR at Tables I-8 and I-9.

[60] Moreover, the URAA amended the statute to state that when the Commission's affirmative injury determination is based on a regional industry, Commerce shall "to the maximum extent possible, direct that duties be assessed only on the subject merchandise of the specific exporters or producers that exported the subject merchandise for sale in the region concerned during the period of investigation." 19 U.S.C. § 1673e(d)(1). Consequently, current shipment patterns may not be a reliable indicator of likely shipment patterns upon revocation.

2. Related Parties

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[61] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[62] In all three prior reviews, the Commission found that California producers Mitsubishi Cement Corp. ("Mitsubishi Cement") and CalPortland were related parties but that appropriate circumstances did not exist to exclude any producer from the regional industry.[63]

The record in the current review indicates that Mitsubishi Cement and CalPortland are respectively owned by Mitsubishi Materials Corp. and Taiheiyo Cement, both of which are producers of the subject merchandise in Japan.[64] However, the record lacks information to indicate whether Mitsubishi Materials Corp. and Taiheiyo Cement exported the subject merchandise during the period of review; therefore, the record is insufficient to establish that Mitsubishi Cement and CalPortland are related parties. In light of this and the lack of any contrary argument, we define the regional industry to include all producers of cement in the state of California.

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[61] *See Torrington Co v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.,* 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[62] The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

(1) the percentage of domestic production attributable to the importing producer;

(2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);

(3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;

(4) the ratio of import shipments to U.S. production for the imported product; and

(5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31(Ct. Int'l. Trade 2015); see *also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[63] *First Review Determination*, USITC Pub. 3361 at 22-23; *Second Review Determination*, USITC Pub. 3856 at 13; *Third Review Determination*, USITC Pub. 4281 at 11-12. The original determination did not discuss related party issues.

[64] CR at I-32; PR at I-26; CR/PR at Table I-5; Response at 51.

III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[65] The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[66] Thus, the likelihood standard is prospective in nature.[67] The CIT has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[68]

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[69] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but

[65] 19 U.S.C. § 1675a(a).

[66] SAA at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id*. at 883.

[67] While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[68] *See NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), *aff'd mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); *Usinor v. United States*, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[69] 19 U.S.C. § 1675a(a)(5).

normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[70]

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[71] It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[72] The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.[73]

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.[74] In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.[75]

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the

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[70] SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

[71] 19 U.S.C. § 1675a(a)(1).

[72] 19 U.S.C. § 1675a(a)(1). Commerce has made no duty absorption findings. *See Issues and Decision Memorandum for the Final results of the Expedited Fourth Sunset review of the Antidumping Duty Order on Gray Portland Cement and Clinker from Japan*, A-588-816, Department of Commerce (Feb. 27, 2017) at 3.

[73] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[74] 19 U.S.C. § 1675a(a)(2).

[75] 19 U.S.C. § 1675a(a)(2)(A-D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[76]

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.[77] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order under review and whether the industry is vulnerable to material injury upon revocation.[78]

Under a regional industry injury analysis, producers of "all or almost all" of the production in the region must be materially injured.[79] There is no specification in the statute or prior Commission determinations as to what percentage of domestic production constitutes "all or almost all" in the context of regional injury analysis. The CIT has held that, for determining the "all" criterion, "a numerical analysis would not be appropriate under the regional injury provision . . . {because} numerous factors must be considered and a quantitative analysis is inappropriate."[80] It held in both *Mitsubishi Materials* and *Cemex* that the "Commission did not err in failing to apply a fixed percentage test of eighty to eighty-five percent" in determining whether a regional industry was injured.[81]

Generally, after determining whether the aggregate regional data show material injury, the Commission next examines individual producer data "as appropriate to determine whether

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[76] *See* 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

[77] 19 U.S.C. § 1675a(a)(4).

[78] The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

[79] 19 U.S.C. § 1677(4)(C).

[80] *Cemex, S.A. v. United States*, 790 F. Supp. 290, 294 (Ct. Int'l Trade 1992), *aff'd*, 989 F.2d 1202 (Fed. Cir. 1993). The *Cemex* court held that it was not appropriate to apply the regional market isolation criteria to the "all" criterion for injury analysis.

[81] *Mitsubishi Materials Corp. v. United States*, 820 F. Supp. at 616, 617; *Cemex*, 790 F. Supp. at 294.

anomalies exist that an aggregate analysis would disguise."[82] In examining individual producer data, the Commission is "not required to adopt the pure plant-by-plant inquiry" and that "{u}se of either a straight aggregate or pure plant-by-plant method in determining injury in a regional analysis is not mandated by statute or case law."[83]

While neither the statute nor legislative history provide no specific guidance on how the "all or almost all" requirement should be applied to a five-year review, the CIT has approved the Commission's application of the test in an affirmative threat determination.[84] For purposes of our regional industry analysis in this review, we consider available data concerning the performance of individual regional producers as well as the performance of the regional industry in the aggregate.

No respondent interested party participated in this expedited review. The record, therefore, contains limited new information with respect to the cement industry in Japan. There also is limited information on the cement market in the United States or the California region during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigation, the three prior reviews, and the limited new information on the record in this fourth five-year review.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[85] The following conditions of competition inform our determination.

1. Demand Conditions

The Original Investigation and Prior Reviews. In the original investigation and all prior reviews, the Commission found that demand for cement was a function of demand for concrete, which was tied to construction activity. The demand was cyclical in nature because it was determined by the level of general construction.[86] Since concrete and cement represented a small portion of construction costs, the Commission also found that the demand for cement was relatively inelastic.[87]

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[82] *Mitsubishi Materials Corp. v. United States*, 820 F. Supp. at 616, 617; *Cemex,* 790 F. Supp.at 294.

[83] *Mitsubishi Materials*, 820 F. Supp. at 618; *Cemex*, 790 F. Supp. at 294, 295.

[84] *Mitsubishi Materials*, 918 F. Supp. at 427.

[85] 19 U.S.C. § 1675a(a)(4).

[86] *Original Determination*, USITC Pub. 2376 at 28; *First Review Determination*, USITC Pub. 3361 at 32; *Second Review Determination*, USITC Pub. 3856 at 19-20; *Third Review Determination*, USITC Pub. 4281 at 16.

[87] *Original Determination*, USITC Pub. 2376 at 28, 41-42; *First Review Determination*, USITC Pub. 3361 at 32; *Second Review Determination*, USITC Pub. 3856 at 19-20; *Third Review Determination*, USITC Pub. 4281 at 16.

In the original investigation, apparent consumption of cement in the Southern California region increased irregularly during the period of investigation.[88] In the first review, the Commission found that demand had increased substantially in the state of California during the period of review. It found that demand for cement tended to be seasonal, with peaks in consumption occurring in the summer months.[89] In the second review, the Commission observed that demand had increased overall in the state of California during the period of review because of changes in the California construction market.[90] In the third review, the Commission observed that demand had declined overall in the state of California during the period of review, with sharp declines during the portion of the period that coincided with a negative cycle in construction demand due to the recession.[91]

The Current Review. Demand for cement continues to be driven by construction activity and the cement market is cyclical as it rises and falls with construction activity.[92] Demand also continues to be inelastic because cement represents a small portion of construction costs, so a decline in the price of cement will not by itself stimulate significant additional demand for the product.[93] The available data indicate that apparent consumption in the state of California increased overall from 2010 to 2015, increasing from 10.1 million short tons in 2010 to 20.0 million short tons in 2015.[94] Domestic Interested Parties assert that despite this increase, demand remains below pre-recession levels.[95]

2. Supply Conditions

The Original Investigation and Prior Reviews. In the original investigation, the Commission found that production of cement in the Southern California region increased overall during the period of investigation while production capacity decreased.[96] In the first review, the Commission found that increases in regional production capacity had not kept pace with increases in demand during the period of review. The constraints in production capacity resulted in substantial and increasing volumes of imports (subject and nonsubject) to meet regional market demand, and the regional industry's share of the California market decreased as a result. However, the Commission acknowledged that a substantial amount of new production capacity was to come on line in the state of California within two years.[97] In the second review, the Commission observed that subject imports from Japan were nearly non-existent, but the quantity of nonsubject imports increased by 51.2 percent from 2001 to 2005.[98]

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[88] *Original Determination*, USITC Pub. 2376 at 24.
[89] *First Review Determination*, USITC Pub. 3361 at 32.
[90] *Second Review Determination*, USITC Pub. 3856 at 19-20.
[91] *Third Review Determination*, USITC Pub. 4281 at 16-17.
[92] CR at I-10; PR at I-8; Response at 11-12; Final Comments at 7.
[93] Response at 8-9; Final Comments at 7.
[94] CR/PR at Table I-12.
[95] Response at 53.
[96] *Original Determination*, USITC Pub. 2376 at 24.
[97] *First Review Determination*, USITC Pub. 3361 at 33-34.
[98] *Second Review Determination*, USITC Pub. 3856 at 20-21.

In the third review, the Commission found that capacity of the regional industry, which consisted of ten facilities operated by six firms, remained relatively stable. It also observed that from 2006 to 2009, the regional industry accounted for an increasing majority of the market share in California, and that nonsubject imports supplied nearly the entire remaining share while subject imports accounted for less than 0.05 percent of market share in the region.[99]

The Current Review. In 2015, the regional industry accounted for 98.4 percent of apparent regional consumption, nonsubject imports accounted for 1.6 percent, and subject imports from Japan accounted for less than 0.05 percent.[100] In 2015, there were ten plants in the regional industry owned by six different firms.[101] USGS data indicate that overall production capacity for cement in the region declined slightly from 2011 to 2013. Cement grinding capacity decreased from 14.2 million short tons in 2011 to 13.3 million short tons in 2013, and cement clinker production capacity remained relatively flat at 13 million short tons.[102] Responding regional producers reported *** million tons of cement capacity and *** million tons of clinker capacity in 2015.[103]

3. Substitutability and Other Conditions

The Original Investigation and Prior Reviews. In the original investigation and prior reviews, the Commission found that cement was a fungible commodity product that was readily interchangeable regardless of the country of origin, and price was an important purchasing factor. It also found that the U.S. market for cement was regional in nature based on the relatively high inland transportation costs due to cement's low value-to-weight ratio, which limited the distances to which it was shipped.[104] In all of the reviews, the Commission found that the cement industry was highly capital intensive and producers operated at high capacity utilization to maximize return on investments.[105] The Commission also found that a substantial portion of regional cement production was owned by large international corporations, and that there was a significant degree of vertical integration between regional cement producers and the downstream ready-mixed concrete operations.[106] In the third

[99] *Third Review Determination*, USITC Pub. 4281 at 17.

[100] CR/PR at Table I-13.

[101] CR/PR at Table I-5.

[102] CR/PR at Table I-7. There are two sets of Tables I-6 and I-7 in the staff report. The citation in this footnote refers to second Table I-7 located in CR at I-41 and PR at I-31.

[103] CR at I-38, PR at I-29 (first Table I-6).

[104] *Original Determination*, USITC Pub. 2376 at 16-17; *First Review Determination*, USITC Pub. 3361 at 32; *Second Review Determination*, USITC Pub. 3856 at 19-20; *Third Review Determination*, USITC Pub. 4281 at 16-17.

[105] *First Review Determination*, USITC Pub. 3361 at 34; *Second Review Determination*, USITC Pub. 3856 at 20; *Third Review Determination*, USITC Pub. 4281 at 17.

[106] *First Review Determination*, USITC Pub. 3361 at 33; *Second Review Determination*, USITC Pub. 3856 at 20; *Third Review Determination*, USITC Pub. 4281 at 17.

review, the Commission found that cement production is energy-intensive, with major sources of energy used in production including coal, fuel oil, and natural gas.[107]

The Current Review. The central conditions that the Commission found in prior proceedings are still applicable. Cement continues to be a fungible product that is readily interchangeable regardless of country of origin.[108] Cement markets are necessarily regional due to the low value-to-weight ratio and relatively high inland transportation costs, which limits the distance to which cement can be shipped.[109] A substantial portion of regional cement production continues to be owned by foreign corporations; eight of the ten regional plants operating in 2015 were under foreign ownership, and four of these were under Japanese ownership.[110] There is still a significant degree of vertical integration.[111] Cement production also continues to be capital intensive with high fixed costs, relative to marginal and variable costs. This creates an incentive for producers to maximize capacity utilization.[112] The industry also continues to be energy-intensive as production requires large amounts of electricity and fuel.[113] Domestic Interested Parties indicate that energy prices have experienced significant volatility over the past few years.[114]

C. Likely Volume of Subject Imports

The Original Investigation and Prior Reviews. In the remand determination, which was made on a non-cumulated basis, the volume of subject imports from Japan into the Southern California region increased from 349,000 tons in 1986 to 1.7 million tons in 1989.[115] The Commission found the volume of subject imports from Japan significant.[116]

In the first review, the Commission found that subject imports from Japan were likely to be significant within a reasonably foreseeable time if the antidumping duty order was revoked. The Commission observed that subject imports from Japan entering the state of California virtually ceased since the original investigation. Furthermore, the Commission found that subject producers in Japan had excess production capacity and an established customer base and distribution system in the California market.[117]

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[107] *Third Review Determination*, USITC Pub. 4281 at 17.
[108] CR at I-7; PR at I-5.
[109] CR at I-34; PR at I-28.
[110] CR/PR at Table I-5.
[111] CR at I-26 to I-27; PR at I-22.
[112] CR at I-39-40; PR at I-29.
[113] CR at I-14 to I-15; PR at I-12.
[114] Response at 6, 8.
[115] CR/PR, Appendix C at Table I-4A.
[116] *Remand Determination*, USITC Pub. 2657 at 11.
[117] *First Review Determination*, USITC Pub. 3361 at 43-44.

The Commission found that subject imports from Japan were non-existent in the second review and very minimal in the third review.[118] Based on the available information in both reviews, the Commission found that the revocation of the antidumping duty order would likely result in significant subject import volumes in the state of California.[119] In both reviews, the Commission observed that the cement industry in Japan had the ability to export significant volumes to the United States based on the combination of substantial excess capacity and a production process that created an incentive to achieve full capacity utilization. In both reviews, the Commission also found that subject producers would have incentive to direct additional exports to California in light of the increasing competition they were facing in third-country export markets from cement from China and India.[120] The Commission in the third review further noted that, based on available information, the industry in Japan faced a pattern of declining home-market shipments and a likely lack of growth in existing export markets.[121]

In each of the prior reviews, the Commission acknowledged that the subject producers' ownership or control of cement production facilities in California could restrain somewhat the quantity of subject imports. It found, however, that imports were likely to increase significantly because they did so during the original investigation period notwithstanding that the subject producers owned substantial regional production facilities at that time. Moreover, the customer base and distribution of the subject producers' subsidiaries in California would permit the subject producers to increase sales of subject merchandise quickly upon revocation.[122] The Commission in the second review further observed that subject producer Taiheiyo had invested in a new permanent import terminal in California at the end of the first review period.[123]

The Current Review. The volume of subject imports entering the state of California during the period of review was minimal.[124] During each year from 2011 to 2015, the quantity of subject imports that entered the state of California never exceeded 500 short tons.[125] In 2015, subject imports accounted for less than 0.05 percent of apparent consumption regionally.[126]

Due to the expedited nature of this review, the record contains limited new information on the cement industry in Japan.[127] The information available indicates that the cement

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[118] *Second Review Determination*, USITC Pub. 3856 at 21 (describing the volume as "virtually non-existent"); *Third Review Determination*, USITC Pub. 4281 at 19 (describing the volume as "minimal").

[119] *Second Review Determination*, USITC Pub. 3856 at 21; *Third Review Determination*, USITC Pub. 4281 at 20.

[120] *Second Review Determination*, USITC Pub. 3856 at 21; *Third Review Determination*, USITC Pub. 4281 at 19-20.

[121] *Third Review Determination*, USITC Pub. 4281 at 19-20.

[122] *First Review* Determination, USITC Pub. 3361 at 43-44; Second *Review Determination*, USITC Pub. 3856 at 21-22; *Third Review Determination*, USITC Pub. 4281 at 20.

[123] *Second Review Determination*, USITC Pub. 3856 at 22.

[124] CR/PR at Table I-9.

[125] CR/PR at Tables I-8 and I-9.

[126] CR/PR at Tables I-11 and I-13.

[127] CR at I-53 to I-58; PR at I-37 to I-41.

industry in Japan has the ability to export a significant volume of cement to the United States in the event of revocation of the order because it has substantial capacity and excess capacity to produce cement. The most contemporaneous information available about the subject industry provided by the Domestic Interested Parties indicates that although production of subject merchandise in Japan has decreased since the third five-year review, there is still 6 million tons of excess cement clinker capacity in Japan in 2015, a level greater than that during the original period of investigation.[128] Consequently, cement producers in Japan have the ability to ship significant volumes of cement to the United States should the order be revoked.

The record also indicates that cement producers in Japan will likely have the incentive to export a significant volume of cement to the United States in the event of revocation. As previously discussed, the capital-intensive nature of the cement industry provides an incentive for the subject producers to use their excess capacity. Additionally, the cement industry in Japan is export oriented, and is facing increased export competition while home market demand is in decline. Domestic Interested Parties assert that domestic cement consumption in Japan declined during the period of review. They claim that expectations of increased demand in Japan for cement stemming from reconstruction efforts after the 2011 earthquake and tsunami did not materialize, and there was a downturn in the housing and construction sector. As a result, they assert that subject producers from Japan have directed production to export markets to maintain high capacity utilization.[129] Japan was one of the three largest world exporters of cement from 2011 to 2015. Nevertheless, despite these incentives to increase exports, global cement exports from Japan fluctuated within a fairly narrow range from 2011 to 2015, and were only 4.2 percent higher in 2015 than 2011.[130] By contrast, during this period exports from China and India grew at much faster absolute and relative levels.[131] Domestic Interested Parties contend that China and India have substantial and growing cement production and excess capacity; these would likely constrain the subject industry's ability to increase exports to existing markets in the reasonably foreseeable future by more than the very modest rates that occurred during the period of review.[132] Consequently, subject producers in Japan will likely have an incentive to increase exports to the United States upon revocation.

Thus, based on the information available regarding subject producers in Japan and their substantial capacity and available excess capacity, export orientation, likely increased competition in export markets, and decline in domestic demand, we find that the volume of subject imports would likely be significant upon revocation.[133]

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[128] Response at 39.

[129] Response at 39-40.

[130] CR/PR at Tables I-14 and I-16.

[131] *See* CR/PR at Table I-14. From 2011 to 2013, China and India were by far the two largest producers of cement in the world, accounting for 59.4 percent and 6.9 percent of world production in 2013, respectively. The third largest producer in 2013 was the United States, accounting for 1.9 percent of world production. The industry in Japan accounted for 1.4 percent of world production in 2013. CR/PR at Table I-14.

[132] Response at 42-45.

[133] Because of the expedited nature of this review, the record does not contain information about inventories of the subject merchandise or the potential for product shifting. Imports of cement (Continued…)

We recognize that two of the producers in California are owned by producers of subject merchandise in Japan.[134] As we have found in prior reviews, while these relationships may constrain the volume of subject imports from Japan to a degree if the order is revoked, the volume of subject imports is nevertheless likely to increase significantly.[135] Indeed, substantial ownership of California production facilities did not prevent Japanese subject producers from exporting significant volume of subject merchandise to the region during the original investigation. Moreover, the established customer base and distribution system maintained by subsidiaries of subject producers would enable them to increase sales of subject merchandise in the region quickly if the order was revoked.[136]

D. Likely Price Effects

The Original Investigation and Prior Reviews. In the original investigation, the Commission found that cumulated subject imports had significant price effects on the Southern California regional industry. It found that, given their predominant underselling and increasing volume, the high substitutability of cement, and inelastic demand, subject imports from Japan had a "suppressing and depressing effect on prices for cement in Southern California."[137]

In the first review, the Commission found that revocation of the antidumping duty order on cement would likely lead to significant underselling by subject imports of the domestic like product in California, as well as significant price depression and suppression, within a reasonably foreseeable time. It emphasized that in the original investigation, subject imports from Japan consistently undersold the domestic like product. Noting that the record did not contain pricing information for the period of review, the Commission found that subject imports and the domestic like product were highly substitutable and that price was an important factor in purchasing decisions. It determined that the subject imports would likely be aggressively priced in order to gain market share. Conversely, it found that "the regional industry's capacity expansion projects and the resultant increase in supply" would likely increase price sensitivity in the market. [138]

In the second and third reviews, the Commission found that, based on the facts available, subject imports would likely significantly undersell the domestic like product should the antidumping duty order be revoked. It explained that subject producers would have the

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(…Continued)
and cement clinker from Japan are not subject to antidumping or countervailing duty orders in any other country. CR at I-58, PR at I-41.

[134] CR at I-32; PR at I-26; CR/PR at Table I-5; Response at 51.

[135] *First Review* Determination, USITC Pub. 3361 at 43-44; Second *Review Determination*, USITC Pub. 3856 at 21-22; *Third Review Determination*, USITC Pub. 4281 at 20.

[136] Domestic Interested Parties assert that Mitsubishi Cement is expanding its infrastructure in California by building an import terminal that would increase storage capacity by 40,000 MT. They contend that this would increase the likelihood of significant subject import volume in the event of a revocation of the antidumping duty order. Response at 38.

[137] *Remand Determination*, USITC Pub. 2657 at 12-13, 27-29.

[138] *First Review Determination*, USITC Pub. 3361 at 45.

incentive to cut prices to capture market share. Additionally, in the second review, the Commission stated that domestic producers' expanded capacity had increased price sensitivity in the market. Overall, because cement from different sources was fungible and lower prices would not serve to stimulate significant additional demand, the Commission concluded that the likely underselling by subject imports would likely have the effect of significantly depressing or suppressing prices in the regional market.[139]

The Current Review. Due to the expedited nature of this review, the record does not contain current pricing comparisons and the most recent pricing data in the record is from the original investigation, which showed that subject imports from Japan consistently undersold the domestic like product in the pertinent region. As discussed above, subject import volume from Japan would likely increase to significant levels upon revocation. This likely significant volume of subject imports from Japan would likely undersell domestic prices in an attempt to regain market share, as demonstrated by their pricing behavior in the original investigations. As discussed above, cement is a fungible product that is readily interchangeable regardless of country of origin.[140] Therefore, the likely significant volume of subject imports that would likely undersell the domestic like product would force the domestic industry either to lower sales prices or lose sales and cede market share. Because price reductions will not stimulate appreciable additional demand for cement,[141] we find that absent the disciplining effect of the order, subject imports from Japan would likely have significant depressing or suppressing effects on prices for the domestic like product.

E. Likely Impact

The Original Investigation and Prior Reviews. In the original investigation, the Commission found material injury by reason of subject imports primarily through the effects on the regional industry's financial condition due to the volume of subject imports, their increasing market penetration, and their effect on prices. The Commission specifically noted the effects of the dumped imports on the financial condition of the regional industry and emphasized that it examined information pertaining to the individual producers in the region.[142]

The Commission in the first review found that subject imports from Japan would likely have a significant impact on the regional industry. In so doing, the Commission found that the imposition of the order appeared to have had a beneficial effect on the regional industry, because the regional industry's production and operating margins had improved. Although the

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[139] *Second Review Determination*, USITC Pub. 3856 at 23; *Third Review Determination*, USITC Pub. 4281 at 21.

[140] CR at I-7; PR at I-5.

[141] Response at 8-9; Final Comments at 7.

[142] *Original Determination*, USITC Pub. 2376 at 43-44; *Remand Determination*, USITC Pub. 2657 at 7-14. The Commission found that although the regional producers' operating margins increased during parts of the period of investigation, it was largely due to declines in costs and increases in sales volume. Overall, the total operating income declined during the period of investigation primarily as a result of a drop in net sales revenue. The Commission also found that the adverse effects on the financial condition were reflected in the regional producers' inability to invest. *Id.*

Commission found that the industry was not in a vulnerable state, it observed that demand in California was projected to increase at a slower rate or remain flat and that California producers were undertaking or had announced plans to expand capacity. Thus, given the likely significant volume and price effects if the order was revoked, the Commission found that subject imports would likely have a significant impact on the regional industry.[143]

The Commission's analysis in the second and third-five year reviews of the likely impact of subject imports followed from its prior findings that revocation would likely result in significant additional volumes of subject imports that would undersell the domestic like product and have significant price effects. It found that the additional subject imports would cause the regional industry to lose market share. Additionally, reduced output and capacity utilization would be particularly harmful to the capital-intensive cement industry. The industry's production, shipments, sales, and revenues would likely be adversely affected, leading to consequent declines in profitability and employment.[144]

The Commission in all prior reviews also examined the performance of the individual producers in the region to ascertain that the statutory "all or almost all" standard was satisfied.[145] It found that while a substantial proportion of the industry was owned or controlled by the subject producers, "the interests of the Japanese operations would likely not be secondary to those of their comparatively small California subsidiaries."[146] In the second and third reviews, the Commission also found that even if a subject producer could attempt to direct its imports in a manner to shield a California affiliate's operations, that affiliate would still be adversely affected by imports from other subject producers.[147] In the third review, the Commission further found that all of the individual member companies of the Committee had uniformly "poor operating performance."[148] Accordingly, the Commission concluded that revocation of the antidumping duty order would likely result in a significant impact to the regional industry.[149]

The Current Review. Information in the record concerning the recent performance of the regional industry is limited. The information is insufficient for us to make a finding as to whether the regional industry is vulnerable to continuation or recurrence of material injury in the event of revocation of the order.

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[143] *First Review Determination*, USITC Pub. 3361 at 45-47.

[144] *Second Review Determination*, USITC Pub. 3856 at 25. *Third Review Determination*, USITC 4281 at 25. The Commission found in each of these reviews that there was insufficient information in the record to permit it to reach a determination whether the regional industry was vulnerable. *Second Review Determination*, USITC Pub. 3856 at 24-25; *Third Review Determination*, USITC Pub. 4281 at 24.

[145] *First Review Determination*, USITC Pub. 3361 at 46; *Second Review Determination*, USITC Pub. 3856 at 25; *Third Review Determination*, USITC Pub. 4281 at 25.

[146] *First Review Determination*, USITC Pub. 3361 at 46; *Second Review Determination*, USITC Pub. 3856 at 25; *Third Review Determination*, USITC Pub. 4281 at 25.

[147] *Second Review Determination*, USITC Pub. 3856 at 25; *Third Review Determination*, USITC Pub. 4281 at 25.

[148] *Third Review Determination*, USITC Pub. 4281 at 25.

[149] *Second Review Determination*, USITC Pub. 3856 at 25.

According to USGS data, from 2011 to 2013, cement grinding capacity in California decreased from 14.2 million short tons in 2011 to 13.3 million short tons in 2013, and cement clinker production capacity remained relatively flat at 13 million short tons. Production of gray portland cement increased from 8.5 million short tons in 2011 to 10.2 million short tons in 2013, and production of cement clinker increased from 7.9 million short tons in 2011 to 9.4 million short tons in 2013. Correspondingly, cement grinding capacity utilization increased from 60.2 percent in 2011 to 76.7 percent in 2013, and clinker production capacity utilization increased from 60.8 percent in 2011 to 72.6 percent in 2013. Regional shipments of cement also increased from 8.2 million short tons in 2011 to 9.6 million short tons in 2013.[150]

Data for 2015 provided by the responding members of the Committee show, for cement operations, capacity of *** short tons, production of *** short tons, capacity utilization of *** percent and *** short tons of U.S. shipments. For clinker operations, capacity was *** short tons, production was *** short tons, and capacity utilization was *** percent; *** shipments were internally consumed.[151] In 2015 these producers earned an operating income of *** and their operating margin was ***.[152]

As previously discussed, revocation of the order would likely lead to a significant volume of subject imports into California that would undersell the domestic like product and have significant effects on the regional industry's prices. Consequently, the likely significant volume of subject imports would place pressure on regional producers to cut prices or lose market share to subject imports. The likely significant volume of subject imports and their price effects would negatively affect the regional industry's production capacity, production, capacity utilization, shipments, and market share, directly impacting the regional industry's profitability and employment. In light of the capital-intensive nature of the industry, decreases in capacity utilization would be particularly harmful as cement producers seek to maximize capacity utilization to meet fixed costs and to justify capital expenditures.

While we have analyzed the statutory factors regarding the aggregate data for the regional industry, we have also examined the performance of individual regional producers to look for anomalies as a safeguard "to assure that 'all or almost all' standard {was} met."[153] We examined the producer-specific information for 2015 submitted by the individual members of the Committee. While these data indicate that the three individual producers had varied financial performance in 2015, based on the information available we do not find anomalies in likely performance among the responding producers for purposes of applying the "all or almost all" standard.[154] We have also considered that subject producers from Japan own or control

[150] CR at I-41; PR at I-31 (second version of Table I-7).

[151] CR at I-38; PR at I-29 (first version of Table I-7). For both cement and clinker, capacity was lower in 2015 than in 2010, but production, capacity utilization, and shipments were higher. *Id*.

[152] CR at I-38; PR at I-29 (first version of Table I-7).

[153] *Cemex*, 790 F. Supp. at 296. While the data show that the operating performance of these producers have improved since the third five-year review, the performance still remains poorer than that of the first and second reviews and the original determination, all of which took place prior to the recession. Response, Exh. 12.

[154] CR/PR at App. B..

cement production in California that is not accounted for by the members of the Committee.[155] We found that this common ownership and control will likely serve to constrain to some extent the volume of subject imports upon revocation.[156] Nevertheless, those subject imports that do enter the market would likely be priced in a manner to undersell regional production, and thus would have adverse effects on all regional producers, including those affiliated with Japanese producers. As discussed above, the substantial unused production capacity of the Japanese cement industry, together with the industry's desire to increase capacity utilization level to meet high fixed costs, would provide necessary incentive for the Japanese producers to increase shipments to the California region if the order is revoked. Indeed, during the original investigation, without the discipline of the order, the interests of the Japanese ownership of California facilities did not prevent Japanese producers from shipping significant quantities of cement at low prices to the California region. Moreover, even if an individual subject producer attempted to direct its imports to shield its regional affiliate's production, that regional affiliate likely would still be adversely affected by imports from other subject producers in light of the fungible nature of cement.

We also have considered the role of factors other than subject imports, so as not to attribute likely injury from other factors to the subject imports. Nonsubject imports were minimal in 2015, when California producers accounted for the vast majority of apparent regional consumption.[157] Because of minimal presence of nonsubject imports, we find that the market share gains likely due to increased volumes of subject imports will likely be significantly at the expense of the regional industry.

Accordingly, based on the information available, we conclude that, if the antidumping duty order is revoked, subject imports from Japan would be likely to have a significant impact on the cement industry in the state of California industry within a reasonably foreseeable time.

IV. Conclusion

For the foregoing reasons, we have determined that revocation of the antidumping duty order on gray portland cement and cement clinker from Japan would be likely to lead to continuation or recurrence of material injury to the state of California industry within a reasonable foreseeable time.

[155] Section II.B.2.; CR/PR at Table I-5.
[156] *See* Section III.C.2.
[157] CR/PR at Table I-13.

INFORMATION OBTAINED IN THESE REVIEWS

BACKGROUND

On November 1, 2016, the U.S. International Trade Commission ("Commission") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted a review to determine whether revocation of the antidumping duty order on gray portland cement and cement clinker from Japan would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.[3] [4] The following tabulation presents information relating to the background and schedule of this proceeding:

Effective or statutory date	Action
November 1, 2016	Notice of initiation and institution by Commerce and Commission
February 6, 2017	Scheduled date for Commission vote on adequacy
March 1, 2017	Scheduled date for Commerce results of its expedited review
March 31, 2017	Commission statutory deadline to complete expedited review
October 27, 2017	Commission statutory deadline to complete full review

[1] 19 U.S.C. 1675(c).

[2] *Gary Portland Cement and Cement Clinker From Japan; Institution of a Five-Year Review*, 81 FR 75848, November 1, 2016. In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of a five-year review of the subject antidumping duty order concurrently with the Commission's notice of institution. *Initiation of Five-Year ("Sunset") Reviews*, 81 FR 75808, November 1, 2016. Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission's website (www.usitc.gov).

[3] As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in prior proceedings is presented in app. C.

[4] Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the subject merchandise. The following four individual firms were named as the largest purchasers of gray portland cement and cement clinker in California: ***. The following five individual firms were named as the largest purchases of gray portland cement and cement clinker in the United States: ***. The responses received from two purchasers (***) are presented in app. D.

RESPONSES TO THE COMMISSION'S NOTICE OF INSTITUTION

Individual responses

The Commission received one submission in response to its notice of institution in the subject review from the Committee For Fairly Traded Japanese Cement ("Committee"); the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers ("Boilermakers"); the United States Steel, Paper & Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("Steelworkers"); and the International Union of Operating Engineers ("Operating Engineers"), collectively referred to herein as "domestic interested parties."[5]

A complete response to the Commission's notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-1. The Commission did not receive any responses from Japanese producers or importers of the subject merchandise from Japan.

Table I-1
Gray portland cement and cement clinker: Summary of responses to the Commission's notice of institution

Type of interested party	Completed responses	
	Number	Coverage
Domestic producers	1	***%[1]
Respondents	0	0%

[1] The coverage figure presented, as provided by the domestic interested parties in their response, represents the firms' aggregate share of total production in California of gray portland cement and cement clinker based on 2013 capacity data provided by the Portland Cement Association. This coverage includes grinding production of CalPortland. Although CalPortland is not a member of the Committee, the union represents a portion of its workers.

Source: *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2017, pp. 3, 52, exh. 4.

[5] The Committee is an *ad hoc* association of the following three domestic producers of gray portland cement: Cemex, Inc. ("Cemex"); Lehigh Hanson, Inc. ("Lehigh"); and National Cement Company of California, Inc. ("National"). These producers own and operate five gray portland cement and cement clinker plants. The Boilermakers represent workers at Lehigh. The Steelworkers represent workers at Lehigh, California Portland Cement Co. ("CalPortland"), Cemex, and National. The Operating Engineers represent workers at California Portland and Lehigh. The three responding domestic producers (*i.e.*, Cemex, Lehigh, and National) accounted for *** percent and *** percent of total production in California of gray portland cement and cement clinker, respectively, during 2013. Those same three producers accounted for *** percent and *** percent of total production in the United States of gray portland cement and cement clinker, respectively, during 2015. *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, pp. 2-3, exh. 12, 13.

Party comments on adequacy

The Commission received a submission from the domestic interested parties commenting on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews. The domestic interested parties noted that the respondent interested parties' response is inadequate and that the domestic interested parties have provided sufficient information to enable the Commission reach a determination without further investigation.[6] The domestic interested parties further indicate that the Commission "determined to conduct expedited fourth reviews in two recent cases {…}, in which there had been a full first five-year review, expedited second and third five-year reviews, and inadequate responses from respondent interested parties to the respective Notices of Institution in the fourth five-year review."[7] Therefore, there are no other factors that would warrant conducting a full review.[8] In addition, the domestic interested parties state that "{p}roducers in California constitute the regional industry that the Commission defined in the first three reviews of the antidumping order."[9]

RECENT DEVELOPMENTS IN THE INDUSTRY

Since the Commission's last five-year review, the following developments have occurred in the gray portland cement and cement clinker industry.

- In January 2010, Cemex permanently closed the Davenport, CA cement plant.[10] The Davenport, CA plant had been in operation since 1906. The closure resulted in the termination of 120 employees.[11]

- The 2010 National Emissions Standards for Hazardous Air Pollutants (NESHAP) went into effect in 2015.[12] The law reduces the levels of contaminants that plants are allowed to produce. Numerous plants have come into compliance with the new regulation; it is not clear how the plan will affect production costs and efficiencies at cement producing plants that use older technology.

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[6] *Five-Year ("Sunset") Review Of The Antiduming Duty Order On Gray Portland Cement And Cement Clinker From Japan: Comments Concerning The Adequacy Of Responses To The Notice of Institution*, January 13, 2017, p. 3.

[7] Ibid., p. 4.

[8] Ibid.

[9] Ibid., p. 3.

[10] Alexander, Kurtis. "Davenport Cemex plant to shutdown for good." *Santa Cruz Sentinel*, January 23, 2010, accessed on January 5, 2017. http://www.santacruzsentinel.com/article/zz/20100123/NEWS/100128700.

[11] Ibid.

[12] United States Geological Survey ("USGS"), *Minerals Yearbook 2013*, Cement, December 2015.

- In February 2012, Holcim, Inc. permanently shuttered the Greene County cement plant in Catskill, NY.[13] The plant had been idled since June 2011. The closure and idling has resulted in the layoff of 100 workers.

- In December 2013, Buzzi Unicem announced a major expansion to its Maryneal, TX cement plant.[14]

- In July 2014, Martin Marietta Materials purchased Texas Industries (TXI).[15] TXI's cement operations and plants will continue to operate under the Martin Marietta brand.

- In July 2015, Holcim Inc. and Lafarge Co. combined to form LafargeHolcim. [16] Holcim and Lafarge were respectively the second and fifth largest cement producers in the United States.[17] The merger required that Lafarge Co. divest its cement plant in Davenport, IA; Holcim sold two slag grinding facilities in Skyway, IL and Camden, NJ.[18]

- In September 2016, Cemex sold its Fairborn, OH cement plant to Eagle Materials, Inc. for approximately $400 million.[19]

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[13] Nearing, Brian, "Cement plant closure to be permanent," *Times Union*, February 23, 2013, http://www.timesunion.com/business/article/Cement-plant-closure-to-be-permanent-3357202.php, accessed on January 06, 2017.

[14] "Buzzi Unicem USA Announces Major Expansion of the Maryneal, Texas Cement Plant," Buzzi Unicem USA, December 3, 2013, http://www.buzziunicemusa.com/docs/news/ViewArticle.aspx?ArticleID=13, accessed on January 7, 2017.

[15] "Martin Marietta Completes Acquisition of Dallas-based Cement Maker TXI," Martin Marietta, July 2, 2014, https://www.martinmarietta.com/about-us/company-news/martin-marietta-completes-acquisition-of-dallas-based-cement-maker-txi/,accessed on January 3, 2017.

[16] "Holcim and Lafarge obtain merger clearances in the United States and Canada paving the way to closing their merger," LafargeHolcim, May 4, 2015, http://www.lafargeholcim.com/holcim-and-lafarge-obtain-merger-clearances-united-states-and-canada-paving-way-closing-their-merger, accessed on January 9, 2017.

[17] USGS, *Minerals Yearbook 2013*, Cement, December 2015.

[18] "Holcim and Lafarge propose final asset disposals in the US," LafargeHolcim, April 17, 2015, http://www.lafargeholcim.com/04172015-Holcim-Lafarge-propose-final-asset-disposals-US, accessed on January 9, 2017.

[19] "CEMEX announces divestment of its Fairborn cement plant in the U.S." CEMEX. September 12, 2016, http://www.cemex.com/MediaCenter/PressReleases/PressRelease20160912.aspx, accessed on January 05, 2017..

- In October 2016, the merger between Heidelberg Cement AG and Italcementi SpA was completed.[20] The combined corporate entity will operate in the United States under the Lehigh Hanson Cement Co. and Essroc Cement Corp. brands. To satisfy U.S. market regulators, the Heidelberg Cement Group sold the Martinsville, WV cement plant and eight cement terminals to an affiliate of Cementos Agros.[21]

- In 2015, St. Mary's Cement has expanded its capacity by reopening a cement plant in Dixon, IL and upgrading a cement plant in Charlevoix, Michigan.[22]

THE PRODUCT

Commerce's scope

Commerce has defined the subject merchandise as follows:

> The products covered by the order are cement and cement clinker from Japan. Cement is a hydraulic cement and the primary component of concrete. Cement clinker, and intermediate material produced when manufacturing cement, has no use other than grinding into finished cement. Microfine cement was specifically excluded from the antidumping duty order. Cement is currently classifiable under the Harmonized Tariff Schedule (HTS) item number 2523.29 and cement clinker is currently classifiable under HTS item number 2523.10. Cement has also been entered under HTS item number 2523.90 as "other hydraulic cements." The HTS item numbers are provided for convenience and customs purposes. The written product description remains dispositive as to the scope of the product covered by the order.[23]

Description and uses[24]

Gray portland cement is a fungible product, with domestically produced product and imported product, including cement from Japan, being readily interchangeable. The cement is a hydraulic (sets or hardens under water) industrial binding agent. Cement clinker is the

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[20] "HeidelbergCement completes sale of assets in the US to Cementos Argos Hiedelberg Cement Group," December 1, 2016, http://www.heidelbergcement.com/en/pr-30-11-2016, accessed on January 9, 2017.

[21] "Press Releases," http://www.heidelbergcement.com/en/press-releases, accessed on January 9, 2017.

[22] "News Articles," St Mary's Cement, August 31, 2016, http://www.stmaryscement.com/Pages/Media%20Centre/News.aspx, accessed on January 10, 2017.

[23] *Gray Portland Cement and Clinker From Japan: Continuation of Antidumping Duty Order*, 76 FR 78240, December 16, 2011.

[24] Unless otherwise noted, this information is based on *Gray Portland Cement and Cement Clinker from Japan, Inv. No. 731-TA-461 (Third review),* USITC Publication 4281, December 2011, pp. I-12 – I-14.

intermediate product resulting from the sintering stage of the cement production process and is quite different in appearance and properties from the finished cement in that clinker is in the form of small, grayish-black pellets, and finished cement is in the form of grayish powder.[25] Clinker has no other use than for the production of cement. If protected from moisture, clinker can be stored and transported to other locations (markets) for finish grinding into cement, a process, which includes the addition of three to five percent gypsum and other materials to retard water absorption and allow for easier handling. This grinding step and the materials added are very important in determining the specifications and type of finished cement.

Portland cement is the most important of the four major categories of hydraulic cements,[26] accounting for approximately 97.5 percent of domestic production in 2013.[27] All cement, including imports from Japan, generally conform to the standards established by the American Society for Testing and Materials ("ASTM").[28] General descriptions of the five standard types of portland cement are defined by ASTM as follows:[29]

- Type I: For use when the special properties specified for any other type are not required;
- Type II: For general use, especially when moderate sulfate resistance or moderate heat of hydration is required;
- Type III: For use when high early strength is required;
- Type IV: For use when a low heat of hydration is required; and
- Type V: For use when high sulfate resistance is required.

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[25] Almost all portland cement production is gray in color, but a white portland cement (a more expensive variety) can be manufactured by using only iron-free raw materials. *See* USGS, *Annual Mineral Industry Survey,* Cement, 1998, April 2000, p. 1. White portland cement was not covered in the original investigation, full first five-year review, expedited second five-year review, expedited third five-year review, and is not covered in this current five-year review.

[26] Portland, masonry, pozzolanic, and natural or Roman cement are the four major categories of hydraulic cements.

[27] USGS, *Annual Minerals Yearbook*, Cement, 2013. Portland cement accounted for about 95 percent of domestic production in both 2009 and 1998. USGS, *Annual Mineral Industry Survey*, Cement, 2009; USGS, *Annual Mineral Industry Survey,* Cement, 1998.

[28] *Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela: Investigations Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review)*, USITC Publication 3361, October 2000, p. I-23; *Japanese Cement Committee Response (Second Review)*, p. 7; *Japanese Cement Committee's Response to the Notice of Institution (Third Review)*, June 2, 2011, p. 6.

[29] Norman L Weiss, ed., *SME Mineral Processing Handbook*, Society of Mining Engineers, American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., volume II, New York, NY, 1985, p. 26-3.

In 2013, types I and II portland cement together accounted for just under 77 percent of the quantity of all shipments of portland cement from U.S. plants (table I-2).[30] [31] Although specifications for type I and type II portland cement are very similar, they differ in that type I has no specifications for several items that are specified for type II. Thus, type II cement meets all the requirements of type I cement and may be used in lieu of type I. In addition to the standard portland cements, there are a number of special cement blends that contain portland cement.[32]

[30] USGS, *Annual Mineral Industry Survey*, Cement, 2013.

[31] In 2003 and 1998, types I and II portland cement together accounted for just under 83 percent and just over 90 percent, respectively, of the quantity of all shipments of portland cement from U.S. plants. USGS, *Annual Mineral Industry Survey*, Cement, 2003; USGS, *Annual Mineral Industry Survey*, Cement, 1998.

[32] Blended cements are not portland cements, but are inter-ground mixtures of finished portland cement (ground clinker plus gypsum) and cementitious additives, with the proportion of additives commonly ranging between 15 and 50 percent by weight. USGS, *Annual Mineral Industry Survey*, Cement, 2013.

Table I-2
Portland cement:[1] Shipments from U.S.[2] plants to domestic consumers, by types of cements, 1998, 2003, 2009, and 2013.

Quantity (1,000 short tons)				
Type of cement	**1998**	**2003**	**2009**	**2013**
General use (types I and II)	93,769	98,657	60,627	67,241
High-early strength (type III)	3,473	4,134	2,712	2,943
Sulfate-resisting (type V)	3,039	11,684	9,491	12,236
Blended	1,235	1,731	1,433	1,400
Oil well	879	1,202	933	2,668
White	871	1,086	636	875
Expansive and regulated fast setting	58	57	14	--
Miscellaneous[3]	742	926	214	271
Total	104,067	119,477	76,059	87,634

[1] The USGS' portland cement classification includes some cements that are special blends consisting of portland cement but that are technically outside of the portland cement category.
[2] Includes Puerto Rico.
[3] Includes waterproof, low-heat (type IV), and regulated fast-setting cement.

Note.--Data may not add to totals shown because of rounding.

Source: Compiled from data provided by the USGS, *Annual Mineral Industry Survey*, Cement, 1998; USGS, *Annual Mineral Industry Survey*, Cement 2003; USGS, *Annual Mineral Industry Survey, Cement*, 2009; USGS, *Annual Mineral Industry Survey*, Cement, 2013.

Cement is hygroscopic, which is a tendency to absorb water. Because cement is hygroscopic, it must be handled and stored in a manner that minimizes the possibility of contamination by water. Thus, both domestic producers and importers must use some type of enclosed system or storage silo and relatively sophisticated equipment to handle finished cement.

Gray portland cement is used predominantly in the production of concrete, which in turn is consumed almost wholly by the construction industry. The chief end users are highway construction using ready-mix concrete and building construction using ready-mix concrete, concrete blocks, and precast concrete units. In many building applications, concrete is used with steel reinforcement to obtain greater strength and durability. One ton of portland cement is used to make about 4 cubic yards of concrete.

Concrete, as a major material in building construction, competes with structural steel, clay products, building stone, and other materials in various building construction applications. However, in almost every type of structure, regardless of the principal building material used, there are certain basic uses for concrete (foundations, basements, floors, and so forth) for which there is little direct competition. The choice of the principal structural material is governed by many factors, such as cost, personal preference, and building code specifications.

Concrete made with gray portland cement is one of the most widely used construction materials in the United States. Table I-3 shows the types of customers for gray portland cement during 1998, 2003, 2009, and 2013, the latest year for which data are available.

Table I-3
Gray portland cement:[1] U.S. producers' estimated shipments[2] as a percentage of total shipments, by types of customers, 1998, 2003, and 2009.

Percent of total				
Type of customer	**1998**	**2003**	**2009**	**2013**
Ready-mixed concrete	74.2	74.2	71.1	70.9
Concrete product manufacturers	11.9	13.8	12.4	11.4
Road paving contractors	4.8	3.3	4.2	--
Building material dealers	3.8	3.8	3.7	4.3
Other contractors	3.1	3.0	4.6	7.3
Oil well drilling, mining, and waste stabilization	1.1	1.3	2.5	4.6
Federal, state, and other government agencies, and miscellaneous	1.1	0.9	1.6	1.4
Total	100.0	100.0	100.0	100.0

[1] Includes cement imported and distributed by domestic producers.
[2] Includes Puerto Rico.

Note--Totals may not sum due to rounding.

Source: Compiled from data provided by the USGS, *Mineral Industry Survey*, Cement 1998; USGS, *Annual Mineral Industry Survey*, Cement 2003; USGS, *Annual Mineral Industry Survey*, Cement 2009; USGS, *Annual Minerals Yearbook*, Cement, 2013.

Manufacturing process[33]

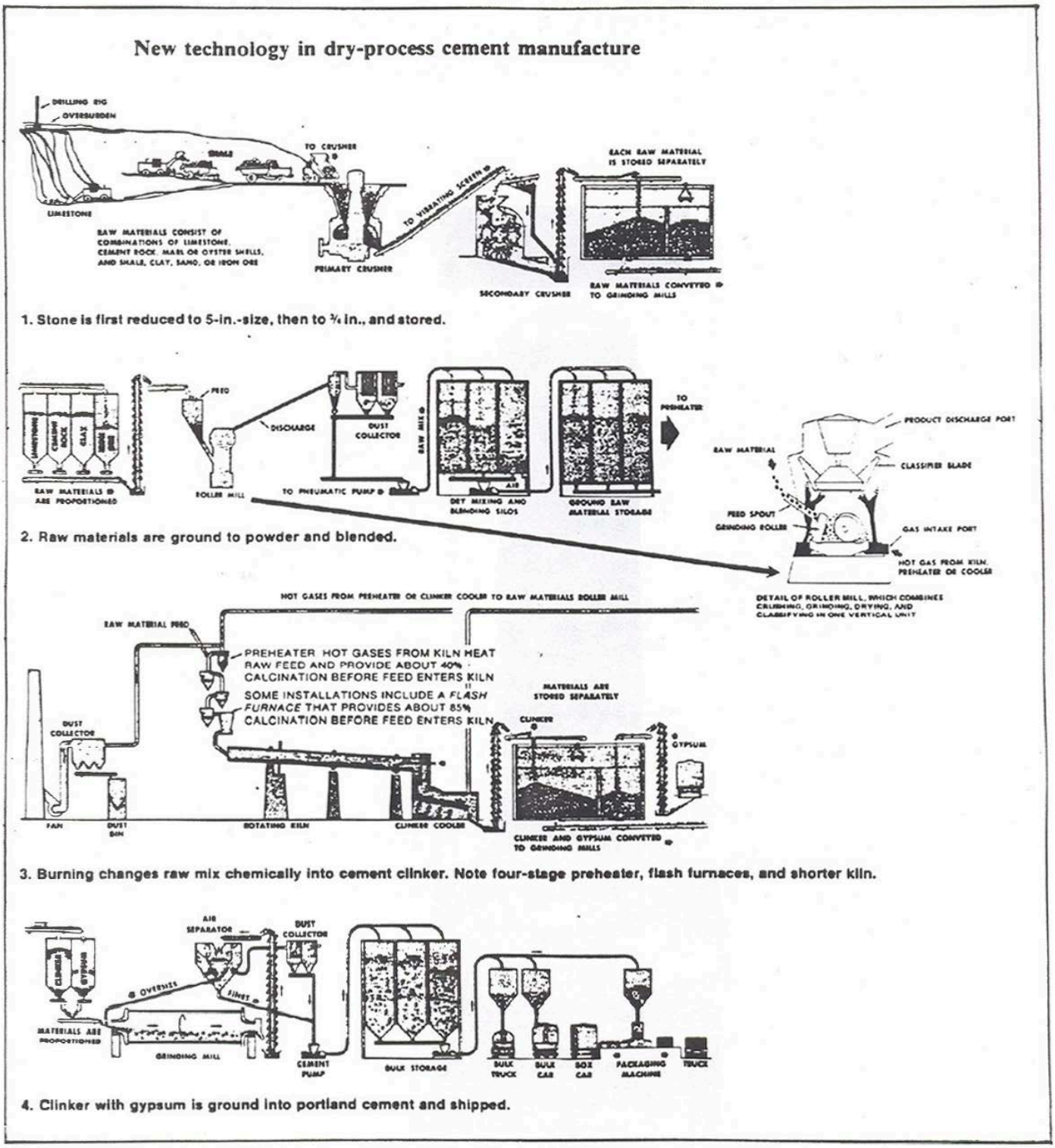
For both the imported and domestic products, the production process for gray portland cement is standardized, with no significant technological advances since the original investigation in 1989-91. Gray portland cement is manufactured from a properly proportioned mixture of raw materials containing chemical components of calcium carbonate, silica, alumina, and iron oxide that react when combined with aggregate and water to form concrete. The raw material mixture usually consists of limestone (a source for calcium carbonate), clay (for silica and alumina), and iron ore (for iron oxide). In cases where the common materials are not available or contain an insufficient amount of the chemical components, other mined materials

[33] Unless otherwise noted, this information is based on *Gray Portland Cement and Cement Clinker from Japan, Inv. No. 731-TA-461 (Third review),* USITC Publication 4281, December 2011, pp. I-15 through I-17.

or industrial products may be substituted or used as additives to correct the deficiencies. The mixture is crushed, ground, and blended into a mill feed that is sintered at about 2,700 degrees Fahrenheit in refractory-lined, cylindrical, steel rotary kilns to make cement clinker.

There are basically two processes used to blend the raw materials to produce cement: a wet and a dry process, which are both depicted in figure I-1. The differences between wet and dry blending are procedural; there are no chemical or physical characteristic differences between the end products. In the wet process, the raw materials are ground, blended, and mixed with water to produce a slurry. This slurry is fed into rotary kilns in which it is heated to induce chemical reactions that convert the raw material into cement clinker. The wet process has typically been used where some of the raw materials are very moist; it is also the older process.

Figure I-1
Gray portland cement: Steps in the manufacture of gray portland cement



Source: "Audit Procedures for cement Production Tax," Texas Comptroller of Public Accounts, December 2005, https://www.comptroller.texas.gov/taxes/audit/manuals/cement/ch1.php, accessed on January 12, 2017.

In the dry process, all grinding and blending are done with dry materials in a roller mill. The more technically advanced facilities in the United States and Japan improve the efficiency of the dry process by feeding the blended raw material through a preheater and precalciner in which it is partially heated using vented kiln gases and partially calcined by direct firing in a blast furnace before entering the rotary kiln. In those dry process facilities that do not include preheater/precalciner technology, the raw material is fed directly into a rotary kiln in which it is calcined into clinker.

The main advantage of the dry process is that it is more fuel efficient, depending on the moisture content of raw materials economically available; preheaters and precalciners further improve this efficiency. In 2009, the dry process with preheaters consumed eight percent less fuel than the national average of fuel consumed by all kilns per short ton of clinker production, whereas the wet process consumed 54 percent more than the national average.[34] Kiln size is also a factor in fuel efficiency, with larger kilns being more efficient than the smaller ones. However, the dry process requires more electricity per unit of output than the wet process. Although electricity is used mostly for grinding clinker and pollution control, it is also used to operate the fuel conservation equipment (*i.e.*, preheaters and precalciners). In 2013, the USGS reported that the dry process production lines consumed more electricity than equivalent capacity wet process lines.[35]

In 2013, approximately 95 percent of U.S. cement clinker was produced by the dry production process;[36] many domestic producers converted their facilities to the dry process to counter higher fuel costs as a result of the energy crisis in the mid-1970s. The recent rise in proportion of dry process is a reflection of the closure and idling of less efficient wet process facilities.[37] In Japan, the dry process reportedly is used for all of the cement clinker production.[38]

For both the wet and dry processes, the major sources of energy to operate the kiln include coal, fuel oil, and natural gas. In the United States, the fuel predominantly used is coal; in the original investigations, the Japanese industry reported using mostly fuel oil. The choice of fuel is generally determined by the economics of fuel prices; transportation cost to the production site; efficiency cost in using one fuel over another; and, for already established

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[34] USGS, *Annual Mineral Industry Survey*, Cement, 2009.

[35] USGS, *Annual Mineral Industry Survey*, Cement, 2009; USGS, *Annual Mineral Industry Survey*, Cement, 2003; USGS, *Annual Mineral Industry Survey*, Cement, 1998.

[36] USGS, *Annual Minerals Yearbook*, Cement, 2013. In 2009, 2003, and 1998, approximately 87, 78, and 69 percent of U.S. cement clinker production facilities used the dry process, respectively. USGS, *Annual Mineral Industry Survey*, Cement, 2009; USGS, *Annual Mineral Industry Survey*, Cement, 2003; and USGS, *Annual Mineral Industry Survey*, Cement, 1998. In 1988, approximately 59 percent of cement clinker was produced by the dry process. *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final), USITC Publication 2376*, April 1991, p. A-9.

[37] USGS, *Annual Mineral Industry Survey*, Cement, 2009.

[38] "Production Ratio by Kiln Type," *Japan Cement Association*, found at http://www.jcassoc.or.jp/cement/2eng/ed2.html.

facilities, the additional capital cost for handling equipment to convert from one fuel to another.[39] Figure I-1 outlines the steps in the manufacturing process of gray Portland cement.

U.S. tariff treatment

Gray portland cement is classified under Harmonized Tariff Schedule ("HTS") subheading 2523.29.00 (covering all non-white portland cement), and cement clinker is provided for *eo nomine* in HTS subheading 2523.10.00. Gray portland cement has reportedly also been imported under HTS subheading 2523.90.00 (other hydraulic cements). Subject merchandise enters at a column 1-general rate of free under each subheading. All three HTS provisions may include items that are not part of the scope. Subheading 2523.10.00 includes clinker for all types of downstream cement, and subheading 2523.29.00 includes finely ground portland cement and masonry cement. Subheading 2523.90.00 encompasses non-portland cements other than aluminous cement of subheading 2523.30.00 and therefore covers slag cement, supersulfate cement, and other hydraulic cements.

The definition of the domestic like product

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. In its original determination, its full first five-year review determination, its expedited second five-year review determination, and its expedited third five-year review determination, the Commission defined the domestic like product as consisting of gray portland cement and cement clinker coextensive with Commerce's scope.[40] In none of the prior proceedings was there a dispute about the definition of the domestic like product.

In its notice of institution for this review, the Commission solicited comments from interested parties regarding the appropriate domestic like product. According to their response to the notice of institution, the domestic interested parties agree that the domestic like product consists of gray portland cement and cement clinker.[41]

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[39] *A Competitive Assessment of the U.S. Cement Industry*, U.S. Department of Commerce, p. 150.

[40] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, p. 13; *Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela: Investigations Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review)*, USITC Publication 3361, October 2000, p. 8; *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006, p. 5; *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. 5.

[41] *Domestic Interested Parties' Response to the Notice of Institution,* December 1, 2016, p. 54.

THE ORIGINAL INVESTIGATION AND SUBSEQUENT REVIEWS

The original investigation

The original investigation resulted from petitions filed on May 18, 1990 alleging that an industry in the United States was materially injured or threatened with material injury by reason of imports of gray portland cement and cement clinker sold at less than fair value ("LTFV") from Japan.[42] The Commission completed the original investigation in April 1991, determining that an industry in the United States was materially injured by reason of LTFV imports of gray portland cement and cement clinker from Japan.[43] Commerce subsequently issued an antidumping duty order on imports of gray portland cement and cement clinker from Japan.[44] The Commission's determination was reviewed by the Court of International Trade, which remanded the plurality's decision to use a cumulative analysis.[45] On remand, the Commission made an affirmative determination with respect to the Southern California regional industry on a non-cumulated basis.[46] The Court of International Trade affirmed.[47]

The first five-year review

On November 4, 1999, the Commission determined that it would conduct a full review on the antidumping duty order on gray portland cement and cement clinker from Japan.[48] On March 3, 2000, in an expedited review, Commerce found that revocation of the antidumping duty order on gray portland cement and cement clinker from Japan would likely lead to

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[42] The petitions were filed by members of the Ad Hoc Committee of Southern California Producers of Gray Portland Cement. These members included: National (Encino, California) and Southwestern Portland Cement (Houston, Texas). In an amendment to the petition filed on June 22, 1990, petitioners added the following co-petitioners: Independent Workers of North America, Locals 49, 52, 89, 192, and 471, and the International Union of Operating Engineers, Local 12. These unions represented the workers at the following plants: Southwestern/Victorville, National/Lebec, Calaveras, Tehachapi, CPC/Mojave, and Riverside/Oro Grande. *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, p. A-1, n.4.

[43] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, p. 13.

[44] *Antidumping Duty Order and Amendment to Final Determination of Sales at Less Than Fair Value: Gray Portland Cement and Clinker From Japan*, 56 FR 21658, May 10, 1991.

[45] Mitsubishi Materials Corp. v. United States, 820 F. Supp. 608 (Ct. Int'l Trade 1993).

[46] *Gray Portland Cement and Cement Clinker from Japan, Inv. No. 731-TA-461 (Remand)*, USITC Publication 2657, June 1993, p. 2.

[47] Mitsubishi Materials Corp. v. United States, 918 F. Supp. 422 (Ct. Int'l Trade 1996).

[48] *Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela*, 64 FR 62689, November 17, 1999. The Commission also determined to conduct full reviews concerning gray portland cement and cement clinker from Mexico and Japan that were instituted on the same day as the review concerning Japan. Ibid.

continuation or recurrence of dumping.[49] On November 1, 2000, the Commission completed a full first five-year review of the antidumping duty order in which it determined that revocation of the order on gray portland cement and cement clinker from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[50] Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, November 15, 2000, Commerce issued a continuation of the antidumping duty order on imports of gray portland cement and cement clinker from Japan.[51]

The second five-year review

On January 6, 2006, the Commission determined that it would conduct an expedited review of the antidumping duty order on gray portland cement and cement clinker from Japan.[52] On February 7, 2006, Commerce published its determination that revocation of the antidumping duty order on gray portland cement and cement clinker from Japan would be

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[49] *Gray Portland Cement and Cement Clinker from Japan; Final Results of Antidumping Duty Expedited Sunset Review*, 65 FR 11549, March 3, 2000.

[50] *Gray Portland Cement and Cement Clinker From Japan, Mexico, and Venezuela*, 65 FR 65327, November 1, 2000. The Commission also determined that revocation of the order on gray portland cement and cement clinker from Mexico would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. However, it determined that termination of the suspended antidumping duty and countervailing duty investigations covering gray portland cement and cement clinker from Venezuela would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. Ibid.

[51] *Continuation of Antidumping Duty Orders: Gray Portland Cement and Cement Clinker from Japan and Mexico*, 65 FR 68979, November 15, 2000.

[52] *Gray Portland Cement and Cement Clinker From Japan*, 71 FR 5069, January 31, 2006. On the same date, the Commission determined that it should proceed to a full review in the five-year review concerning the antidumping duty order on subject imports from Mexico having found that both the responses of the domestic interested party and the respondent interested party group to be adequate. On March 6, 2006, the Office of the United States Trade Representative, Secretaria de Economia of the United Mexican States, and Commerce entered into an Agreement on Trade in Cement ("Agreement"). *Gray Portland Cement and Clinker From Mexico: Agreement Between the Office of the United States Trade Representative, The United States Department of Commerce and Secretaria de Economia of Mexico on Trade in Cement*, 71 FR 13082, March 14, 2006. Pursuant to the Agreement, the domestic industry submitted letters stating that they had "no interest" in maintaining the order after the expiration of the Agreement. Effective April 1, 2009, Commerce revoked the order after determining that the terms of the Agreement and, therefore, the terms of the "no interest" letters from producers that accounted for substantially all of the production of the domestic like product had been met. *Gray Portland Cement and Clinker From Mexico: Final Results of Changed-Circumstances Review, Revocation of Antidumping Duty Order, and Termination of Five-Year (Sunset) Review of Antidumping Duty Order*, 74 FR 15435, April 6, 2009.

likely to lead to continuation or recurrence of dumping.[53] On May 31, 2006, the Commission notified Commerce of its determination that material injury would be likely to continue or recur within a reasonably foreseeable time.[54] Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, June 16, 2006, Commerce issued a continuation of the antidumping duty order on imports of gray portland cement and cement clinker from Japan.[55]

The third five-year review

On August 5, 2011, the Commission determined that it would conduct an expedited review of the antidumping duty order on gray portland cement and cement clinker from Japan.[56] On August 31, 2011, Commerce published its determination that revocation of the antidumping duty order on gray portland cement and cement clinker from Japan would be likely to lead to continuation or recurrence of dumping.[57] On December 2, 2011, the Commission notified Commerce of its determination that material injury would be likely to continue or recur within a reasonably foreseeable time.[58] Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, December 16, 2011, Commerce issued a continuation of the antidumping duty order on imports of gray portland cement and cement clinker from Japan.[59]

[53] *Gray Portland Cement and Clinker from Japan; Final Results of the Expedited Sunset Review of the Antidumping Duty Order*, 71 FR 6268, February 7, 2006.

[54] *Gray Portland Cement and Cement Clinker From Japan*, 71 FR 32127, June 2, 2006.

[55] *Gray Portland Cement and Cement Clinker from Japan: Continuation of Antidumping Duty Order*, 71 FR 34892, June 16, 2006.

[56] *Gray Portland Cement and Cement Clinker From Japan; Scheduling of an Expedited Five-Year Review Concerning the Antidumping Duty Order on Gray Portland Cement and Cement Clinker From Japan*, 76 FR 50252, August 12, 2011.

[57] *Gray Portland Cement and Clinker From Japan: Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*, 76 FR 54206, August 31, 2011.

[58] *Gray Portland Cement and Cement Clinker From Japan*, 76 FR 76760, December 8, 2011.

[59] *Gray Portland Cement and Clinker From Japan: Continuation of Antidumping Duty Order*, 76 FR 78240, December 16, 2011.

PRIOR RELATED INVESTIGATIONS

The Commission has conducted investigations and/or five-year reviews concerning portland hydraulic cement dating back to 1960 with regard to the following 14 countries: Australia, Belgium, Canada, Colombia, Dominican Republic, France, Greece, Japan, Korea, Mexico, Portugal, Spain, Sweden, and Venezuela. Table I-4 presents certain information related to these Commission proceedings.[60]

[60] In addition to the listed investigations or reviews in table I-1, the Commission conducted an investigation with regard to U.S. imports of white portland cement from Japan in 1964. That investigation resulted in a negative determination by the Commission. *White Portland Cement from Japan, Inv. No. AA1921-38*, TC Publication 129, July 9, 1964. Imports of gray portland cement from two additional countries were also examined in 1962 and 1963 by the Department of the Treasury. However, the Department of the Treasury determined that U.S. imports of portland cement, other than white, nonstaining portland cement, from Norway and Poland, respectively, were not being, nor were likely to be, sold at LTFV. *Portland Cement from Norway*, 27 FR 11903, December 1, 1962; and *Portland Cement from Poland*, 28 FR 6660, June 27, 1963. Also, during 1983, Commerce determined that subsidized portland hydraulic cement from Mexico was being sold in the United States (48 FR 43063, September 21, 1983). The Commission was not involved in this investigation because Mexico was not entitled to an injury investigation in countervailing duty cases at that time.

Table I-4
Portland cement: Previous Commission proceedings

Year	Country	Determination	Geographic scope of domestic industry	Citation
1960	Canada	Negative	--	*Portland Cement from Canada, Inv. No. AA1921-12*, {No publication number}, March 11, 1960; 25 FR 2191 (March 16, 1960)
1961	Sweden	Affirmative	Rhode Island, eastern Massachusetts, and eastern Connecticut (1 market area)	*Portland Cement from Sweden, Inv. No. AA1921-16*, TC Publication 10, April 4, 1961
1961	Belgium	Affirmative	East coast of Florida	*Portland Cement from Belgium*, AA1921-19, TC Publication 22, June 2, 1961
1961	Portugal	Affirmative	Connecticut, Massachusetts, and New Jersey (1 market area)	*Portland Gray Cement from Portugal, Inv. No. AA1921-22*, TC Publication 37, October 20, 1961
1962	Dominican Republic	Negative	Metropolitan New York City and Puerto Rico (2 market areas)	*Portland Cement from Dominican Republic, Inv. No. AA1921-23*, TC Publication 87, April 18, 1962
1963	Dominican Republic	Affirmative	Metropolitan New York City	*Portland Cement from the Dominican Republic, Inv. No. AA1921-25*, TC Publication 87, April 19, 1963
1975	Mexico	([1])	Arizona, New Mexico, and southwestern Texas (1 market area)	*Portland Hydraulic Cement, Other than White Nonstaining Cement from Mexico, Inquiry No. AA1921-Inq.-3*, ITC Publication 751, December 1975
1976	Mexico	Negative	Florida and southeastern Georgia (1 market area)	*Portland Hydraulic Cement from Mexico, Inv. No. AA1921-161*, USITC Publication 795, December 1976
1978	Canada	Negative	Northeast U.S. market/Canadian border U.S. market (2 optional market areas)	*Portland Hydraulic Cement from Canada, Inv. No. AA1921-184*, USITC Publication 918, September 1978
1983	Australia	Negative	California and Nevada (1 region)	*Portland Hydraulic Cement from Australia and Japan, Inv. Nos. 731-TA-108 and 109 (Final)*, USITC Publication 1440, October 1983
	Japan	Negative		
1986	Colombia	Negative	National basis	*Portland Hydraulic Cement and Cement Clinker from Colombia, France, Greece, Japan, Mexico, the Republic of Korea, Spain, and Venezuela, Investigations Nos. 731-TA-356 through 363 (Preliminary)*, USITC Publication 1925, December 1986
	France	Negative		
	Greece	Negative		
	Japan	Negative		
	Mexico	Negative		
	Korea	Negative		
	Spain	Negative		
	Venezuela	Negative		

Table continued on next page.

Table I-4—Continued
Portland cement: Previous Commission proceedings

1990	Mexico	Affirmative	Southern-tier region	*Gray Portland Cement and Cement Clinker from Mexico, Investigation No. 731-TA-451 (Final)*, USITC Publication 2305, August 1990
1991	Japan	Affirmative	Southern California	*Gray Portland Cement and Cement Clinker from Japan, Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991
1991	Venezuela	Affirmative	State of Florida	*Gray Portland Cement and Cement Clinker from Venezuela, Investigation Nos. 303-TA-21 and 731-TA-519 (Preliminary)*, USITC Publication 2400, July 1991
2000	Japan	Affirmative	State of California	*Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela, Investigations Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review)*, USITC Publication 3361, October 2000
	Mexico	Affirmative	Southern-tier region	
	Venezuela	Negative	State of Florida	
2006	Japan	Affirmative	State of California	*Gray Portland Cement and Cement Clinker from Japan, Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006

[1] Negative Commission determination of "no reasonable indication of injury." Subsequent to the Commission's determination, the Department of the Treasury made a negative LTFV determination and the investigation was terminated.

Source: Cited USITC publications and/or *Federal Register* notices.

The most recent proceedings conducted by the Commission beginning with the 1986 investigations have also included cement clinker, an intermediate product used in the production of cement. Of the completed Commission cement proceedings, all but the 1986 investigations were determined on the basis of a regional, rather than a national, industry.

The antidumping duty order concerning Japan that is the subject of this fourth five-year review is the only remaining order in effect on gray portland cement and cement clinker.

ACTIONS AT COMMERCE

Commerce has not made any company revocations, duty absorption findings, or completed scope inquiry reviews since the imposition of the order. In addition, Commerce has not completed any changed circumstances reviews or critical circumstances reviews nor has had any anti-circumvention findings since the third continuation of the order in 2011.

Current five-year review

In the original investigation, Commerce calculated weighted-average antidumping duty margins on Nihon (84.70 percent), Onoda (47.79 percent), and "all others" (65.22 percent).[61] In the full first five-year review, Commerce calculated weight-average antidumping duty margins on Nihon (69.89 percent), Onoda (70.52 percent), and "all others" (70.23 percent). Given the fact that Nihon and Onoda no longer existed,[62] the margin determined to be most relevant was the 70.23 percent "all others" margin.[63] In the expedited second five-year review, Commerce calculated weighted-average antidumping duty margins on Onoda (70.52 percent), Nihon (69.89 percent), and "all other" (70.23 percent).[64] In the expedited third five-year review, Commerce calculated weighted-average antidumping duty margins on Onoda (70.52 percent), Nihon (69.89 percent), and "all other" (70.23 percent).[65]

Commerce notified the Commission that it had not received adequate responses from the respondent interested parties to its notice initiating this current five-year review of the antidumping duty order on imports of gray portland cement and cement clinker from Japan. As a result, Commerce intends to conduct an expedited review of the order and to issue its final results by March 1, 2017.[66]

THE INDUSTRY IN THE UNITED STATES

U.S. producers

According to the USGS, in 2015, gray portland cement was produced at 99 plants in 34 states by 34 companies, plus 2 in Puerto Rico (other company totals are possible depending on

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[61] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, p. 13.

[62] In 1998, Onoda and Nihon merged to form Taiheiyo. *Gray Portland Cement and Cement Clinker From Japan: Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006, p. I-8.

[63] *Gray Portland Cement and Cement Clinker from Japan; Final Results of Antidumping Duty Expedited Sunset Review*, 65 FR 11549, March 3, 2000.

[64] *Gray Portland Cement and Clinker from Japan; Final Results of the Expedited Sunset Review of the Antidumping Duty Order*, 71 FR 6268, February 7, 2006.

[65] *Gray Portland Cement and Clinker From Japan: Final Results of the Expedited Third Sunset Review of the Antidumping Duty Order*, 76 FR 54206, August 31, 2011. As previously mentioned, Onoda and Nihon merged to form Taiheiyo. *Gray Portland Cement and Cement Clinker From Japan: Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006, p. I-8. Consistent with the prior review and because Commerce had not determined whether Taiheiyo is the successor-in-interest to either Nihon or Onoda, Commerce found that Taiheiyo is a new entity to which the "all others" rate should apply. *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-6.

[66] Jim Doyle, Director, Office V, AD/CVD Operations, Enforcement and Compliance, Department of Commerce, letter to Catherine DeFilippo, December 20, 2016.

ownership breakdowns).[67] This compares with 115 plants in 37 states plus 2 in Puerto Rico in 1999, 116 plants in 37 states plus 2 in Puerto Rico in 2003, and 107 plants in 37 states plus two in Puerto Rico in 2009.[68] In 1988 (during the period examined in the original final investigation), there were 134 active U.S. cement manufacturing plants (including 10 plants that operated solely for the grinding of imported, purchased, or interplant transfers of clinker), 67 of which were operated by foreign ownership or joint ventures with foreign owned participants.[69] During the period of the first review in 1999, nearly 61 percent of U.S. capacity was foreign-owned.[70] During the period of the second review in 2003, approximately 81 percent of U.S. gray portland cement capacity was foreign-owned.[71] During the period of the third review in 2009, approximately 77 percent of U.S. gray portland cement capacity was foreign-owned.[72] During the period of the fourth review, in 2013, approximately 79 percent of U.S. gray portland cement capacity was foreign-owned.[73]

Nationally, U.S. producers generally range from companies operating a single plant with less than 0.5 percent of total U.S. capacity to the large, multiplant corporations having nearly 15 percent of total U.S. capacity.[74] According to the USGS, the top 10 companies in 2013 were, in descending order of production, Cemex; Holcim (US) Inc.; Lehigh; Buzzi Unicem USA, Inc. (including Alamo Cement Co.) ("Buzzi"); Ash Grove Cement Co. ("Ash Grove"); Lafarge North America Inc. ("Lafarge"); Texas Industries, Inc ("TXI"); Eagle Materials Inc. ("Eagle Materials"); Essroc Cement Corp. ("Essroc"); and St. Mary's Cement Group ("St. Mary's Cement"). These, combined, accounted for 78 percent of U.S. gray portland cement production in 2013.[75] [76] [77]

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[67] USGS, *Mineral Commodity Summary*, Cement, 2016; *Domestic interested parties' Response to the Notice of Institution*, December 1, 2016, exh. 35. There were plant closures in 2012 of a grinding plant in Idaho, and integrated plant in Kansas, and one of two grinding plants in Michigan. USGS, *Annual Minerals Yearbook*, Cement, 2013.

[68] USGS, *Monthly Mineral Industry Survey*, Cement, April 2000; USGS, *Annual Mineral Industry Summary*, Cement, April 2004; USGS, *Annual Mineral Industry Summary*, Cement, 2010.

[69] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, p. A-18.

[70] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006, p. I-23.

[71] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-22.

[72] USGS, *Annual Mineral Industry Survey*, Cement, 2009

[73] USGS, *Minerals Yearbook*, Cement, 2013.

[74] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-22.

[75] USGS, *Minerals Yearbook*, Cement, 2013. Of these companies, all except Ash Grove Cement Co., Eagle Materials Inc., and TXI were foreign-owned as of yearend 2013. Ibid.

[76] California Portland, CEMEX, and Lehigh have operations in Southern California and/or California. *Domestic interested parties' Response to the Notice of Institution*, December 1, 2016, exh. 35.

[77] About the time of the first five-year review, the top 10 companies in 1998 were, in descending order of production, Holnam (Holcim (US)), Southdown (purchased by Cemex in 2000), Lafarge, Lehigh, Blue Circle (purchased by Lafarge in 2001), Ash Grove, Essroc, Lone Star, California Portland, and TXI.

(*continued*...)

A number of Southern California and California operations changed hands from the original investigation to the period of the first review with the share of foreign ownership increasing. At the time of the first review in 1999, capacity in Southern California was just over 62 percent foreign-owned, while capacity in California was just over 68 percent foreign-owned. By 2002, foreign ownership controlled nearly 94 percent of Southern California capacity and more than 95 percent of California capacity.[78]

The Southern California and California industries in question featured, and still do, a number of large, integrated producers, with varied degrees of integration. In some instances, producers own both aggregate operations (raw materials) and/or readymix and concrete product operations (*e.g.*, concrete block, concrete pipe, prestressed concrete, etc.). Among integrated producers operating in Southern California and California are California Portland, Cemex (Southdown prior to 2000), Lehigh, Mitsubishi Cement Corp. ("Mitsubishi"), and TXI.[79]

In 2015, overall U.S. gray portland cement production increased by 24.2 percent from 2011 to just over 91 million short tons.[80] The top five producing States in 2015 were, in descending order, Texas, California, Missouri, Florida, and Alabama, accounting for nearly half of U.S. production. Consumption in 2015 was just over 102 million short tons, an increase of 4.3 percent from 2014.[81]

(…*continued*)

These, combined, accounted for 70 percent of U.S. gray portland cement production in 1998, during which California Portland, Lehigh, Southdown, and TXI had operations in Southern California and/or California. In 2003, during the time period examined in the second five-year review, the top 10 companies in descending order were Holcim (US), Cemex, Lafarge, RC Lonestar (purchased by Buzzi in 2004), Lehigh, Ash Grove, Essroc, TXI, California Portland, and Centex. California Portland, Lehigh, TXI, and Cemex had operations in California. In 2009, during the time period examined in the third five-year review, the top 10 companies in descending order were Holcim (US), Cemex, Lafarge, Lehigh, Buzzi, Ash Grove, TXI, Essroc, California Portland, and St. Mary's Cement. *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-22, n.94.

[78] Cemex's purchase of Southdown in 2000 accounted for most of the change in the portion of foreign-owned operations from 1999 to 2003. Ibid., p. I-30, n. 95.

[79] Ibid., pp. I-30 – I-31.

[80] USGS, *Mineral Commodity Summary*, Cement, 2016.

[81] USGS, *Mineral Commodity Summary*, Cement, 2016. Summary data reported by USGS in 2014 and 2015 are estimates. In 1999, overall U.S. gray portland cement production rose by 2.5 percent from 1998 to a then record of over 89 million short tons. The top five producing States in 1999 were, in descending order, California, Texas, Pennsylvania, Michigan, and Missouri. Consumption rose 4.8 percent from the previous year to a then record level in excess of 116 million short tons. USGS, *Monthly Mineral Survey*, Cement, April 2000. In 2003, overall U.S. gray portland cement production rose by 3.3 percent from 2002 to a new record of over 97 million short tons. The top five producing States in 2003 were, in descending order, California, Texas, Pennsylvania, Michigan, and Missouri. Consumption in 2003 stood at just over 119 million short tons (the second highest year on record), or 3.7 percent ahead of 2002 consumption. USGS, *Annual Mineral Industry Survey*, Cement, 2003. In 2009, overall U.S. gray portland cement production declined by 25.6 percent from 2998 to just under 69 million short tons, the lowest production since 1983. The top five producing States in 2009 were, in descending order, Texas,

(*continued*...)

Ownership changes in California subsequent to the second review, was the Lehigh purchase of Hanson Permanente in 2007 as well as the Eagle Materials purchase of two cement plants (Sugar Creek, Missouri, and Tulsa, Oklahoma.) from Lafarge in 2012. In addition, Essroc transferred its Essexville, Michigan grinding plant to Lafarge as part of an asset swap.[82] Table I-5 details information with respect to plant locations, ownership, and nationality of ownership of production facilities located in Southern California and California at the time of the original investigation, the first, second, and third reviews, as well as the current review (see, figure I-2 for plant locations).

(…*continued*)
California, Missouri, Pennsylvania, and Alabama. Consumption in 2009 stood at just under 76 million short tons, a decrease of 26.5 percent from 2008 and the least since 1983. USGS, *Annual Mineral Industry Survey*, Cement, 2009.

[82] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-23; USGS, *Minerals Yearbook*, Cement, 2013.

Table I-5
Gray portland cement and cement clinker: Southern California/California plant locations, ownership, and nationality of ownership, 1989, 2000, 2005, 2010, and 2015

Plant location	Company/ownership, Nationality				
	1989	2000	2005	2010	2015
California (Southern):					
Crestmore	Riverside/Gifford-Hill, USA	Riverside/TXI, USA	Riverside/TXI, USA	Riverside/TXI, USA	Riverside/TXI, USA
Oro Grande	Riverside/Gifford-Hill, USA	Riverside/TXI, USA	Riverside/TXI, USA	Riverside/TXI, USA	California Portland/Taiheiyo, Japan
Victorville	Southdown	Southdown	CEMEX, Mexico (purchased from Southdown in 2000)	CEMEX, Mexico	CEMEX, USA
Colton	CalMat, USA	California Portland/Taiheiyo, Japan	California Portland/Taiheiyo, Japan	California Portland/Taiheiyo, Japan	California Portland/Taiheiyo, Japan
Mojave	CalMat, USA	California Portland/Taiheiyo, Japan	California Portland/Taiheiyo, Japan	California Portland/Taiheiyo, Japan	California Portland/Taiheiyo, Japan
Lebec	National Cement/Vicat, France	National Cement/Vicat, France	National Cement/Vicat, France	National Cement/Vicat, France	National Cement/Vicat, France
Lucerne Valley	Mitsubishi/ Mitsubishi Japan	Mitsubishi/ Mitsubishi Japan	Mitsubishi/ Mitsubishi Japan	Mitsubishi/ Mitsubishi Japan	Mitsubishi/ Mitsubishi Japan
Monolith	Calaveras/ Cementeries, Belgium and Heidelberger, Germany	Calaveras/ Cementeries, Belgium and Heidelberger, Germany	Lehigh/ Cementeries, Belgium and Heidelberger, Germany	Lehigh/ Cementeries, Belgium and Heidelberger, Germany	Lehigh/ Cementeries, Belgium and Heidelberger, Germany
California (Northern):					
Redding	Calaveras/ Cementeries, Belgium and Heidelberger, Germany	Calaveras/ Cementeries, Belgium and Heidelberger, Germany	Lehigh/ Cementeries, Belgium and Heidelberger, Germany	Lehigh/ Cementeries, Belgium and Heidelberger, Germany	Lehigh/ Cementeries, Belgium and Heidelberger, Germany
Davenport	RMC Lone Star/Rosebud Holdings, USA and RMC Group, UK	RMC Pacific Materials/RMC Industries, USA	CEMEX, Mexico (purchased from RMC Group UK in 2005)	Shuttered in 2010	Shuttered in 2010
Cupertino	Kaiser/Hanson PLC, UK	Hanson Permanente/ Hanson PLC, UK	Hanson Permanente/ Hanson PLC, UK	Lehigh/ Cementeries, Belgium and Heidelberger, Germany (purchased in 2007 from Hanson/ Permanente/ Hanson PLC, UK)	Lehigh/ Cementeries, Belgium and Heidelberger, Germany

Footnotes continued on following page.

Table I-5—Continued
Gray portland cement and cement clinker: Southern California/California plant locations, ownership, and nationality of ownership, 1989, 2000, 2005, 2010, and 2015

[1] Grinding only operations.

Source: *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-24; "Texas Industries inc - Riverside Cement Crestmore Plant," Cement, 2017, http://www.cemnet.com/GCR/plant/672, accessed on January 12; "Oro Grande Cement Plant," CalPortland, http://www.calportland.com/locations/california/oro-grande-cement-plant/, accessed January 12, 2017; "CEMEX USA's Historic Victorville Cement Plant Receives Environmental Accolades," November 4, 2016, http://www.cemexusa.com/MediaCenter/PressRelease/victorville-plant-receives-environmental-accolades-20161104.aspx accessed on January 12, 2017; "Colton Cement Plant," CalPortland, http://www.calportland.com/locations/california/colton-plant/, accessed on January 12, 2017; "Mojave Plant," CalPortland, http://www.calportland.com/locations/california/mojave-plant/, accessed on January 12, 2017; "Lebec Cement Plant," National Cement, http://www.nationalcement.com/cement/plant/lebec, accessed on January 12, 2017; "Facilities," Mitsubishi Cement Corporation, http://mitsubishicement.com/facilities/, accessed on January 12, 2017; "Locations," Lehigh Hanson, http://www.lehighhanson.com/locations, accessed on January 12, 2017; "Davenport Cemex plant to shutdown for good." Santa Cruz Sentinel , January 23, 2010, http://www.santacruzsentinel.com/article/zz/20100123/NEWS/100128700, accessed on January 5, 2017; "Lehigh Quarry and Cement Plant Information," Cupertino, August 2013, http://www.cupertino.org/index.aspx?page=944, accessed on January 12, 2017.

Figure I-2
Gray portland cement: California gray portland cement plants, 2015

Source: *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, figure I-3; "Davenport Cemex plant to shutdown for good." Santa Cruz Sentinel , January 23, 2010, http://www.santacruzsentinel.com/article/zz/20100123/NEWS/100128700, accessed on January 5, 2017.

Definition of the domestic industry

The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. In its original determination, its full first five-year review determination, and its expedited second five-year review determination, the Commission defined the domestic industry as producers of gray portland cement and cement clinker, including "grinding only" operations.[83]

The domestic interested parties indicated in their response to the Commission's notice of institution in the expedited third five-year review and in this fourth five-year review that they agree that the domestic industry includes producers of gray portland cement and cement clinker, including "grinding only" operations.[84]

Related party issues

The Commission considered in the original investigation whether domestic producers that either were owned by a foreign producer, imported subject product, or ground imported subject product should be excluded as related parties, and found that appropriate circumstances to do so did not exist.[85] Producers that were importers, or were related to exporters and/or importers of Japanese cement during the original investigation were: (1) Mitsubishi Cement Co., owned by Mitsubishi Mining & Cement Co., Ltd. of Japan; (2) California Portland Cement Co., owner of a 50 percent interest in CalMat Terminals, an importer of Japanese cement; (3) Riverside Cement Co., a joint venture partner with RIC Co., an importer of Japanese cement; and, (4) RMC Lonestar, owner of a 50 percent interest in Pacific Coast Cement Corp., an importer of Japanese cement.[86] As was the case in the original investigation, the Commission found in the first five-year review a number of related parties, either through ownership by Japanese firms or as importers of Japanese product, but concluded that

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[83] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, p. 13; *Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela: Investigations Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review)*, USITC Publication 3361, October 2000, p. 8; *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006, p. 5.

[84] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-12; *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, p. 54.

[85] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, p. 13.

[86] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Preliminary)*, USITC Publication 2297, July 1990, pp. 51-52.

appropriate circumstances did not exist to exclude any of the producers from the domestic industry.[87]

In the expedited second and expedited third five-year reviews, the Commission found that Mitsubishi Cement Corp. and California Portland Cement were related parties, but that appropriate circumstances did not exist to exclude them from the domestic industry. In the current review, the domestic interested parties states in their response to the Commission's notice of institution that Mitsubishi Cement Corp. ("Mitsubishi") and CalPortland, which are not part of the Committee, are wholly owned by Japanese producers of gray portland cement. Mitsubishi has one plant in California and CalPortland has two plants in California.[88] Neither CalPortland nor Mitsubishi participated in this current five-year review.

Regional industry analysis

The Commission concluded in its original determination, its full first five-year review determination, its expedited second five-year review determination, and its expedited third five-year review determination that appropriate circumstances existed for a regional industry analysis. In the original investigation, the Commission considered whether the Southern California region (defined by the USGS for statistical and analytical purposes as the counties of San Luis Obispo, Kern, Inyo, Mono, Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, San Diego, and Imperial), as proposed by the petitioners, or a larger region, the State of California, was the appropriate region. In its original determination, the Commission determined that both regions satisfied the market isolation criteria but found the more appropriate region for its analysis was Southern California; one Commissioner found the regional industry to consist of producers in the State of California.[89] In its full first five-year review determination, the Commission found that there had been integration of the Northern and Southern regions of California and defined the region as the State of California.[90] The Commission also determined that the record in its expedited second five-year review and expedited third five-year review supported a finding of a regional industry corresponding to the region of the State of California.[91] [92]

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[87] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final), USITC Publication 2376*, April 1991, p. 13; *Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela: Investigations Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review)*, USITC Publication 3361, October 2000, p. 8. The domestic interested parties did not argue for an exclusion.

[88] *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, p. 3.

[89] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Final)*, USITC Publication 2376, April 1991, pp. 13-21.

[90] *Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela: Investigations Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review)*, USITC Publication 3361, October 2000, pp. 8-21.

[91] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006, pp. 6-12; *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. 10.

The domestic parties indicated in their response to the Commission's notice of institution in this fourth five-year review that the Commission should take into account its definition of the domestic industry in the three previous five-year reviews and again define the domestic industry as the region of the State of California.[93] They also noted that the domestically produced product and subject imports are highly fungible and there are relatively high transportation costs. Therefore, "{t}he California cement market remains isolated, as it was during the First, Second, and Third Reviews. Cement producers in California continue to sell almost all of their production in California, and cement demand in California is not supplied to any substantial degree by cement producers located elsewhere in the United States."[94]

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution in this current five-year review.[95] A compilation of the data submitted from all responding U.S. producers as well as trade and financial data submitted by U.S. producers in the original investigation, full first five-year review, expedited second five-year review, and expedited third five-year review are presented in table I-6 (United States) and table I-7 (California).

(…*continued*)

[92] As shown in table I-2, in all but one of the prior Commission grouped proceedings concerning gray portland cement, the Commission has used a regional industry analysis. In the 1986 investigation concerning imports from eight countries, petitioner, while noting that cement was sold in regional markets, argued that producers in all regional markets were being injured, and the Commission could, therefore, view injury on a national basis. The Commission made a unanimous negative determination at the preliminary stage of the investigation. *Portland Hydraulic Cement and Cement Clinker from Colombia, France, Greece, Japan, Mexico, the Republic of Korea, Spain, and Venezuela, Investigations Nos. 731-TA-356 through 363 (Preliminary)*, USITC Publication 1925, December 1986.

[93] *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, p. 55.

[94] Ibid.

[95] Individual company trade and financial data are presented in app. B.

Table I-6
Gray portland cement and cement clinker: Trade and financial data submitted by U.S. producers in the United States, 1990, 1999, 2005, 2010, and 2015

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Table I-7
Gray portland cement and cement clinker: Trade and financial data submitted by U.S. producers in California, 1990, 1999, 2005, 2010, and 2015

* * * * * * *

Certain cement data published by the USGS for 2011-2013 are presented in table I-6 (United States) and table I-7 (California). From 2011 to 2013, production of cement increased by 13.1 percent in the United States and by 19.8 percent in California. According to the domestic interested parties, cement production is highly capital intensive and energy intensive. They note that "fixed costs are high relative to marginal and variable costs. Because the capital stock is industry-specific and difficult or impossible to transfer to other locations and uses, cement firms will continue to produce as long as they can cover their marginal or variable costs."[96] Furthermore, cement producers in California are currently experiencing ***.[97] As shown in table I-7, producers' capacity utilization for cement in California increased from 60.2 percent in 2011 to 76.7 percent in 2013 (the latest year for which data are available).

[96] *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, pp. 6, 8.

[97] Ibid., p. 8. California cement producers, unlike Japanese cement producers, are also subject to substantial compliance costs under regulations implementing California's Global Warming Solutions Act, which authorizes the California Air Resources Board to adopt regulations to reduce greenhouse gas emissions in 1990 levels by 2020. Ibid., p. 12.

Table I-6
Salient cement statistics for the United States, 2011-2013[1] [2]

Quantity = 1,000 short tons; value = 1,000 dollars Unit values = dollars per short ton			
Item	**2011**	**2012**	**2013**
Production:			
Cement[3]	74,841	81,737	84,662
Clinker	67,507	74,045	76,522
Shipments from mills/terminals:[4] [5] [6]			
Quantity	79,477	86,311	90,059
Value	6,440,000	7,020,000	7,760,000
Average value	81.0	81.3	86.2
Stocks, yearend:			
Cement	6,911	7,606	7,242
Clinker	5,093	5,368	5,611

[1] Unless otherwise indicated, data are for portland (including blended) and masonry cements only. Even where presented unrounded, data are thought to be accurate to no more than three significant digits.
[2] Excludes Puerto Rico.
[3] Includes cement made from imported clinker.
[4] Includes imported cement.
[5] Shipments to final domestic customers. Data are from an annual survey of plants and terminals and may differ from other data published by the USGS that are based on consolidated monthly surveys from companies.
[6] Value free on board mill or independently reporting terminal.

Source: USGS, *Minerals Yearbook*, Cement, 2013.

Table I-7
Salient portland and blended cement and clinker statistics for California, 2011-2013[1]

Quantity = 1,000 short tons; value = 1,000 dollars Unit values = dollars per short ton			
Item	**2011**	**2012**	**2013**
Capacity:			
Cement[2]	14,166	13,216	13,316
Clinker[3]	13,047	13,134	13,007
Production:			
Cement	8,521	9,262	10,212
Clinker	7,929	8,949	9,439
Capacity utilization:			
Cement	60.2	70.1	76.7
Clinker	60.8	68.1	72.6
Shipments of portland cement:			
Quantity	8,173	8,713	9,571
Value	558,000	584,379	669,076
Average value	68.3	67.1	69.9
Stocks, yearend:			
Cement	475	526	443
Clinker	685	698	786

[1] Even where presented unrounded, data are thought to be accurate to no more than three significant digits. Includes data for gray and white portland cement. Includes data made from imported clinker.
[2] Grinding capacity is based on fineness needed to produce a plant's normal output mix, including masonry cement, and allowing for downtime for routine maintenance.
[3] Includes kilns active for at least one day during the year. For kilns idle all year, excludes those that cannot be restarted, fully permitted, in less than six months. Data presented are the sum of apparent annual capacities for each kiln. For each kiln, the statistic is calculated as 366 days minus days reported for routine maintenance and then multiplied by the unrounded daily capacity.

Source: USGS, *Minerals Yearbook*, Cement, 2011-13.

U.S. IMPORTS AND APPARENT CONSUMPTION

U.S. importers

The Commission reported in the original investigation and the first and second five-year reviews that most U.S. imports of gray portland cement and cement clinker were controlled by U.S. producers, a number of which were affiliated with foreign producers either through direct ownership or joint-venture operations. The three Southern California producers who imported subject and/or nonsubject product in the original investigation and the first five-year review indicated that they imported the product to supplement their own production in order to meet local market demand. However, no importer questionnaire respondents reported subject imports from Japan during the period of the full first five-year review and no respondent interested parties provided responses to the Commission's notice of institution in the second or third five-year reviews of the order concerning Japan. In fact, shortly after the imposition of the antidumping duty order, imports from Japan dropped to near zero as the Japanese effectively

left the California market. In the expedited third five-year review, the domestic interested parties indicated that they were not aware of any currently operating U.S. importers of gray portland cement and cement clinker from Japan and noted that imports of the subject merchandise from Japan have been minimal due to the antidumping duty order.[98]

In the current fourth five-year review, the domestic parties noted that U.S. importers of gray portland cement and cement clinker from Japan are unknown. Imports from Japan are nearly zero due to the 70.23 percent antidumping cash deposit rate. According to the domestic interested parties, however, "it is possible {…} that CalPortland and Mitsubishi have the capability to import cement from Japan. These companies were importers during the original investigation, they are affiliated with Japanese producers, and Mitsubishi maintains and is expanding an import terminal in California."[99]

U.S. imports

In the remand determination for the original investigation, the Commission found that the volume of subject imports from Japan was significant, quadrupling from 1986 to 1989 before declining in 1990. The market share of subject imports from Japan in the Southern California region increased from 4.9 percent in 1986 to 18.2 percent in 1989, before declining to 14.7 percent in 1990.[100]

In the first review determination, the Commission found that the subject imports from Japan were likely to be significant if the order was revoked. The Commission cited the large increase in subject imports from Japan during the original period of investigation. It observed that subject imports from Japan had virtually ceased during the first period of review. However, it found that the volume of subject imports from Japan would likely be significant following revocation of the order given Japanese excess production capacity and established distribution systems in California.[101]

During the period from 2001 to 2005 examined in the expedited second five-year review, subject imports from Japan were nearly non-existent, amounting to under 3,500 tons for the five-year period.[102]

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[98] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, pp. I-32 – I -33.

[99] *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, p. 51.

[100] *Gray Portland Cement and Cement Clinker From Japan: Investigation No. 731-461 (Remand)*, USITC Publication 2657, June 1993, p. 27. As previously discussed, the Commission plurality's analysis of subject import volumes in the original determination was remanded because it cumulated subject imports from Japan and Mexico.

[101] *Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela: Investigations Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review)*, USITC Publication 3361, October 2000, p. 21.

[102] *Gray Portland Cement and Cement Clinker From Japan, Investigation No. 731-TA-461 (Second Review)*, USITC Publication 3856, May 2006, p. 21.

During the period from 2006 to 2010 in the expedited third five-year review, minimal quantities of subject imports entered the State of California. The quantity of subject imports into the State of California was 2,000 short tons in 2006, 3,000 short tons in 2007, and zero in 2008, 2009, and 2010.[103] Subject imports accounted for 0.04 percent or less of apparent regional consumption during each year of the period of review.[104]

In their response to the Commission's notice of institution in this current five-year review, the domestic interested parties noted that the revocation of the order would result in a significant increase in the volume of unfairly traded imports into California. This increase would be "{b}ecause cement producers in Japan have more production capacity than can be utilized for their domestic consumption and their access to significant non-U.S. export markets is greatly limited."[105] Furthermore, as noted earlier, Japanese producer Mitsubishi Materials Corp., which is owned by Mitsubishi, is expanding an import terminal in Long Beach, California by 40,000 metric tons of storage capacity. This project increases the likelihood that the volume of subject imports would be significant if the antidumping duty order is revoked.[106]

Table I-8 presents the quantity, value, and unit value for total U.S. imports from Japan as well as the other top sources of total U.S. imports using official Commerce statistics during 2011-15 (shown in descending order of 2015 imports by quantity). During this period, imports from Japan were nearly zero. The quantity of U.S. imports of cement and cement clinker from Japan peaked in 2013 and 2015 at 2,000 short tons. The value of U.S. imports of cement and cement clinker from Japan followed a similar trend.[107]

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[103] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, pp. I-34 – I-35.

[104] Ibid.

[105] *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, p. 37.

[106] Ibid., p. 38.

[107] The domestic interested parties noted that the McGraw Hill Construction Engineering News-Record ("ENR") publishes monthly "spot prices quoted from a single source" per ton based on quotas for delivered prices of Type I gray portland cement for Los Angeles and Southern California, as well as 20 individual cities in the United States and a 20-city average. Additionally, USGS publishes average annual shipment values per metric tons for all varieties of portland cement (including both gray and white cement) shipped in the United States, by district. USGS notes that "unit value data should be viewed as value indicators." *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, pp. 53-54. USGS reported that the price (average mill value) in dollars per ton for cement is estimated to have been $105.50 in 2015, up from $89.50 in 2011. USGS, *Cement Summary*, 2016.

Table I-8
Gray portland cement and cement clinker: U.S. imports, 2011-15

Item	2011	2012	2013	2014	2015
Quantity (1,000 short tons)					
Japan (subject)	1	1	2	1	2
Canada	3,467	3,752	3,620	3,752	4,563
China	587	365	518	893	1,572
France	78	93	102	104	([1])
Greece	0	671	757	852	1,758
Korea	1,546	1,411	1,371	1,516	1,216
All other imports (nonsubject)	638	553	719	1,052	1,917
Total imports	6,315	6,846	7,088	8,169	11,028
Landed, duty-paid value ($1,000)					
Japan (subject)	578	848	1,160	678	1,029
Canada	238,068	259,110	248,170	254,127	312,260
China	41,197	25,744	35,858	59,238	101,516
France	23,831	31,876	34,760	36,075	83
Greece	0	40,267	44,009	49,265	102,574
Korea	86,072	85,121	84,508	94,275	73,640
All other imports (nonsubject)	46,167	43,778	54,056	76,255	131,930
Total imports	435,912	486,744	502,522	569,913	723,033
Unit value (dollars per short ton)					
Japan (subject)	578.0	848.0	580.0	678.0	514.5
Canada	68.7	69.1	68.6	67.7	68.4
China	70.2	70.5	69.2	66.3	64.6
France	305.5	342.8	340.8	346.9	83.0
Greece	N/A	60.0	58.1	57.8	58.3
Korea	55.7	60.3	61.6	62.2	60.6
All other imports (nonsubject)	72.4	79.2	75.2	72.5	68.8
Total imports	69.0	71.1	70.9	69.8	65.6

[1] Less than 500 short tons.

Note.--Because of rounding, figure may not add to totals shown.
Note.--Imports may be slightly over-counted due to additional types of cement contained in the three HTS statistical reporting numbers, which are outside the scope of this review.

Source: Official statistics of Commerce for HTS statistical reporting numbers 2523.10.0000, 2523.29.0000, and 2523.90.0000.

Table I-9 presents the quantity, value, and unit value for imports into California from Japan as well as the other top sources of imports into California using official Commerce statistics during 2011-15 (shown in descending order of 2015 imports by quantity). During this period, imports from Japan and all other sources were at a minimum. The quantity of total imports in California of cement and cement clinker from Japan peaked in 2015 with an overall increase of 338.7 percent from 2011 to 2015, after decreasing by 98.7 percent from 2011 to 2013. The value of total imports in California of cement and cement clinker from Japan also peaked in 2015 with an overall increase of 328.0 percent from 2011 to 2015, after decreasing by 95.9 percent from 2011 to 2012.

Table I-9
Gray portland cement and cement clinker: California imports, 2011-15

Item	2011	2012	2013	2014	2015
Quantity (1,000 short tons)					
Japan (subject)	([1])	0	([1])	([1])	([1])
Canada	0	0	0	0	0
China	([1])	([1])	0	28	329
France	0	0	([1])	([1])	([1])
Greece	0	0	0	0	0
Korea	0	0	0	0	0
All other imports (nonsubject)	75	2	([1])	([1])	([1])
Total imports	75	2	1	28	329
Landed, duty-paid value ($1,000)					
Japan (subject)	16	0	241	55	198
Canada	0	0	0	0	0
China	8	15	0	1,713	19,216
France	0	0	78	66	8
Greece	0	0	0	0	0
Korea	0	0	0	0	0
All other imports (nonsubject)	4,527	171	168	21	57
Total imports	4,551	186	486	1,854	19,479
Unit value (dollars per short ton)					
Japan (subject)	933.4	N/A	701.6	1,489.1	725.2
Canada	N/A	N/A	N/A	N/A	N/A
China	380.2	272.8	N/A	62.1	58.4
France	N/A	N/A	713.2	753.1	7,742.0
Greece	N/A	N/A	N/A	N/A	N/A
Korea	N/A	N/A	N/A	N/A	N/A
All other imports (nonsubject)	60.2	73.8	534.7	2,962.4	679.8
Total imports	60.5	78.4	634.8	67.0	59.1

[1] Less than 500 short tons.

Note.--Because of rounding, figure may not add to totals shown.
Note.--Imports may be slightly over-counted due to additional types of cement contained in the three HTS statistical reporting numbers, which are outside the scope of this review.

Source: Official statistics of Commerce for HTS statistical reporting number 2523.10.0000, 2523.29.0000, and 2523.90.0000 entering into U.S. ports of entry in California.

Apparent U.S. consumption and market shares

Table I-10 presents data on U.S. producers' U.S. shipments, U.S. imports, and apparent U.S. consumption, while table I-11 presents data on U.S. market shares of U.S. apparent consumption. In addition, table I-12 presents data on producers' U.S. shipments, imports, and apparent consumption in California, while table I-13 present data on California market shares.

Table I-10
Gray portland cement and cement clinker: U.S. producers' U.S. shipments, U.S. imports, and apparent U.S. consumption, 1990, 1999, 2005, 2010, and 2015

* * * * * * *

Table I-11
Gray portland cement and cement clinker: Apparent U.S. consumption and U.S. market shares, 1990, 1999, 2005, 2010, and 2015

* * * * * * *

Table I-12
Gray portland cement and cement clinker: U.S. producers' shipments, imports, and apparent consumption in California, 1990, 1999, 2005, 2010, and 2015

* * * * * * *

Table I-13
Gray portland cement and cement clinker: Apparent consumption and market shares in California, 1990, 1999, 2005, 2010, and 2015

* * * * * * *

THE INDUSTRY IN JAPAN

At the time of the original investigation concerning Japan, the Japanese cement and clinker industry consisted of 23 producers operating 41 plants. During the first five-year review, 19 Japanese producers of the subject merchandise operating 39 plants were identified by the Commission. At that time, the Commission reported that five Japanese producers (Mitsubishi, Sumitomo Osaka, Taiheiyo, Tokuyama, and Ube) together accounted for 87.3 percent of Japanese production of gray portland cement in 1999. During the second five-year review, the Commission once again reported that the Japan cement industry was highly concentrated and that it had undergone a further contraction in the number of producing firms to 18 producers operating 33 plants. The Commission also reported that the Government of Japan approved two major mergers: (1) Chichibu Onoda Cement and Nihon Cement (formally known as Taiheyo Cement after the merger) and (2) Ube Industries and Mitsubishi Materials. Merged companies Taiheyo Cement and Ube/Mitsubishi accounted for 27 percent and 24 percent of total cement

production in Japan during 2004, respectively. A third Japanese producer, Sumitomo Osaka Cement, accounted for 16 percent of the 2004 cement production of the Japanese industry. Thus, three firms (Taiheyo Cement, Ube/Mitsubishi, and Sumitomo Osaka Cement) together controlled 67 percent of the output of the Japanese industry during 2004.[108] In the third five-year review, the domestic interested parties again noted that the Japan cement industry was highly concentrated with "substantial" excess capacity and provided the Commission with a list of 17 producers of gray Portland cement and cement clinker in Japan in their response.

In their response to the Commission's notice of institution in this fourth five year review, the participating domestic interested parties provided the Commission with a list of 17 producers of gray portland cement and cement clinker in their response. They also noted that:

> "{a}lthough total Japanese capacity has decreased since the third review, the Japanese cement industry still has unused production capacity. In 2015, Japanese cement production was 4 percent lower than 2014, clinker production was 3.2 percent lower than 2014, and clinker capacity utilization was 89.4 percent. With a clinker capacity of approximately 61.6 million short tons {…}, Japanese cement producers has over 6 million short tons {…} of excess clinker capacity in 2015. In 1990, which was the last year of the original investigation's period of investigation, reporting Japanese producers utilized 93 percent of their cement clinker capacity and had nearly 3.5 million short tons of excess clinker capacity. Thus, compared to 1990, Japanese producers currently have a greater ability to use excess capacity to increase production and exports to the California Region."[109]

During the original investigation and first review, Japan was third largest cement producing country in the world after China and the United States. As of 2007, Japan was the fourth largest cement producing country after China, India, and the United States and the third largest cement exporting country after China and Thailand. By 2010, the USGS placed Japan as the sixth largest hydraulic cement producing country after China, India, the United States (includes Puerto Rico), Turkey, and Brazil.[110] World hydraulic cement production data gathered by the USGS are presented in table I-14, which shows that USGS placed Japan as the ninth largest hydraulic cement producing country after China, India, the United States (includes Puerto Rico), Iran, Turkey, Brazil, Russia, and Vietnam in 2013. As of 2015, Japan was the seventh largest cement exporting country in the world.[111]

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[108] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-40.

[109] *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, p. 39, exh. 36.

[110] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-41.

[111] *Domestic Interested Parties' Response to the Notice of Institution*, December 1, 2016, p. 42.

Table I-14
Hydraulic cement: World production, by country, 2011-13

Country	2011	2012	2013
		Quantity (1,000 short tons)	
China	2,313,749	2,436,105	2,663,181
India	275,578	297,624	308,647
United States[1]	75,661	82,601	85,335
Iran	72,752	77,162	79,366
Turkey	69,892	70,414	78,635
Brazil	70,650	76,415	77,134
Russia	61,950	68,013	73,193
Vietnam	64,233	61,212	63,934
Japan	56,539	60,337	63,273
All other countries	961,397	985,341	998,603
World total	4,023,432	4,210,824	4,486,402
		Share of world production (percent)	
China	57.5	57.9	59.4
India	6.8	7.1	6.9
United States[1]	1.9	2.0	1.9
Iran	1.8	1.8	1.8
Turkey	1.7	1.7	1.8
Brazil	1.8	1.8	1.7
Russia	1.5	1.6	1.6
Vietnam	1.6	1.5	1.4
Japan	1.4	1.4	1.4
All other countries	23.9	23.4	22.3
World total	100.0	100.0	100.0

[1] Includes Puerto Rico.

Note: World totals and estimated data are rounded to no more than three significant digits. Data are from a variety of sources, including the European Cement Association. Data may include clinker exports for some countries. Data for 2013 are estimates.

Source: USGS, *Minerals Yearbook*, Cement, 2013.

Since 1990, there has been an overall consolidation of the Japanese industry as the number of producers dropped from 23 operating 41 plants at the time of the original investigation to 19 producers operating 39 plants in 1998 at the time of the first review, and then declined to the present 17 producers operating 30 plants.[112] Over the same period of

[112] *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-43, n.128; *Japan Cement Association*, http://www.jcassoc.or.jp/cement/2eng/e_02.html, accessed January 9, 2017. During the second review, (*continued*...)

time, Japanese capacity rose from 96.1 million short tons to 105.4 million short tons, and then dropped to 81.8 million short tons in 2004, 69.9 million short tons in 2009, and 61.7 million short tons in 2014. Production of cement increased from 95.9 million short tons in 1990 to a high of 109.6 million short tons in 1996, then dropped to 91.8 million short tons in 1998, 79.8 million short tons in 2004, 65.7 million short tons in 2009, and increased to 68.3 million short tons in 2014. Japanese consumption, at an all-time high of 93.3 million short tons in 1991, declined irregularly to 90.7 million short tons in 1996, then dropped more sharply to 78.9 million short tons in 1998, before declining to 63.0 million short tons in 2004 and even further to 48.8 million short tons in 2009. Japanese consumption subsequently increased to 50.6 million short tons in 2014.[113] As of 2015, the four largest companies (Taiheiyo Group, Mitsubishi Materials, Ube Industries, and Sumitomo Osaka Cement) account for 73.4 percent of the cement industry in Japan.[114]

Five Japanese producers provided the Commission information concerning their operations during the full first five-year review. Taiheiyo, an integrated multinational producer, was the largest Japanese producer of gray portland cement with 10 plants and 3 grinding operations with a 1999 capacity of 33.2 million short tons. During the first review, Taiheyo exported approximately *** percent of its shipments with its principal export markets being ***.[115]

During the first review, domestic interested parties contended that Japanese producers would be highly motivated to direct their exports to the U.S. market citing, as an example, Taiheiyo's questionnaire comment that in "***." Japanese respondents countered that their motivation to export to the United States has changed from the original investigation given Taiheiyo's and Mitsubishi's ownership of a "***"of Southern California production capacity.[116]

Data for gray portland cement from Japan are presented in table I-15. The largest export market for Japan of gray portland cement in 2015 was Australia, followed by Argentina.

(…*continued*)
there were 18 producers operating 33 plants. During the third review, there were 18 producers operating 32 plants.

[113] Consumption data for 2014 refers to total sales. *Gray Portland Cement and Cement Clinker from Japan: Investigation No. 731-TA-461 (Third Review)*, USITC Publication 4281, December 2011, p. I-43, n.128; *Japan Cement Association*, http://www.jcassoc.or.jp/cement/2eng/e_02.html, accessed January 9, 2017.

[114] *Japan Relies on Cement Exports*, Global Cement, http://www.globalcement.com/news/item/5456-japan-relies-on-cement-exports, accessed on January 9, 2017.

[115] Taiheiyo's 1999 capacity utilization rate was *** percent. . *Investigation No. 731-TA-461 (Third Review): Gray Portland Cement and Cement Clinker from Japan—Staff Report*, INV-JJ-088, September 12, 2011, p. I-57, n.130.

[116] The level of Taiheiyo's investment in California, ***. During the original investigation, Taiheiyo's predecessors, Nihon and Onada, and Mitsubishi accounted for ***. In 1999, the Southern California production facilities California Portland and Mitsubishi accounted for *** percent of capacity and *** percent of production in that region. California Portland opposed revocation while Mitsubishi ***. Ibid., p. I-58, n.134.

Table I-15
Gray portland cement: Japanese exports of gray portland cement by major sources, 2011-15

Item	Calendar year				
	2011	2012	2013	2014	2015
	Quantity (1,000 short tons)				
Australia	3,510	4,280	4,130	3,884	4,488
Argentina	1,192	1,349	1,117	1,594	1,914
Bahrain	749	792	768	914	1,046
Canada	682	788	781	981	955
Bengladesh	207	167	--	42	418
Benin	494	405	446	480	480
Brazil	356	65	--	82	286
China	291	279	269	297	285
Brunei Darussalam	345	328	283	251	243
Cameroon	253	310	166	258	219
All other	2,200	1,405	1,167	691	319
Total	10,279	10,168	9,127	9,474	10,644

Note.--Because of rounding, figures may not add to totals shown.

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheadings 2523.10.00; 2523.29.00; 2523.90.00.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

Based on the information available, Japanese exports of gray Portland cement and cement clinker are not subject to any antidumping/countervailing orders in third-country markets.

The Global Market

Table I-16 presents data for the largest global export sources of gray portland cement during 2011-15. Thailand was the largest exporter of gray portland cement during 2011-12 and China was the largest exporter of gray portland cement during 2013-15.

Table I-16
Gray portland cement: Global exports of gray portland cement by major sources, 2011-15

Item	Calendar year				
	2011	2012	2013	2014	2015
	Quantity (1,000 short tons)				
China	11,575	13,058	15,874	15,172	17,204
Thailand	13,288	14,343	10,325	13,134	13,770
Japan	10,782	10,720	9,659	10,008	11,233
Vietnam	7,238	--	11,753	13,648	10,943
Spain	4,346	6,734	7,375	9,115	8,904
South Korea	10,971	9,711	10,123	10,494	8,138
Germany	8,677	7,663	7,100	6,743	7,254
Pakistan	10,010	9,888	9,679	9,837	6,811
India	4,286	3,435	4,529	6,805	6,288
Canada	3,473	3,764	3,631	3,749	4,551
All other	68,632	67,937	80,463	79,626	66,572
Total	168,110	161,129	183,003	189,367	172,300

Note.--Because of rounding, figures may not add to totals shown.

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheadings 2523.10.00; 2523.29.00; 2523.90.00.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
81 FR 75808 November 1, 2016	*Initiation of Five-Year ("Sunset") Reviews*	https://www.gpo.gov/fdsys/pkg/FR-2016-11-01/pdf/2016-26364.pdf
81 FR 75848 November 1, 2016	*Gray Portland Cement and Cement Clinker From Japan; Institution of a Five-Year Review*	https://www.gpo.gov/fdsys/pkg/FR-2016-11-01/pdf/2016-26265.pdf

APPENDIX B

COMPANY-SPECIFIC DATA

RESPONSE CHECKLIST FOR U.S. PRODUCERS (UNITED STATES)

Item	CEMEX	Lehigh Hanson	National Cement	Total
	Quantity=1,000 short tons; value=1,000 dollars			
Nature of operation	✓	✓	✓	
Statement of intent to participate	✓	✓	✓	
Statement of likely effects of revoking the order	✓	✓	✓	
U.S. producer list	✓	✓	✓	
U.S. importer/foreign producer list	✓	✓	✓	
List of 3-5 leading purchasers	✓	✓	✓	
List of sources for national/regional prices	✓	✓	✓	
Production:				
Quantity	***	***	***	***
Percent of total reported	***	***	***	100.0
Capacity	***	***	***	***
Commercial shipments:				
Quantity	***	***	***	***
Value	***	***	***	***
Internal consumption:				
Quantity	***	***	***	***
Value	***	***	***	***
Net sales	***	***	***	***
COGS	***	***	***	***
Gross profit or (loss)	***	***	***	***
SG&A expenses	***	***	***	***
Operating income or (loss)	***	***	***	***
Changes in supply/demand	✓	✓	✓	

Note.—The production, capacity, and shipment data presented are for calendar year 2015. The financial data are for fiscal year ended December 31, 2015. In addition, the information presented combine data for both gray portland cement and cement clinker.

✓ = response provided;? = indicated that the information was not known.

RESPONSE CHECKLIST FOR U.S. PRODUCERS (CALIFORNIA)

Item	CEMEX	Lehigh Hanson	National Cement	Total
	Quantity=1,000 short tons; value=1,000 dollars			
Nature of operation	✓	✓	✓	
Statement of intent to participate	✓	✓	✓	
Statement of likely effects of revoking the order	✓	✓	✓	
U.S. producer list	✓	✓	✓	
U.S. importer/foreign producer list	✓	✓	✓	
List of 3-5 leading purchasers	✓	✓	✓	
List of sources for national/regional prices	✓	✓	✓	
Production:				
Quantity	***	***	***	***
Percent of total reported	***	***	***	100.0
Capacity	***	***	***	***
Commercial shipments:				
Quantity	***	***	***	***
Value	***	***	***	***
Internal consumption:				
Quantity	***	***	***	***
Value	***	***	***	***
Net sales	***	***	***	***
COGS	***	***	***	***
Gross profit or (loss)	***	***	***	***
SG&A expenses	***	***	***	***
Operating income or (loss)	***	***	***	***
Changes in supply/demand	✓	✓	✓	

Note.—The production, capacity, and shipment data presented are for calendar year 2015. The financial data are for fiscal year ended December 31, 2015. In addition, the information presented combine data for both gray portland cement and cement clinker.

✓ = response provided;? = indicated that the information was not known.

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR INVESTIGATIONS

* * * * * * *

Table C-3
Gray portland cement: Summary data concerning UNITED STATES (NATIONAL), 1997-99

0 short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

	Reported data			Period changes		
Item	1997	1998	1999	1997-99	1997-98	1998-99
U.S. consumption quantity:						
Amount	104,152	111,169	116,450	11.8	6.7	4.8
Responding producers' share (1	72.1	69.7	68.9	-3.2	-2.4	-0.8
Other producers' share (1)	13.0	11.4	8.5	-4.6	-1.7	-2.9
Importers' share (1):						
Japan	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	0.9	1.1	1.0	0.1	0.2	-0.1
Venezuela	1.3	1.3	1.6	0.4	0.0	0.3
Subtotal	2.2	2.5	2.7	0.5	0.2	0.2
Other sources	12.6	16.5	19.9	7.3	3.8	3.5
Total imports	14.9	18.9	22.7	7.8	4.1	3.7
U.S. imports from:						
Japan:						
Quantity	0.373	23	33	8,704.1	6,041.1	43.4
Value	252	1,368	1,873	644.6	443.8	36.9
Unit value	$675.03	$59.78	$57.09	-91.5	-91.1	-4.5
Ending inventory quantity	***	***	***	***	***	***
Mexico:						
Quantity	978	1,262	1,216	24.4	29.1	-3.6
Value	34,858	45,318	44,861	28.7	30.0	-1.0
Unit value	$35.65	$35.91	$36.90	3.5	0.7	2.7
Ending inventory quantity	***	***	***	***	***	***
Venezuela:						
Quantity	1,338	1,462	1,907	42.5	9.3	30.4
Value	60,640	66,542	89,098	46.9	9.7	33.9
Unit value	$45.32	$45.50	$46.72	3.1	0.4	2.7
Ending inventory quantity	***	***	***	***	***	***
Subtotal:						
Quantity	2,316	2,747	3,156	36.3	18.6	14.9
Value	95,750	113,228	135,832	41.9	18.3	20.0
Unit value	$41.34	$41.22	$43.04	4.1	-0.3	4.4
Ending inventory quantity	***	***	***	***	***	***
Other sources:						
Quantity	13,165	18,303	23,223	76.4	39.0	26.9
Value	612,376	824,487	1,012,351	65.3	34.6	22.8
Unit value	$46.52	$45.05	$43.59	-6.3	-3.2	-3.2
Ending inventory quantity	***	***	***	***	***	***
All sources:						
Quantity	15,481	21,050	26,379	70.4	36.0	25.3
Value	708,125	937,714	1,148,182	62.1	32.4	22.4
Unit value	$45.74	$44.55	$43.53	-4.8	-2.6	-2.3
Ending inventory quantity	580	655	659	13.5	12.8	0.6
Shipments by nonresponding U.S. producers (quantity)	13,560	12,631	9,861	-27.3	-6.9	-21.9

Table continued on next page.

Table C-3--Continued
Gray portland cement: Summary data concerning UNITED STATES (NATIONAL), 1997-99

0 short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

	Reported data			Period changes		
Item	1997	1998	1999	1997-99	1997-98	1998-99
Responding U.S. producers':						
Average capacity quantity	80,471	80,928	82,266	2.2	0.6	1.7
Production quantity	75,223	76,222	78,409	4.2	1.3	2.9
Capacity utilization (1)	93.5	94.2	95.3	1.8	0.7	1.1
U.S. shipments:						
Quantity	75,111	77,489	80,210	6.8	3.2	3.5
Value	5,026,925	5,426,160	5,703,951	13.5	7.9	5.1
Unit value	$66.93	$70.03	$71.11	6.3	4.6	1.6
Export shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	4,623	4,350	5,612	21.4	-5.9	29.0
Inventories/production (1)	6.1	5.7	7.2	1.0	-0.4	1.4
Production workers	6,777	6,843	7,030	3.7	1.0	2.7
Hours worked (1,000s)	15,206	15,125	15,570	2.4	-0.5	2.9
Wages paid ($1,000s)	304,794	316,659	331,848	8.9	3.9	4.8
Hourly wages	$20.04	$20.94	$21.31	6.3	4.4	1.8
Productivity (tons per hour)	4.4	4.5	4.5	2.7	2.4	0.3
Unit labor costs	$4.57	$4.66	$4.73	3.5	2.0	1.5
Net sales (2):						
Quantity	76,011	79,214	82,001	7.9	4.2	3.5
Value	5,060,620	5,494,704	5,790,476	14.4	8.6	5.4
Unit value	$66.58	$69.37	$70.61	6.1	4.2	1.8
Cost of goods sold (COGS)	3,256,853	3,495,251	3,695,137	13.5	7.3	5.7
Gross profit or (loss)	1,803,767	1,999,453	2,095,339	16.2	10.8	4.8
SG&A expenses	399,310	435,617	453,606	13.6	9.1	4.1
Operating income or (loss)	1,404,457	1,563,836	1,641,733	16.9	11.3	5.0
Capital expenditures	480,626	589,166	1,107,824	130.5	22.6	88.0
Unit COGS	$42.85	$44.12	$45.06	5.2	3.0	2.1
Unit SG&A expenses	$5.25	$5.50	$5.53	5.3	4.7	0.6
Unit operating income or (loss)	$18.48	$19.74	$20.02	8.4	6.8	1.4
COGS/sales (1)	64.4	63.6	63.8	-0.5	-0.7	0.2
Operating income or (loss)/ sales (1)	27.8	28.5	28.4	0.6	0.7	-0.1

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Financial data reported for Portland cement and cement clinker.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires, official Commerce statistics, and data from the USGS.

Table I-4B
Gray portland cement: CALIFORNIA summary data presenting selected items from the original investigations and the first reviews on Mexico, Japan, and Venezuela, 1986-90 and 1997-99

Item	1986	1987	1988	1989	1990	1997	1998	1999
(Quantity in 1,000 tons, value in 1,000 dollars, and unit values are per 1,000 tons)								
GRAY PORTLAND CEMENT:								
CALIFORNIA consumption quantity:								
Amount	10,643	10,887	12,402	13,213	12,235	9,971	11,591	13,025
Producers' share	83.5	79.1	77.8	75.5	77.5	88.9	79.0	73.9
Importers' share:								
Japan	3.3	4.5	9.9	13.1	10.7	0.0	0.1	0.2
Mexico	6.5	7.9	7.4	6.7	8.2	0.2	0.2	0.4
Venezuela[1]						0.0	0.0	0.0
Subtotal	9.8	12.3	17.2	19.8	18.9	0.2	0.4	0.6
All other	6.7	8.6	5.0	4.8	3.6	10.9	20.6	25.5
Total imports	16.5	20.9	22.2	24.5	22.5	11.1	21.0	26.1
Shares of CALIFORNIA consumption supplied by--								
Producers and importers WITHIN region	96.9	97.0	96.7	96.7	96.5	100.0	100.0	100.0
Producers OUTSIDE region	3.1	3.0	3.3	3.3	3.5	0.0	0.0	0.0
CALIFORNIA imports from:								
Japan:								
Quantity	349	486	1,222	1,726	1,309	0	16	32
Value	11,926	17,373	40,361	54,567	45,821	0	702	1,328
Unit value	$34.17	$35.75	$33.03	$31.61	$35.00	$0.00	$44.91	$41.73
Mexico:								
Quantity	693	857	916	884	1,009	21	29	49
Value	24,525	27,827	28,986	27,476	34,972	846	996	1,809
Unit value	$35.39	$32.47	$31.64	$31.08	$34.66	$40.45	$34.74	$36.70
Venezuela:[1]								
Quantity						0	0	0
Value						0	0	0
Unit value						$0.00	$0.00	$0.00
Subtotal:								
Quantity	1,042	1,343	2,138	2,611	2,318	21	44	81
Value	36,461	45,200	69,347	82,043	80,793	846	1,698	3,137
Unit value	$34.99	$33.66	$32.44	$31.42	$34.85	$40.45	$38.32	$38.67

Table continued on next page.

Table I-4B--Continued
Gray portland cement: CALIFORNIA summary data presenting selected items from the original investigation and the first reviews on Mexico, Japan, and Venezuela, 1986-90 and 1997-99

Item	1986	1987	1988	1989	1990	1997	1998	1999
(Quantity in 1,000 tons, value in 1,000 dollars, and unit values are per 1,000 tons)								
GRAY PORTLAND CEMENT:								
CALIFORNIA imports from–Continued								
All other sources:								
Quantity	711	937	614	629	438	1,089	2,387	3,321
Value	25,984	31,552	19,061	23,739	18,062	54,454	106,391	137,818
Unit value	$36.55	$33.67	$31.04	$37.74	$41.24	$50.01	$44.58	$41.50
All sources:								
Quantity	1,753	2,280	2,752	3,239	2,756	1,110	2,431	3,402
Value	62,436	76,752	88,408	105,782	98,855	55,301	108,089	140,955
Unit value	$35.62	$33.66	$32.13	$32.66	$35.87	$49.83	$44.47	$41.43
CALIFORNIA producers'--								
Capacity	11,733	11,733	11,480	11,528	11,628	11,616	11,659	11,829
Production	9,224	8,987	9,809	10,341	9,779	10,979	10,889	11,302
Capacity utilization	78.6	76.6	85.4	89.7	84.1	94.5	93.4	95.5
Shipments INSIDE region:								
Quantity	8,555	8,283	9,239	9,534	9,046	8,861	9,160	9,623
Value	517,993	482,970	500,314	535,918	528,660	554,486	632,446	690,878
Unit value	$60.55	$58.31	$54.15	$56.21	$58.44	$62.57	$69.04	$71.80
Shipments OUTSIDE region:								
Quantity	683	553	678	822	680	2,231	1,721	1,591
Value	38,942	31,699	37,134	47,787	41,077	134,682	110,568	94,851
Unit value	$57.02	$57.32	$54.77	$58.14	$60.41	$60.36	$64.23	$59.61
Production workers	1,651	1,537	1,403	1,362	1,309	956	994	994
Hours worked (*1,000s*)	3,769	3,515	3,254	3,202	2,973	2,225	2,250	2,300
GRAY PORTLAND CEMENT AND CEMENT CLINKER:								
CALIFORNIA producers'--								
Net sales *(value)*	546,681	531,453	543,625	575,197	547,178	706,221	768,570	816,605
COGS *(value)*	431,928	409,282	434,074	440,662	414,166	493,008	506,534	528,215
Gross profit *(value)*	114,753	122,171	109,551	134,535	133,012	213,213	262,036	288,390
Operating income *(value)*	74,669	86,799	78,901	101,951	101,905	163,222	207,062	230,415
Operating income or (loss)/sales *(percent)*	13.7	16.3	14.5	17.7	18.6	23.1	26.9	28.2

[1] 1986-90 imports from Venezuela included in imports from all other sources.

Source: Compiled from data submitted in response to Commission questionnaires in the original investigations and first reviews, official Commerce statistics, and data from the USGS.

Table I-6B
Gray portland cement: CALIFORNIA summary data concerning statutory criteria for regional analysis from the original investigations and current reviews on Japan, Mexico, and Venezuela, 1986-90 and 1997-99

Item	1986	1987	1988	1989	1990	1997	1998	1999
(In percent, based on quantity)								
Share of--								
Regional producers' shipments made within region	93	94	93	92	93	80	84	86
Regional consumption supplied by U.S. producers outside region	3	3	3	3	4	0	0	0
Region's share of--								
Total imports from Japan	68	71	75	79	68	([1])	70	97
Total imports from Mexico	22	23	20	23	47	2	2	4
Total imports from Venezuela	([2])	([2])	([2])	([2])	([2])	0	0	0
Ratio of imports from Japan to consumption--								
Within region	3	5	10	13	11	0	([1])	([1])
Outside region	([1])	([1])	1	1	1	0	([1])	([1])
Ratio of imports from Mexico to consumption--								
Within region	7	8	7	7	8	([1])	([1])	([1])
Outside region	3	4	5	4	2	([1])	([1])	([1])
Ratio of imports from Venezuela to consumption--								
Within region	([2])	([2])	([2])	([2])	([2])	0	0	0
Outside region	([2])	([2])	([2])	([2])	([2])	0	0	0

[1] Less than 0.5 percent.
[2] Not available.

Source: 1986-90 data compiled from *Original Report*. 1997-99 data compiled from data submitted in response to Commission questionnaires in the *First Review*, official Commerce statistics, and data from the USGS.

Table C-2
Gray portland cement: Summary data concerning CALIFORNIA, 1997-99

0 short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

	Reported data			Period changes		
Item	1997	1998	1999	1997-99	1997-98	1998-99
Regional consumption quantity:						
Amount	9,971	11,591	13,025	30.6	16.2	12.4
Regional producers' share (1)	88.9	79.0	73.9	-15.0	-9.8	-5.1
Importers' share (1):						
Japan	0.0	0.1	0.2	0.2	0.1	0.1
Mexico	0.2	0.2	0.4	0.2	0.0	0.1
Venezuela	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	0.2	0.4	0.6	0.4	0.2	0.2
Other sources	10.9	20.6	25.5	14.6	9.7	4.9
Total imports	11.1	21.0	26.1	15.0	9.8	5.1
U.S. imports into region from:						
Japan:						
Quantity	0	16	32	(2)	(2)	103.6
Value	0	702	1,328	(2)	(2)	89.2
Unit value	(2)	$44.91	$41.73	(2)	(2)	-7.1
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Mexico:						
Quantity	21	29	49	135.5	37.0	71.9
Value	846	996	1,809	113.7	17.7	81.6
Unit value	$40.45	$34.74	$36.70	-9.3	-14.1	5.6
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Venezuela:						
Quantity	0	0	0	0.0	0.0	0.0
Value	0	0	0	0.0	0.0	0.0
Unit value	(2)	(2)	(2)	(2)	(2)	(2)
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Subtotal:						
Quantity	21	44	81	287.6	111.7	83.1
Value	846	1,698	3,137	270.5	100.6	84.7
Unit value	$40.45	$38.32	$38.67	-4.4	-5.3	0.9
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Other sources:						
Quantity	1,089	2,387	3,321	205.0	119.2	39.2
Value	54,454	106,391	137,818	153.1	95.4	29.5
Unit value	$50.01	$44.58	$41.50	-17.0	-10.9	-6.9
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
All sources:						
Quantity	1,110	2,431	3,402	206.6	119.0	40.0
Value	55,301	108,089	140,955	154.9	95.5	30.4
Unit value	$49.83	$44.47	$41.43	-16.9	-10.8	-6.8
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)

Table continued on next page.

Table C-2--Continued
Gray portland cement: Summary data concerning CALIFORNIA, 1997-99

0 short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

	Reported data			Period changes		
Item	1997	1998	1999	1997-99	1997-98	1998-99
U.S. regional producers':						
Average capacity quantity	11,616	11,659	11,829	1.8	0.4	1.5
Production quantity	10,979	10,889	11,302	2.9	-0.8	3.8
Capacity utilization (1)	94.5	93.4	95.5	1.0	-1.1	2.2
U.S. shipments within region:						
Quantity	8,861	9,160	9,623	8.6	3.4	5.0
Value	554,476	632,446	690,878	24.6	14.1	9.2
Unit value	$62.57	$69.04	$71.80	14.7	10.3	4.0
U.S. shipments outside region:						
Quantity	2,231	1,721	1,591	-28.7	-22.9	-7.6
Value	134,682	110,568	94,851	-29.6	-17.9	-14.2
Unit value	$60.36	$64.23	$59.61	-1.2	6.4	-7.2
Export shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	314	331	413	31.5	5.4	24.8
Inventories/production (1)	2.9	3.0	3.7	0.8	0.2	0.6
Production workers	956	994	994	4.0	4.0	0.0
Hours worked (1,000s)	2,225	2,250	2,300	3.4	1.1	2.2
Wages paid ($1,000s)	51,565	55,509	58,168	12.8	7.6	4.8
Hourly wages	$23.18	$24.67	$25.29	9.1	6.5	2.5
Productivity (tons per hour)	4.9	4.8	4.9	-0.4	-1.9	1.5
Unit labor costs	$4.70	$5.10	$5.15	9.6	8.5	1.0
Net sales (4):						
Quantity	11,454	11,366	11,894	3.8	-0.8	4.6
Value	706,221	768,570	816,605	15.6	8.8	6.2
Unit value	$61.66	$67.62	$68.66	11.4	9.7	1.5
Cost of goods sold (COGS)	493,008	506,534	528,215	7.1	2.7	4.3
Gross profit or (loss)	213,213	262,036	288,390	35.3	22.9	10.1
SG&A expenses	49,991	54,974	57,975	16.0	10.0	5.5
Operating income or (loss)	163,222	207,062	230,415	41.2	26.9	11.3
Capital expenditures	59,872	51,792	103,949	73.6	-13.5	100.7
Unit COGS	$43.04	$44.57	$44.41	3.2	3.5	-0.3
Unit SG&A expenses	$4.36	$4.84	$4.87	11.7	10.8	0.8
Unit operating income or (loss)	$14.25	$18.22	$19.37	35.9	27.8	6.3
COGS/sales (1)	69.8	65.9	64.7	-5.1	-3.9	-1.2
Operating income or (loss)/ sales (1)	23.1	26.9	28.2	5.1	3.8	1.3

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.
(3) Not available.
(4) Financial data reported for Portland cement and cement clinker.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires, official Commerce statistics, and data from the USGS.

Table I-4A
Gray portland cement: SOUTHERN CALIFORNIA summary data presenting selected items from the original investigations and the first reviews on Mexico, Japan, and Venezuela, 1986-90 and 1997-99

Item	1986	1987	1988	1989	1990	1997	1998	1999
(Quantity in 1,000 tons, value in 1,000 dollars, and unit values are per 1,000 tons)								
GRAY PORTLAND CEMENT:								
SOUTHERN CALIFORNIA consumption quantity:								
Amount	7,115	7,302	8,409	8,807	8,064	6,485	6,999	8,263
Producers' share	78.5	72.9	69.3	67.1	69.2	77.3	67.4	61.7
Importers' share:								
Japan	4.9	6.7	14.1	18.2	14.7	0.0	0.2	0.4
Mexico	8.2	8.5	7.6	6.8	10.6	0.3	0.4	0.6
Venezuela[1]						0.0	0.0	0.0
Subtotal	13.1	15.2	21.7	25.0	25.3	0.3	0.6	1.0
All other	7.5	10.8	7.3	6.3	3.9	16.8	30.0	29.8
Total imports	20.7	26.0	29.0	31.3	29.2	17.1	30.6	30.8
Shares of SOUTHERN CALIFORNIA consumption supplied by--								
Producers and importers WITHIN region	99.2	98.9	98.3	98.4	98.4	94.4	98.0	92.5
Producers OUTSIDE region	0.8	1.1	1.7	1.6	1.6	5.6	2.0	7.5
SOUTHERN CALIFORNIA imports from:								
Japan:								
Quantity	349	486	1,183	1,607	1,186	0	16	32
Value	11,926	17,373	38,756	50,115	40,751	0	702	1,328
Unit value	$34.17	$35.75	$32.76	$31.19	$34.33	$0.00	$44.91	$41.73
Mexico:								
Quantity	586	624	642	595	857	21	29	49
Value	21,046	21,456	21,205	19,303	29,533	846	996	1,809
Unit value	$33.91	$34.38	$33.03	$32.44	$34.46	$40.45	$34.74	$36.70
Venezuela:[1]								
Quantity						0	0	0
Value						0	0	0
Unit value						$0.00	$0.00	$0.00
Subtotal:								
Quantity	934	1,110	1,825	2,201	2,043	21	44	81
Value	32,972	38,829	59,961	69,418	70,284	846	1,698	3,137
Unit value	$35.30	$34.98	$32.86	$31.54	$34.40	$40.45	$38.32	$38.67

Table continued on next page.

Table I-4A--Continued
Gray portland cement: SOUTHERN CALIFORNIA summary data presenting selected items from the original investigation and the first reviews on Mexico, Japan, and Venezuela, 1986-90 and 1997-99

Item	1986	1987	1988	1989	1990	1997	1998	1999
(Quantity in 1,000 tons, value in 1,000 dollars, and unit values are per 1,000 tons)								
GRAY PORTLAND CEMENT:								
SOUTHERN CALIFORNIA imports from–Continued								
All other sources:								
Quantity	535	790	614	552	315	1,089	2,099	2,465
Value	18,590	24,232	19,054	21,339	13,226	54,411	91,410	94,069
Unit value	$34.75	$30.67	$31.03	$38.66	$41.99	$49.97	$43.54	$38.17
All sources:								
Quantity	1,470	1,901	2,439	2,753	2,358	1,110	2,144	2,546
Value	51,562	63,061	79,015	90,757	83,510	55,257	93,108	97,205
Unit value	$35.08	$33.17	$33.40	$32.97	$35.42	$49.79	$43.44	$38.18
SOUTHERN CALIFORNIA producers'--								
Capacity	8,558	8,558	8,305	8,353	8,453	8,521	8,554	8,704
Production	6,521	6,185	6,852	7,224	6,784	7,920	7,840	8,173
Capacity utilization	76.2	72.3	82.5	86.5	80.3	93.0	91.6	93.9
Shipments INSIDE region:								
Quantity	5,588	5,325	5,830	5,906	5,579	5,010	4,715	5,099
Value	348,251	317,915	317,575	334,749	325,743	299,201	305,224	346,696
Unit value	$62.32	$59.70	$54.47	$56.68	$58.39	$59.72	$64.74	$67.99
Shipments OUTSIDE region:								
Quantity	929	773	1,043	1,305	1,173	2,979	3,108	3,010
Value	55,731	45,252	57,317	71,806	68,163	180,631	211,020	199,633
Unit value	$59.99	$58.54	$54.95	$55.02	$58.11	$60.63	$67.90	$66.32
Production workers	1,146	1,072	986	965	960	771	809	805
Hours worked (*1,000s*)	2,666	2,538	2,330	2,305	2,172	1,807	1,862	1,905
GRAY PORTLAND CEMENT AND CEMENT CLINKER:								
SOUTHERN CALIFORNIA producers'--								
Net sales *(value)*	392,135	378,378	378,979	395,894	368,509	496,895	541,801	577,206
COGS *(value)*	314,736	297,833	315,159	314,012	294,707	352,408	366,667	388,025
Gross profit *(value)*	77,399	80,545	63,820	81,882	73,802	144,487	175,124	189,181
Operating income *(value)*	53,099	59,415	44,743	59,912	50,010	107,913	134,591	147,537
Operating income or (loss)/sales *(percent)*	13.5	15.7	7.5	12.4	6.3	21.7	24.8	25.6

[1] **1986-90 imports from Venezuela included in imports from all other sources.**

Source: Compiled from data submitted in response to Commission questionnaires in the original investigations and first reviews, official Commerce statistics, and data from the USGS.

Table I-6A
Gray portland cement: SOUTHERN CALIFORNIA summary data concerning statutory criteria for regional analysis from the original investigations and current reviews on Japan, Mexico, and Venezuela, 1986-90 and 1997-99

Item	1986	1987	1988	1989	1990	1997	1998	1999
(In percent, based on quantity)								
Share of--								
Regional producers' shipments made within region	87	87	85	82	83	63	60	63
Regional consumption supplied by U.S. producers outside region	1	1	2	2	2	6	2	8
Region's share of--								
Total imports from Japan	68	71	73	74	61	([1])	70	97
Total imports from Mexico	19	17	14	15	40	([1])	([1])	([1])
Total imports from Venezuela	([2])	([2])	([2])	([2])	([2])	0	0	0
Ratio of imports from Japan to consumption--								
Within region	5	7	14	18	15	0	([1])	([1])
Outside region	([1])	([1])	([1])	1	1	0	([1])	([1])
Ratio of imports from Mexico to consumption--								
Within region	8	9	8	7	11	([1])	([1])	1
Outside region	3	4	5	4	2	1	1	1
Ratio of imports from Venezuela to consumption--								
Within region	([2])	([2])	([2])	([2])	([2])	0	0	0
Outside region	([2])	([2])	([2])	([2])	([2])	0	0	0

[1] Less than 0.5 percent.
[2] Not available.

Source: 1986-90 data compiled from *Original Report*. 1997-99 data compiled from data submitted in response to Commission questionnaires in the *First Review*, official Commerce statistics, and data from the USGS.

Table C-1
Gray portland cement: Summary data concerning SOUTHERN CALIFORNIA, 1997-99

0 short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

	Reported data			Period changes		
Item	1997	1998	1999	1997-99	1997-98	1998-99
Regional consumption quantity:						
Amount	6,485	6,999	8,263	27.4	7.9	18.1
Regional producers' share (1)	77.3	67.4	61.7	-15.5	-9.9	-5.7
External producers' share (1)	5.6	2.0	7.5	1.8	-3.6	5.5
Importers' share (1):						
Japan	0.0	0.2	0.4	0.4	0.2	0.2
Mexico	0.3	0.4	0.6	0.3	0.1	0.2
Venezuela	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	0.3	0.6	1.0	0.7	0.3	0.3
Other sources	16.8	30.0	29.8	13.0	13.2	-0.2
Total imports	17.1	30.6	30.8	13.7	13.5	0.2
U.S. imports into region from:						
Japan:						
Quantity	0	16	32	(2)	(2)	103.6
Value	0	702	1,328	(2)	(2)	89.2
Unit value	(2)	$44.91	$41.73	(2)	(2)	-7.1
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Mexico:						
Quantity	21	29	49	135.5	37.0	71.9
Value	846	996	1,809	113.7	17.7	81.6
Unit value	$40.45	$34.74	$36.70	-9.3	-14.1	5.6
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Venezuela:						
Quantity	0	0	0	(2)	(2)	(2)
Value	0	0	0	(2)	(2)	(2)
Unit value	(2)	(2)	(2)	(2)	(2)	(2)
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Subtotal:						
Quantity	21	44	81	287.6	111.7	83.1
Value	846	1,698	3,137	270.5	100.6	84.7
Unit value	$40.45	$38.32	$38.67	-4.4	-5.3	0.9
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Other sources:						
Quantity	1,089	2,099	2,465	126.4	92.8	17.4
Value	54,411	91,410	94,069	72.9	68.0	2.9
Unit value	$49.97	$43.54	$38.17	-23.6	-12.9	-12.3
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
All sources:						
Quantity	1,110	2,144	2,546	129.4	93.2	18.8
Value	55,257	93,108	97,205	75.9	68.5	4.4
Unit value	$49.79	$43.44	$38.18	-23.3	-12.8	-12.1
Ending inventory quantity	(3)	(3)	(3)	(2)	(2)	(2)
Shipment quantity into the region by external U.S. producers	365	140	618	69.2	-61.6	340.9

Table continued on next page.

Table C-1--Continued
Gray portland cement: Summary data concerning SOUTHERN CALIFORNIA, 1997-99

0 short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

	Reported data			Period changes		
Item	1997	1998	1999	1997-99	1997-98	1998-99
U.S. regional producers':						
Average capacity quantity	8,521	8,554	8,704	2.1	0.4	1.8
Production quantity	7,920	7,840	8,173	3.2	-1.0	4.3
Capacity utilization (1)	93.0	91.6	93.9	0.9	-1.3	2.2
U.S. shipments within region:						
Quantity	5,010	4,715	5,099	1.8	-5.9	8.2
Value	299,201	305,225	346,696	15.9	2.0	13.6
Unit value	$59.72	$64.74	$67.99	13.8	8.4	5.0
U.S. shipments outside region:						
Quantity	2,979	3,108	3,010	1.0	4.3	-3.1
Value	180,631	211,020	199,633	10.5	16.8	-5.4
Unit value	$60.63	$67.90	$66.32	9.4	12.0	-2.3
Export shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	219	235	297	35.6	7.3	26.4
Inventories/production (1)	2.8	3.0	3.6	0.9	0.2	0.6
Production workers	771	809	805	4.4	4.9	-0.4
Hours worked (1,000s)	1,807	1,862	1,905	5.4	3.0	2.3
Wages paid ($1,000s)	43,601	46,553	48,968	12.3	6.8	5.2
Hourly wages	$24.13	$25.00	$25.70	6.5	3.6	2.8
Productivity (tons per hour)	4.4	4.2	4.3	-2.1	-3.9	1.9
Unit labor costs	$5.50	$5.94	$5.99	8.8	7.9	0.9
Net sales (4):						
Quantity	8,351	8,307	8,790	5.3	-0.5	5.8
Value	496,895	541,801	577,206	16.2	9.0	6.5
Unit value	$59.50	$65.22	$65.67	10.4	9.6	0.7
Cost of goods sold (COGS)	352,408	366,677	388,025	10.1	4.0	5.8
Gross profit or (loss)	144,487	175,124	189,181	30.9	21.2	8.0
SG&A expenses	36,574	40,533	41,644	13.9	10.8	2.7
Operating income or (loss)	107,913	134,591	147,537	36.7	24.7	9.6
Capital expenditures	47,317	36,404	84,388	78.3	-23.1	131.8
Unit COGS	$42.20	$44.14	$44.14	4.6	4.6	0.0
Unit SG&A expenses	$4.38	$4.88	$4.74	8.2	11.4	-2.9
Unit operating income or (loss)	$12.92	$16.20	$16.78	29.9	25.4	3.6
COGS/sales (1)	70.9	67.7	67.2	-3.7	-3.2	-0.5
Operating income or (loss)/ sales (1)	21.7	24.8	25.6	3.8	3.1	0.7

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.
(3) Not available.
(4) Financial data reported for Portland cement and cement clinker.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires, official Commerce statistics, and data from the USGS.

APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

As part of their response to the notice of institution, interested parties were asked to provide a list of three to five leading purchasers in the U.S. market for the domestic like product. A response was received from domestic interested parties and they named the following *** firms as the top purchasers of gray portland cement and cement clinker: ***. Purchaser questionnaires were sent to these firms and two firms (***) provided responses, which are presented below.

1. a.) Have any changes occurred in technology; production methods; or development efforts to produce gray portland cement and cement clinker that affected the availability of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan since 2011?

   b.) Do you anticipate any changes in technology; production methods; or development efforts to produce gray portland cement and cement clinker that will affect the availability of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan within a reasonably foreseeable time?

Purchaser	Changes that have occurred	Anticipated changes
***	***	***
***	***	***

2. a.) Have any changes occurred in the ability to increase production of gray portland cement and cement clinker (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production) that affected the availability of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan since 2011?

   b.) Do you anticipate any changes in the ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production) that will affect the availability of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan within a reasonably foreseeable time?

Purchaser	Changes that have occurred	Anticipated changes
***	***	***
***	***	***

3. a.) Have any changes occurred in factors related to the ability to shift supply of gray portland cement and cement clinker among different national markets (including barriers to importation in foreign markets or changes in market demand abroad) that affected the availability of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan since 2011?

   b.) Do you anticipate any changes in factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad) that will affect the availability of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan within a reasonably foreseeable time?

Purchaser	Changes that have occurred	Anticipated changes
***	***	***
***	***	***

4. a.) Have there been any changes in the end uses and applications of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan since 2011?

   b.) Do you anticipate any changes in the end uses and applications of gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan within a reasonably foreseeable time?

Purchaser	Changes that have occurred	Anticipated changes
***	***	***
***	***	***

5. a.) Have there been any changes in the existence and availability of substitute products for gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan since 2011?

   b.) Do you anticipate any changes in the existence and availability of substitute products for gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan within a reasonably foreseeable time?

Purchaser	Changes that have occurred	Anticipated changes
***	***	***
***	***	***

6. a.) Have there been any changes in the level of competition between gray portland cement and cement clinker produced in the United States, gray portland cement and cement clinker produced in Japan, and such merchandise from other countries in the U.S. market or in the market for gray portland cement and cement clinker in Japan since 2011?

   b.) Do you anticipate any changes in the level of competition between gray portland cement and cement clinker produced in the United States, gray portland cement and cement clinker produced in Japan, and such merchandise from other countries in the U.S. market or in the market for gray portland cement and cement clinker in Japan within a reasonably foreseeable time?

Purchaser	Changes that have occurred	Anticipated changes
***	***	***
***	***	***

7. a.) Have there been any changes in the business cycle for gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan since 2011?

   b.) Do you anticipate any changes in the business cycle for gray portland cement and cement clinker in the U.S. market or in the market for gray portland cement and cement clinker in Japan within a reasonably foreseeable time?

Purchaser	Changes that have occurred	Anticipated changes
***	***	***
***	***	***