Electrolytic Manganese Dioxide from China

Investigation No. 731-TA-1125 (Second Review)

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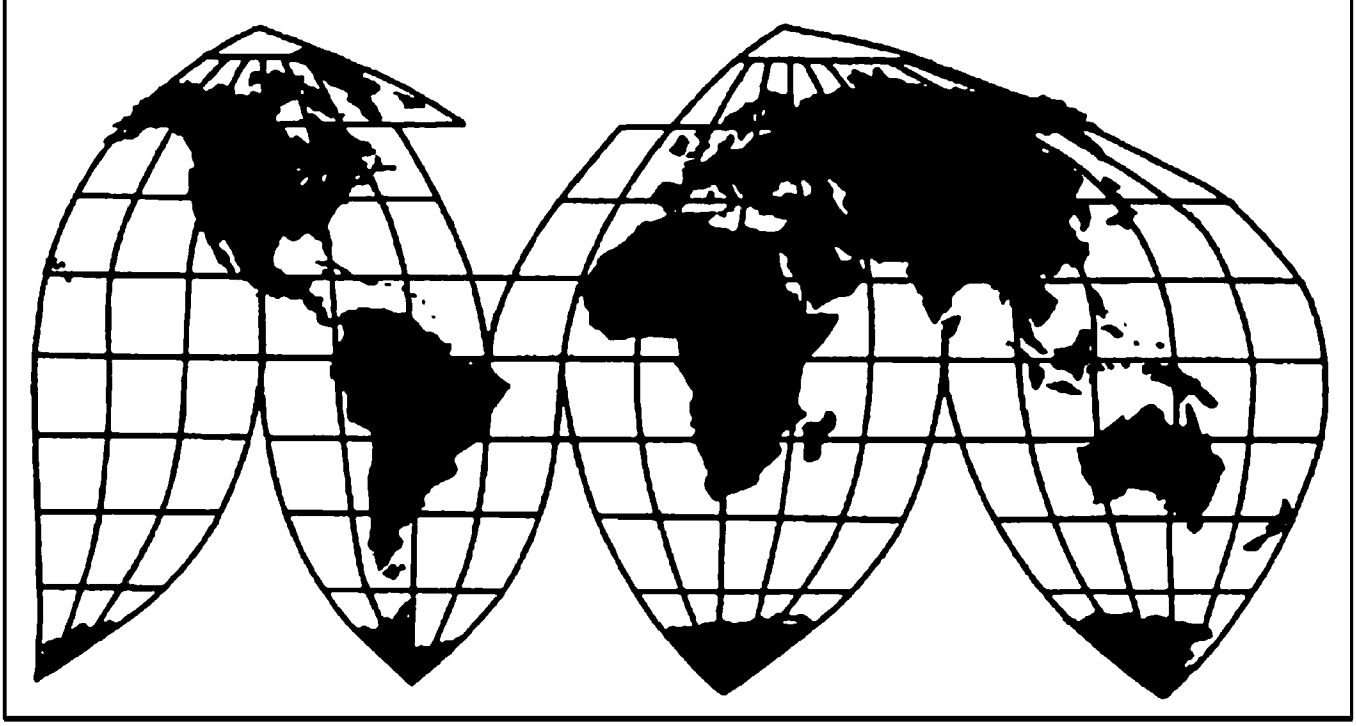
U.S. International Trade Commission



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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1125 (Second Review)

Electrolytic Manganese Dioxide from China

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 electrolytic manganese dioxide from China 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 instituted this review on December 2, 2019 (84 FR 66005) and determined on March 6, 2020 that it would conduct an expedited review (85 FR 29973, May 19, 2020).

[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 electrolytic manganese dioxide ("EMD") from China 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

Original Investigations: The original investigations resulted from petitions Tronox, LLC filed on August 22, 2007 concerning imports of EMD from Australia and China. The Commission determined on September 12, 2008 that a domestic industry was materially injured by reason of less than fair value ("LTFV') imports of EMD from Australia and China.[1] The U.S. Department of Commerce ("Commerce") published antidumping duty orders on subject imports of EMD from Australia and China on October 7, 2008.[2]

First Reviews: The Commission instituted the first reviews on September 3, 2013.[3] Notwithstanding the inadequate respondent interested party group response, the Commission determined to conduct full reviews on December 20, 2013, so that it could investigate current and likely conditions of competition in the U.S. market and in the subject countries for EMD, as production of EMD in Australia had reportedly ceased. On December 2, 2014, the Commission determined that revocation of the antidumping duty order on EMD from Australia 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 and that revocation of the antidumping duty order on EMD from China would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.[4] Consequently, effective January 9, 2015, Commerce revoked

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[1] *Electrolytic Manganese Dioxide from Australia and China*, Inv. Nos. 731-TA-1124 and 1125 (Final), USITC Pub. 4036 (Sept. 2008) ("Original Determinations").

[2] *Antidumping Duty Order*: *Electrolytic Manganese Dioxide from Australia*, 73 Fed. Reg. 58538 (Oct. 7, 2008); *Antidumping Duty Order*: *Electrolytic Manganese Dioxide from China*, 73 Fed. Reg. 58537 (Oct. 7, 2008).

[3] 78 Fed. Reg. 54269 (Sept. 3, 2013).

[4] *Electrolytic Manganese Dioxide from Australia and China*, Inv. Nos. 731-TA-1124 and 1125 (Review), USITC Pub. 4506 (Dec. 2014) ("Review Determinations").

the antidumping duty order on imports of EMD from Australia and issued a continuation of the antidumping duty order on imports of EMD from China.[5]

Second Review: On December 2, 2019, the Commission instituted this second review of the antidumping duty order on EMD from China.[6] Two domestic producers, Borman Specialty Materials and Prince Specialty Products LLC (collectively, "domestic interested parties"), jointly filed the sole response to the notice of institution. The Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate. It therefore determined to expedite the review on March 6, 2020.[7] The domestic interested parties submitted comments pursuant to Commission rule 207.62(d) regarding the determination the Commission should reach.[8]

U.S. industry data are based on information that the domestic interested parties submitted in response to the notice of institution. These domestic producers estimate that they accounted for *** percent of domestic production of EMD in 2018.[9] U.S. import data and related information are based on official import statistics from Commerce.[10] Foreign industry data and related information are based on information from the domestic producers, questionnaire responses from the original investigations and first reviews, and publicly available information gathered by staff.[11] Three U.S. purchasers of EMD responded to the Commission's adequacy phase questionnaire.[12]

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[5] *Electrolytic Manganese Dioxide From the People's Republic of China and Australia: Continuation of the Antidumping Duty Order on the People's Republic of China, Revocation of the Antidumping Duty Order on Australia*, 80 Fed. Reg. 1393 (Jan. 9, 2015).

[6] *Electrolytic Manganese Dioxide from China; Institution of a Five-Year Review,* 84 Fed. Reg. 66005 (Dec 2, 2019).

[7] *Electrolytic Manganese Dioxide from China; Scheduling of an Expedited Five-Year Review,* 85 Fed. Reg. 29973 (May 19, 2020).

[8] *See* Domestic Interested Parties' Final Comments.

[9] Confidential Report ("CR")/Public Report ("PR") at Table I-1.

[10] CR/PR at Table I-3.

[11] *See* CR/PR at I-16-17.

[12] CR/PR at D-3.

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."[13] 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."[14] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.[15]

Commerce has defined the scope of the order under review as:

> *The merchandise covered by the Order includes all manganese dioxide (MnO_2) that has been manufactured in an electrolysis process, whether in powder, chip, or plate form. Excluded from the scope are natural manganese dioxide (NMD) and chemical manganese dioxide (CMD). The merchandise subject to these orders is classified in the Harmonized Tariff Schedule of the United States ("HTSUS") at subheading 2820.10.00.00. While the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of the Order is dispositive.*[16]

The scope of this review is identical to the scope of the original investigations and first reviews.[17]

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[13] 19 U.S.C. § 1677(4)(A).

[14] 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).

[15] *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).

[16] *Electrolytic Manganese Dioxide From the People's Republic of China: Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order*, 85 Fed. Reg. 16057 (Mar. 20, 2020).

[17] *See* Original Determinations, USITC Pub. 4036 at 4; Review Determinations, USITC Pub. 4506 at 4.

EMD is a black powder (or plate or chip that will be ground into powder) that has a gamma crystalline structure and is used almost exclusively in the cathode of dry-cell batteries.[18] There are three grades of EMD – alkaline, lithium, and zinc-chloride.[19] All types and grades of EMD are produced by the same general process.[20] The quality of EMD within each grade may vary.[21] All new suppliers of EMD must be qualified by the battery manufacturer before they can be used in a specific battery.[22]

In the original investigations and first reviews, the Commission defined a single domestic like product consisting of all EMD corresponding to Commerce's scope definition.[23] The definition of the domestic like product was not disputed in the original investigations or first reviews.[24]

In the current review, the domestic interested parties agree with the Commission's definition of the domestic like product from the original investigations and first reviews.[25] The record contains no information suggesting that the characteristics of domestically produced EMD have changed since the prior proceedings.[26] Accordingly, we define a single domestic like product consisting of EMD, coextensive with the scope of the order under review.

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."[27] 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.

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[18] CR/PR at I-7.
[19] CR/PR at I-7.
[20] CR/PR at I-8-9.
[21] CR/PR at I-7.
[22] CR/PR at I-7.
[23] Original Determinations, USITC Pub. 4036 at 5; Review Determinations, USITC Pub. 4506 at 5.
[24] Original Determinations, USITC Pub. 4036 at 5; Review Determinations, USITC Pub. 4506 at 5.
[25] Domestic Interested Parties' Final Comments at 20.
[26] *See generally* CR/PR at I-7-8.
[27] 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.

In the original investigations, the Commission defined the domestic industry as consisting of all producers of the domestic like product.[28] It found that domestic producer *** implicated the related parties provision because it imported *** quantities of EMD from China during the period of investigation, but found that appropriate circumstances did not exist to exclude it from the domestic industry.[29] In the first reviews, the Commission found that *** was a related party because it was affiliated with an exporter of subject merchandise from China, but found that appropriate circumstances did not exist to exclude the firm from the domestic industry, and defined the domestic industry to include all U.S. producers of EMD.[30]

In the current review, 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.[31] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[32]

The domestic interested parties did not import subject merchandise during the period of review and are not related to exporters or importers of subject merchandise.[33] They believe,

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[28] Original Determinations, USITC Pub. 4036 at 6.

[29] Original Determinations, USITC Pub, 4036 at 5-6; Confidential Original Determination, EDIS Doc. 701203 at 7-9.

[30] First Review Determinations, USITC Pub. 4506 at 6; Confidential Review Determinations, EDIS Doc. 701210 at 8.

[31] *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).

[32] 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. U.S. Int'l Trade Comm'n*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); *see also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[33] Domestic Interested Parties' Response to the Notice of Institution at 18.

however, that domestic producer Energizer Battery Manufacturing, Inc. ("Energizer") imported subject merchandise during the period of review.[34] Energizer did not respond to the notice of institution. Available data indicate that its imports of subject merchandise during the period of review were likely *** than its domestic production.[35] We therefore find that appropriate circumstances do not exist to exclude Energizer from the domestic industry. Consequently, we define the domestic industry to consist of all domestic producers of EMD.

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."[36] The Uruguay Round Statement of Administrative Action (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."[37] Thus, the likelihood standard is prospective in nature.[38] The U.S. Court of International Trade has found that "likely," as used in the five-year review

[34] Domestic Interested Parties' Response to the Notice of Institution at 18.

[35] *See* CR/PR at Table I-1 (estimating Energizer captively produced *** short tons of EMD in 2018, Table I-3 (total of 80 short tons of subject imports in 2018).

[36] 19 U.S.C. § 1675a(a).

[37] SAA, H.R. Rep. 103-316, vol. I at 883-84 (1994). 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.

[38] 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.

provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[39]

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."[40] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[41]

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."[42] 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).[43] The statute further provides

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[39] *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'").

[40] 19 U.S.C. § 1675a(a)(5).

[41] 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*.

[42] 19 U.S.C. § 1675a(a)(1).

[43] 19 U.S.C. § 1675a(a)(1). Commerce indicated that there have been no completed administrative reviews (there is one ongoing administrative review covering 2018-19), changed circumstances determinations, new shipper reviews, scope rulings, or duty absorption findings in connection with the antidumping duty order. *Issues and Decision Memorandum for the Final Results of Expedited Second Sunset Review of the Antidumping Duty Order on Electrolytic Manganese Dioxide from the People's Republic of China*, A-570-919 (March 16, 2020) at 2-3 (EDIS Doc. No. 705722).

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.[44]

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.[45] 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.[46]

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 United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[47]

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

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[44] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[45] 19 U.S.C. § 1675a(a)(2).

[46] 19 U.S.C. § 1675a(a)(2)(A-D).

[47] *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.

more advanced version of the domestic like product.[48] 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.[49]

No respondent interested party participated in this expedited review. The record, therefore, contains limited new information with respect to the EMD industry in China. There also is limited information on the EMD market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigations and first reviews, and the limited new information on the record in this second 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."[50] The following conditions of competition inform our determination.

1. Demand Conditions

The Original Investigations. In the original investigations, the Commission found that demand for EMD declined over the period of investigation. The Commission found that apparent U.S. consumption as measured by U.S. shipments declined by 14.3 percent from 2005 through 2007.[51] In interim 2008 (January-March 2008) U.S. consumption was 9.9 percent higher than in interim 2007 (January-March 2007).[52] The Commission also found that usage of EMD by U.S. battery producers during the period of investigation decreased by 4.2 percent.[53]

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[48] 19 U.S.C. § 1675a(a)(4).

[49] 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.

[50] 19 U.S.C. § 1675a(a)(4).

[51] Original Determinations, USITC Pub. 4036 at 13.

[52] Original Determinations, USITC Pub. 4036 at 13.

[53] Original Determinations, USITC Pub. 4036 at 13-14.

The Commission observed that the U.S. EMD market consisted of very few suppliers and purchasers, and that virtually all the domestic and imported product was used for a single purpose, the production of alkaline batteries.[54] The Commission also pointed out limitations in the data it collected pertaining to U.S. apparent consumption. The volume and market share of subject imports from China appeared to be substantially understated. U.S. battery producer usage data included use of EMD by battery purchasers from existing inventories.[55]

The First Reviews. In the first reviews, the Commission found that EMD continued to be used almost exclusively in the production of dry-cell batteries, primarily alkaline batteries.[56] Apparent U.S. consumption of EMD declined irregularly and was *** percent lower in 2013 than in 2008.[57] Questionnaire respondents attributed declining demand to the movement of battery production abroad and the increased importation of products from China with batteries installed, while the domestic interested parties attributed the decline to technological changes and a shift to smaller battery cell sizes.[58] The Commission also noted that the three largest purchasers, ***, accounted for *** percent of apparent U.S. consumption in 2013.[59]

The Current Review. A majority of EMD sold in the U.S. market continues to be used in the production of alkaline batteries, and responding purchasers reported that demand for EMD has declined as production of such batteries has migrated out of the United States.[60] The record shows that apparent U.S. consumption was lower in 2018, when it was *** short tons, than in 2013, when it was *** short tons.[61] Thus, apparent U.S. consumption (by quantity)

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[54] Original Determinations, USITC Pub. 4036 at 13-14.

[55] Original Determinations, USITC Pub. 4036 at 13-14.

[56] Review Determinations, USITC Pub. 4506 at 17.

[57] Review Determinations, USITC Pub. 4506 at 17; Confidential Review Determinations, EDIS Doc. 701210 at 25. The period of review for the first reviews was January 2008-June 2014. *Id.*

[58] First Review Determinations, USITC Pub. 4506 at 17.

[59] First Review Determinations, USITC Pub. 4506 at 18; Confidential Review Determinations, EDIS Doc. No. 701210 at 26.

[60] Domestic Interested Parties' Final Comments at 4; CR/PR at D-3.

[61] CR/PR at Table I-4. We observe that the available data in this review are not fully comparable to the data in the prior proceedings. In each of the prior proceedings, the Commission obtained data from firms representing all domestic EMD production. CR/PR at I-9. By contrast, the domestic interested parties that provided information in this review estimate that they constitute *** percent of domestic production. CR/PR at Table I-1. Consequently, apparent U.S. consumption and the domestic industry's market share for 2018 are likely somewhat understated, and market share data for imports for 2018 are likely somewhat overstated.

declined by *** percent from 2013 to 2018.[62] Since the previous reviews, consumption of EMD has declined for alkaline battery production and has increased for production of lithium batteries, such as for electric vehicles and for the grid storage of renewable energy, resulting in an increased proportion of lithium grade EMD produced worldwide.[63]

2. Supply Conditions

The Original Investigations. The Commission found that a limited number of suppliers were qualified by one or more of the four U.S. battery manufacturers.[64] The domestic industry was the largest supplier of EMD in the U.S. market throughout the period of investigation, followed by subject imports.[65] Nonsubject imports from Japan and South Africa supplied the remainder of the U.S. market.[66]

The First Reviews. The Commission found that domestic producers supplied the bulk (*** to *** percent) of apparent U.S. consumption during the period of review, and that nonsubject imports, primarily from South Africa and Japan, supplied the balance.[67] Subject imports ceased after 2008.[68]

The Current Review. The record shows that the domestic industry continued to supply the bulk of apparent U.S. consumption during the period of review, with the industry's U.S. shipments accounting for *** percent of apparent U.S. consumption in 2018.[69] There have been changes in the ownership of the domestic producers. In December 2016, Prince International Corp. acquired the manganese operations of Erachem.[70] In 2018, EMD Acquisition LLC purchased the original petitioner, Tronox, and renamed it Borman Specialty Materials.[71]

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[62] CR/PR at Table I-4.

[63] CR/PR at I-8, D-3; Domestic Interested Parties' Response to the Notice of Institution at Exhibit 3 (***); *see also* Domestic Interested Parties' Final Comments at 4. ***. Domestic Interested Parties' Response to the Notice of Institution at Exhibit 3.

[64] Original Determinations, USITC Pub. 4036 at 14.

[65] Original Determinations, USITC Pub. 4036 at 14.

[66] Original Determinations, USITC Pub. 4036 at 14-15.

[67] First Review Determinations, USITC Pub. 4506 at 18; Confidential Review Determinations, EDIS Doc. No. 701210 at 26-27.

[68] First Review Determinations, USITC Pub. 4506 at 18.

[69] CR/PR at Table I-4.

[70] CR/PR at I-10.

[71] CR/PR at I-9-10.

Most of the balance of apparent U.S. consumption was satisfied by nonsubject imports, the largest source of which was Japan.[72] Nonsubject imports supplied *** percent of apparent U.S. consumption in 2018.[73] There was a small volume of subject imports from China in every year from 2014 to 2018 ranging from 80 to 288 short tons.[74] In 2018, subject imports accounted for *** percent of apparent U.S. consumption.[75]

3. Substitutability and Other Conditions

The Original Investigations. The Commission found that the domestic like product and subject imports were at least moderately substitutable.[76] The Commission observed that the interchangeability of domestic and imported EMD was somewhat limited because all purchases of EMD from new suppliers needed to undergo rigorous qualification procedures, which could take 6 to 16 months.[77] Nevertheless, at various times during the period of the investigation, the domestic product and imports from both subject countries were qualified by one or more of the four major battery producers for at least some battery types.[78] All domestic producers and half of responding importers reported that the domestic like product and subject imports were "always" or "frequently" interchangeable.[79] Most responding purchasers, however, reported that domestic and subject EMD were "sometimes" or "never" interchangeable.[80]

The Commission also found that domestically produced and imported EMD were usually sold pursuant to annual short-term contracts/agreements negotiated in the fourth quarter of the preceding year.[81] The negotiation process generally involved competitive bids or quotes from a battery manufacturer's qualified suppliers.[82] The Commission stated that domestic

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[72] CR/PR at Table I-3.

[73] CR/PR at Table I-4.

[74] CR/PR at Table I-3. The domestic interested parties claim that subject imports from China have been present in the U.S. market in all but two years since imposition of the antidumping duty order in 2008. Domestic Interested Parties' Response to the Notice of Institution at 16 (*citing* Exhibit 8 (U.S. Bureau of Census import statistics 2005-19 YTD, HTS 2820.10)). We note the record of the first reviews does not show any subject imports from China during the 2009-13 period. CR/PR at Table C-1.

[75] CR/PR at Table I-4.

[76] Original Determinations, USITC Pub. 4036 at 11, 17.

[77] Original Determinations, USITC Pub. 4036 at 15.

[78] Original Determinations, USITC Pub. 4036 at 15.

[79] Original Determinations, USITC Pub. 4036 at 15.

[80] Original Determinations, USITC Pub. 4036 at 15.

[81] Original Determinations, USITC Pub. 4036 at 15.

[82] Original Determinations, USITC Pub. 4036 at 15.

producers must operate their plants at or near full capacity utilization to remain profitable, due to the capital-intensive nature of EMD production.[83]

The First Reviews. The Commission found that if subject imports from China were to re-enter the U.S. market after revocation, these imports would likely be moderately substitutable with the domestic like product.[84] It further found that price was an important factor in purchasing decisions, along with quality, product consistency, and reliability of supply.[85] The Commission also observed that production of EMD requires access to high magnesium content ore and a constant supply of electricity, and that domestic producers must operate their plants at or near full capacity utilization to remain profitable, due to the capital-intensive nature of EMD production.[86]

The Current Review. There is no new information on the record of the current review to indicate that the conditions of competition concerning the substitutability of subject merchandise from China and the domestic like product or the importance of price in purchasing decisions have changed since the prior proceedings.[87] We therefore find a moderate degree of substitutability between subject imports and the domestic like product and that price is an important factor in purchasing decisions. As in the original investigations and first reviews, the domestic interested parties state that the capital intensity of EMD production requires domestic producers to maximize their capacity utilization and minimize their unit fixed costs to operate their production facilities economically.[88]

Subject imports have been subject to additional tariffs pursuant to section 301 of the Trade Act of 1974[89] ("section 301 tariffs') since September 24, 2018. These tariffs were initially 10 percent *ad valorem* and increased to 25 percent *ad valorem* for entries made on or after June 15, 2019.[90]

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[83] Original Determinations, USITC Pub. 4036 at 16.
[84] First Review Determinations, USITC Pub. 4506 at 19.
[85] First Review Determinations, USITC Pub. 4506 at 19.
[86] First Review Determinations, USITC Pub. 4506 at 19.
[87] *See* Domestic Interested Parties' Final Comments at 5.
[88] Domestic Interested Parties' Final Comments at 5.
[89] 19 U.S.C. § 2411.
[90] *See* Domestic Interested Parties' Response to the Notice of Institution at 13; CR/PR at I-7.

C. Likely Volume of Subject Imports

1. The Original Investigations

In the original investigations, the Commission found that the volume of cumulated subject imports was significant during the period of investigation, both in absolute terms and relative to consumption and production in the United States.[91] Subject import volume declined steadily from *** short tons in 2005 to *** short tons in 2006 and *** short tons in 2007, but was higher in interim 2008, at *** short tons, than in interim 2007, at *** short tons.[92] Cumulated subject import market share increased from *** percent in 2005 to *** percent in 2006 before declining to *** percent in 2007.[93] Cumulated subject import market share was *** percent in interim 2008, down from *** percent in interim 2007.[94] The ratio of cumulated subject imports to U.S. production ranged from *** percent in 2005 and *** percent in 2007, and was *** percent in interim 2008.[95]

2. The First Reviews

In the first reviews, the Commission found that subject imports from China would likely be significant after revocation of the order because Chinese producers had the ability and the incentive to significantly increase their exports to the U.S. market.[96] It found that subject producers in China had the ability to significantly increase exports due to their substantial

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[91] Original Determinations, USITC Pub. 4036 at 16.

[92] Original Determinations, USITC Pub. 4036 at 17; Confidential Original Determinations, EDIS Doc. 701203 at 23-24. Thus, during the original investigation subject import volume declined *** percent from 2005 to 2007; subject import volume was *** percent higher in interim 2008 than interim 2007. Original Investigations Confidential Report INV-FF-108, EDIS Doc. 701199 ("Original CR") at IV-3, Table IV-2 (Aug. 27, 2008).

[93] Original Determinations, USITC Pub. 4036 at 18; Confidential Original Determinations, EDIS Doc. No. 701203 at 24. Thus, cumulated subject import market share declined *** percentage points from 2005 to 2007. CR/PR at Table C-1.

[94] Original Determinations, USITC Pub. 4036 at 18; Confidential Original Determinations, EDIS Doc. No. 701203 at 24. Thus, cumulated subject import market share was *** percentage points lower in interim 2008 than in interim 2007. CR/PR at Table C-1.

[95] Original Determinations, USITC Pub. 4036 at 18; Confidential Original Determinations, EDIS Doc. No. 701203 at 24. Thus, the ratio of cumulated subject imports to U.S. production declined by *** percentage points from 2005 to 2007. The volume and market penetration of subject imports from China was *** short tons and *** percent in 2005, *** short tons and *** percent in 2006, and *** short tons and *** percent in 2007. Original CR, EDIS Doc. 701199 at Tables IV-7-8. Thus, the market share of subject imports (by volume) declined *** percentage points from 2005 to 2007.

[96] First Review Determinations, USITC Pub. 4506 at 20.

excess capacity, then equivalent to *** percent of apparent U.S. consumption in 2013.[97] The Commission also found that subject producers in China had incentive to increase their exports to the U.S. market, as doing so would boost capacity utilization and reduce unit fixed costs during conditions of oversupply prevailing in the Chinese market, while also capitalizing on the relatively higher prices and substantial demand in the U.S. market.[98] Responding importers and purchasers also reported that they would consider importing and sourcing EMD from China after revocation.[99]

3. The Current Review

The record shows that subject imports from China have maintained a small presence in the U.S. market throughout the period of review at annual volumes ranging from 80 to 288 short tons from 2014 to 2018.[100]

The information available in the current review further shows that subject producers in China continue to possess the ability to increase exports to the U.S. market. According to information from the *** supplied by the domestic interested parties, Chinese producers increased their capacity by *** percent over the period of review, from *** short tons in 2014 to *** short tons in 2018.[101] In 2018, the subject producers' reported capacity utilization rate of *** percent yielded unused capacity of *** short tons, equivalent to *** percent of apparent U.S. consumption that year.[102] Given the high fixed costs of EMD production, subject producers would have an economic incentive to utilize excess capacity and reduce fixed costs by increasing exports to the United States after revocation.

Moreover, the EMD industry in China remains export oriented: China was the world's largest exporter of EMD throughout the period of review, accounting for 38.6 percent of global exports in 2018.[103] That same year, Chinese producers exported approximately *** percent of

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[97] First Review Determinations, USITC Pub. 4506 at 20; Confidential Review Determinations, EDIS Doc. No. 701210 at 30-31.

[98] First Review Determinations, USITC Pub. 4506 at 20-21.

[99] First Review Determinations, USITC Pub. 4506 at 21.

[100] CR/PR at Table I-3.

[101] Domestic Interested Parties' Final Comments at 8; Domestic Interested Parties' Response to the Notice of Institution at Exhibit 3.

[102] Domestic Interested Parties' Final Comments at 8; Domestic Interested Parties' Response to the Notice of Institution at Exhibit 3; CR/PR at Table I-4.

[103] CR/PR at Table I-6. Available Global Trade Atlas data concern a somewhat broader category of merchandise, manganese dioxide, than the subject imports and consequently may include out-of-scope product. *Id.*

their EMD production.[104] We also note that Chinese consumption of EMD in the production of nickel manganese cobalt oxide batteries for electric cars may weaken after the scheduled 2020 phase-out by the Chinese government of subsidies for domestic electric car battery manufacturing.[105] Weakening home market demand for EMD would likely incentivize subject producers to export more EMD in response to continued and growing demand in the electric vehicle and renewable energy sectors, where lithium batteries containing EMD already constitute a growing majority of batteries used.[106]

Chinese producers are likely to target the U.S. market given the continued presence of subject imports from China in the market through the period of review, as well as the higher prices available in the United States relative to China and third-country markets.[107] We also observe that Japan maintains an antidumping duty order on imports of EMD from China, increasing the likelihood of those exports being diverted to the U.S. if the order were revoked.[108]

In light of the Chinese producers' ability and incentive to increase exports to the U.S. market in the event of revocation, we find that the likely volume of subject imports, both in absolute terms and relative to consumption in the United States, would be significant if the order were revoked.[109]

D. Likely Price Effects

1. Original Investigations

In the original investigations, the Commission found that the domestic like product and subject imports appeared to be at least moderately interchangeable, and although respondents emphasized that quality was an important factor in purchasing decisions, the record reflected

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[104] Domestic Interested Parties' Final Comments at 8; Domestic Interested Parties' Response to the Notice of Institution at Exhibit 3; CR/PR at Table I-6.

[105] CR/PR at I-16-17.

[106] CR/PR at I-8.

[107] CR/PR at Table I-3; Domestic Interested Parties' Final Comments at 9; Domestic Interested Parties' Response to the Notice of Institution at Exhibit 6.

[108] CR/PR at I-18. We do not find that the imposition of section 301 tariffs would likely restrain subject imports from entering the U.S. market upon revocation, in light of the other considerations making the United States an attractive export market for subject producers. None of the responding purchasers identified section 301 tariffs as a pertinent supply condition. CR/PR at D-3-4.

[109] Due to the expedited nature of this review, the record does not contain current information regarding inventories of subject merchandise or subject producers' ability to shift production to EMD from out-of-scope products.

that price was also an important factor.[110] The Commission found significant underselling by subject imports during the period of investigation, based on underselling in 24 of 25 quarterly comparisons at margins ranging from *** to *** percent.[111] While recognizing that prices for the domestic like product increased between the first and last quarters for which data were collected, the Commission found that subject imports suppressed these prices to a significant degree, as the domestic industry's cost of goods sold to net sales ratio increased from 87.5 percent in 2005 to 100.9 percent in 2007 – an increase of 13.4 percentage points.[112] The Commission attributed the industry's cost-price squeeze to subject import competition based on evidence that ***.[113]

2. The First Reviews

The Commission found that subject imports from China would likely undersell the domestic like product to a significant degree after revocation, thereby likely depressing and suppressing domestic like product prices to a significant degree.[114] In light of the moderate degree of substitutability between subject imports from China and the domestic like product and the importance of price to purchasers, the Commission reasoned that Chinese producers would likely revert to their underselling strategy from the original investigations as a means of rapidly increasing their penetration of the U.S. market.[115] The Commission found that likely significant subject import underselling would likely depress or suppress domestic like product prices to a significant degree, by forcing domestic producers to reduce their prices to maintain their market share and an acceptable rate of capacity utilization.[116]

3. The Current Review

Due to the expedited nature of this review, the record does not contain recent product-specific pricing information for EMD. As previously discussed, the domestic like product and

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[110] Original Determinations, USITC Pub. 4036 at 17-18.

[111] Original Determinations, USITC Pub. 4036 at 18; Confidential Original Determinations, EDIS Doc. No. 701203 at 25-26. Subject imports from China undersold the domestic like product in all *** quarterly pricing comparisons. Original CR, EDIS Doc. No. 701199 at Table V-4.

[112] Original Determinations, USITC Pub. 4036 at 18.

[113] Original Determinations, USITC Pub. 4036 at 19; Confidential Original Determinations, EDIS Doc. No. 701203 at 27.

[114] First Review Determinations, USITC Pub. 4506 at 21. There was no pricing data for subject imports in the first review. *Id*. at V-4.

[115] First Review Determinations, USITC Pub. 4506 at 22.

[116] First Review Determinations, USITC Pub. 4506 at 22.

subject imports are moderately substitutable and price is an important factor in purchasing decisions. Given this, and the prevalence of underselling by subject imports from China during the original investigations,[117] we find that significant underselling by subject imports from China is likely after revocation, as Chinese producers would likely revert to underselling the domestic like product to rapidly increase their presence in the U.S. market.

We also find that the significant underselling by subject imports from China after revocation would likely result in the depression or suppression of domestic like product prices to a significant degree. Domestic producers would likely have to reduce their prices or restrain price increases to maintain their market share and an acceptable rate of capacity utilization in the face of significantly increased quantities of low-priced subject imports from China.[118]

Thus, we conclude that, if the order were revoked, significant volumes of subject imports from China would likely undersell the domestic like product significantly to gain market share, thereby likely depressing or suppressing domestic like product prices to a significant degree.

E. Likely Impact

1. Original Investigations

In the original investigations, the Commission found that the domestic industry's performance declined throughout the period of investigation with respect to both its total operations and its merchant market operations.[119] In particular, the Commission found that the industry's financial indicators declined as the industry experienced a cost-price squeeze and a declining rate of capacity utilization.[120]

The Commission concluded that cumulated subject imports had a significant impact on the condition of the domestic industry during the period of investigation.[121] As the Commission

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[117] In the original investigations, subject imports from China undersold the domestic like product in *** quarterly comparisons, at margins ranging from *** to *** percent. Original CR, EDIS Doc. No. 701199 at Table V-4; Original Determinations, USITC Pub. 4036 at Table V-4.

[118] *See* Domestic Interested Parties' Final Comments at 11.

[119] Original Determinations, USITC Pub. 4036 at 19. Although it found that the criteria for application of the statutory captive production provision were not satisfied, the Commission considered as a condition of competition the substantial share of domestic production captively consumed by domestic producer Energizer, and noted that its performance was similar to that of the industry as a whole. *Id.* at 12-13, 19 n.145.

[120] Original Determinations, USITC Pub. 4036 at 19, 21.

[121] Original Determinations, USITC Pub. 4036 at 22. The Commission found that application of the replacement/benefit analysis articulated in *Bratsk Aluminum Smelter v. United States*, 444 F.3d

explained, domestic producers needed to raise prices or gain market share during the period to compensate for increasing raw material costs and declining demand, which resulted in higher unit fixed costs.[122] Due to the significant volume of subject imports that consistently undersold the domestic like product, however, the domestic industry experienced a cost-price squeeze, reduced U.S. shipments and capacity utilization, a build-up in inventory, and declining financial performance, including operating losses in 2007 and interim 2008.[123]

The Commission rejected the respondent's argument that no remedial purpose would be served by imposing an antidumping duty order on EMD from Australia given that Australian EMD production had ceased.[124] The Commission explained that it was not required to consider the effectiveness of the order and that the order would not be punitive, as respondents argued, because the sole Australian producer had closed and parties were not foreclosed from seeking a changed circumstances review with respect to any order on EMD from Australia. [125]

2. The First Reviews

The Commission began its analysis of likely impact by finding that the domestic industry was not in a vulnerable condition, having performed well during the period of review by most measures.[126] In particular, the Commission found that the domestic industry's financial performance was robust during the 2008-13 period, although it weakened between the interim periods.[127] Nevertheless, the Commission found that the likely significant increase in subject imports after revocation, coupled with the likelihood of adverse price effects, would likely have a significant impact on the domestic industry within a reasonably foreseeable time.[128]

The Commission took into account whether there were other factors likely to affect the domestic industry.[129] While recognizing that nonsubject imports had supplied an appreciable share of the U.S. market, the Commission noted that their presence did not prevent the

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1369, 1375 (Fed. Cir. 2006), was not required because all parties agreed that EMD was not a commodity. Original Determinations, USITC Pub. 4036 at 25.

[122] Original Determinations, USITC Pub. 4036 at 22.
[123] Original Determinations, USITC Pub. 4036 at 22.
[124] Original Determinations, USITC Pub. 4036 at 22-23.
[125] Original Determinations, USITC Pub. 4036 at 23.
[126] First Review Determinations, USITC Pub. 4506 at 22.
[127] First Review Determinations, USITC Pub. 4506 at 24.
[128] First Review Determinations, USITC Pub. 4506 at 25.
[129] First Review Determinations, USITC Pub. 4506 at 25.

domestic industry from achieving strong performance during the period of review.[130] The Commission also observed that production in South Africa, the largest source of nonsubject imports, had ceased, and that imports of EMD from Australia were unlikely to re-enter the U.S. market.[131] The Commission concluded that imports from other sources were unlikely to prevent subject imports from China from increasing significantly after revocation, causing adverse effects that were distinguishable from those caused by imports from other sources.[132]

3. The Current Review

In this expedited review, the information available on the domestic industry's condition is limited to that which the domestic interested parties provided in their response to the notice of institution.[133] In 2018, the domestic industry's capacity was *** short tons, its production was *** short tons, and its capacity utilization rate was *** percent.[134] The industry's U.S. shipments were *** short tons.[135] The industry's net sales revenue was $***, and its ratio of COGS to net sales was *** percent.[136] Its gross *** was $***, and its operating *** was $***, resulting in a ratio of operating income to net sales of *** percent.[137] The limited evidence in this expedited review is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury should the order be revoked.

As addressed above, we have found that revocation of the order on subject imports from China would likely result in a significant volume of subject imports that would likely undersell the domestic like product, thereby likely depressing or suppressing domestic like product prices to a significant degree. We find that the likely volume and price effects of the subject imports would likely have an adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. These reductions would have a direct

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[130] First Review Determinations, USITC Pub. 4506 at 25.

[131] First Review Determinations, USITC Pub. 4506 at 25.

[132] First Review Determinations, USITC Pub. 4506 at 25.

[133] We recognize that apparent changes in the domestic industry's performance between 2013 and 2018 reflect, to some extent, lower domestic industry coverage in this review than in the first reviews. In the first reviews, three domestic producers accounting for all domestic production completed domestic producers' questionnaire responses. First Reviews Confidential Report INV-MM-117, EDIS Doc. 701204 at I-12 (Nov. 13, 2014). In the current review, two domestic producers accounting for approximately *** percent of domestic production responded to the notice of institution. CR/PR at Table I-1.

[134] CR/PR at Table I-2.

[135] CR/PR at Table I-2.

[136] CR/PR at Table I-2.

[137] CR/PR at Table I-2.

adverse impact on the industry's profitability and employment as well as its ability to raise capital and make and maintain necessary capital investments. We therefore conclude that, if the order were revoked, subject imports from China would be likely to have a significant impact on the domestic industry within a reasonably foreseeable time.

In our analysis of the likely impact of subject imports from China on the domestic industry, we have taken into account whether there are other factors that likely would affect the domestic industry. As discussed above, nonsubject imports accounted for only *** percent of apparent U.S. consumption in 2018, down from *** percent of apparent U.S. consumption in 2013.[138] No party has argued that the U.S. market share of nonsubject imports is likely to increase significantly in the reasonably foreseeable future. Moreover, the average unit value of nonsubject imports was consistently higher than the average unit value of subject imports and the domestic industry's U.S. shipments during the period of review.[139] Imports from other sources are therefore unlikely to prevent low-priced subject imports from significantly increasing their penetration of the U.S. market after revocation. Given the domestic industry's dominant market share and the moderate degree of substitutability between subject imports and the domestic like product, any increase in subject import volume and market penetration is likely to come, at least in part, at the expense of the domestic industry. Accordingly, we find that the likely effects attributable to the subject imports are distinguishable from any effects likely from nonsubject imports in the event of revocation of the order.

We have also considered the likely effects of demand trends on the domestic industry. Reported apparent U.S. consumption was lower in 2018 than in 2013, and two of three responding purchasers reported that U.S. demand for EMD declined during the period of review as alkaline battery production migrated abroad.[140] Despite declining demand for EMD in the production of alkaline batteries, the industry's market share was higher in 2018 than in 2013.[141]

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[138] CR/PR at Table I-4. Thus, non-subject imports as a percent of apparent U.S. consumption declined *** percentage points from 2013 to 2018. *Id.*

[139] CR/PR at Tables I-2-3.

[140] CR/PR at D-3, Table I-4. We recognize the lower apparent U.S. consumption in 2018 compared to 2013 is partly a function of the lower coverage of the domestic industry in this review compared to the first reviews, as discussed above.

[141] CR/PR at Table I-4. The U.S. industry's market share increased from *** percent in 2013 to *** percent in 2018 – an increase of *** percentage points. *Id*. We observe that the domestic producers that provided data in this review and their predecessor companies were responsible for all merchant market shipments of the domestic like product in 2013 and 2018. *See* CR/PR at Table I-1 note; First Review Determinations, USITC Pub. 4506 at III-5.

Furthermore, demand for EMD in the production of lithium batteries for electric vehicles is expected to be driven by double-digit growth in that sector over the next several years, likely compensating to some extent for reduced demand for EMD from alkaline battery producers.[142] Two of three responding purchasers anticipate that U.S. demand for EMD will remain stable within a reasonably foreseeable time.[143] For these reasons, we find that the likely effects attributable to the subject imports are distinguishable from any effects likely from demand trends in the event of revocation of the order.

Accordingly, we conclude that, if the antidumping duty order were revoked, subject imports would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the reasons discussed above, we determine that revocation of antidumping duty order on EMD from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

[142] CR/PR at I-8.
[143] CR/PR at D-4.

Information obtained in this review

Background

On December 2, 2019, 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 electrolytic manganese dioxide ("EMD") from China 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 date	Action
December 1, 2019	Notice of initiation by Commerce (84 FR 65968, December 2, 2019)
December 2, 2019	Notice of institution by Commission (84 FR 66005, December 2, 2019)
March 6, 2020	Commission's vote on adequacy
March 20, 2020	Commerce's results of its expedited review
June 19, 2020	Commission's determination and views

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

[2] 84 FR 66005, December 2, 2019. 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. 84 FR 65968, December 2, 2019. 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 are 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. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

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, filed on behalf of the following entities:

1. Borman Specialty Materials ("Borman") and Prince Specialty Products LLC ("Prince"),[5] domestic producers of EMD (collectively referred to herein as "domestic interested parties").

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.

[5] Borman is the corporate successor to the petitioner in the original investigations, Tronox LLC, whereas Prince is the corporate successor to another domestic producer, Erachem Comilog, Inc. ("Erachem").

Table I-1

EMD: Summary of responses to the Commission's notice of institution

Type of interested party	Completed responses	
	Number of firms	Coverage
Domestic:		
U.S. producer	2	***%

Note: In their response to the notice of institution, domestic interested parties estimated that they account for this share of the total U.S. production of EMD during 2018. Domestic interested parties have based their computation on estimated total U.S. production of *** short tons in 2018 with Borman and Prince accounting for approximately *** and *** percent, respectively. Borman and Prince estimate that the other *** percent of total U.S. production (approximately *** short tons in 2018) is accounted for by Energizer, a captive U.S. producer of EMD that does not sell into the U.S. merchant market. Domestic interested parties' response to the Commission's cure letter, January 24, 2020, p. 2.

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews from Borman and Prince. The domestic interested parties request that the Commission conduct an expedited review of the antidumping duty order on EMD.[6]

The original investigations and subsequent reviews

The original investigations

The original investigations resulted from petitions filed on August 22, 2007 with Commerce and the Commission by Tronox LLC ("Tronox"), Oklahoma City, Oklahoma, concerning imports from Australia and China.[7] On August 14 and 18, 2008, Commerce determined that imports of EMD from Australia and China, respectively, were being sold at less than fair value ("LTFV").[8] The Commission determined on September 25, 2008 that the domestic industry was materially injured by reason of LTFV imports of EMD from Australia and China.[9] On October 7, 2008, Commerce issued its antidumping duty orders on Australia and

[6] Domestic interested parties' comments on adequacy, February 13, 2020, p 2.

[7] Electrolytic Manganese Dioxide from Australia and China, Investigation Nos. 731-TA-1124 and 1125 (Final), USITC Publication 4036, September 2008 ("Original publication"), p. I-1.

[8] 73 FR 47586, August 14, 2008; and 73 FR 48195, August 18, 2008.

[9] 73 FR 60322, October 10, 2008.

China, with the final weighted-average dumping margins of 83.66 percent and 149.92 percent, respectively.[10]

The first five-year reviews

On December 20, 2013, the Commission determined that it would conduct full reviews of the antidumping duty orders on EMD from Australia and China.[11] On February 3, 2014, Commerce determined that revocation of the antidumping duty orders on EMD from Australia and China would be likely to lead to continuation or recurrence of dumping.[12] On December 24, 2014, the Commission notified Commerce of its determinations that revocation of the antidumping duty order on EMD from Australia 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 and that revocation of the antidumping duty order on EMD from China would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.[13] Following the determinations in the five-year reviews by Commerce and the Commission, effective January 9, 2015, Commerce revoked the antidumping duty order on imports of EMD from Australia and issued a continuation of the antidumping duty order on imports of EMD from China.[14]

Previous and related investigations

On May 31, 1988, the Commission instituted antidumping duty investigations on EMD from Greece, Ireland, and Japan.[15] Commerce determined that there were no LTFV imports on EMD from Ireland, and the investigation concerning Ireland was terminated. On April 10, 1989, the Commission issued its final affirmative determinations with regards to imports of EMD from Greece and Japan,[16] and on April 17, 1989, Commerce issued antidumping duty orders on EMD from Greece and Japan.[17]

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[10] 73 FR 58538, October 7, 2008; and 73 FR 58537, October 7, 2008.
[11] 79 FR 30163, May 27, 2014.
[12] 79 FR 6162, February 3, 2014.
[13] 79 FR 77525, December 24, 2014.
[14] 80 FR 1393, January 9, 2015.
[15] 53 FR 21530, June 8, 1988.
[16] Electrolytic Manganese Dioxide from Greece and Japan, Investigation Nos. 731-TA-406 and 408 (Final), USITC Publication 2177, April 1989, p. 1.
[17] 54 FR 15243, April 17, 1989; and 54 FR 15244, April 17, 1989.

On May 26, 1998, Eveready (also referred to as Energizer) filed with the Commission a request for a changed circumstances review with regard to imports from Greece pursuant to section 751 (b) of the Act.[18] The Commission determined that the request did not show changed circumstances sufficient to warrant a review.[19] Eveready appealed the Commission's determination to the Court of International Trade ("CIT"). The Commission moved to dismiss the appeal, which was granted on the basis that an upcoming five-year review of the orders would provide the equivalent relief Eveready sought.[20]

On May 3, 1999, the Commission instituted five-year reviews to determine whether revocation of the antidumping duty orders on imports of EMD from Greece and Japan would likely lead to continuation or recurrence of material injury to the domestic EMD industry.[21] On April 20, 2000, the Commission determined that revocation would not be likely to lead to continuation or recurrence of material injury to the U.S. industry within a reasonably foreseeable time, and the orders were subsequently revoked.[22]

On July 31, 2003, the Commission instituted antidumping duty investigations on EMD from Australia, China, Greece, Ireland, Japan, and South Africa.[23] On September 15, 2003, the Commission made affirmative preliminary determinations on EMD from Australia, Greece, Ireland, Japan, and South Africa, and determined that imports from China were negligible, thus ending the investigation concerning EMD from China.[24] On March 2, 2004, the Commission received notice from Commerce stating that it had received a letter from petitioner Kerr-McGee Chemical LLC withdrawing its petitions. As a result, Commerce and the Commission terminated their respective investigations.[25]

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[18] In its request, Eveready alleged the following circumstances: (1) the addition of a third recognized type of EMD – "high drain" EMD; (2) structural changes in battery consumption (a shift from C and D size batteries to smaller AA and AAA size batteries); and (3) the impeding unavailability of supply of regular and "high drain" EMD from U.S. producers and producers in countries not subject to antidumping duty orders.

[19] 63 FR 43192, August 12, 1998.

[20] *Eveready Battery Co. v. United States*, Slip Op. 99-126 (CIT, November 23, 1999).

[21] 64 FR 23675, May 3, 1999. The Commission determined to conduct full five-year reviews on these orders. 64 FR 46407, August 25, 1999.

[22] Electrolytic Manganese Dioxide from Greece and Japan, Investigation. Nos. 731-TA-406 and 408 (Review), USITC Publication 3296, May 2000, p.1; and 65 FR 34661, May 31, 2000.

[23] 68 FR 47607, August 11, 2003.

[24] 68 FR 55062, September 22, 2003.

[25] 69 FR 9799, March 2, 2004; and 69 FR 11040, March 9, 2004.

Commerce's five-year review

Commerce is conducting an expedited review with respect to the order on imports of EMD from China and intends to issue the final results of this review based on the facts available not later than March 31, 2020.[26] Commerce's Issues and Decision Memorandum, published concurrently with Commerce's final results, will contain complete and up-to-date information regarding the background and history of the order, including scope rulings, duty absorption, changed circumstances reviews, and anti-circumvention. A complete version of the Issues and Decision Memorandum can be accessed at http://enforcement.trade.gov/frn/. The Memorandum will also include any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping duty order on imports of EMD from China will be noted in the sections titled "The original investigations" and "U.S. imports," if applicable.

The product

Commerce's scope

Commerce has defined the scope as follows:

> The merchandise covered by these orders includes all manganese dioxide (MnO_2) that has been manufactured in an electrolysis process, whether in powder, chip, or plate form. Excluded from the scope are natural manganese dioxide (NMD) and chemical manganese dioxide (CMD). The merchandise subject to these orders is classified in the Harmonized Tariff Schedule of the United States ("HTSUS") at subheading 2820.10.0000. While the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of these orders is dispositive.[27]

U.S. tariff treatment

EMD is currently imported under HTS statistical reporting number 2820.10.0000. This statistical reporting number also encompasses out of scope natural manganese dioxide (NMD) and chemical manganese dioxide (CMD). EMD imported from China enters the U.S. Market at a

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[26] Letter from Alex Villanueva, Senior Director, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, January 22, 2020.

[27] 80 FR 1393, January 9, 2015.

column 1-general duty rate of 4.7 percent ad valorem. Chinese-origin EMD is also subject to additional Section 301 tariffs of 25 percent ad valorem under HTS heading 9903.88.03. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Description and uses[28]

EMD is a form of manganese dioxide (MnO_2) that has been manufactured through an electrolysis process as either black powder, plate, or chip. It is a higher purity manganese dioxide than out of scope NMD or CMD; higher purity is required for use in high-performance batteries.[29] EMD is predominantly used in battery manufacturing.

There are three grades of EMD in use, depending on the type of battery being manufactured: alkaline, zinc chloride, or lithium.[30] These grades differ in characteristics such as particle size and acidity, but are similar in terms of purity and crystalline structure. Quality differences within each grade depend on the presence of impurities, performance within a battery design, discharge performance, and energy capacity.[31] Battery manufacturers require consistent EMD for each product line to ensure uniform performance both within and between lots, necessitating a variety of tests during quality control.[32] The qualification process extends beyond generalized material tests to include battery-specific qualification, which may take 6-16 months as tests are performed on the EMD itself, manufacturing model systems, and during pilot production. This qualification also ensures that manufacturing equipment is capable of using that EMD.

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[28] Unless otherwise noted, this information is based on Electrolytic Manganese Dioxide from Australia and China, Investigation Nos. 731-TA-1124 and 1125 (Review), USITC Publication 4506, December 2014 ("First review publication"), pp. I-8-I-10.

[29] NMD is relatively pure naturally occurring manganese ore and is not produced in the United States or imported in substantial quantities. CMD is chemically refined manganese dioxide that has lower battery performance characteristics than EMD, and it is not used in the United States.

[30] The function of EMD in a battery is the same regardless of type. It acts as the cathode (electron acceptor) for the battery's electrochemical reaction. For example, in a zinc-carbon battery, zinc gives up its electrons to the EMD. The movement of those electrons creates the electric current for the device powered by the battery.

[31] Impurities may include other metals (e.g., iron, molybdenum, lead, or antimony); other differences include parameters such as moisture content, acidity, and particle size.

[32] Tests include discharge performance (i.e., how long the battery can provide power during use), gassing (i.e., an estimate of impurity levels), and compressed density measurements (i.e., determining the amount of power per volume of the battery).

There have been substantial increases in specific market sectors using lithium batteries containing EMD since the previous review.[33] The largest of these has been for electric vehicles, which has and is anticipated to continue experiencing *** growth over the next several years.[34] Similar gains have been experienced for grid storage of renewable energy.[35] Lithium batteries containing EMD now constitute *** of batteries used in these markets, and the market share of EMD-containing batteries is anticipated to *** for several years.[36] EMD is also used in *** of non-rechargeable lithium batteries.[37]

In the original investigations, Tronox asserted that EMD is a commodity-like product, with all products interchangeable after passing a qualification process. Respondents asserted that EMD is not a commodity, with Spectrum Brands, Inc. noting the importance of non-price, physical characteristics in choosing an EMD source.

Manufacturing process[38]

EMD production starts with refining the manganese source prior to electrolysis. Manganese dioxide ore (MnO_2, pyrolusite) is first roasted in a furnace to produce manganese oxide reduced ore (MnO); the alternative source, manganese carbonate ore ($MnCO_3$, rhodochrosite), does not require this step. In both cases, the ore is next digested in a sulfuric acid bath to produce manganese sulfate ($MnSO_4$). This intermediate product is chemically treated to remove metal impurities such as copper, nickel, cobalt, molybdenum, antimony, and arsenic. The purified manganese sulfate solution is then filtered and concentrated before being fed into an electrolytic cell, where EMD is deposited on a titanium electrode over the course of 2-4 weeks.[39] Following deposition, the EMD-coated anode is removed and washed, and the EMD is physically removed from the surface as plates or chips. Another round of washing, neutralization, and drying precedes a grinding step to produce EMD powder.[40] Before shipping

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[33] In the form of lithium manganese oxide (LMO) and lithium nickel manganese cobalt oxide (NMC) materials.

[34] "Lithium, Lithium Minerals, and Lithium Chemicals," Samantha Wietlisbach and Adam Gao, Chemical Economics Handbook, March 16, 2016, pp. 19, 24–26, 33, 35.

[35] Ibid., pp. 24-25.

[36] Ibid., p. 26.

[37] Ibid., p. 28.

[38] Unless otherwise noted, this information is based on first review publication, pp. I-10-I-11.

[39] Hydrogen gas (H_2) is produced at the other electrode during processing, which is either lead or carbon.

[40] Neutralization determines the acidity of the final product, which is a specification that may vary depending on the end use.

to the end user, the EMD is modified to appropriate specifications and packed for the end user as required.[41]

The specific EMD manufacturing process will vary by producing firm, which may include differences in energy use requirements or grade of ore used. In the original investigations, ***.[42] For example, in China, ***. During the first five-year reviews, all three U.S. producers reported that ***.[43]

The industry in the United States

U.S. producers

During the final phase of the original investigations, the Commission received U.S. producer questionnaires from three firms, which accounted for all U.S. production of EMD in 2007.[44] During the first five-year reviews, the Commission received U.S. producer questionnaires from three firms, which accounted for all U.S. production of EMD in 2013.[45] In response to the Commission's notice of institution in this current review, domestic interested parties Borman and Prince estimate that they accounted for *** percent of total U.S. production of EMD in 2018.

Recent developments

Since the Commission's last five-year reviews, the following developments have occurred in the EMD industry. Both petitioners from the original investigations have been sold to, or merged with, other firms. Tronox LLC was sold to EMD Acquisition LLC on September 1,

[41] Additional steps to meet specification include modifying the powder's attributes such as particle size distribution, compressed density, and abrasiveness.

[42] Investigation Nos. 731-TA-1124 and 1125 (Review): Electrolytic Manganese Dioxide from China, Confidential Report, INV-MM-117, November 13, 2014, p. I-20 ("First review confidential report").

[43] Ibid.

[44] Original publication, p. III-1.

[45] First review publication, pp. I-11-I-12 and III-1.

2018, including its production facility in Henderson, Nevada.[46] This part of EMD Acquisition LLC was then renamed as Borman Specialty Materials, which continues to produce EMD in Nevada, along with other unrelated products.[47] Erachem's manganese operations were acquired by Prince International Corporation on December 30, 2016.[48] Both acquisitions were preceded by environmental emission compliance issues for the petitioning firms. In 2016, litigation was started against Erachem for nitrate and manganese compound emissions in Maryland.[49] In 2016, fines and permitting issues were levied against Tronox for air pollution issues.[50]

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 the current five-year review.[51] Table I-2 presents 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 investigations and prior five-year reviews.

[46] "Tronox Enters into Purchase Agreement to Sell Electrolytic Operations," March 21, 2018, http://investor.tronox.com/news-releases/news-release-details/tronox-enters-purchase-agreement-sell-electrolytic-operations.

[47] "About Us," Borman Specialty Materials, https://www.bormansm.com/www/; and "Electrolytic Manganese Dioxide," Borman Specialty materials, https://www.bormansm.com/www/electrolytic-manganese-dioxide/.

[48] Prince is based in Houston, Texas and produces a portfolio of inorganic chemicals for a variety of markets. "PMHC II, Inc. Completes Previously Announced Acquisition of the Erachem Manganese Chemicals Business," Prince International Corporation, https://www.princecorp.com/news/pmhc-ii-inc-completes-previously-announced-acquisition-of-the-erachem-manganese-chemicals-business/.

[49] "Curtis Bay Plant Faulted for Releasing 12 Times more Nitrogen into Bay than Permitted," Scott Dance, https://www.baltimoresun.com/maryland/bs-md-erachem-pollution-20160201-story.html; and "Chemical Firm is Illegally Discharging Nitrogen into Curtis Creek, Groups Say," Fern Shen, https://www.baltimorebrew.com/2016/02/01/chemical-firm-is-illegally-discharging-nitrogen-into-curtis-creek-groups-say/.

[50] "Tronox to Pay $505K Settlement for Hazardous Emissions at Henderson Plant," Michael Scott Davidson, https://www.reviewjournal.com/local/henderson/tronox-to-pay-505k-settlement-for-hazardous-emissions-at-henderson-plant/.

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

Table I-2
EMD: Trade and financial data submitted by U.S. producers, 2007, 2013, and 2018

Item	2007	2013	2018
Capacity (short tons)	70,475	***	***
Production (short tons)	61,468	***	***
Capacity utilization (percent)	87.2	***	***
U.S. shipments:			
Quantity (short tons)	45,895	***	***
Value ($1,000)	63,082	***	***
Unit value (per short ton)	$1,374	***	***
Net sales ($1,000)	83,113	***	***
COGS ($1,000)	83,902	***	***
COGS/net sales (percent)	100.9	***	***
Gross profit (loss) ($1,000)	(789)	***	***
SG&A expenses ($1,000)	8,812	***	***
Operating income (loss) ($1,000)	(9,601)	***	***
Operating income (loss)/net sales (percent)	(11.6)	***	***

Note: For a discussion of data coverage, please see the "U.S. producers" section.

Source: For the years 2007 and 2013, data are compiled using data submitted in the Commission's original investigations and first five-year reviews. *See app. C*. For the year 2018, data are compiled using data submitted by domestic interested parties. Domestic interested parties' response to the notice of institution, December 23, 2019, exh. 9.

Definitions of the domestic like product and domestic industry

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. 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. Under the related parties' provision, the Commission may exclude a related party for purposes of its injury determination if "appropriate circumstances" exist.[52]

[52] Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

In its original determination and its full first five-year review determination, the Commission defined one domestic like product consisting of all EMD coextensive with Commerce's scope. In its original determination and its full first five-year review determination, the Commission defined the domestic industry as all domestic producers of EMD.[53]

In its response to the notice of institution, the domestic interested parties agree with the Commission's prior definitions of the domestic like product and the domestic industry, but reserve the right to comment on the appropriate definitions in the course of this proceeding.[54]

U.S. imports and apparent U.S. consumption

U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from seven firms, which accounted for virtually all U.S. imports of EMD during 2007.[55] During the first five-year reviews, the Commission received U.S. importer questionnaire responses from five firms, representing the majority of in-scope U.S. imports from China.[56] Import data presented in the original investigations and first reviews are based on questionnaire responses.

In its response to the Commission's notice of institution, the domestic interested parties provided a list of five U.S. importers of EMD.[57]

U.S. imports

Table I-3 presents the quantity, value, and unit value of U.S. imports from China as well as the other top sources of U.S. imports (shown in descending order of 2018 imports by quantity).

[53] 84 FR 66005, December 2, 2019.
[54] Domestic interested parties' response to the notice of institution, December 23, 2019, pg. 20.
[55] First review publication, p. I-12.
[56] Ibid.
[57] Domestic interested parties' response to the notice of institution, December 23, 2019, exh. 10.

Table I-3
EMD: U.S. imports, 2014-18

Item	2014	2015	2016	2017	2018
	Quantity (short tons)				
China	200	288	88	88	80
Japan	6,536	6,447	5,575	7,653	5,499
Belgium	278	101	49	82	65
India	19	0	102	38	25
All other imports	8,453	659	263	405	216
Subtotal, nonsubject	15,286	7,207	5,989	8,179	5,805
Total imports	15,486	7,495	6,077	8,266	5,885
	Landed, duty-paid value ($1,000)				
China	176	307	165	156	184
Japan	15,778	15,719	12,872	17,544	13,189
Belgium	286	364	128	289	176
India	35	10	185	71	49
All other imports	15,059	1,234	493	786	455
Subtotal, nonsubject	31,158	17,327	13,678	18,690	13,869
Total imports	31,334	17,634	13,844	18,846	14,053
	Unit value (dollars per short tons)				
China	881	1,064	1,878	1,778	2,301
Japan	2,414	2,438	2,309	2,292	2,398
Belgium	1,028	3,586	2,607	3,531	2,726
India	1,858	36,966	1,814	1,859	1,955
All other imports	1,782	1,873	1,878	1,939	2,103
Subtotal, nonsubject	2,038	2,404	2,284	2,285	2,389
Total imports	2,023	2,353	2,278	2,280	2,388

Note: Because of rounding, figure may not add to total shown.

Note: South Africa, presented in “all other imports,” was the largest nonsubject source of imports in 2014 (6,783 short tons valued at $13.8 million); there were no imports of EMD from South Africa during 2015-18. Producers in South Africa reportedly ceased EMD production operations. *See* Domestic interested parties’ response to the notice of institution, December 23, 2019, p. 7; and first review confidential report, pp. IV-26-28.

Source: Compiled from official Commerce statistics for HTS statistical reporting number 2820.10.00.00.

These data may be overstated as HTS statistical reporting number 2820.10.00.00 may contain products outside the scope of this review.

Apparent U.S. consumption and market shares

Table I-4 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

Table I-4
EMD: U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares, 2007, 2013, and 2018

Item	2007	2013	2018
	Quantity (short tons)		
U.S. producers' U.S. shipments	60,485	***	***
U.S. imports from—			
Australia[58]	***	***	--
China	***	***	80
Subtotal, subject	***	***	N/A
All other sources	***	***	5,805
Total imports	33,422	***	5,885
Apparent U.S. consumption	93,907	***	***
	Value (1,000 dollars)		
U.S. producers' U.S. shipments	85,501	***	***
U.S. imports from—			
Australia	***	***	--
China	***	***	184
Subtotal, subject	***	***	--
All other sources	***	***	13,869
Total imports	45,441	***	14,053
Apparent U.S. consumption	130,942	***	***

Table continued on next page.

[58] Australia is a nonsubject source in the current review.

Table I-4--Continued
EMD: U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares, 2007, 2013, and 2018

Item	2007	2013	2018
	Share of consumption based on quantity (percent)		
U.S. producer's share	64.4	***	***
Australia	***	***	N/A
China	***	***	***
Subtotal, subject	***	***	N/A
All other sources	***	***	***
Total imports	35.6	***	***
	Share of consumption based on value (percent)		
U.S. producer's share	65.3	***	***
Australia	***	***	N/A
China	***	***	***
Subtotal, subject	***	***	N/A
All other sources	***	***	***
Total imports	34.7	***	***

Note: For the year 2007, apparent U.S. consumption was calculated using U.S. shipments of imports rather than U.S. imports.

Note: For the year 2018, imports from Australia are presented in "all other sources."

Note: For a discussion of data coverage, please see the "U.S. producers" and "U.S. importers" sections.

Source: For the years 2007 and 2013, data are compiled using data submitted in the Commission's original investigations and first five-year reviews. *See app. C.* For the year 2018, U.S. producers' U.S. shipments are compiled from the domestic interested parties' response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting number 2820.10.00.00. As discussed, these data may be overstated.

The industry in China

During the final phase of the original investigations, the Commission received foreign producer/exporter questionnaires from two firms, which accounted for approximately *** percent of all EMD production in China during 2007, and approximately *** percent of all EMD exports from China to the United States during 2007.[59] During the first five-year reviews, the Commission received ***.[60]

Although the Commission did not receive responses from any respondent interested parties in this five-year review, the domestic interested parties provided a list of 28 producers of EMD in China.[61]

The use of EMD in Chinese lithium battery production has substantially increased since the previous reviews to support the electric vehicle market.[62] Until 2017, the Chinese government exclusively incentivized production of an alternative lithium technology, but have since supported nickel manganese cobalt oxide (NMC) batteries as well.[63] Approximately *** manufacturers now produce these batteries in China, and total capacity has increased from approximately short tons in 2014 to short tons in 2017.[64] While Chinese imports of NMC material have increased over the period (to *** short tons in 2016), the country exports over double that amount (*** short tons in 2016).[65] Manufacturing EMD-based batteries for the mobile device sector has been more stable since 2014.[66] The United States has several domestic manufacturers that compete with Chinese firms in these markets, which only control approximately *** percent of the global market compared to China's *** percent.[67]

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[59] Investigation Nos. 731-TA-1124 and 1125 (Final), Electrolytic Manganese Dioxide from Australia and China, Confidential Report, INV-FF-108, August 27, 2008, as revised in INV-FF-112, September 8, 2008 ("Original confidential report"), p. VII-9.

[60] First review confidential report, p. IV-15.

[61] Domestic interested parties' response to the notice of institution, December 23, 2019, exh. 10.

[62] "Lithium, Lithium Minerals, and Lithium Chemicals," Samantha Wietlisbach and Adam Gao, Chemical Economics Handbook, March 16, 2016, p. 153.

[63] Ibid, pp. 27, 35, 158.

[64] Ibid, pp. 27-28, 166-168.

[65] Ibid, p. 169.

[66] Ibid, pp. 171-172.

[67] "Lithium, Lithium Minerals, and Lithium Chemicals," Samantha Wietlisbach and Adam Gao, Chemical Economics Handbook, March 16, 2016, p. 73; and "Why China Is Dominating Lithium-Ion Battery Production," Robert Rapier, August 4, 2019.

However, Chinese government support for domestic manufacturing of electric vehicle batteries is set to phase out in 2020, which may open the market for foreign firms.[68]

Table I-5 presents export data for manganese dioxide, a category that includes EMD and out-of-scope products, from China (by export destination in descending order of quantity for 2018).

Table I-5

Manganese dioxide: Exports from China, by destination, 2014–18

Item	Calendar year				
	2014	2015	2016	2017	2018
	Quantity (short tons)				
Singapore	6,587	8,408	9,429	11,465	14,550
Indonesia	10,904	11,361	10,727	10,907	10,894
India	6,389	7,056	7,659	7,887	7,042
Thailand	2,592	2,401	4,354	4,826	4,165
Germany	3,282	2,796	3,477	3,814	3,514
Vietnam	2,228	2,423	2,384	2,674	3,267
Belgium	612	1,968	795	6,484	3,094
Malaysia	2,430	2,160	2,833	4,216	3,066
South Korea	3,266	3,382	3,317	2,754	2,804
Myanmar	2,113	2,406	1,823	2,116	2,328
All other	7,023	7,072	7,428	9,400	8,378
Total	47,425	51,434	54,226	66,544	63,101

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

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheading 2820.10. These data may be overstated as HTS subheading 2820.10 may contain products outside the scope of this review.

https://www.forbes.com/sites/rrapier/2019/08/04/why-china-is-dominating-lithium-ion-battery-production/#24e418353786.

[68] "China's Breaking up the EV Battery Monopoly it Carefully Created," Echo Huang, June 25, 2019, https://qz.com/1651944/china-ends-policy-steering-ev-makers-to-local-battery-firms/.

Antidumping or countervailing duty orders in third-country markets

Japan extended antidumping duties on EMD from China, South Africa, and Spain for five years following the completion of a sunset review investigation in 2014.[69] A subsequent sunset review, initiated in 2018, removed the antidumping duties on imports from South Africa and Spain (effective March 4, 2019), but reaffirmed duties on imports from China.[70] The duties are 34.3 percent ad valorem for the Guizhou Restar Developing Dalong Manganese Industry and 46.5 percent for all other firms.[71]

The European Union implemented antidumping duties of 17.1 percent ad valorem on EMD from South Africa in 2008, which were renewed in 2014; however, these duties expired on March 1, 2019 due to a lack of requests for review.[72]

The global market

Table I-6 presents export data for manganese dioxide, a category that includes EMD and out-of-scope products by major sources in descending order of quantity for 2018. Table I-7 presents import data for manganese dioxide, a category that includes EMD and out-of-scope products by major destinations in descending order of quantity for 2018.

[69] "A Report was Compiled Concerning the Expiry Review of Anti-Dumping Duty of Electrolytic Manganese Dioxide Originating in the Republic of South Africa, the People's Republic of China, and Spain," Office for Trade Remedy Investigations, Trade Control Dept., Trade and Economic Cooperation Bureau, February 21, 2014, http://www.meti.go.jp/english/press/2014/0221_03.html; and first review publication, p. IV-3.

[70] "Semi-annual report of anti-dumping actions for the period 1 January – 30 June 2019," World Trade Organization, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/ADP/N328JPN.pdf.

[71] "Japan to renew anti-dumping duty on Chinese manganese for batteries," Mayumi Watanabe, February 26, 2019, https://www.spglobal.com/platts/en/market-insights/latest-news/metals/022619-japan-to-renew-anti-dumping-duty-on-chinese-manganese-for-batteries.

[72] Council Regulation (EC) No 221/2008, March 10, 2008; Council Implementing Regulation (EU) No 191/2014, February 24, 2014; and O.J. 2019/C 68/08.

Table I-6

Manganese dioxide: Global exports by major sources, 2014–18

Item	Calendar year				
	2014	2015	2016	2017	2018
	Quantity (short tons)				
China	47,425	51,434	54,226	66,544	63,101
South Africa	17,852	7,726	18,237	24,466	33,053
Japan	15,585	15,455	16,755	17,469	17,903
Spain	11,636	11,828	12,066	12,244	13,050
United States	7,202	6,593	7,299	8,286	8,874
Belgium	3,146	3,574	3,888	5,613	8,142
Zambia	0	0	0	34,987	6,013
Colombia	5,552	4,485	4,751	3,450	5,192
India	2,909	3,675	2,427	2,928	2,109
Peru	330	763	723	1,556	1,496
All other	9,303	6,051	9,621	5,916	4,339
Total	120,938	111,584	129,992	183,458	163,272

Note: Because of rounding, figures may not add to total shown.

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheading 2820.10. These data may be overstated as HTS subheading 2820.10 may contain products outside the scope of this review.

Table I-7

Manganese dioxide: Global imports by major destinations, 2014–18

Item	Calendar year				
	2014	2015	2016	2017	2018
	Quantity (short tons)				
Belgium	24,556	21,330	29,271	31,492	33,273
Indonesia	23,630	24,346	22,613	22,656	21,411
Australia	11,181	14,333	15,654	14,283	18,158
Singapore	10,741	10,344	12,124	12,611	16,868
Germany	17,267	19,350	16,406	14,877	16,159
Thailand	10,709	8,175	10,836	8,706	9,846
India	8,540	8,867	9,806	8,810	8,797
Malaysia	3,772	3,055	3,318	5,354	6,686
United States	15,486	7,514	6,058	8,266	5,885
Poland	2,256	4,054	5,341	4,873	5,337
All other	46,796	51,232	40,977	56,737	33,331
Total	174,935	172,599	172,403	188,666	175,751

Note: Because of rounding, figures may not add to total shown.

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheading 2820.10. These data may be overstated as HTS subheading 2820.10 may contain products outside the scope of this review.

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
84 FR 66005, December 2, 2019	*Electrolytic Manganese Dioxide From China: Institution of a Five-Year Review*	https://www.govinfo.gov/content/pkg/FR-2019-12-02/pdf/2019-25940.pdf
84 FR 65968, December 2, 2019	*Initiation of Five-Year ("Sunset") Review*	https://www.govinfo.gov/content/pkg/FR-2019-12-02/pdf/2019-26015.pdf

APPENDIX B

COMPANY-SPECIFIC DATA

* * * * * * *

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Table C-1
EMD: Summary data concerning the U.S. market, 2005-07, January-March 2007, and January-March 2008

(Quantity=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			
				January-March					Jan.-Mar.
Item	2005	2006	2007	2007	2008	2005-07	2005-06	2006-07	2007-08
U.S. consumption quantity:									
Amount	109,619	100,862	93,907	19,493	21,421	-14.3	-8.0	-6.9	9.9
Producers' share (1)	64.4	61.4	64.4	65.8	68.2	0.0	-2.9	3.0	2.4
Importers' share (1):									
Australia	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Subtotal	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***
Total imports	35.6	38.6	35.6	34.2	31.8	-0.0	2.9	-3.0	-2.4
U.S. consumption value:									
Amount	142,731	137,780	130,942	27,179	31,073	-8.3	-3.5	-5.0	14.3
Producers' share (1)	66.1	64.4	65.3	67.0	68.0	-0.8	-1.8	0.9	1.0
Importers' share (1):									
Australia	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Subtotal	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***
Total imports	33.9	35.6	34.7	33.0	32.0	0.8	1.8	-0.9	-1.0
U.S. shipments of imports from:									
Australia:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
China:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subtotal:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All sources:									
Quantity	39,066	38,894	33,422	6,673	6,808	-14.4	-0.4	-14.1	2.0
Value	48,324	49,113	45,441	8,958	9,944	-6.0	1.6	-7.5	11.0
Unit value	$1,237	$1,263	$1,360	$1,342	$1,461	9.9	2.1	7.7	8.8
Ending inventory quantity	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity	70,024	69,998	70,475	17,603	17,625	0.6	-0.0	0.7	0.1
Production quantity	69,582	68,412	61,468	16,592	15,976	-11.7	-1.7	-10.2	-3.7
Capacity utilization (1)	99.4	97.7	87.2	94.3	90.6	-12.1	-1.6	-10.5	-3.6
U.S. shipments:									
Quantity	70,553	61,968	60,485	12,820	14,613	-14.3	-12.2	-2.4	14.0
Value	94,407	88,667	85,501	18,221	21,129	-9.4	-6.1	-3.6	16.0
Unit value	$1,338	$1,431	$1,414	$1,421	$1,446	5.6	6.9	-1.2	1.7
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1)	***	***	***	***	***	***	***	***	***
Production workers	212	213	211	215	208	1.9	2.9	-0.9	-3.3
Hours worked (1,000s)	458	460	454	115	114	-0.9	0.4	-1.3	-0.9
Wages paid ($1,000s)	12,050	12,697	13,105	3,182	3,424	8.8	5.4	3.2	7.6
Hourly wages	$26	$28	$29	$28	$30	9.7	4.9	4.6	8.5
Productivity (tons/1,000 hours)	151.9	148.7	135.4	144.3	140.1	-10.9	-2.1	-9.0	-2.9
Unit labor costs	$173	$186	$213	$192	$214	23.1	7.2	14.9	11.8
Net sales:									
Quantity	70,835	62,208	60,203	12,820	14,734	-15.0	-12.2	-3.2	14.9
Value	94,808	87,136	83,113	17,623	21,043	-12.3	-8.1	-4.6	19.4
Unit value	$1,338	$1,401	$1,381	$1,375	$1,428	3.1	4.7	-1.4	3.9
Cost of goods sold (COGS)	82,970	81,995	83,902	18,669	20,066	1.1	-1.2	2.3	7.5
Gross profit or (loss)	11,838	5,141	(789)	(1,046)	977	(2)	-56.6	(2)	(2)
SG&A expenses	8,228	8,543	8,812	2,286	2,654	7.1	3.8	3.1	16.1
Operating income or (loss)	3,610	(3,402)	(9,601)	(3,332)	(1,677)	(2)	(2)	182.2	49.7
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	$1,171	$1,318	$1,394	$1,456	$1,362	19.0	12.5	5.7	-6.5
Unit SG&A expenses	$116	$137	$146	$178	$180	26.0	18.2	6.6	1.0
Unit operating income or (loss)	$51	($55)	($159)	($260)	($114)	(2)	(2)	-191.6	56.2
COGS/sales (1)	87.5	94.1	100.9	105.9	95.4	13.4	6.6	6.8	-10.6
Operating income or (loss)/ sales (1)	3.8	-3.9	-11.6	-18.9	-8.0	-15.4	-7.7	-7.6	10.9

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Undefined.

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 not 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.

Table C-2
EMD: Summary data concerning the U.S. merchant market, 2005-07, January-March 2007, and January-March 2008

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Table C-3
EMD: Summary data concerning the U.S. market, including data on U.S. battery producers' usage of EMD, 2005-07, January-March 2007, and January-March 2008

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Table C-1
EMD: Summary data concerning the U.S. market, 2008-13, January to June 2013, and January to June 2014

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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 it named the following four firms as the top purchasers of electrolytic manganese dioxide: ***. Purchaser questionnaires were sent to these four firms and three firms (***) provided responses which are presented below.

1. Have there been any significant changes in the supply and demand conditions for electrolytic manganese dioxide that have occurred in the United States or in the market for electrolytic manganese dioxide in China since January 1, 2014?

Purchaser	Changes that have occurred
***	Since 2014, overall US demand for electrolytic manganese dioxide has decreased due to the partial shift of *** alkaline battery production to China and diminishing market demand for C and D batteries. To our knowledge no production capacity changes have taken place in North America. Since 2014, EMD supply and demand in China has steadily increased due to more alkaline cells are being manufactured in China.
***	Capacity used in EMD manufacturing may be used for products targeted for rechargeable batteries designed for use in hybrid (HEV) and electric vehicles (EV). Growth in HEV and EV applications may impact global demand. U.S. Producers of primary zinc manganese batteries continue to evaluate its manufacturing footprint to best serve its customers and consumers. EMD is a critical battery material for primary battery manufacturing. Known closure of the Duracell facility in Laurent SC since January 1, 2014 likely diminished immediate demand in US for EMD.
***	No

2. Do you anticipate any significant changes in the supply and demand conditions for electrolytic manganese dioxide in the United States or in the market for electrolytic manganese dioxide in China within a reasonably foreseeable time?

Purchaser	Anticipated changes
***	Our view is that the US demand for electrolytic manganese dioxide will be stable in the years ahead. Of course, in the current unpredictable geopolitical environment, the imposition of tariff(s) among other actions may/can lead to alternative supply / demand scenarios in a reasonably foreseeable time (1 to 2 years). From *** perspective EMD demand will – at worst – remain stable in the near term. But in our view it is more likely that the continued focus on and transition to battery technology and battery-powered devices will yield a significant increase in demand for EMD, particularly in new and different formulations.
***	Much of the global factors of supply reside in the Chinese Market, which is difficult to discern, but-for reports refencing HV and EV demand, and potential heighten level of activity in steel markets which uses EMM, (Electrolytic Manganese Metal) as an additive in its process. EMM uses similar process capacity as EMD. Additionally, U.S. Producers of EMD are required to import high quality manganese ore for its production of EMD, given scarce or low volume of supply of such quality within the U.S. High quality ore is required in order to meet the ever demanding specifications of EMD from primary battery manufacturers in the U.S.
***	No