

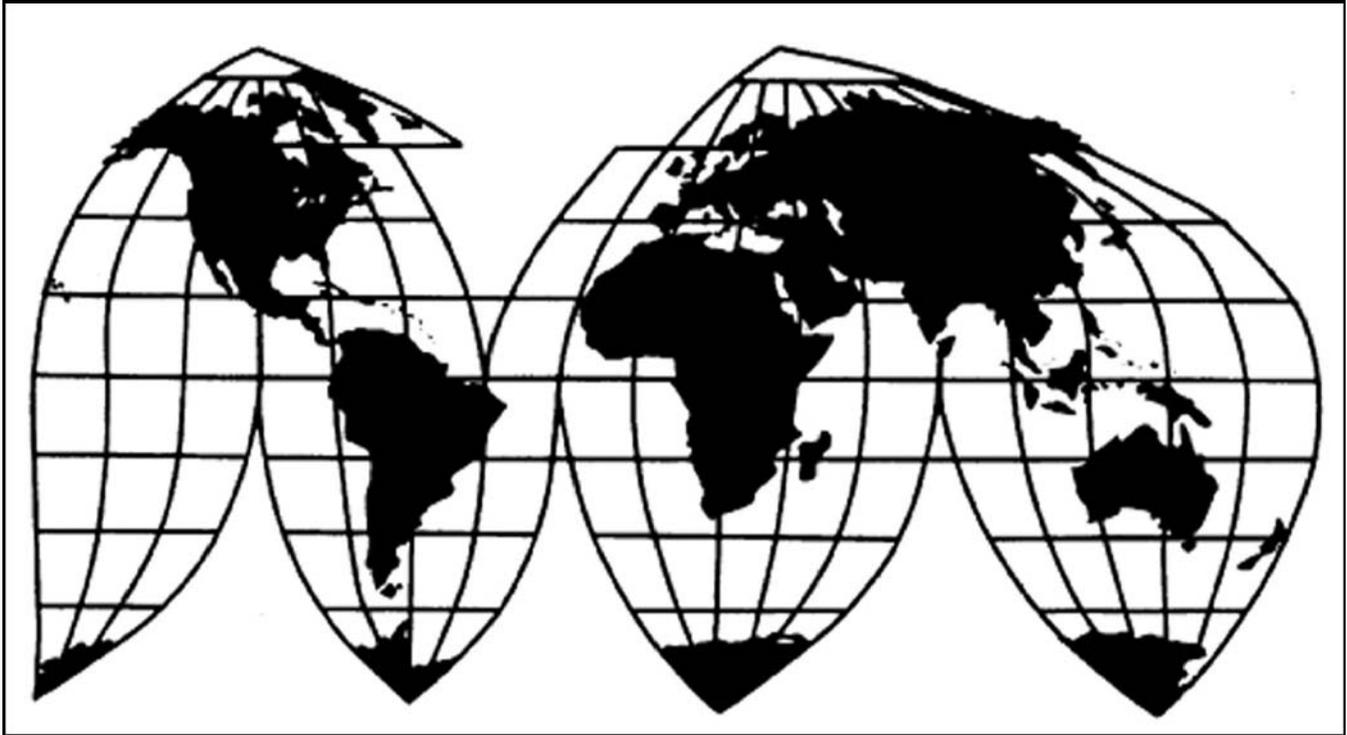
Electrolytic Manganese Dioxide From Australia and China

Investigation Nos. 731-TA-1124 and 1125 (Final)

Publication 4036

September 2008

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

Shara L. Aranoff, Chairman
Daniel R. Pearson, Vice Chairman
Deanna Tanner Okun
Charlotte R. Lane
Irving A. Williamson
Dean A. Pinkert

Robert A. Rogowsky
Director of Operations

Staff assigned

Cynthia Trainor, Investigator
Jack Greenblatt, Industry Analyst
Gerry Benedick, Economist
David Boyland, Accountant
Gracemary Roth-Roffy, Attorney
Lemuel Shields, Statistician

George Deyman, Supervisory Investigator

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Electrolytic Manganese Dioxide From Australia and China

Investigation Nos. 731-TA-1124 and 1125 (Final)

Publication 4036



September 2008

CONTENTS

	<i>Page</i>
Determinations	1
Views of the Commission	3
Part I: Introduction	I-1
Background	I-1
Statutory criteria and organization of the report	I-1
U.S. EMD market summary	I-3
Summary data	I-3
Previous and related investigations	I-4
Nature and extent of sales at LTFV	I-5
The subject merchandise	I-5
Commerce's scope	I-5
Tariff treatment	I-6
The product	I-6
Description and applications	I-6
Manufacturing processes	I-9
Domestic like product	I-10
Part II: Conditions of competition in the U.S. market	II-1
Channels of distribution and market characteristics	II-1
Purchases of EMD by U.S. battery producers	II-2
Usage of EMD by U.S. battery producers	II-3
U.S. battery producers' inventories of EMD	II-5
Supply and demand considerations	II-6
U.S. supply	II-6
U.S. demand	II-12
Changes in U.S. demand for EMD	II-12
Changes in demand for EMD outside the United States	II-16
Substitutability issues	II-17
EMD qualification	II-17
EMD blending	II-18
Changes in product range and marketing of EMD	II-18
Factors affecting purchases	II-18
Comparisons between the U.S.-produced and imported EMD	II-20
Elasticity estimates	II-24
U.S. supply elasticity	II-24
U.S. demand elasticity	II-24
Substitution elasticity	II-25
Part III: U.S. producers' production, shipments, and employment	III-1
U.S. producers	III-1
U.S. capacity, production, and capacity utilization	III-1
U.S. producers' U.S. shipments and export shipments	III-3
Captive consumption	III-3
U.S. producers' imports and purchases of imports	III-5
U.S. producers' inventories	III-5
U.S. employment, wages, and productivity	III-6

CONTENTS

	<i>Page</i>
Part IV: U.S. imports, apparent consumption, and market shares	IV-1
U.S. importers	IV-1
U.S. imports	IV-1
Negligibility	IV-3
Cumulation considerations	IV-4
Fungibility	IV-4
Geographical market segmentation	IV-5
Common or similar channels of distribution	IV-5
Simultaneous presence in the market	IV-5
Apparent U.S. consumption	IV-6
U.S. market shares	IV-8
Ratio of imports to U.S. production	IV-9
 Part V: Pricing and related information	 V-1
Factors affecting pricing	V-1
Raw material costs	V-1
Tariff rates and transportation costs to the U.S. market	V-3
U.S.-inland transportation costs	V-4
Exchange rates	V-5
Pricing practices	V-7
Short-term contracts/agreements	V-8
Other pricing practices	V-9
Price data	V-9
Annual EMD contract/agreement price offers and awards	V-9
Questionnaire quarterly selling price data	V-11
Prices of EMD in the U.S. market compared to prices in other countries	V-15
Lost revenues and lost sales	V-15
 Part VI: Financial experience of the U.S. producers	 VI-1
Background	VI-1
Merchant-market operations on EMD	VI-1
Overall operations on EMD	VI-3
Capital expenditures, research and development expenses, assets, and return on investment ...	VI-8
Capital and investment	VI-8
Actual negative effects (Australia)	VI-8
Anticipated negative effects (Australia)	VI-8
Actual negative effects (China)	VI-8
Anticipated negative effects (China)	VI-8
 Part VII: Threat considerations and <i>Bratsk</i> information	 VII-1
The industry in Australia	VII-1
Delta EMD Australia Pty Limited	VII-1
HiTec Energy Limited	VII-3
The industry in China	VII-3
The industries in Australia and China combined	VII-4

CONTENTS

	<i>Page</i>
Part VII: Threat considerations and Bratsk information—Continued	
U.S. importers’ inventories	VII-5
U.S. importers’ imports subsequent to March 31, 2008	VII-5
Antidumping investigations in third-country markets	VII-5
Information on nonsubject sources	VII-6
“Bratsk” considerations	VII-6
Nonsubject source information	VII-6
Overview	VII-6
Brazil	VII-10
Colombia	VII-10
Greece	VII-11
India	VII-11
Japan	VII-12
South Africa	VII-13
Spain	VII-14
 Appendixes	
A. <i>Federal Register</i> notices	A-1
B. Calendar of public hearing	B-1
C. Summary data	C-1
D. U.S. battery producers’ discussions of bargaining leverage in negotiating prices of EMD and their discussions of EMD price leaders in the U.S. market during January 2005-March 2008	D-1
E. U.S. battery producers’ discussions of their qualification process for EMD suppliers	E-1
F. U.S. battery producers’ usage of EMD for each category of EMD battery they produced domestically, by grade of EMD, by country of origin and supplier of EMD, annually during 2005-07 and during January-March 2008	F-1
G. U.S. battery producers’ end-of-period EMD inventories by country of origin and by period, January 2005-March 2008	G-1
H. Offshore battery production locations of U.S. battery producers	H-1
I. Detailed price offer and contract award information of each responding U.S. battery producer by contract year, 2005-08	I-1
J. Net U.S. selling price data of the domestic and subject imported EMD for sales to each U.S. battery-producer customer	J-1
K. Questionnaire selling price data for the specified EMD product category 1 produced in the United States and imported from nonsubject countries	K-1

Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 731-TA-1124 and 1125 (Final)

ELECTROLYTIC MANGANESE DIOXIDE FROM AUSTRALIA AND CHINA

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from Australia and China of electrolytic manganese dioxide (“EMD”), provided for in subheading 2820.10.00 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (Commerce) to be sold in the United States at less than fair value (LTFV).

BACKGROUND

The Commission instituted these investigations effective August 22, 2007, following receipt of a petition filed with the Commission and Commerce by Tronox LLC, Oklahoma City, OK. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of EMD from Australia and China were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase of the Commission’s investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of April 30, 2008 (73 FR 23491). The hearing was held in Washington, DC, on July 24, 2008, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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 these investigations, we determine that an industry in the United States is materially injured by reason of imports of electrolytic manganese dioxide (“EMD”) from Australia and China that is sold in the United States at less than fair value (“LTFV”).

I. BACKGROUND

In these investigations, Tronox LLC (“Tronox” or “Petitioner”) is the sole petitioner. Representatives from Tronox appeared at the hearing on July 24, 2008, and filed prehearing and posthearing briefs. Australian subject producer Delta EMD Australia (Pty) Limited (“Delta” or “Australian Respondent”) submitted briefs but did not appear at the hearing. Spectrum Brands Inc. (“Spectrum”), a U.S. purchaser that opposes the petition, submitted prehearing and posthearing briefs but did not appear at the hearing. No producer, exporter, or importer of the subject merchandise from China appeared at the hearing or submitted briefs.

The Commission received questionnaire responses from three U.S. producers of EMD that accounted for all U.S. production of EMD. The Commission also received a questionnaire response from Delta, the sole Australian producer of EMD during the period of investigation.¹ In addition, the Commission received two foreign producer questionnaire responses from the *** of EMD in China, Xiangtan Electrochemical Scientific Ltd. (“Xiangtan”) and Guizhou Redstar Developing Dalong Manganese Industry, Ltd. (“Redstar”), which together accounted for approximately *** percent of Chinese EMD production and *** percent of Chinese EMD exports to the United States in 2007.² Finally, the Commission obtained questionnaire responses from seven importers that accounted for virtually all imports of EMD during the period of investigation.³

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁴ Section 771(4)(A) of the Tariff Act of 1930, as amended (“the Tariff Act”), defines the relevant domestic industry as the “producers as a {w}hole 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.”⁵ In turn, 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....”⁶

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in

¹ Confidential Staff Report (“CR”) and Public Staff Report (“PR”) at I-3.

² CR at VII-9, PR at VII-4.

³ CR/PR at IV-1.

⁴ 19 U.S.C. § 1677(4)(A).

⁵ 19 U.S.C. § 1677(4)(A).

⁶ 19 U.S.C. § 1677(10).

characteristics and uses” on a case-by-case basis.⁷ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.⁸ The Commission looks for clear dividing lines among possible like products and disregards minor variations.⁹ Although the Commission must accept Commerce’s determination as to the scope of the imported merchandise subsidized or sold at LTFV,¹⁰ the Commission determines what domestic product is like the imported articles Commerce has identified.¹¹

B. Product Definition

In its final determinations, Commerce defined the imported merchandise within the scope of these investigations as follows –

[a]ll manganese dioxide (MnO₂) that has been manufactured in an electrolytic process, whether in powder, chip or plate form. Excluded from the scope are natural manganese dioxide (NMD) and chemical manganese dioxide (CMD).¹²

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.¹³ There are three grades of EMD – alkaline, lithium, and zinc-chloride – that are designed to be used in alkaline, lithium, and chloride batteries, respectively. All types and grades of EMD are produced by the same general process.¹⁴ The three grades differ primarily in particle size and pH or acidity/alkalinity (characteristics

⁷ 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); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), aff’d, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

⁸ See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

⁹ Nippon, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49; see also S. Rep. No. 96-249 at 90-91 (1979) (Congress has indicated that the like product standard should not be interpreted in “such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

¹⁰ See, e.g., USEC, Inc. v. United States, 34 Fed. Appx. 725, 730 (Fed. Cir. 2002) (“The ITC may not modify the class or kind of imported merchandise examined by Commerce.”); Algoma Steel Corp. v. United States, 688 F. Supp. 639, 644 (Ct. Int’l Trade 1988), aff’d, 865 F.3d 240 (Fed. Cir.), cert. denied, 492 U.S. 919 (1989).

¹¹ Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); Cleo, 501 F.3d at 1298, n.1 (“Commerce’s {scope} finding does not control the Commission’s {like product} determination.”); Torrington, 747 F. Supp. at 748-52 (affirming Commission determination of six like products in investigations where Commerce found five classes or kinds).

¹² 73 Fed. Reg. 48195 (Aug. 18, 2008).

¹³ CR at I-8-I-9, PR at I-6-I-7.

¹⁴ CR at I-9 and I-13, PR at I-7 and I-9.

which are imparted during the finishing process for EMD), but are similar in all other physical characteristics.¹⁵

Virtually all EMD produced and consumed in the United States is of the alkaline grade.¹⁶ Within each of the grades of EMD, the quality of EMD may vary.¹⁷ Typically, higher quality EMD is used in AA/AAA type batteries, while lower quality grade may be used in C/D batteries. All new supplies of EMD must be qualified by the battery manufacturer before they can be used in a specific battery.¹⁸ Almost all EMD is sold directly or indirectly through an importer or producers' sales representatives to end users (battery manufacturers).¹⁹

C. Domestic Like Product

In the preliminary phase of these investigations, Petitioner proposed that the Commission define a single domestic like product, all EMD, coextensive with the scope of investigation. Respondents did not object to the proposed definition. The Commission found no significant differences among the several grades of EMD with respect to physical characteristics, uses, production processes, or channels of distribution. Given that there was no clear dividing line among the grades of EMD, the Commission defined a single like product as EMD coextensive with Commerce's scope.²⁰

In the final phase of these investigations, no party advocates defining the domestic like product differently. The record contains no information pertinent to the definition of the domestic like product materially different from the information generated in the preliminary phase of these investigations.²¹ Accordingly, we define a single domestic like product coextensive with the scope of the investigations for the reasons stated in the preliminary determinations.

D. Domestic Industry

The domestic industry is defined as the domestic "producers as a [w]hole 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."²² In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

1. Related Parties

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 19 U.S.C. § 1677(4)(B). Subsection 1677(4)(B) allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are

¹⁵ CR at I-9, PR at I-7.

¹⁶ CR at I-9, PR at I-7.

¹⁷ CR at I-9-I-10, PR at I-7-I-8.

¹⁸ CR at I-11, PR at I-8.

¹⁹ CR/PR at II-1.

²⁰ Electrolytic Manganese Dioxide from Australia and China, Inv. Nos. 731-TA-1124 and 1125 (Prelim.), USITC Pub. 3955 (Oct. 2007) ("Preliminary Determination") at 6.

²¹ See generally CR at I-7-I-16, PR at I-6-I-10.

²² 19 U.S.C. § 1677(4)(A).

related to an exporter or importer of subject merchandise or which are themselves importers²³. Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.²⁴ In the preliminary determinations, the Commission concluded that both ***, on the basis of its imports of subject merchandise, and ***, on the basis of its relationship with a subject producer and its imports of subject merchandise, were related parties.²⁵ The Commission found, however, that appropriate circumstances did not exist to exclude these producers from the domestic industry.

In the final phase of these investigations, there continues to be a related party issue with respect to ***.²⁶ *** further reported that ***.²⁷ As such, *** is a related party.

Despite its interest in ***, there is no evidence in the record that *** principal interest lies in the importation of subject merchandise rather than in domestic production. *** imports of subject merchandise were less than *** compared to its domestic production of over *** short tons during each

²³ 19 U.S.C. § 1677(4)(B).

²⁴ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party are as follows: (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, *i.e.*, 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, and (3) the position of the related producer vis-a-vis the rest of the industry, *i.e.*, whether inclusion or exclusion of the related party will skew the data for the rest of the industry. See, e.g., Torrington Co. v. United States, 790 F. Supp. 1161 (Ct. Int'l Trade 1992), aff'd without opinion, 991 F.2d 809 (Fed. Cir. 1993). The Commission has also considered the ratio of import shipments to U.S. production for related producers and whether the primary interest of the related producer lies in domestic production or importation. These latter two considerations were cited as appropriate factors in Allied Mineral Products, Inc. v. United States, —F. Supp. 2d—, Slip Op. 04-139 (Ct. Int'l Trade November 12, 2004) at 5-6 (“The most significant factor considered by the Commission in making the ‘appropriate circumstances’ determination is whether the domestic producer accrued a substantial benefit from its importation of the subject merchandise.”); USEC, Inc. v. United States, 132 F. Supp. 2d 1, 12 (Ct. Int'l Trade 2001) (“the provision’s purpose is to exclude from the industry headcount domestic producers substantially benefitting from their relationships with foreign exporters.”), aff'd, Slip Op. 01-1421 (Fed. Cir. April 22, 2002); S. Rep. No. 249, 96th Cong. 1st Sess. at 83 (1979) (“where a U.S. producer is related to a foreign exporter and the foreign exporter directs his exports to the United States so as not to compete with his related U.S. producer, this should be a case where the ITC would not consider the related U.S. producer to be a part of the domestic industry”).

²⁵ Preliminary Determination at 8.

²⁶ We note that *** did not import subject merchandise during the period of investigation in these final investigations. It did, however, purchase subject merchandise from importer ***. The Commission has concluded that a domestic producer that does not itself import subject merchandise, or does not share a corporate affiliation with an importer, may nonetheless be deemed a related party if it controls large volumes of imports. The Commission has found such control to exist where the domestic producer was responsible for a predominant share of an importer's purchases and the importer's imports were substantial. See, e.g., Foundry Coke from China, Inv. No. 731-TA-891 (Final), USITC Pub. 3449 (September 2001) at 8-9; Certain Cut-to-Length Steel Plate from the Czech Republic, France, India, Indonesia, Italy, Japan, Korea, and Macedonia, Inv. Nos. 701-TA-387-392 and 731-TA-815-822 (Prelim.), USITC Pub. 3181 at 12 (April 1999). The record, however, indicates that *** purchased *** quantities of subject merchandise and these purchases did not represent a predominant share of *** total imports. As such, we find that *** is not a related party.

²⁷ CR at III-9, PR at III-5.

year of the period of investigation.²⁸ Nor is *** currently certified to supply EMD to any U.S. battery manufacturer, which further suggests that *** interest does not lie in importation.²⁹ ***.³⁰ Finally, ***.^{31 32 33} Based on the record evidence, we find that appropriate circumstances do not exist to exclude *** from the domestic industry.

Based on the reasons above and consistent with our definition of the domestic like product, we define the domestic industry as all domestic producers of EMD.

III. CUMULATION³⁴

For purposes of evaluating the volume and price effects for a determination of material injury by reason of the subject imports, section 771(7)(G)(I) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with domestic like products in the U.S. market.³⁵ In assessing whether subject imports compete with each other and with the domestic like product, the Commission has generally considered four factors:

- (1) the degree of fungibility between the subject imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
- (2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;
- (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

²⁸ CR/PR at Table III-2.

²⁹ CR at II-4 and tabulation at II-4, PR at II-2.

³⁰ CR/PR at Table III-1.

³¹ CR/PR at Table VI-7.

³² Consistent with her practice in past investigations and reviews, Chairman Aranoff does not rely on individual-company operating income margins, which reflect a domestic producer's financial operations related to production of the domestic like product, in assessing whether a related party has benefitted from importation of subject merchandise. Rather, she determines whether to exclude a related party based principally on its ratio of subject imports to domestic production and whether its primary interests lie in domestic production or importation.

³³ As he has done in other investigations, Commissioner Pinkert has not relied upon related parties' financial performance on their U.S. manufacturing operations as a factor in determining whether there are appropriate circumstances to exclude them from the domestic industry and has instead relied on the other information set forth in the text. He has not relied upon their financial performance because the record in the final phase of these investigations does not reflect a link between their profitability and any benefit that they derive from imports.

³⁴ Negligibility under 19 U.S.C. § 1677(24) is not an issue in these investigations. During the most recent 12-month period prior to filing of the petition for which data are available, subject imports from Australia accounted for 48.5 percent of total imports of EMD and subject imports from China accounted for 32.6 percent of total imports. CR/PR at Table IV-4.

³⁵ 19 U.S.C. § 1677(7)(G)(i).

- (4) whether the subject imports are simultaneously present in the market.^{36 37}

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.³⁸ Only a “reasonable overlap” of competition is required.³⁹

The statutory threshold for cumulation is satisfied in these investigations, because all petitions were filed on the same day.⁴⁰ None of the statutory exceptions to cumulation is applicable.

A. Parties’ Arguments

Petitioner. Petitioner argues for cumulation, stating that the Commission found a reasonable overlap of competition in its preliminary determinations and the current record again supports such a conclusion.⁴¹ In particular, it notes that EMD competes for end-user sales without regard to geographical location in the United States; subject imports from both countries and domestic product are sold directly to end users; and subject imports generally have been simultaneously present in the U.S. market throughout the period.

At the hearing, Tronox was asked, given the closure of the sole Australian producer of EMD in March 2008, whether the Commission should find that subject imports from Australia were simultaneously present for cumulation purposes.⁴² Tronox responded in its brief that “[n]othing about Delta’s unreliable claims that it stopped production in March 2008 should alter the POI-based analysis required for the Commission’s present injury determination.”⁴³ It notes that subject imports from Australia and China entered the U.S. market in all months from January 2005 through March 2008, with a few exceptions. Additionally, Petitioner stresses that battery producers’ reported usage data confirm that subject imports from Australia and China were simultaneously present in the U.S. market throughout the period of investigation.⁴⁴

³⁶ See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), aff’d, Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898 (Ct. Int’l Trade), aff’d, 859 F.2d 915 (Fed. Cir. 1988).

³⁷ Commissioner Lane notes with respect to the first factor that her analysis does not require such similarity of products that a perfectly symmetrical fungibility is required and that this factor would be better described as an analysis of whether subject imports from each country and the domestic like product could be substituted for each other. See Separate Views of Commissioner Charlotte R. Lane, Certain Lightweight Thermal Paper from China, Germany, and Korea, Inv. Nos. 701-TA-451 and 731-TA-1126-1128 (Preliminary), USITC Pub. 3964 (Nov. 2007).

³⁸ See, e.g., Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

³⁹ The Uruguay Round Agreements Act, Statement of Administrative Action, H.R. Doc. No. 103-316, Vol. 1 at 848 (1994) (“SAA”) expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” SAA at 848 (citing Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int’l Trade 1988)), aff’d, 859 F.2d 915 (Fed. Cir. 1988). See Goss Graphic Sys., Inc. v. United States, 33 F. Supp. 2d 1082,1087 (Ct. Int’l Trade 1998) (“cumulation does not require two products to be highly fungible”); Wieland Werke, AG, 718 F. Supp. at 52 (“Completely overlapping markets are not required.”).

⁴⁰ CR at I-1, PR at I-1.

⁴¹ Petitioner’s Prehearing Brief at 16-17.

⁴² Transcript at 61 (Commissioner Pinkert).

⁴³ Petitioner’s Posthearing Brief at 12.

⁴⁴ Petitioner’s Posthearing Brief at 12-13.

Australian Respondent. Delta did not address whether subject imports from the two countries should be cumulated.

Spectrum. Spectrum argues that the Commission should not cumulate subject imports from Australia and China because they did not compete directly with each other in the U.S. market late in the period of investigation.⁴⁵ According to Spectrum, the sole Australian producer “has ceased all manufacturing operations and there will be no production of EMD in Australia for the foreseeable future ***. Because of this significant development, Spectrum contends that imports of EMD from Australia and China cannot be competing with each other and imports from Australia cannot be competing with the domestic like product” and the Commission should therefore decline to cumulate.⁴⁶

With respect to whether there is a reasonable overlap of competition over the period of investigation generally, Spectrum argues that subject imports from China are not fungible with subject imports from Australia or with the domestic like product. Spectrum contends that it cannot use domestic EMD interchangeably with imported EMD from Australia and China, emphasizing that *** of the domestic producers *** currently qualified to supply EMD to Spectrum for use in any of its four alkaline battery sizes (AA, AAA, C or D).⁴⁷ Spectrum points out that it is unable to switch easily from one EMD supplier to another given that “the significant processing requirements, product performance issues and frequent changes in battery design require extensive engineering effort in production and technology prior to any change in EMD supplier[s].”⁴⁸ Finally, it indicates that Chinese EMD is not directly substitutable with other EMD because ***.⁴⁹

B. Analysis

Section 771(7)(G)(i) of the Act requires that the Commission assess cumulatively the volume and effect of imports of the subject merchandise from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market.⁵⁰ In assessing whether subject imports compete with each other for cumulation purposes, the Commission relies on four factors, including simultaneous presence, the purpose of which is to determine whether the “marketing of imports is reasonably coincident.”⁵¹ In so doing, the Commission generally examines the presence of imports over the entire period of investigation in deciding which imports compete.⁵²

⁴⁵ Spectrum’s Posthearing Brief at 5.

⁴⁶ Spectrum’s Prehearing Brief at 7-8.

⁴⁷ Spectrum’s Prehearing Brief at 8.

⁴⁸ Spectrum’s Prehearing Brief at 9.

⁴⁹ Spectrum’s Prehearing Brief at 9-10.

⁵⁰ 19 U.S.C. § 1677(7)(G)(i).

⁵¹ See Carbon Steel Wire Rod from Poland, Portugal and Venezuela, Inv. No. 701-TA-243 and 244 (Prelim.) and 731-TA-256 and 258 (Prelim.) USITC Pub. 1701(May 1985) at n 24 (This requirement is expressed in the conference agreement on the House and Senate versions of the bill . . . in determining whether the marketing of imports is reasonably coincident, we considered such factors as ... (3) simultaneous presence in the market.”).

⁵² See e.g. Hydroxyethylidene-1, 1Diphosphonic Acid (HEDP) from China and India, Inv. Nos. 731-TA-1146-1147 (Prelim.), USITC Pub. No. 3998 at 14 (May 2008); (imports present throughout most of the period of investigation); Cold-Rolled Steel from Argentina, Brazil, China, Indonesia, Japan, Russia, Slovakia, South Africa, Taiwan, Thailand, Turkey and Venezuela, Inv. Nos. 701-TA-393 (Final) and 731-TA-829-840 (Final), USITC Pub. 3283 (March 2000) and Pub. 34320 (July 2000) at 14 (Thailand present of only 19 of 30 months); Certain Cold-Rolled Steel Products from China, Indonesia, Slovakia, and Taiwan, Inv. Nos. 831-832, 835, and 837 (Final) USITC Pub. 3320 at 7 (July 2000) (cumulating even when subject imports from one country were not present for a

(continued...)

On December 18, 2007, Delta announced that it was permanently closing its EMD plant in Australia reportedly due to the oversupply of EMD in the world market, the weakening Australian dollar, and the pendency of antidumping investigations in its key markets of Japan and the United States.⁵³ Delta ceased production in mid-March 2008 and laid off its workforce, with the exception of limited personnel to assist in the clean-up, demolition, and sale of the production facility equipment and site. Although Delta ***. Since that time, Delta has ***. Delta has also *** and, in June 2008, ***, which it indicates will be approved within 16 weeks of its application.⁵⁴ According to Delta, it is highly improbable that EMD production will resume as it would cost nearly ***.⁵⁵ There is no documented evidence in the record indicating that the Delta plant is being or will be purchased for purposes of resuming EMD production.

We consider first whether the closure of the Delta plant in March 2008 warrants a departure from our general practice of examining competition over the entire period of investigation. We examine whether the closure altered the nature of competition between subject imports from Australia and China to such a dramatic degree that, in evaluating whether a reasonable overlap of competition exists, we should focus primarily on information following the filing of the petition and the closure of the Delta facility.⁵⁶ We also consider any connection between the closure and the investigation.

While we find that the sole Australian producer permanently ceased production toward the end of the period of investigation, this event does not warrant departure from our traditional practice of examining the presence of imports over the entire period of investigation. Subject imports from Australia were present throughout most of the period of investigation, including the vast majority of the full three years examined. Although the Australian producer ceased its exports to the United States in early 2008 (despite ***), it continued to export to other markets through the second quarter of 2008.⁵⁷ The record also indicates that as of June 2008, Delta ***.⁵⁸ Finally, the stoppage of production at the Delta plant, was due, at least in part, to these antidumping duty investigations.⁵⁹

We consequently examine whether there is a reasonable overlap of competition between subject imports from Australia and China, as well as between subject imports and the domestic like product.

⁵²(...continued)

substantial portion of the period of investigation); Hot Rolled Steel Products from Argentina and South Africa, Inv. Nos. 701-TA-404 (Final) and 731-TA-898 and 905 (Final), USITC Pub. 3446 (August 2001) at 13-14 (Argentina absent for all of 1998, 1 month in 2000, and 1 of 3 months in interim 2001); See also Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (CIT), aff'd, 859 F.2d 915 (Fed. Cir. 1988) (imports only need to be marketed in a "similar time period.").

⁵³ CR at VII-3, PR at VII-1.

⁵⁴ CR at VII-3-VII-7, PR at VII-1-VII-2.

⁵⁵ CR at VII-3-VII-7, PR at VII-1-VII-2.

⁵⁶ Compare Nucor Corp. v. United States, 414 F.3d 1331, 1337 (Fed. Cir. 2005) (the Federal Circuit upholding the Commission's discretion, in deciding material injury, to give greater weight to evidence from the latter part of the period of investigation where the "imposition of section 201 tariffs had such a dramatic impact on the industry.").

⁵⁷ The record indicates that Delta exported *** short tons of EMD to other markets in January-March 2008 and *** short tons in April-June 2008. CR/PR at Tables VII-1, VII-2.

⁵⁸ CR/PR at Table VII-2.

⁵⁹ See Delta's Posthearing Brief at Attachment 4, p. 3. ("In Delta EMD recent losses incurred and the ongoing impact that current anti-dumping cases may have on the ability to access certain markets led to the decision to close the Australian plant.") and Petitioners' Posthearing Brief at Exh. 4 (Delta Annual Report 2007) at 8 (plant closure due in part to "expected outcomes of the U.S. and Japanese anti-dumping investigations.").

C. Reasonable Overlap of Competition

Fungibility. While the evidence is somewhat mixed, subject imports from each country appear to be moderately interchangeable with each other and the domestic like product. The three domestic producers indicated that both the domestic like product and imported EMD were “always” or “frequently” interchangeable.⁶⁰ U.S. importers of EMD were almost equally divided in responding that the domestic like product and subject imports from each country were “always” or “frequently” interchangeable or are “sometimes” or “never” interchangeable.⁶¹ U.S. battery producers asserted more often that domestic and subject EMD were “sometimes” or “never” interchangeable.⁶² U.S. EMD producers generally responded that non-price differences were “sometimes” or “never” important while U.S. importers reported more frequently than U.S. EMD producers that such differences were “always” or “frequently” important.⁶³ On the other hand, U.S. battery manufacturers reported that the domestic and subject imports from China and Australia were generally comparable on non-price factors.⁶⁴

All EMD must go through a rigorous, costly, and lengthy qualification process which limits, to some extent, shifting among suppliers in the short run. Domestic and subject EMD from Australia and China are generally produced to a particular customer’s specifications.⁶⁵ As noted above, Spectrum argues that it is unable to switch easily from one EMD supplier to another given that “the significant processing requirements, product performance issues, and frequent changes in battery design require extensive engineering effort in production and technology prior to any change in EMD supplier[s].”⁶⁶ Although all EMD must be qualified, the record shows that the domestic like product and subject imports from both countries have been qualified by several of the same U.S. battery producers, ***, and for most types of batteries (C/D and AA/AAA).⁶⁷

Spectrum contends that Chinese EMD is not directly substitutable with other EMD because of ***.⁶⁸ According to the record, ***, ***. Although ***,⁶⁹ While ***,⁷⁰

Same Geographical Markets. The record indicates that subject EMD from Australia and China and domestically produced EMD are all sold to battery manufacturers that are located in the Midwest and Southeastern sections of the United States.⁷¹

Channels of Distribution. All imports from both subject countries and domestic EMD are sold directly to end users, battery manufacturers.⁷²

Simultaneous Presence. Subject imports from Australia and China entered the United States throughout the period of investigation. Subject imports from Australia and China entered the United States in all months from January 2005 through March 2008, with the following exceptions: no subject

⁶⁰ CR at II-54, PR at II-21, CR/PR at Table II-5.

⁶¹ CR at II-54, PR at II-21, CR/PR at Table II-5.

⁶² CR at II-54, PR at II-21, CR/PR at Table II-5.

⁶³ CR/PR at Table II-6.

⁶⁴ CR/PR at Tables II-7a and II-7b.

⁶⁵ CR at I-11, II-4, PR at I-8, II-2.

⁶⁶ Spectrum’s Prehearing Brief at 9.

⁶⁷ CR/PR at Table II-1 and CR at tabulation at II-4, PR at II-2. ***. CR/PR at Table II-1 and CR at tabulation at II-4, PR at II-2.

⁶⁸ Spectrum’s Prehearing Brief at 9-10.

⁶⁹ CR at II-49, II-18.

⁷⁰ CR at II-49, II-18.

⁷¹ CR at II-1, V-10, PR at II-1, V-5; ***.

⁷² CR at II-1, V-10, PR at II-1, V-5.

imports from Australia in April, May, June, and July 2005; March 2006; January 2007; and March 2008; no subject imports from China in May 2005 or February and March 2008.⁷³ As such, consistent with prior Commission practice, Australian and Chinese imports are simultaneously present for cumulation purposes.

Conclusion. On balance, the record indicates at least moderate fungibility among products from different sources. Subject EMD from Australia and China and the domestic like product are all sold to battery manufacturers located in the Midwest and Southeastern sections of the United States. U.S. EMD producers sell directly to end users (battery manufacturers) and U.S. importers sell subject EMD directly or through their sales representatives to battery manufacturers. Finally, imports from each of the subject countries and domestic shipments have been present in the U.S. market during the period of investigation.

Thus, based on the record, we conclude that, over the period of investigation, there was a reasonable overlap of competition between the domestic like product and subject imports from Australia and China, and between the subject imports from Australia and China. We consequently cumulate subject imports from Australia and China for our analysis of material injury by reason of subject imports.

IV. CONDITIONS OF COMPETITION

A. Captive Production⁷⁴

We must assess whether the statutory captive production provision applies in these investigations, and whether we consequently must focus our analysis primarily on the merchant market when assessing market share and factors affecting the financial performance of the domestic industry. We find that a significant amount of domestic production of EMD is both captively consumed and is sold in the merchant market,⁷⁵ and thus the threshold requirement is met. However, the record indicates that EMD

⁷³ CR at IV-10, PR at IV-5.

⁷⁴ This provision, found in section 771(7)(C)(iv) of the Tariff Act, provides as follows:

If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that --

- (I) the domestic like product produced that is internally transferred for processing into the downstream article does not enter the merchant market for the domestic like product,
- (II) the domestic like product is the predominant material input in the production of that downstream article, and
- (III) the production of the domestic like product sold in the merchant market is not generally used in the production of that downstream article,

then the Commission, in determining market share and the factors affecting financial performance ..., shall focus primarily on the merchant market for the domestic like product 19 U.S.C. § 1677(7)(C)(iv).

⁷⁵ The record indicates that during the period of investigation, captive consumption represented *** percent of the volume of U.S. producers' U.S. shipments in 2005, *** percent in 2006, and *** percent in 2007. Energizer represented *** percent of U.S. EMD production in 2007 and captively consumes *** of its production. Tronox and Erachem sell all of their EMD production on the open market. Commercial shipments accounted for *** percent of U.S. producers' U.S. shipments in 2005, *** percent in 2006, and *** percent in 2007. Transfers to related firms accounted for *** percent of U.S. producers' U.S. shipments in each year of the investigation period. CR/PR at

(continued...)

sold in the merchant market is used in the production of the same downstream products, batteries, for which EMD is captively consumed.⁷⁶ Accordingly, we find that the third criterion of the captive production provision is not satisfied, and therefore the captive production provision does not apply in these investigations. Nevertheless, we take the captive production into account as a significant condition of competition in our analysis.

B. Other Conditions of Competition

The following additional conditions of competition inform our analysis of whether there is material injury by reason of subject imports.

Demand Conditions. EMD is used almost exclusively in the production of dry cell batteries. As such, demand for EMD is derived from the demand for dry cell batteries, in particular alkaline batteries, which in turn is derived from the demand for the electronic devices that utilize such batteries. There has been an increase in demand relating to the production of smaller size batteries (AA/AAA) due to an increase in consumer use of portable consumer electronic devices such as remote controls and digital cameras. Demand for EMD is not seasonal, but can be affected by increases in battery consumption during the holiday season and in response to natural disasters such as hurricanes.⁷⁷

In determining demand, the Commission traditionally relies on apparent U.S. consumption based on U.S. shipments of the domestic like product and imports. Unlike in most other investigations, the industry in these investigations, as discussed below, is comprised of very few suppliers and purchasers. Moreover, unlike many other investigations, virtually all of the domestic and imported product is used for a single purpose (the production of alkaline batteries). Consequently, the Commission also was able to collect data for actual usage of EMD throughout the period of investigation.⁷⁸ There are limitations, however, with respect to the collected data on both EMD usage and U.S. shipments of EMD imports. With respect to apparent U.S. consumption as measured by U.S. shipments, it appears that Chinese import volume and market share are substantially understated due to problems ***.⁷⁹ With respect to U.S. battery producer usage data, its usefulness as a measure for U.S. demand is diminished somewhat by the fact it includes use of EMD by battery purchasers from existing inventories.⁸⁰ Both data sets generally show similar trends for U.S. consumption of EMD, however, and we therefore rely on both sets in measuring demand for EMD in the U.S. market over the period of investigation.⁸¹

Apparent U.S. consumption as measured by U.S. shipments declined by 14.3 percent from 2005 through 2007,⁸² from 109,619 short tons in 2005 to 100,862 short tons in 2006, and then to 93,907 short tons in 2007.⁸³ Apparent U.S. consumption was 9.9 percent higher in interim 2008 (January-March 2008) than in interim 2007 (January-March 2007), at 21,421 short tons compared to 19,493 short tons.⁸⁴ Usage

⁷⁵(...continued)

Table III-1, CR at III-6-III-7, PR at III-3-III-5.

⁷⁶ CR at III-6-III-7, PR at III-3-III-5.

⁷⁷ CR at II-27-II-31, PR at II-12-II-13.

⁷⁸ CR at II-10, PR at II-4, and CR/PR at Table C-3. The Commission also was able to collect data for EMD purchases by U.S. battery producers. CR at II-6, PR at II-3.

⁷⁹ Cf. CR/PR at Tables C-1 and VII-3.

⁸⁰ CR/PR at Table C-3.

⁸¹ We note that the Commission did not collect usage data for interim 2007.

⁸² CR/PR at Table C-1.

⁸³ CR/PR at Table C-1.

⁸⁴ CR/PR at Table C-1.

of EMD by U.S. battery producers during the period of investigation also decreased overall, but at a more modest rate of 4.2 percent,⁸⁵ increasing from 104,993 short tons in 2005 to 106,513 short tons in 2006 but then decreasing to 100,543 short tons in 2007.⁸⁶ Usage of EMD by U.S. battery producers was 23,638 short tons in interim 2008.⁸⁷ U.S. battery producers variously indicated that demand for EMD during the period of investigation ***. ***⁸⁸ ***.⁸⁹ Most market participants generally attributed stronger demand in 2005 to hurricane activity.⁹⁰

The alkaline EMD market in the United States is comprised of a small number of purchasers. During the period of investigation, there were only four major alkaline battery producers: Duracell, Energizer, Spectrum, and Panasonic.⁹¹ Panasonic closed its U.S. EMD battery production on March 31, 2008, and no longer produces alkaline batteries in the United States.⁹²

Supply Conditions. There are only a limited number of suppliers that were qualified by one or more of the four U.S. battery manufacturers during the period of investigation. These include ***⁹³ *** of its EMD production but also ***.

The domestic industry was the largest supplier of EMD in the U.S. market throughout the period of investigation. The domestic industry's market share as measured by U.S. shipments on a quantity basis decreased from 64.4 percent in 2005 to 61.4 percent in 2006 but increased to 64.4 percent in 2007. In interim 2008, the domestic industry's market share was 68.2 percent, compared to 65.8 percent in interim 2007.⁹⁴ The domestic industry's market share as measured by U.S. battery producers' usage decreased from *** percent in 2005 to *** percent in 2006 but increased to *** percent in 2007. In interim 2008, the domestic industry's market share as measured by U.S. battery producers' usage was *** percent.⁹⁵ U.S. EMD production capacity remained fairly steady, increasing very slightly from 70,024 short tons in 2005 to 70,475 short tons in 2007, which was equivalent to a little more than three-quarters of total apparent U.S. consumption in 2007. The domestic industry also had the ability to supply more of the U.S. market given sizeable inventories, which *** between 2005 and 2007.⁹⁶

The next largest source of supply to the U.S. market was subject imports. Cumulated subject imports' share of the U.S. market as measured by U.S. shipments on a quantity basis fluctuated during the period of investigation, increasing from *** percent in 2005 to *** percent in 2006, and then decreasing to *** percent in 2007. In interim 2007 and 2008, cumulated subject imports' U.S. market share was *** percent and *** percent, respectively.⁹⁷ Cumulated subject imports' share of the U.S. market as measured by U.S. battery producers' usage increased steadily over the period of investigation, from *** percent in 2005 to *** percent in 2007. In interim 2008, cumulated subject imports' U.S. market share as measured

⁸⁵ CR/PR at Table C-3.

⁸⁶ CR/PR at Table C-3.

⁸⁷ CR/PR at Table C-3.

⁸⁸ CR at II-30-II-31, PR at II-12-II-13. ***. CR at II-30, PR at II-12-II-13.

⁸⁹ CR at II-30-II-31, PR at II-12-II-13.

⁹⁰ CR at II-29-II-31, PR at II-12-II-13.

⁹¹ CR at II-2, PR at II-1.

⁹² CR at II-2, n.9, PR at II-1, n.9.

⁹³ CR at II-4, PR at II-2.

⁹⁴ CR/PR at Tables IV-7 and C-1.

⁹⁵ CR/PR at Table C-3.

⁹⁶ CR/PR at Table C-1.

⁹⁷ CR/PR at Table C-1.

by U.S. battery producers' usage was *** percent.⁹⁸ As noted above, Delta ceased production of EMD in March 2008 and *** shipments of EMD to the U.S. market in early 2008.

Nonsubject imports from Japan and South Africa supplied the remainder of the U.S. market.⁹⁹ Nonsubject imports' market share as measured by U.S. shipments fluctuated during the period of investigation, but increased overall from *** percent in 2005 to *** percent in 2007. Nonsubject imports' market share was lower in interim 2008 at *** percent compared to *** percent in interim 2007.¹⁰⁰ Nonsubject imports' market share as measured by U.S. battery producer usage fluctuated during the period of investigation, but increased overall from *** percent in 2005 to *** percent in 2007. Nonsubject imports' market share was *** percent in interim 2008.¹⁰¹

Product Interchangeability. As discussed earlier with respect to cumulation, the interchangeability of domestic and imported EMD is limited somewhat by the fact that all purchases of EMD from new suppliers are required to undergo rigorous qualification procedures. The qualification process is both battery specific and plant specific, and can range from about 6 to 16 months in duration and \$100,000-\$250,000 in cost.¹⁰² While all EMD must be qualified, the domestic product and subject imports from both countries have been qualified by *** of the four major battery producers for at least some battery types at various times during the period of investigation.¹⁰³

Also as discussed earlier, the three domestic EMD producers indicated that both the domestic product and imported EMD were "always" or "frequently" interchangeable.¹⁰⁴ U.S. importers of EMD were almost equally divided in responding that the domestic like product and subject imports from each country were "always" or "frequently" interchangeable or are "sometimes" or "never" interchangeable.¹⁰⁵ U.S. battery producers asserted more often that domestic and subject EMD were "sometimes" or "never" interchangeable.¹⁰⁶ U.S. EMD producers generally responded that non-price differences were "sometimes" or "never" important while U.S. importers reported more frequently than U.S. EMD producers that such differences were "always" or "frequently" important.¹⁰⁷ On the other hand, U.S. battery manufacturers reported that the domestic and subject imports from China and Australia were generally comparable on non-price factors.¹⁰⁸

Other Conditions. Both domestically produced and imported EMD are usually sold under annual short-term contracts/agreements, with negotiations occurring in the fourth quarter of the previous year for shipments in the following year.¹⁰⁹ Generally, the negotiation process involves competitive bids or quotes from a battery manufacturer's various qualified suppliers before the contract is awarded, and may involve counteroffers and other terms of negotiation. There were mixed responses regarding whether prices could be renegotiated during the contract period, although all responding firms reported that the short-term

⁹⁸ CR/PR at Table C-3.

⁹⁹ CR at IV-5, PR at IV-3.

¹⁰⁰ CR/PR at Table C-1.

¹⁰¹ CR/PR at Table C-3.

¹⁰² CR at II-3, PR at II-2.

¹⁰³ CR at II-4, PR at II-2.

¹⁰⁴ CR at II-54, PR at II-21, CR/PR at Table II-5.

¹⁰⁵ CR at II-54, PR at II-21, CR/PR at Table II-5.

¹⁰⁶ CR at II-54, PR at II-21, CR/PR at Table II-5.

¹⁰⁷ CR/PR at Table II-6.

¹⁰⁸ CR/PR at Tables II-7a and II-7b.

¹⁰⁹ CR at V-13, PR at V-7.

contracts/agreements do not have meet-or-release provisions and typically fix quantity and price.¹¹⁰ According to ***, however, even though the contract fixes quantity and price, the customer can adjust quantity.¹¹¹

EMD production involves substantial fixed and variable costs. The primary raw material for all domestic EMD producers is manganese ore and ***. Coupled with energy costs, these combined inputs averaged *** percent of domestic producers' total cost of goods sold ("COGS") to produce EMD during January 2005-March 2008.¹¹² EMD production is also capital intensive and, as a result, EMD producers generally must keep their plants operating at near full capacity to remain profitable.¹¹³

C. Volume of the Subject Imports

Section 771(7)(C) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."¹¹⁴

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. The volume of cumulated subject imports based on U.S. official statistics and questionnaire responses decreased from *** short tons in 2005 to *** short tons in 2006 and to *** short tons in 2007, the year the petitions were filed.^{115 116 117} Subject import volume was higher in interim 2008, at *** short tons, compared to *** short tons in interim 2007.^{118 119} Despite the decline in absolute terms, subject imports increased their

¹¹⁰ CR at V-14, PR at V-8.

¹¹¹ CR at V-14, PR at V-8.

¹¹² CR at II-17, n.46, PR at II-7, n.46.

¹¹³ CR at II-17, PR at II-7. According to Petitioner, all major producers must maintain enough volume at key accounts to keep plants operating at or near full capacity, even at the expense of lower prices. CR at II-17, PR at II-7.

¹¹⁴ 19 U.S.C. § 1677(7)(C)(i).

¹¹⁵ CR/PR at Table IV-2.

¹¹⁶ The statutory provision governing the Commission's treatment of post-petition information, 19 U.S.C. § 1677(7)(I), states as follows:

[T]he Commission shall consider whether any change in the volume, price effects, or impact of imports of the subject merchandise since the filing of the petition in an investigation ... is related to the pendency of the investigation and, if so, the Commission may reduce the weight accorded to the data for the period after the filing of the petition in making its determination of material injury, threat of material injury, or material retardation of the establishment of an industry in the United States.

See also Statement of Administrative Action to the Uruguay Round Agreements Act, H. Rep. 103-316, Vol. 1 ("SAA") at 854 (1994).

¹¹⁷ The volume of cumulated subject imports as measured by U.S. shipments was large throughout the period of investigation, decreasing *** from *** short tons in 2005 to *** short tons in 2006 and then decreasing to *** short tons in 2007, the year the petitions were filed. Subject import volume as measured by U.S. shipments, however, was *** higher in interim 2008, at *** short tons, compared to *** short tons in interim 2007. CR/PR at Table C-1.

¹¹⁸ CR/PR at Table IV-2.

¹¹⁹ We note that subject import volume as measured by U.S. shipments may be understated with respect to China. U.S. shipments of Chinese imports were *** short tons in 2005, *** short tons in 2006, and *** short tons in 2007;

(continued...)

market share from 2005 to 2006, and maintained a sizeable market share despite decreasing EMD demand.¹²⁰ The market share held by cumulated subject imports, as measured by U.S. shipments, increased from *** percent in 2005 to *** percent in 2006, before declining *** to *** percent in 2007. Subject import market share was *** percent in interim 2007 compared to *** percent in interim 2008.¹²¹ The ratio of subject imports to U.S. production was also significant throughout the period, ranging from *** in 2005 to *** percent in 2007, and was *** percent in interim 2007 and *** percent in interim 2008.^{122 123}

Cumulated subject imports' share of the U.S. market as measured by U.S. battery producers' usage increased steadily over the period of investigation, increasing from *** percent in 2005 to *** percent in 2007. In interim 2008, cumulated subject imports' U.S. market share as measured by U.S. battery producers' usage was *** percent.¹²⁴

For the foregoing reasons, we find that the subject imports' volume and market share were significant, both in absolute terms and relative to consumption and production in the United States.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether –

(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.¹²⁵

As noted above, the domestic like product and subject imports appear to be at least moderately interchangeable. Although the respondents emphasize that quality is an important factor in purchasing

¹¹⁹(...continued)

and were *** short tons in interim 2007 compared to *** short tons in interim 2008. CR/PR at Table C-1. Responding Chinese subject producers, however, reported that their exports to the United States were *** short tons in 2005, *** short tons in 2006, *** short tons in 2007; and were *** short tons in interim 2007 compared to *** short tons in interim 2008. CR at Table VII-3. Thus, Chinese exports in 2007 were reported to be *** U.S. shipments of subject imports from China in that year. We note the data series for both EMD purchases and usage of Chinese EMD by U.S. battery producers showed similar trends to, and even larger volumes than, Chinese export data. See CR at II-6 and II-10, PR at II-3 and II-4.

¹²⁰ CR/PR at Tables IV-7 and C-1. Apparent U.S. consumption declined by 14.3 percent from 2005 to 2007. *Id.*

¹²¹ CR/PR at Table C-1.

¹²² CR/PR at Table IV-8.

¹²³ The volume of cumulated subject imports' market share was larger in relation to the merchant market, where the domestic industry faced more direct competition with subject imports. Cumulated subject imports' share of the U.S. merchant market increased from *** percent in 2005 to *** percent in 2006, and then decreased to *** percent in 2007. Cumulated subject imports' share of the U.S. merchant market was lower in interim 2008 (*** percent) compared to interim 2007 (*** percent). CR/PR at Table C-2.

¹²⁴ CR/PR at Table C-3.

¹²⁵ 19 U.S.C. § 1677(7)(C)(ii).

decisions, the record reflects that price is also an important factor.¹²⁶ As discussed earlier, U.S. producers and some importers reported that non-price factors were “never” or “sometimes” important in purchasing decisions.¹²⁷ Each purchaser has qualified ***, elevating the importance of price in competition for sales among eligible suppliers.¹²⁸ Furthermore, there are no substitutes for EMD in the production of alkaline batteries.¹²⁹

According to quarterly selling price data collected in these investigations, there was significant price underselling by subject imports during the period of investigation. Subject imports undersold the domestic like product in all but one of 25 possible price comparisons.¹³⁰ Margins of underselling ranged from *** percent to *** percent.¹³¹ These margins of underselling may be understated with respect to the Chinese product because importers of Chinese EMD included, in their reported prices, transportation costs from the point of entry (the West Coast) to entry in U.S. warehouses in the Midwestern and Southeastern portions of the United States.¹³²

Domestic producers’ prices for the specified product fluctuated over the period of investigation, and were higher in the first quarter of 2008 than at the beginning of the period of investigation.¹³³ The price for the Australian product also fluctuated, and reached *** in the first quarter of 2008.¹³⁴ The price for the Chinese product fluctuated as well, and was the same in the first quarter of 2008 as in the first quarter of 2005.¹³⁵

While the price of the domestic like product increased over the period of investigation, we find that subject imports prevented domestic price increases that otherwise would have occurred to a significant degree. The industry’s average unit sales value for both overall and merchant-market operations increased irregularly from 2005 to 2007, while unit cost of goods sold (“COGS”) increased by a much greater amount.¹³⁶ As a result, the industry’s COGS/sales ratio rose from 2005 to 2007, from 87.5 percent to 100.9 percent for overall operations, and from *** percent to *** percent for merchant market operations.¹³⁷ These data indicate that domestic producers had a very strong incentive to raise prices substantially in line with increasing costs but were unable to do so.

We attribute the domestic industry’s inability to raise prices more commensurately with rising costs to the lower-priced subject imports to a significant degree. Although we recognize that apparent consumption has declined, there are very few qualified suppliers of EMD, there are no substitutes for

¹²⁶ Although U.S. battery producers generally emphasized that quality of EMD was the most important factor in purchasing decisions, they rated the domestic like product inferior to subject imports from Australia and China on price because it was priced higher than subject imports. CR at II-61, PR at II-24 and CR/PR at Table II-7a.

¹²⁷ CR/PR at Table II-6.

¹²⁸ CR at II-4, PR at II-2.

¹²⁹ CR at II-32-33, PR at II-13-II-14.

¹³⁰ CR/PR at Table V-3.

¹³¹ CR/PR at Table V-4.

¹³² CR at V-35 n.72, PR at V-15 n.72.

¹³³ CR at V-31, PR at V-13, CR/PR at Table V-3.

¹³⁴ CR at V-31, PR at V-13, CR/PR at Table V-3.

¹³⁵ CR at V-31-V-32, PR at V-13-V-14, CR/PR at Table V-3.

¹³⁶ Unit sales values for the industry’s overall operations increased from \$1,338 per short ton in 2005 to \$1,381 per short ton in 2007. Unit COGS for the industry’s overall operations increased from \$1,171 per short ton to \$1,394 per short ton. CR/PR at Tables VI-6, C-1. Unit sales values for the merchant market operations increased from \$*** per short ton in 2005 to \$*** per short ton in 2007. Unit COGS for the merchant market operations increased from \$*** per short ton to \$*** per short ton. CR/PR at Table C-2.

¹³⁷ CR/PR at Tables C-1 and C-2.

EMD, and battery producers require reliable supply. Thus it would be expected that the domestic industry could raise its prices more commensurately with rising costs. The record indicates, however, that because of the availability of large volumes of low-priced subject imports, ***.¹³⁸ Further, although the U.S. battery producers generally ***.¹³⁹ While unit COGS were lower (due in part to lower raw material costs) and unit sales values were higher for both the industry's overall and merchant market operations in interim period 2008 compared to interim period 2007, the increase in unit sales values was insufficient to ***.¹⁴⁰ However, since the petitions were filed, ***.¹⁴¹ We therefore find that U.S. producers' prices were suppressed to a significant degree by lower-priced subject imports, subjecting domestic producers to a cost-price squeeze.

For the foregoing reasons, we find that there has been significant underselling by subject imports and that such imports have suppressed domestic prices to a significant degree. Thus, we find that subject imports have had significant adverse effects on domestic prices.

E. Impact of the Subject Imports on the Domestic Industry¹⁴²

Section 771(7)(C)(iii) of the Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry."¹⁴³ These factors include output, sales, inventories, ability to raise capital, research and development, and factors affecting domestic prices. No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."¹⁴⁴

We have examined the performance indicators in the trade and financial data for the domestic industry producing EMD both for their total operations and their merchant market operations.¹⁴⁵ During the period of investigation, due to the significant volumes of low-priced subject imports, the domestic industry was unable to maintain high capacity utilization rate or to obtain higher prices to cover increasing costs, in particular raw material costs. As such, the data indicate declining overall trends throughout the period of investigation.

¹³⁸ CR at V-15-V-16, V-39, PR at V-8-V-9, V-15-16.

¹³⁹ Petitioners' Posthearing Brief at 30.

¹⁴⁰ CR/PR at Table VI-6.

¹⁴¹ CR/PR at II-1, CR at V-15, PR at V-9.

¹⁴² The statute instructs the Commission to consider the "magnitude of the dumping margin" in antidumping proceedings as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination, Commerce calculated a weighted-average final dumping margin (in percent ad valorem) for imports of EMD from Australia of 83.66 percent for Delta and all others; and for imports from China, it calculated a weighted-average final dumping margin of 149.92 percent for Guizhou Redstar Developing Import and Export Company, Ltd. and all others. CR at I-7, PR at I-5.

¹⁴³ 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 ("In material injury determinations, 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 also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports."). SAA at 885.

¹⁴⁴ 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851, 885.

¹⁴⁵ While we examine the domestic industry as a whole, 19 U.S.C. § 1677(4)(A), we take into account as a condition of competition, the substantial share of domestic production captively consumed by U.S. producer, Energizer. We note that the merchant market producers' indicators followed similar trends as those for the industry as a whole.

U.S. production, shipments, net sales quantity, and capacity utilization all declined substantially from 2005 to 2007.¹⁴⁶ The domestic industry's production, U.S. shipments, and net sales quantity all were higher in interim 2008 than in interim 2007,¹⁴⁷ but so was demand as measured by U.S. shipments. The domestic industry's capacity was relatively flat from 2005 to 2007.¹⁴⁸ Domestic producers' market share decreased from 64.4 percent in 2005 to 61.4 percent in 2006, and then increased to 64.4 percent in 2007. Domestic producers' market share as measured by U.S. shipments was higher in interim 2008 at 68.2 percent compared to 65.8 percent in interim 2007.¹⁴⁹ ¹⁵⁰ The domestic industry's market share as measured by U.S. battery producers' usage decreased from *** percent in 2005 to *** percent in 2006 but increased to *** percent in 2007. In interim 2008, the domestic industry's market share as measured

¹⁴⁶ The domestic industry's overall production, U.S. shipments, and net sales by quantity declined by 11.7 percent, 14.3 percent, and 15.0 percent, respectively, from 2005 to 2007. CR/PR at Table C-1. Production declined from 69,582 short tons in 2005 to 68,412 short tons in 2006 and to 61,468 short tons in 2007 and was lower in interim 2008 (15,976 short tons) compared to interim 2007 (16,592 short tons). CR/PR at Table C-1. U.S. shipments declined from 70,553 short tons in 2005 to 61,968 short tons in 2006 and to 60,485 short tons in 2007, and were higher in interim 2008 (14,613 short tons) compared to interim 2007 (12,820 short tons). CR/PR at Table C-1. Net sales declined from 70,835 short tons in 2005 to 62,208 short tons in 2006, and then to 60,203 short tons in 2007 and were higher at 14,734 short tons in interim 2008 compared to 12,820 short tons in interim 2007. Capacity utilization decreased from 99.4 percent in 2005 to 97.7 percent in 2006 and 87.2 percent in 2007, and was 94.3 percent in interim 2007 compared to 90.6 percent in interim 2008. CR/PR at Table C-1.

U.S. merchant producers' production decreased from *** short tons in 2005 to *** short tons in 2006 and then to *** short tons in 2007, and production was lower in interim 2008 (*** short tons) than in interim 2007 (*** short tons). CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117. U.S. merchant producers' U.S. commercial shipments decreased from *** short tons in 2005 to *** short tons in 2006 and then to *** short tons in 2007, and were higher in interim 2008 *** than in interim 2007 ***. Net sales declined from *** short tons in 2005 to *** short tons in 2006, and then to *** short tons in 2007 and were higher at *** short tons in interim 2008 compared to *** short tons in interim 2007. Their capacity utilization decreased from *** percent in 2005 to *** percent in 2006, and then to *** percent in 2007; capacity utilization was lower in interim 2008 *** than in interim 2007 ***.

¹⁴⁷ CR/PR at Table C-1.

¹⁴⁸ CR/PR at Table C-1. Respondents assert that domestic producers do not have the capacity to supply the entire U.S. EMD market. Although domestic producers' existing production capacity is less than U.S. apparent consumption, U.S. EMD producers appear capable of supplying a large share of the U.S. EMD market and experienced *** increase in inventories over the period of investigation. Moreover, as the Commission previously has noted, "there is no short supply provision in the statute" and "the fact that the domestic industry may not be able to supply all of demand does not mean the industry may not be materially injured or threatened with material injury by reason of subject imports." Softwood Lumber from Canada, Inv. Nos. 701-TA-414 and 731-TA-928 (Article 1904 NAFTA Remand) at 108, n.310 (December 2003). See also, Certain Activated Carbon from China, Inv. No. 731-TA-1103 (Preliminary), USITC Pub. 3852 (May 2006) at 19, n.134; Certain Orange Juice from Brazil, Inv. No. 731-TA-1089 (Final), USITC Pub. 3838 (March 2006) at 20 n.143; Certain Lined Paper School Supplies, Inv. Nos. 701-TA-442-443 (Preliminary) and 731-TA-1095-1097 (Preliminary), USITC Pub. 3811 (October 2005) at 23, n.155; Metal Calendar Slides from Japan, Inv. No. 731-TA-1094 (Preliminary), USITC Pub. 3792 (August 2005) at 9, n.45 ("To the extent that Respondents claim that the Commission is legally unable to make an affirmative finding of material injury by reason of subject imports because the domestic industry is incapable of supplying domestic demand, they are incorrect.").

¹⁴⁹ CR/PR at Table C-1.

¹⁵⁰ As noted earlier, subject imports' market share of apparent U.S. consumption was more pronounced in the merchant market, where the domestic industry faced direct competition with subject imports. U.S. merchant producers' market share decreased from *** percent in 2005 to *** percent in 2006 and increased to *** percent in 2007, a level still below the market share held in 2005. U.S. merchant producers' market share was higher at *** percent in interim 2008 compared to *** percent in interim 2007. CR/PR at Table C-2.

by U.S. battery producers' usage was *** percent.¹⁵¹ At the same time, domestic producers' ending inventory quantities increased ***, by *** percent from 2005 to 2007, but were *** percent lower in interim 2008 than in interim 2007.¹⁵² Domestic producers' inventories as a share of U.S. shipments rose from *** percent in 2005 to *** percent in 2007 and was *** percent higher in interim 2008 than in interim 2007.¹⁵³

The average number of production-related workers and hours worked remained fairly steady from 2005 to 2007 and between the interim periods.¹⁵⁴ The wages paid increased from 2005 to 2007 and were higher in interim 2008 compared to interim 2007.¹⁵⁵ Productivity, however, declined from 2005 to 2007, and was lower in interim 2008 than in interim 2007.¹⁵⁶

The domestic industry's financial indicators declined steadily from 2005 to 2007 but improved in interim 2008 compared to interim 2007 following the filing of the petitions.¹⁵⁷ As discussed previously, COGS as a ratio to net sales increased overall from 2005 to 2007 but was lower in interim 2008 than in interim 2007. The COGS to net sales ratio was 87.5 percent in 2005, 94.1 percent in 2006, and 100.9 percent in 2007 and was 105.9 percent in interim 2007 and 95.4 percent in interim 2008.¹⁵⁸ As the result of this cost/price squeeze, the industry reported steady declines at the operating and net income levels from 2005 to 2007 and reported operating losses in both interim periods. Operating income declined from \$3.6 million to negative \$ 9.6 million and was negative \$1.7 million in interim 2008 compared to

¹⁵¹ CR/PR at Table C-3.

¹⁵² CR/PR at Table C-1. End-of-period inventories increased from *** short tons in 2005 to *** short tons in 2007 and were lower in interim 2008 *** short tons compared to *** short tons in interim 2007. CR/PR at Table C-1.

U.S. merchant producers' end-of-period inventories increased from *** short tons in 2005 to *** short tons in 2005 and then to *** short tons in 2007. End-of-period inventories were lower in interim 2008 (***) short tons than in interim 2007 (***) short tons). CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117.

¹⁵³ CR/PR at Table C-1.

¹⁵⁴ The domestic industry's average number of production workers declined from 212 in 2005 to 211 in 2007. The hours worked also decreased from 458,000 in 2005 to 454,000 in 2007. CR/PR at Table C-1. Hours worked increased slightly from 458,000 in 2005 to 460,000 in 2006, and then decreased to 454,000 in 2007. Hours worked were slightly higher in interim 2008 (115,000) than in interim 2007 (114,000). CR/PR at Table C-1.

U.S. merchant producers' average number of production workers was relatively flat, increasing *** from *** in 2005 to *** in 2007. The average number of workers was lower in interim 2008 *** than in interim 2007 ***. Hours worked increased *** from *** in 2005 to *** in 2007. Hours worked were *** lower in interim 2008 *** than in interim 2007 ***. CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117.

¹⁵⁵ The domestic industry paid wages of \$12.0 million in 2005, \$12.7 million in 2006, and \$13.1 million in 2007. Wages paid during the interim periods were slightly higher in interim 2008 (\$3.4 million) than in interim 2007 (\$3.2 million). CR/PR at Table C-1.

U.S. merchant producers paid wages of \$*** in 2005, \$*** in 2006, and \$*** in 2006. Wages paid were higher in interim 2008 (\$***) than in interim 2007 (\$***). CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117.

¹⁵⁶ Productivity for the domestic industry decreased from 151.9 short tons per 1,000 hours in 2005 to 148.7 short tons per 1,000 hours in 2006, and to 135.4 short tons per 1,000 hours in 2007 and was 144.3 short tons per 1,000 hours in interim 2007 compared to 140.1 short tons per 1,000 hours in interim 2008. CR/PR at Table C-1.

U.S. merchant producers' productivity decreased from *** in 2005 to *** in 2006, and to *** in 2007 and was *** in interim 2007 compared to *** short tons per 1,000 hours in interim 2008. CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117.

¹⁵⁷ CR/PR at Table C-1.

¹⁵⁸ CR/PR at Table C-1.

negative \$3.3 million in interim 2007.¹⁵⁹ The domestic industry's operating income to net sales ratio declined from 3.8 percent in 2005 to negative 11.6 percent in 2007, and was negative 18.9 percent in interim 2007, compared to negative 8.0 percent in interim 2008.¹⁶⁰

Capital expenditures increased from 2005 to 2007, but were lower in interim 2008 compared to interim 2007.¹⁶¹ Research and development expenditures increased from 2005 to 2007, and were higher in interim 2008 than in interim 2007.¹⁶²

Based on the record in the final phase of these investigations, we conclude that cumulated subject imports had a significant adverse impact on the condition of the domestic industry during the period of investigation. During the period of investigation, a substantial rise in raw material costs and increases in fixed costs per unit resulting from a decline in apparent U.S. consumption brought pressure upon the domestic industry to raise prices and/or gain market share. As discussed above, however, subject imports, which were significant in volume in both absolute and relative terms, consistently undersold the domestic like product and prevented the domestic industry from raising prices in tandem with rising costs. As a result of subject imports' effects, the domestic industry lost critical U.S. shipments and experienced decreased capacity utilization, a build-up of EMD finished goods inventory, and operating losses. The suppressed domestic prices, combined with the sales volumes lost to subject imports, caused significant declines in the domestic industry's financial performance over the period of investigation.¹⁶³

Spectrum contends that in assessing material injury the Commission should take into account that the purpose of the statutory scheme is remedial and not punitive. It argues that no remedial purpose would be served if an antidumping duty order were imposed with respect to Australia as subject imports ceased at the end of the period of investigation due to the closure of the Delta plant. As we have previously stated, nothing in the statute or case law requires or allows us to consider the likely effectiveness of the order.¹⁶⁴

Although Spectrum argues otherwise, imposition of an antidumping duty order on subject imports in these investigations would not be punitive. First, as we previously discussed, the closure of the

¹⁵⁹ CR/PR at Table C-1. U.S. merchant producers' financial indicators followed similar trends as those for the industry as a whole. U.S. merchant producers' operating income declined from \$*** in 2005 to \$*** in 2006, and then to *** in 2007; it was *** in interim 2007 and *** in interim 2008. CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117.

¹⁶⁰ CR/PR at Table C-1. U.S. merchant producers' operating income/loss margin ***. It was *** in interim 2008 at *** percent compared to *** percent in interim 2007. CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117.

¹⁶¹ The domestic industry's capital expenditures were \$*** in 2005, \$*** in 2006, and \$*** in 2007. Capital expenditures were lower in interim 2008 (***) than in interim 2007 (***). CR/PR at Tables VI-10, C-1.

U.S. merchant producers' capital expenditures were \$*** in 2005, \$*** in 2006 and \$*** in 2007. They were lower in interim 2008 (\$***) than in interim 2007 (\$***). CR/PR at Table C-2 as revised by OINV Memorandum INV-FF-117.

¹⁶² The domestic industry's research and development expenditures were \$*** in 2005, and were \$*** in 2006 and \$*** in 2007. These expenditures were higher in interim 2008 (\$***) than in interim 2007 (\$***). CR/PR at Table VI-10.

As ***, U.S. merchant producers' research and development expenditures were ***. CR/PR at Table VI-10.

¹⁶³ CR at II-6, II-10, PR at II-2, II-4, CR/PR at Table C-3.

¹⁶⁴ See Wooden Bedroom Furniture from China, Inv. No. 731-TA-1058 (Final), USITC Pub. 3743 at 27, n.222 (Dec. 2004); Certain Frozen or Canned Warmwater Shrimp and Prawns from Brazil, China, Ecuador, India, Thailand, and Vietnam, Inv. Nos. 731-TA-1063-68 (Final), USITC Pub. 3748 (Jan. 2005); Accord, Mittal Steel Point Lisas, Ltd., Slip Op. 2007-1552 at 16 (Fed. Cir. Sept. 18, 2008) ("The focus of the inquiry is on cause of injury in the past, not the prospect of effectiveness in the future.").

Delta plant has not prevented the Australian producer from shipping to other markets.¹⁶⁵ Moreover, given that the sole producer of EMD has closed permanently and subject imports have ceased, it cannot be said that anyone would be “punished” with respect to the imposition of the order. Specifically, no one will have to pay duties if there are no future imports of EMD from Australia. Furthermore, despite Spectrum’s arguments to the contrary, parties are not foreclosed from seeking a changed circumstances review with respect to the antidumping duty order on subject imports from Australia. Finally, we note that the Commission’s material injury determination is based on the effects of cumulated subject imports during the period of investigation and that reported exports to the U.S. market and usage of Chinese EMD by U.S. battery producers increased *** from 2005 to 2007.

For these reasons, we find that subject imports have had a significant adverse impact on the domestic industry.

V. APPLICATION OF THE *BRATSK ALUMINUM SMELTER v. UNITED STATES* REPLACEMENT/BENEFIT TEST

A. Background¹⁶⁶

We are required by the Federal Circuit’s decision in Bratsk Aluminum Smelter v. United States¹⁶⁷ to undertake an “additional causation inquiry” whenever certain triggering factors are met: “whenever the antidumping investigation is centered on a commodity product, and price competitive nonsubject imports are a significant factor in the market.”¹⁶⁸ The additional inquiry required by Bratsk, which we refer to as the Bratsk replacement/benefit test, is “whether nonsubject imports would have replaced the subject imports without any beneficial effect on domestic producers.”¹⁶⁹

As noted in other investigations, we respectfully disagree¹⁷⁰ with Bratsk that the statute requires any analysis beyond that already included in our discussion above of the statutory volume, price, and

¹⁶⁵ CR/PR at Table VII-2.

¹⁶⁶ Vice Chairman Pearson and Commissioner Okun do not join section IV.A. of this opinion. We note that the Federal Circuit’s decision in Mittal Steel Point Lisas Ltd. v. United States was issued after the Commission’s vote in these investigations. Slip Op. 2007-1552 (Fed. Cir., Sept. 18, 2008). Although we intend to fully evaluate the Federal Circuit’s decision for guidance in analyzing whether injury is by reason of subject imports in subsequent cases, for purposes of this case, we find it sufficient to observe that the Mittal Steel Court clarifies that its decision in Bratsk Aluminum v. United States did not require the application of the specific “replacement/benefit test” developed by the Commission. See Separate and Additional Views of Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun Concerning Bratsk Aluminum v. United States in Sodium Hexametaphosphate from China, Inv. No. 731-TA-1110 (Preliminary), USITC Pub. 3912 at 20-21 (April 2007). In the body of this opinion, we have considered the alleged other factors and concluded that we have not attributed the effects of any other factors to the subject imports.

¹⁶⁷ 444 F.3d at 1369 (Fed. Cir. 2006).

¹⁶⁸ Bratsk, 444 F.3d at 1375.

¹⁶⁹ Bratsk, 444 F.3d at 1375.

¹⁷⁰ We note that the Federal Circuit’s decision in Mittal Steel Point Lisas Ltd. v. United States, Slip Op. 2007-1552 (Fed. Cir. Sept. 18, 2008) was issued after the Commission’s vote in these investigations. Given the recent issuance of the Mittal decision, the Commission is still in the process of fully evaluating the Federal Circuit’s decision and how it would affect the Commission’s analysis in future proceedings. Nevertheless, we view our determinations in these investigations to be consistent with Mittal.

impact factors, and do not reiterate the Commission's interpretation of the statutory scheme here.¹⁷¹ The Commission has a well established approach to addressing causation.¹⁷² We apply the Bratsk replacement/benefit test to our analysis, however, because the Federal Circuit has directed us to do so, notwithstanding that, in our considered view, this test is not required by or consistent with the statute.

B. Parties' Arguments

Petitioner. Petitioner argues that the Commission need not conduct a Bratsk analysis in this case because neither of the triggering factors is met. First, Petitioner asserts that EMD is not a commodity product because all EMD must be qualified by battery producers. It notes that EMD becomes interchangeable only after qualification and therefore cannot be considered a commodity product. Secondly, Petitioner argues that price-competitive nonsubject imports are not a significant factor in the U.S. market. According to Petitioner, only two nonsubject countries, Japan and South Africa, had a meaningful presence in the U.S. market and the AUVs for EMD from both these countries were *** the AUVs for domestic EMD or the subject imports.¹⁷³

Even if the triggering factors were met, Petitioner asserts that there is no indication that nonsubject imports would have replaced subject imports without beneficial effect for domestic producers. It argues that the condition of the domestic industry has improved since the filing of the petitions. Petitioner also maintains that the current nonsubject suppliers, Japan and South Africa, would not likely prevent the U.S. industry from expanding shipment volumes given their ***. Finally, Petitioner argues that EMD suppliers in Japan, South Africa, and other global producers have reported constraints on their ability to ship to the U.S. market, notably long-term commitments to non-U.S. customers and ***.¹⁷⁴

Respondents. Neither Spectrum nor Delta made an argument concerning Bratsk in its prehearing or posthearing briefs in the final phase of these investigations.

¹⁷¹ For a full discussion of our views on the applicability of Bratsk, see our Views in the Remand Determination for Silicon Metal from Russia, Inv. No. 731-TA-991 (Final) (Second Remand), USITC Pub. 3910 (March 2007) and Views of the Commission in Certain Polyester Staple Fiber from China, Inv. No. 731-TA-1104 (Final), USITC Pub. 3922 at 24-26 (June 2007). For a full discussion of Chairman Aranoff's views on the applicability of Bratsk, see the Views of the Commission in Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago, Inv. No. 731-TA-961 (Final) (Remand), USITC Pub. 3903 (January 2007).

¹⁷² See Silicon Metal from Russia, Inv. No. 731-TA-991 (Second Remand), USITC Pub. 3910 (Mar. 2007), at 3-8 (articulating in detail the Commission's longstanding interpretation of the "by reason of" causation standard).

¹⁷³ Petitioner's Prehearing Brief at 33-34.

¹⁷⁴ Petitioner's Prehearing Brief at 35-37.

C. Analysis and Conclusion¹⁷⁵

Noting that the parties are in agreement, based on this record we do not find, for purposes of these investigations, that EMD is a commodity.¹⁷⁶ All purchases of EMD from new suppliers are required to undergo rigorous qualification procedures. The qualification process is both battery specific and plant specific, and can range from about 6 to 16 months with costs in a range from \$100,000-\$250,000.¹⁷⁷ Hence, interchangeability in the short run appears to be limited inasmuch as it may be difficult if not impossible for an EMD user to switch suppliers if the alternate supplier has not already been qualified by that particular user.

Because we find that the first Bratsk triggering factor is not met, we are not required to consider whether the second triggering factor (whether price-competitive non-subject imports are a significant factor in the U.S. market) is met or to address “whether non-subject imports would have replaced subject imports without any beneficial effect on domestic producers.”¹⁷⁸ Our affirmative material injury determination, therefore, is consistent with the Court’s holding in Bratsk.

CONCLUSION

For the reasons stated above, we find that the domestic industry producing EMD is materially injured by reason of subject imports of EMD from Australia and China that are sold in the United States at less than fair value.

¹⁷⁵ Commissioner Pinkert does not join in this analysis, but performs his own Bratsk analysis in these investigations. He finds that the evidence regarding the first triggering factor (commodity) suggests, though the issue is close, that EMD is a fungible commodity – once suppliers are qualified, they compete closely on the basis of price. With regard to the second triggering factor (price competitive non-subject imports significantly present in the U.S. market), he finds that the evidence is extremely close on the issue of whether the percentage of U.S. consumption accounted for by non-subject imports was significant. If he were to find that it was significant, he would find that the non-subject imports were price competitive.

Because the threshold issues are close, Commissioner Pinkert finds it prudent to proceed to the question of whether, in the absence of non-subject imports, non-subject imports would have completely replaced subject imports during the period of investigation without any benefit to the domestic industry. He finds, for the following reasons, that non-subject imports would not have completely replaced subject imports during the period of investigation under that hypothetical scenario.

The three non-subject countries with the largest EMD production capacity in 2003 and 2007 were Greece, Japan, and South Africa. CR/PR at Table VII-8. Tosoh Hellas in Greece reported that ***. CR at VII-26; PR at VII-11. Japan reported exports to the United States ranging only from *** short tons to *** short tons annually from 2005 to 2007. CR/PR at Table VII-12. As for South Africa, Delta South Africa’s exports to the United States were *** during the POI. CR/PR at Table VII-13. Delta was ***. CR at II-4, PR at II-2. ***.

¹⁷⁶ We note that it is improper to assume that simply because goods are generally interchangeable for purposes of the “reasonable overlap of competition” analysis for cumulation, or are interchangeable for purposes of defining the domestic like product, that they are necessarily “commodities” for purposes of assessing causation, which is the function of the Bratsk “test.” See Silicon Metal from Russia, USITC Pub. 3910 at 10-11 (footnotes omitted), citing BIC Corp. v. United States, 964 F. Supp. 391, 397, 399 (Ct. Int’l Trade 1997) (“{L}ike product, cumulation and causation are functionally different inquiries because they serve different statutory purposes As a result, each inquiry requires a different level of fungibility. Hence the record may contain substantial evidence that two products are fungible enough to support a finding in one context (e.g., one like product), but not in another (e.g., cumulation or causation.”)).

¹⁷⁷ CR at II-3, PR at II-2.

¹⁷⁸ Bratsk, 444 F.3d 1375.

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed on August 22, 2007, by Tronox LLC (“Tronox”), Oklahoma City, OK, alleging that an industry in the United States is materially injured and threatened with further material injury by reason of less-than-fair-value (“LTFV”) imports of electrolytic manganese dioxide (“EMD”)¹ from Australia and China. Information relating to the background of these investigations is provided below.²

Effective date	Action
August 22, 2007	Petition filed with Commerce and the Commission; Commission institutes investigations (72 FR 49309, August 28, 2007)
September 11, 2007	Commerce’s notice of initiation (72 FR 52850, September 17, 2007)
October 18, 2007	Commission’s preliminary determinations (72 FR 60388, October 24, 2007)
March 26, 2008	Commerce’s notices of preliminary LTFV determinations, affirmative preliminary determination of critical circumstances (Australia), and postponement of final determination (China) (73 FR 15982 and 73 FR 15988, March 26, 2008); scheduling of final phase of the Commission’s investigations (73 FR 23491, April 30, 2008)
July 24, 2008	Commission’s hearing ¹
August 14, 2008	Commerce’s notice of final determination of sales at LTFV and termination of critical circumstances investigation (Australia) (73 FR 47586, August 14, 2008)
August 18, 2008	Commerce’s notice of final determination of sales at LTFV (China) (73 FR 48195, August 18, 2008)
September 12, 2008	Date of the Commission’s vote
September 25, 2008	Commission’s determinations and views were transmitted to Commerce

¹ App. B is a list of witnesses who appeared at the hearing.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Section 771(7)(B) of the Tariff Act of 1930 (the “Act”) (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission—

shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic

¹ A complete description of the imported product subject to these investigations is presented in *The Subject Merchandise* section located in Part I of this report.

² *Federal Register* notices cited in the tabulation are presented in app. A.

like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and . . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--

In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.

. . .

In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether . . . (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.

. . .

In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to

. . . (I) actual and potential declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

Information on the subject merchandise, margins of dumping, and the domestic like product is presented in *Part I*. Information on conditions of competition and other relevant economic factors is presented in *Part II*. *Part III* presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. The volume and pricing of imports of the subject merchandise are presented in *Parts IV and V*, respectively. *Part VI* presents information on the financial experience of U.S. producers. *Part VII* presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury and the

judicial requirements and information obtained for use in the Commission’s consideration pursuant to *Bratsk* rulings.

U.S. EMD MARKET SUMMARY

U.S. apparent consumption for EMD totaled 93,907 short tons (\$130.9 million) in 2007. Three firms – Energizer Battery Manufacturing Inc. (“Energizer”); Erachem Comilog, Inc. (“Erachem”); and Tronox LLC (“Tronox”) – accounted for all known U.S. production in 2007. At least five firms have imported EMD from Australia and/or China since 2005. The three largest importers and/or consignees – ***³ *** – accounted for *** percent of reported U.S. imports from Australia and *** percent of reported U.S. imports from China in 2007. One firm, Delta Australia, produces EMD in Australia and at least 14 firms produce EMD in China. The two largest producers in China – *** – accounted for approximately *** percent of China’s production in 2007, approximately *** percent of China’s exports to the United States in 2007, and *** percent of reported U.S. imports of EMD from China in 2007.

EMD is primarily used in the manufacture of alkaline batteries, but may also be used in some battery applications such as for military and other special purpose areas. Four purchasers of EMD – Duracell, a division of The Procter & Gamble Co. (“Duracell”); Energizer Battery Manufacturing Inc. (“Energizer”); Panasonic Primary Battery Corp. of America (“Panasonic”); and Spectrum Brands, Inc. (formerly Rayovac Corp.) (“Spectrum”) – accounted for virtually 100 percent of U.S. EMD consumption in 2007.

U.S. producers’ U.S. shipments of EMD totaled 60,485 short tons in 2007, and accounted for 64.4 percent of apparent U.S. consumption by quantity. U.S. shipments of imports from Australia totaled *** short tons in 2007, and accounted for *** percent of apparent U.S. consumption by quantity; U.S. shipments of imports from China totaled *** short tons in 2007, and accounted for *** percent of apparent U.S. consumption by quantity; and U.S. shipments of imports from all other sources combined totaled *** short tons in 2007, and accounted for *** percent of apparent U.S. consumption by quantity.

SUMMARY DATA

A summary of data collected in these investigations for the U.S. EMD market is presented in appendix C, tables C-1 (data on the total U.S. market), C-2 (data on the U.S. merchant market), and C-3 (consumption data based on usage). Table C-1 includes data submitted by all three U.S. producers. Table C-2 includes data for the *** U.S. producers that sell EMD in the merchant market.⁴ Table C-3 includes usage data for ***.⁵

Producer data are based on questionnaire responses of three firms that accounted for all U.S. production of EMD during the period examined. U.S. import data are based on questionnaire responses of seven importers that accounted for virtually all imports of EMD during the period examined. Data on U.S. consumption of imports were compiled using shipment data reported in the questionnaire responses of the seven firms that imported the subject product during the period examined.

³ ***.

⁴ ***.

⁵ Table C-3 was constructed from usage data that appears in the section entitled “Usage of EMD by U.S. Battery Producers” in Part II and in app. F of this report.

PREVIOUS AND RELATED INVESTIGATIONS

On May 31, 1988, the Commission instituted antidumping investigations on EMD (defined as in the present investigations) from Greece, Ireland, and Japan.⁶ On April 10, 1989, the Commission issued final affirmative determinations with regard to imports of EMD from Greece and Japan,⁷ and on April 17, 1989 Commerce issued antidumping duty orders on EMD from Greece and Japan.⁸

On May 26, 1998, Eveready (referred to as Energizer in this report) 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.⁹ The Commission determined that the request did not show changed circumstances sufficient to warrant a review.¹⁰ Eveready appealed the Commission's determination to the Court of International Trade. 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.¹¹

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 the continuation or recurrence of material injury to the domestic EMD industry.¹² On April 20, 2000, the Commission determined that revocation would not likely lead to continuation or recurrence of material injury to the U.S. industry, and the orders were subsequently revoked.¹³

On July 31, 2003, the Commission instituted antidumping investigations on EMD from Australia, China, Greece, Ireland, Japan, and South Africa.¹⁴ 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 China.¹⁵ On March 2, 2004, the Commission received notice from the Department of Commerce ("Commerce") stating that it had received a letter from petitioner Kerr-McGee Chemical LLC (now Tronox) withdrawing its petitions. As a result, Commerce and the Commission terminated their respective investigations.

⁶ *Notice of Institution of Antidumping Duty Investigations: Electrolytic Manganese Dioxide from Greece, Ireland, and Japan*, 53 FR 21530, June 8, 1988.

⁷ *Electrolytic Manganese Dioxide from Greece and Japan, Investigations Nos. 731-TA-406 and 408 (Final)*, USITC Publication 2177 (April 1989), p. 1. Commerce determined that there were no LTFV imports of EMD from Ireland, and the investigation concerning Ireland was terminated.

⁸ 54 FR 15244, April 17, 1989.

⁹ In its request, Eveready alleged the following changed 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 impending unavailability of supply of regular and "high drain" EMD from U.S. producers and producers in countries not subject to antidumping duty orders.

¹⁰ 63 FR 43192, August 12, 1998.

¹¹ *Eveready Battery Co., Inc. v. United States*, Slip. Op. 99-126 (CIT, November 23, 1999).

¹² *Notice of Institution of Five-year Reviews: Electrolytic Manganese Dioxide from Greece and Japan*, 64 FR 23675, May 3, 1999. The Commission determined to conduct full five-year reviews on these orders. 64 FR 46407, August 25, 1999.

¹³ *Electrolytic Manganese Dioxide from Greece and Japan, Investigations Nos. 731-TA-406 and 408 (Review)*, USITC Publication 3296 (May 2000), p. 1.

¹⁴ *Notice of Institution of Antidumping Duty Investigations: Electrolytic Manganese Dioxide from Australia, China, Greece, Ireland, Japan, and South Africa*, 68 FR 47607, August 11, 2003.

¹⁵ 68 FR 55062, September 22, 2003.

NATURE AND EXTENT OF SALES AT LTFV

On August 14, 2008, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV on EMD from Australia and on the termination of its critical circumstances investigation concerning Delta Australia, and on August 18, 2008, Commerce published its notice of final determination of sales at LTFV on EMD from China. The final weighted-average dumping margins (in percent *ad valorem*), as reported by Commerce, are presented in the following tabulation.¹⁶

Manufacturer or exporter	Type of comparison	Dumping margin (percent <i>ad valorem</i>)
Australia:		
Delta	Adverse facts available, recalculated from the petition	83.66
All others	Adverse facts available, recalculated from the petition	83.66
China:		
Guizhou Redstar Developing Import and and Export Company, Ltd.	Export price to normal value	149.92
PRC-Wide Entity (includes Xiangtan)	Adverse facts available, calculated rate of Redstar	149.92

THE SUBJECT MERCHANDISE

Commerce's Scope

Commerce has defined the scope of these investigations as follows:

All manganese dioxide (MnO₂) that has been manufactured in an electrolysis process, whether in powder, chip or plate form ("EMD").

Excluded from the scope are natural manganese dioxide ("NMD") and chemical manganese dioxide ("CMD").

The merchandise subject to these investigations is classified in the Harmonized Tariff Schedule of the United States ("HTSUS") at subheading 2820.10.00. The tariff classifications are provided for convenience and Customs purposes; however, the written description of the scope of these investigations is dispositive.

¹⁶ *Notice of Final Determination of Sales at Less Than Fair Value and Termination of Critical-Circumstances Investigation: Electrolytic Manganese Dioxide from Australia*, 73 FR 47586, August 14, 2008; *Electrolytic Manganese Dioxide from the People's Republic of China: Final Determination of Sales at Less than Fair Value*, 73 FR 48195, August 18, 2008.

Tariff Treatment

The EMD that is the subject of these investigations is classifiable in the HTSUS in subheading 2820.10.00. The column 1-general (most-favored-nation) rate of duty for this subheading, applicable to the EMD from China subject to these investigations, is 4.7 percent *ad valorem*. Imports of EMD from Australia are eligible for a duty rate of free, provided that they are properly entered under the U.S.-Australia Free Trade Agreement; if not, they receive the general duty rate. Table I-1 presents the tariff treatment for EMD.

Table I-1
EMD: Tariff treatment, 2008

HTS provision	Article description	General ¹	Special ²	Column 2 ³
		Rates (<i>percent ad valorem</i>)		
2820 2820.10.00	Manganese oxides: Manganese dioxide	4.7%	Free (A, AU, BH, CA, CL, E, IL, J, JO, MA, MX, P, SG)	25%
¹ Normal trade relations, formerly known as the most-favored-nation duty rate. ² Special rates not applicable when General rate is free. "AU" is the symbol for the U.S.-Australia Free Trade Agreement; see general note 28 to the HTS. ³ Applies to imports from a small number of countries that do not enjoy normal trade relations duty status.				
Source: Harmonized Tariff Schedule of the United States (2008).				

THE PRODUCT

Description and Applications

EMD (electrolytic manganese dioxide) is a form of the chemical known as manganese dioxide (MnO₂), that has been manufactured in an electrolysis process. It has a crystalline structure which is referred to by scientists to as a gamma crystalline structure. Its gamma crystalline structure, as opposed to most other crystalline structures that manganese dioxide powder can assume, allows for the free transfer of hydrogen ions within the manganese dioxide crystal. This property allows for the fullest possible utilization of this form of manganese dioxide, which exists as a black powder, in the production of electrical current within a dry-cell battery.^{17 18}

¹⁷ Petition, pp. 7-9.

¹⁸ The essence of a battery is that an electron donator located at a negative plate (anode) transfers electrons to an electron acceptor located at the positive plate (cathode) when the anode and cathode are connected by a suitable wire or conductor, thereby converting chemical energy to electrical energy. It is essential that the anode and cathode are not in direct physical contact. Inside the cell, the anode and cathode are immersed in a conducting medium. When the battery is connected forming a closed circuit, electrons flow from the anode to the cathode through the wire while the electrolyte in the conducting medium moves toward the plates in such a way as to preserve electroneutrality, thereby allowing the reaction to continue. The reactants are chosen so that the net reaction releases energy.

In a primary battery, the reaction is not reversible and the battery must be discarded after sufficient use, i.e., when the reactants are used up. In an alkaline battery (petition, p. 8), the anode consists of powdered amalgamated zinc metal and the cathode consists of a high-density blend of EMD and graphite. The zinc metal loses electrons (in the language of chemistry we say that the zinc metal is oxidized) which are transferred to the manganese dioxide (in
(continued...)

There are three grades of EMD depending on the intended battery end use--alkaline, zinc chloride, and lithium grade; however, virtually all EMD produced in the United States is of the alkaline grade.¹⁹ Alkaline grade EMD, because of particle size and pH (acidity or alkalinity level), qualifies for use in the manufacture of alkaline batteries; zinc chloride-grade qualifies for use in zinc chloride batteries (although such batteries are not known to have been produced in the United States during the period for which data were collected in these investigations); and lithium grade can be used in some primary battery applications such as in military and other special purpose areas.²⁰ The desired particle size (grind) and pH are achieved in the finishing process of the EMD. All other properties of the three grades of EMD are similar, including the moisture content, sulfate content, other metallic element content, purity, and crystalline structure.²¹

Within each grade of EMD there exists a relatively higher and lower quality EMD. Higher quality EMD within a particular grade tends to have a higher discharge rate and longer shelf life than lower quality EMD. Higher quality EMD is distinguished from lower quality EMD by its lower levels of impurities, superior flow characteristics of the materials in the battery, and higher energy capacity per unit weight.²² Features such as grain size, uniformity, abrasiveness, pH, and moisture levels are also important. Of course, the quality of EMD is only one factor out of many that contribute to the quality of a finished battery.

Every battery manufacturer has subtly different process specific requirements that affect the battery cathode granulation process. Consistency of parameters such as moisture content, pH, and particle size from lot to lot, and within a lot, are critical. It is important that impurities (or "gassing agents," such as iron, molybdenum, lead, and antimony) are within specifications to prevent battery leakage, as it is generally these electrochemical properties and the purity of EMD that determine battery discharge performance. AA/AAA size batteries generally require higher discharge performance to meet the needs of high-drain devices.

In addition to EMD, there are two other types of manganese dioxide, both of which can be used in dry-cell batteries: natural manganese dioxide ("NMD") and chemical manganese dioxide ("CMD"). NMD consists of certain naturally occurring manganese ore, selected because of its high MnO₂ content, favorable electrochemical properties, and low level of impurities.²³ The ore is often processed to remove impurities and improve battery activity. NMD has a lower performance rate than EMD or CMD but this drawback may, in part, be overcome because NMD may be blended with synthetic manganese dioxide for increased performance. NMD is not produced in the United States today, only small amounts (if any) are imported, and NMD is not within the scope of these investigations.

¹⁸ (...continued)

the language of chemistry we say that the manganese dioxide is reduced).

Alkaline batteries are named as such because they use concentrated potassium hydroxide (KOH) (a strong alkali) as an electrolyte rather than ammonium chloride or zinc chloride which may be used in other batteries. Alkaline batteries have the ability to deliver more current and have a longer shelf-life than zinc-carbon and zinc chloride batteries.

¹⁹ Petition, p. 8. As noted, of the three grades of EMD, alkaline-grade EMD is required for alkaline batteries.

²⁰ Transcript of the Commission's September 12, 2007 conference in the preliminary phase of these investigations ("conference transcript"), p. 53 (Gutwald).

²¹ Petition, p. 8.

²² ***. The high-density technology is designed to produce an EMD for batteries that can handle the next generation of electronic devices that have a higher drain capacity or higher power utilization requirement. However, "high-drain" EMD has not been commercially successful. Conference transcript, p. 43 (Gutwald).

²³ Subsequent to the invention of the wet zinc/manganese dioxide primary cell (the precursor of the present-day dry-cell battery) in the 1860s, NMD was the only type of manganese dioxide used in dry-cell batteries.

CMD is chemically precipitated, battery-active manganese dioxide. CMD differs from EMD in three major respects: surface area, electrolyte absorption, and density and in these features, EMD is considered superior; for example, CMD generally exhibits lower discharge rates than does EMD. CMD is used outside the United States in lower-performance batteries but is not known to be used domestically in batteries. CMD is not within the scope of these investigations.²⁴

Before EMD can be used in a battery, a sample is tested extensively (“qualification”). The most important tests that an EMD producer or consumer uses to determine EMD quality are (1) discharge performance tests, (2) gassing tests, and (3) tests to measure the compressed density of the EMD. The discharge performance test measures how long a battery will maintain useful voltage for a given load and rate of discharge. This test essentially provides information on the number of hours of service a battery will provide. The gassing test measures how much gas is generated as a result of impurities in the EMD. The less gas that is generated, the purer the EMD and the longer the shelf life of the battery.²⁵ Tests to measure the compressed density of a given sample of EMD determine how much EMD can be used in a battery within the space limitations of the battery. The more EMD that can be contained in a battery, the higher the electrical capacity of the battery.

Although a given sample of EMD may perform satisfactorily when subjected to standard tests such as the discharge performance test, it cannot be used commercially in a specific battery unless it also is qualified for use in that battery. The qualification process is both battery-specific and plant-specific, and depending on the battery producer can take 6 to 16 months.²⁶ Qualification standards for EMD used in AA and AAA batteries are also reported to be more stringent than standards for EMD used in C and D batteries.^{27 28} In general, the former standards are higher because smaller-battery performance is more dependent on EMD discharge quality than that of larger batteries. The qualification process ensures that the processing equipment used to manufacture a given battery is compatible with the type of EMD to be used, so as to optimize battery performance. The qualification process entails physical and chemical analysis of the EMD, followed by model shop tests and plant scale trials.²⁹

In the preliminary phase of the investigations, Tronox contended that EMD was a commodity-like product as producers from a number of countries improved their production processes so as to better control EMD quality.³⁰ In the final phase of the investigations, Tronox clarified that characterization in light of the fact that the qualification process (which is presumably not characteristic of commodities) is recognized by Tronox as an essential feature of EMD procurement.³¹ However, Tronox also contends

²⁴ A Tronox official testified that he has no knowledge of any NMD or CMD production in the United States. Conference transcript, p. 52 (Stater).

²⁵ The shelf life of a battery is a measure of how long a battery may be stored and still provide useful service. Alkaline batteries typically have a shelf life of several years.

²⁶ U.S. purchaser questionnaire responses (section III-17).

²⁷ Tronox’s prehearing brief, p. 9.

²⁸ ***.

²⁹ Petition, pp. 8-9.

³⁰ According to Tronox, “We also understand that EMD from Australia and China is routinely supplied into those large cells that account for a large part of the market. In addition, we have heard from customers and competitors that both Australian and Chinese EMD are suitable for use in the small cells. Now, we believe that we produce a first rate, high quality product. The reality is the subject imports are also of a high quality. As a result, EMD has increasingly become commoditized.” Conference transcript, p. 23 (Gutwald).

³¹ A representative of Tronox stated the following: “I’m not suggesting that EMD is technically speaking a commodity product . . . EMD first needs to be qualified for a particular use in a customer’s battery and in the various battery sizes” (transcript of the Commission’s July 24, 2008 hearing (“hearing transcript”), p. 16 (Gutwald)). However, Tronox indicates that otherwise EMD behaves like a commodity. “The commercial reality is that once

(continued...)

that the qualification process is not a rigid process but can be greatly expedited given the economic need.³² Respondents disagree with any assertion that “commoditization” has occurred.³³ In any event, quality remains a source of concern in certain instances, not only for foreign suppliers but also for domestic suppliers. For example, Spectrum describes the Chinese EMD as having particulates added to it to “enhance deposit yields.” This produces “more manganese dioxide for a given applied current, but results in a lower grade EMD with reduced performance.”³⁴ ***.³⁵ Spectrum has also reported that it found ***.³⁶ Information on battery producers and the EMD suppliers they have qualified is presented in Parts II and V of this report.

Manufacturing Processes

All types and grades of EMD, whether imported or domestically produced, are subject to the same general manufacturing process. There are three stages of EMD production: ore handling, electrolysis, and finishing.³⁷ Ore handling involves the preparation of manganese dioxide for electrolysis. Currently, the only suitable ores contain either manganese dioxide or manganese carbonate. Manganese ore containing manganese dioxide is crushed and ground and then fed into reduction furnaces that convert manganese dioxide to the sulfuric acid-soluble manganese oxide (MnO) known as reduced ore.³⁸ The manganese is then “leached” by having the reduced ore digested continuously in spent electrolyte and sulfuric acid. Next, the resulting manganese sulfate solution is purified to remove, to the extent possible, such impurities as copper, nickel, cobalt, molybdenum, antimony, and arsenic (manganese dioxide for batteries should be essentially free of impurities that would deposit on a zinc anode).³⁹ Iron may be added to aid in the removal of impurities.⁴⁰

In electrolysis, the manganese sulfate solution is processed through a number of thickeners and filters and is fed to the electrolytic cell room. The purified manganese sulfate is then metered to the electrolytic cells, where hydrogen is liberated at the cathode (consisting of carbon or lead) cathodes and manganese dioxide is deposited on titanium anodes. The period of electrolysis lasts from two to four weeks.

³¹ (...continued)

EMD from a particular source is ‘qualified’ for use at a given battery producer for a particular cell size, all such EMDs become interchangeable with one another such that the key driver in a battery producer’s purchasing decision is price” (Tronox’s prehearing brief, p. 9).

³² Hearing transcript, pp. 85-86 (Levy).

³³ In the preliminary phase of these investigations, respondents testified “Unlike a commodity, EMD is not sold principally on the basis of price. Now, because of that in economist’s terms EMD from different manufacturers are imperfect substitutes. Now, the important nonprice characteristics include product quality, and quality features include grain size, uniformity, freedom from impurities, abrasiveness, compliance with customer specifications including pH moisture levels and so forth.” Conference transcript, p. 67 (Reilly). This view is reiterated in the final phase of the investigations. For example, Spectrum states that “As indicated numerous times in respondent’s prior submissions in this investigation, EMD is not a commodity product” (Spectrum’s posthearing brief, p. 1).

³⁴ Spectrum’s prehearing brief, p. 9.

³⁵ Ibid.

³⁶ Ibid., pp. 13-14.

³⁷ Petition, p. 9.

³⁸ For ore containing manganese carbonate, the reduction step is omitted.

³⁹ *Electrolytic Manganese Dioxide from Australia, China, Greece, Ireland, Japan, and South Africa, Investigations Nos. 731-TA-1048-1053 (Preliminary)*, USITC Publication 3633, September 2003, pp. I-7-I-8.

⁴⁰ Later removal of the iron is important because it would otherwise contaminate the product and affect efficiency in the electrolysis process, and because impurities such as arsenic and lead are co-precipitated when the iron is precipitated.

In the finishing process, the anodes are removed from the cells and are immersed in hot water to remove the electrolyte solution. The EMD deposit is removed from the anodes, washed, and neutralized to remove traces of the electrolyte. Neutralization determines the final pH of the EMD. EMD is in plate or chip form when removed from the anodes and neutralized. To be used in batteries, the EMD must be ground into a powder, a process which is usually performed by the EMD producers. Prior to shipment, the EMD is dried and packed according to customer specification. Before EMD is shipped to a customer, relatively minor adjustments are made to meet the particular needs of the customer. Adjustments include modifying the particle-size distribution, compressed density, and abrasiveness of the EMD.

Increased economic and environmental pressures have spurred companies to modify their production processes for EMD. For example, ***.

***.⁴¹ ***. The company believes that ***.⁴²

In response to a question (U.S. producer's questionnaire, question II-3) on whether firms produced other products on the same equipment and machinery used in the production of EMD, and using the same production and related workers, ***.

DOMESTIC LIKE PRODUCT

Tronox contends that the Commission should find one domestic like product⁴³ consisting of EMD, coextensive with Commerce's scope of the investigations.⁴⁴ Respondents have not opposed Tronox's proposed definition of the domestic like product.⁴⁵ In the preliminary phase of the investigations, the Commission found no significant differences among the several grades of EMD with respect to physical characteristics, uses, production processes, or channels of distribution, and stated that absent a clear dividing line between different grades of EMD it defined a single domestic like product consisting of EMD, coextensive with the scope of the investigations.⁴⁶

⁴¹ ***, July 9, 2008.

⁴² ***, June 13, 2008 and July 7, 2008.

⁴³ The Commission's decision regarding the appropriate domestic products that are "like" the subject imported products is based on a number of factors including (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. Information on EMD's physical characteristics, uses, and manufacturing processes is found earlier in Part I of this report; information on interchangeability, customer and producer perceptions, and channels of distribution is presented in Part II; and information on the pricing of EMD is presented in Part V.

⁴⁴ Petitioner's prehearing brief, pp. 6-8.

⁴⁵ E.g., Delta Australia's September 19, 2007 Responses to Supplemental Questions, p. 9, and Spectrum's postconference brief, pp. 6-7.

⁴⁶ *Electrolytic Manganese Dioxide from Australia and China, Investigations Nos. 731-TA-1124 and 1125 (Preliminary)*, USITC Publication 3955 (October 2007), p. 6.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

CHANNELS OF DISTRIBUTION AND MARKET CHARACTERISTICS

The reporting U.S. producers of EMD and U.S. importers of EMD from Australia, China, and nonsubject countries shipped their EMD in the U.S. market almost exclusively to U.S. battery producers during January 2005-March 2008.¹ There were at least eight merchant market suppliers (including two U.S. EMD producers) of U.S.-produced and imported EMD to the U.S. market during this period, while primarily four U.S. battery producers purchased the EMD for the production of mostly alkaline dry-cell batteries during this period.² According to the petitioner, purchasers reportedly have enough market power to pressure their suppliers to meet undisclosed lower prices from competing suppliers.³ *** asserted ***.⁴ For 2008, ***.⁵ U.S. battery producers were requested to discuss the bargaining strengths between their firms and their qualified EMD suppliers in negotiating prices during January 2005-March 2008; the U.S. battery producers were also asked to discuss who they considered price leaders for EMD in the U.S. market.⁶ Comments of the four responding U.S. battery producers to these requests are shown in appendix D.

The number of EMD suppliers to the U.S. market decreased between 2005 and 2008, resulting in increased supplier concentration between these periods and perhaps a shift in negotiating leverage between EMD sellers and purchasers. Based on EMD supply awards reported by the four major U.S. battery producers,⁷ a Herfindahl (H) index involving the top five merchant market U.S. suppliers increased from 0.2622 in 2005 to 0.2995 in 2008;⁸ the H index measures both concentration and size distribution of firms, such that an H value of 1 suggests a monopoly and successive values less than 1 and approaching zero suggest increasingly less concentration/more competition.

The Commission initially sent purchaser questionnaires to the four U.S. battery producers (Duracell, Energizer, Panasonic Primary Battery Corp. of America (Panasonic),⁹ and Spectrum) that were identified during the preliminary phase as those accounting for U.S. EMD battery production and most

¹ *** reported shipping ***; the shipments to companies other than U.S. battery producers accounted for *** percent of U.S. apparent consumption during this period. All the other U.S. merchant market EMD suppliers reported shipping their U.S.-produced and imported EMD to U.S. battery producers.

² The properties of EMD make it particularly useful in the production of dry-cell batteries, particularly alkaline batteries, by far its principal use (Petition, p. 8). Demand for EMD is derived almost exclusively from demand for alkaline batteries, which, in turn, is derived from the demand for the wireless/portable electronic devices that use these batteries.

³ Petition, p. 31.

⁴ U.S. producer questionnaire response, section IV-A-3.

⁵ Ibid.

⁶ U.S. purchaser questionnaire responses, sections IV-16 through IV-18.

⁷ U.S. purchaser questionnaire responses, section VI-3.

⁸ The H index is also expressed in units of 10,000 such that the H index for EMD increased from 2622 in 2005 to 2995 in 2008. The U.S. Department of Justice and the Federal Trade Commission consider industries to be highly concentrated when the H index is above 1800, moderately concentrated when the H index is between 1000-1800, and unconcentrated when the H index is below 1000 (http://usdoj.gov/atr/public/guidelines/horiz_book/15.html, retrieved March 27, 2007).

⁹ In Parts II and V, Panasonic refers to Panasonic Primary Battery Corp. of America, which produced *** in the United States during January 2005-March 2008, before closing its U.S. battery production facilities at the end of March 2008. Panasonic Battery Corp. of America, Lithium Battery Division, produced *** in the United States during this period and continues such production today. The latter Panasonic firm will be referred to as Panasonic-LB. ***.

U.S. purchases of EMD.¹⁰ Upon learning about Panasonic-LB ***, the Commission sent a shortened purchaser questionnaire to Panasonic's sister company. Duracell and Energizer *** together accounted for *** percent of the five battery producers' total reported U.S. production of EMD batteries during January 2005-March 2008.¹¹ ***,¹² ***,¹³

Each U.S. battery producer qualifies each EMD formulation of its suppliers for each type of battery and each producing location of the battery producers. Depending on the battery producer, the qualification process takes 6-16 months and costs in a range of \$100,000-\$250,000;¹⁴ detailed responses of U.S. battery producers describing the complex, costly, and lengthy qualification process for EMD suppliers are shown in appendix E.¹⁵ U.S. battery producers were also requested to identify the suppliers that were qualified to supply EMD to their U.S. battery production facilities during at least some part of January 2005-March 2008 and to report the country of origin of the EMD.¹⁶ The responses of each of the five responding U.S. battery producers are shown in the following tabulation.

* * * * *

U.S. battery producers were also requested to identify which EMD suppliers, if any, they have or are currently qualifying (since March 2008), or which they qualified during January 2005-March 2008.¹⁷ ***,¹⁸ whereas ***,¹⁹ ***,²⁰

Purchases of EMD by U.S. Battery Producers

The following two tabulations show reported purchases of EMD by U.S. battery producers.²¹ The tabulation on the following page shows each reporting U.S. battery producer's total reported purchases of EMD from U.S. producers and importers, by country of origin, and the delivered unit values during January 2005-March 2008.

* * * * *

¹⁰ Conference transcript, p. 82 (Stevens).

¹¹ U.S. purchaser questionnaire responses, section III-4a.

¹² U.S. producer questionnaire response, section IV-A. *** accounted for *** percent of U.S. EMD producers' total reported selling price data for EMD during January 2005-March 2008, and *** percent of U.S. EMD producers' and importers' reported selling price data of the domestic and subject imported EMD. *** (Letter from ***, June 18, 2008). Given ***, and the elapsed time in the final-phase investigation process before the staff became aware of this firm, the staff did not send a purchaser questionnaire to this firm.

¹³ Staff telephone interview with ***, June 18, 2008. *** (U.S. importer questionnaire response, section III-A.1-7).

¹⁴ U.S. purchaser questionnaire responses, section III-17.

¹⁵ U.S. purchaser questionnaire responses, sections III-17 and III-18.

¹⁶ U.S. purchaser questionnaire responses, section II-2b.

¹⁷ U.S. purchaser questionnaire responses, sections III-16 and III-17b.

¹⁸ ***.

¹⁹ ***.

²⁰ ***.

²¹ U.S. purchaser questionnaire responses, section II-2a.

The following tabulation shows total U.S. battery producers' purchases of EMD from U.S. producers and importers, by country of origin of the EMD, and the delivered unit values, by year during 2005-07 and during January-March 2008.²²

* * * * *

U.S. EMD battery producers were also requested to report the effect that the filing of the petition and/or the preliminary LTFV determinations had on their purchases or direct imports of EMD from Australia and China.²³ *** reported that *** had stopped purchasing the EMD from *** due to the preliminary LTFV determination.²⁴ *** reported that the firms had stopped purchasing EMD from *** and *** reported that it had stopped purchasing EMD from *** but not due to either the filing of the petition or the preliminary LTFV determination.²⁵ *** provided additional comments, which are shown in the following tabulation.

* * * * *

Separately, U.S. EMD battery producers were requested to identify any EMD suppliers that lost their approved status with the U.S. battery producers since January 2005.²⁶ Three of the four responding U.S. battery producers (***) reported that no EMD suppliers had lost their approved status, whereas *** reported that *** was recently disqualified for failure ***. As noted above, *** also ceased purchasing ***. At the request of staff, *** discussed scenarios under which it would ***.²⁷ *** provided the following responses:

***.

Usage of EMD by U.S. Battery Producers²⁸

U.S. battery producers were requested to report their usage of EMD for each category of EMD battery they produced domestically,²⁹ by grade of EMD (alkaline, lithium, or chlorine EMD),³⁰ and by country of origin and supplier of EMD, annually during 2005-07 and during January-March 2008.³¹ This reported information is summarized in the following two tabulations and table II-1 and shown in more detail in appendix F tables F-1a through F-1d. The tabulation immediately following shows, by the

²² Ibid.

²³ U.S. purchaser questionnaire responses, section II-4.

²⁴ *** did not purchase or import EMD from *** during January 2005-March 2008.

²⁵ ***.

²⁶ U.S. purchaser questionnaire responses, section III-19.

²⁷ Letter from ***, June 16, 2008.

²⁸ The EMD use was reported by five of the six known U.S. battery producers; the remaining U.S. battery producer was ***. *** reported selling a total of *** short tons of *** EMD to *** during January 2005-March 2008, which represented *** percent of total reported EMD usage during this period. In addition, the annual sales of EMD to *** during 2005-07 showed *** during this period.

²⁹ The battery producers were requested to specify each EMD battery category by cell size, voltage, premium or value line, and rechargeable or non-rechargeable. All reported U.S.-produced EMD batteries were non-rechargeable. Not all U.S. battery producers were able to separate premium from value line batteries.

³⁰ Almost all of the reported EMD was alkaline-grade.

³¹ U.S. purchaser questionnaire responses, section III-4a.

individual U.S. battery producers, their total usage of EMD by country of origin and their associated total U.S. production of EMD batteries during January 2005-March 2008.³²

* * * * *

The following tabulation on the next page shows total U.S. battery producers' usage of EMD and the associated U.S. EMD battery production (all battery categories combined), by country of origin of the EMD, by year, 2005-07, and during January-March 2008.³³

Combined EMD usage of U.S. battery producers					
Country of origin of EMD	2005	2006	2007	January-March 2008	Total
United States:					
EMD (<i>short tons</i>)	***	***	***	***	***
Batteries (<i>1,000s</i>)	***	***	***	***	***
Australia:					
EMD (<i>short tons</i>)	***	***	***	***	***
Batteries (<i>1,000s</i>)	***	***	***	***	***
China:					
EMD (<i>short tons</i>)	***	***	***	***	***
Batteries (<i>1,000s</i>)	***	***	***	***	***
Japan:					
EMD (<i>short tons</i>)	***	***	***	***	***
Batteries (<i>1,000s</i>)	***	***	***	***	***
South Africa:					
EMD (<i>short tons</i>)	***	***	***	***	***
Batteries (<i>1,000s</i>)	***	***	***	***	***
EMD Total (<i>short tons</i>)	104,993	106,513	100,543	23,638	335,687
Battery Total (<i>1,000s</i>)	6,428,007	6,686,924	6,531,685	1,531,489	21,178,105
Source: Compiled from data submitted in response to Commission questionnaires.					

³² Ibid.

³³ Ibid.

Table II-1 shows, by the individual U.S. battery producers, their usage of EMD, by country of origin and by battery cell size, during the full period of January 2005-March 2008.³⁴

Table II-1

EMD usage: Summary of EMD usage by battery cell size, by battery producer, and country-of-origin of EMD during January 2005-March 2008

* * * * *

Based on comments of the five responding U.S. EMD battery producers (***), *** firms produce both manufacturer and private label EMD batteries and three of the five responding firms (***) produce premium line and value line EMD batteries.³⁵ Approximately *** percent of reported U.S.-produced EMD batteries during 2007 were manufacturer label batteries and the remaining *** percent were private label batteries.³⁶ Of the total manufacturer label EMD batteries, *** percent were premium line and *** per were value line during 2007; ***, of the total private-label EMD batteries, *** percent were premium line and *** percent were value line.³⁷ The U.S. producers of batteries generally reported that the manufacturer label EMD batteries are typically sold at higher invoice prices than comparable size private label EMD batteries,³⁸ but that both labels compete with each other at the retail level.³⁹ According to the responding U.S. EMD battery producers, premium line batteries have superior run times at a higher price than the value line batteries, but each battery producer ***. According to ***, other construction techniques, including chemical amounts and seal technology, ***.

U.S. Battery Producers' Inventories of EMD

Four of five responding U.S. battery producers reported end-of-period inventories of EMD, by country of origin, during January 2005-March 2008.⁴⁰ The total EMD inventories from all sources were similar among three of the four U.S. battery producers as a share of their EMD use. *** total EMD inventories of *** short tons during January 2005-March 2008 averaged *** percent of its total EMD use during this period. *** total EMD inventories of *** short tons averaged *** percent of its total EMD

³⁴ Ibid.

³⁵ U.S. purchaser questionnaire responses, section III-3a. The firms reported producing the *** (U.S. purchaser questionnaire responses, section III-3b).

³⁶ *** was the only U.S. battery producer that produced ***.

³⁷ Ibid.

³⁸ Three U.S. battery producers also commented on the reasons for the selling strength of the manufacturer label batteries (higher priced and greater market share) over the private label batteries (U.S. purchaser questionnaire responses, section III-3c). *** reported that the manufacturer label batteries have a brand image and brand equity value that has been created over many years through consumer focused marketing, long-standing manufacturing credentials, and an innovative led research and development function. *** reported that the price premium for the manufacturer label batteries was due to brand strength and construction techniques. *** reported that the manufacturer label is sold at a higher price based on the equity associated with its brand as well as the cost of advertising and public relations to support the brand. According to ***, private label batteries are typically sold at a lower price, because it does not own the brand and does not support the private label with advertising or public relations.

³⁹ U.S. purchaser questionnaire responses, sections III-3c and III-3d. According to ***, private label EMD batteries continue to hold a small share of the market because retailers in the United States generally prefer branded batteries and the related manufacturer advertising and public relations supporting such brands.

⁴⁰ U.S. purchaser questionnaire responses, section II-3. *** reported that *** (U.S. purchaser questionnaire response, section II-8).

use during this period. *** total EMD inventories of *** short tons averaged *** percent of its total EMD use during this period. *** total EMD inventories of *** short tons averaged *** percent of its total EMD use during this period. U.S. battery producers' end-of-period inventories, by country of origin and by year, are shown in appendix G, along with explanations of any sharp period-to-period changes in the reported inventory levels.

Two of the four responding U.S. battery producers also discussed the role of their EMD inventories during January 2005-March 2008.⁴¹ *** reported that it held inventories of *** for *** and that it held inventories of ***. *** also reported that its inventories of *** accounted for ***. *** reported that the role of inventories of its purchased EMD that was *** was to have sufficient inventory to supply continuing battery manufacturing operations with as little excess inventory as possible to accomplish this goal.

SUPPLY AND DEMAND CONSIDERATIONS⁴²

U.S. EMD producers and importers and U.S. EMD battery producers were requested to discuss whether there was world excess supply capacity of EMD during January 2005-March 2008.⁴³ *** responding U.S. EMD producers (***), two of four responding U.S. importers (***), and *** U.S. battery producers (***) asserted that global excess supply of EMD existed; the remaining U.S. EMD producer (***), one of the U.S. importers (***), and two of the U.S. EMD battery producers (***) reported that no excess supply of EMD existed; and the remaining U.S. importer (***) and the remaining U.S. battery producer (***) indicated that they did not know if there was an excess supply of EMD. Seven of the responding firms provided additional comments, which are shown in the following tabulation.

* * * * *

U.S. Supply⁴⁴

U.S. Production

Based on available information, U.S. producers had an ability to respond to changes in U.S. demand with moderate changes in the quantity of shipments of U.S.-produced EMD to the U.S. market during January 2005-March 2008. Factors contributing to this degree of responsiveness of supply are discussed below.

Industry capacity

Based on the three U.S. producers' reported capacity and production, the domestic industry's annual capacity utilization for EMD fluctuated but remained high during 2005-06, averaging 98.6 percent during this period, but decreased to 87.2 percent during 2007; capacity utilization was 90.6 percent during January-March 2008 compared to 94.3 percent during January-June 2007. These levels of capacity

⁴¹ U.S. purchaser questionnaire responses, section II-8.

⁴² Short-run effects discussed in the supply and demand sections refer to changes that could occur within 12 months, unless otherwise indicated.

⁴³ U.S. producer and importer questionnaire responses, sections IV-B-23 and III-B-17, respectively, and U.S. purchaser questionnaire responses, section IV-8.

⁴⁴ Data on U.S. EMD production, production capacity, capacity utilization, inventories, and exports are shown in detail in Part III; details on foreign producer supply operations are shown in detail in Part VII.

utilization indicate that U.S. producers of EMD had little available capacity with which they could increase production of EMD in the short run in the event of a price change during 2005-06, but greater available capacity during 2007 and January-March 2008 indicates more flexibility to increase production during these latter periods.⁴⁵

The three U.S. producers of EMD, Energizer, Erachem and Tronox, reported their variable costs, which averaged, for the three producers combined, *** percent of their costs to produce EMD during 2006, while fixed costs were *** percent.⁴⁶ Although low output levels reportedly lead to increased unit costs, substantial variable costs potentially moderate, at least somewhat, such an increase in unit costs. In the short run, firms with high variable costs to total costs tend to reduce production and maintain prices when faced with a downturn in demand, whereas firms with high fixed costs tend to maintain production and reduce selling prices. Tronox reported that the capital-intensive nature of the EMD production process requires the firm to operate the plant as fully as possible to minimize unit costs.⁴⁷ For this reason, according to the petitioner, all major producers must maintain enough volume at key accounts to keep their plants operating at or near full capacity, even at the expense of lower prices.⁴⁸

Erachem and Tronox reported that if market conditions warranted, *** prepared to *** their U.S. EMD production capacity, whereas *** reported that *** for such ***.⁴⁹ *** estimated that ***. Due to the time needed, these *** increases in production capacity would not increase domestic EMD supply in the short run. However, *** estimated incremental increases in EMD production capacity that are estimated to occur within one year and, as such, could increase domestic EMD supply in the short run. *** estimated that ***. Both firms indicated that ***.⁵⁰

Inventory levels

The three U.S. producers of EMD reported combined end-of-period inventory quantities that fluctuated but *** during 2005-07, from *** percent of U.S. producers' total shipments of the U.S.-produced EMD during 2005 to *** percent during 2007; these inventories were *** percent of annualized shipments during January-March 2008 compared with *** percent during January-March 2007. These levels of inventories suggest that U.S. producers may have had a moderate ability to use inventories to respond to price changes in the short run. This flexibility may be constrained in the short run to the extent that U.S. producers' EMD inventories consist of products already committed to customers in the U.S. and/or export markets. *** reported that its EMD inventories are generally available for sale, but

⁴⁵ U.S. producers' supply flexibility may be constrained, even with excess capacity, by limited capability of specific U.S. plants to produce or to be qualified by end users to supply all the required formulations of EMD. According to the petitioner, supply relationships at different U.S. accounts are well-established (petition, p. 31).

⁴⁶ U.S. producer questionnaire response, section IV-B-15; the reported percentage figures for variable and fixed costs were weighted by each responding firm's reported total cost of goods sold (COGS) to derive a weighted-average figure for the industry. The U.S. EMD producers were also requested to identify which costs they considered variable and which they considered fixed (Ibid.). The three responding U.S. EMD producers identified a number of common variable cost items, such as ***. The primary raw material for all U.S. EMD producers was manganese dioxide ore and/or *** and, coupled with energy costs, these combined inputs averaged *** percent of their total COGS to produce EMD during January 2005-March 2008.

⁴⁷ Conference transcript, p. 17 (Stater).

⁴⁸ Petition, p. 31.

⁴⁹ U.S. producer questionnaire responses, sections IV-B-20 and 21. *** (U.S. producer questionnaire response, section IV-B-21).

⁵⁰ U.S. producer questionnaire responses, section II-12.

***.⁵¹ In addition, end-of-period inventories of EMD held by *** during January 2005-March 2008 averaged *** short tons annually during this period, or *** percent of all three U.S. EMD producers' combined average annual inventories of EMD during this period. *** holds its inventories of its U.S.-produced EMD for ***. Deducting these limits on inventory availability, U.S. producers' end-of-period EMD inventories that were available to increase supply to the U.S. market during January 2005-March 2008 ranged from a low of *** short tons in 2005 to a high of *** short tons in January-March 2008. On the other hand, this supply availability may have been restrained in the short run to the extent that U.S. producers' EMD inventories consisted of products that were not required by the increased demand or not qualified by the U.S. battery producers that would have initiated the increased demand.

*** reported the role of their U.S. inventories of each firm's U.S.-produced EMD during January 2005-March 2008.⁵² ***.

Alternate markets

The two merchant market U.S. EMD producers' total reported exports of U.S.-produced EMD averaged almost *** percent of the quantity of their total shipments of U.S.-produced EMD during January 2005-March 2008. This *** level of exports during the period indicates that domestic producers of EMD *** in their ability to shift shipments from other markets to the United States in the short run in response to price changes, but have a *** ability to shift shipments from the U.S. market to other markets. This *** to shift shipments to the U.S. market may be *** constrained in the short run to the extent that U.S. producers' sales of EMD exported to third-country markets were not used/acceptable in the U.S. market, or to the extent that U.S. producers have binding supply agreements 12 months or longer with customers in third country markets. *** reported that ***,⁵³ ***.⁵⁴ *** reported that ***.⁵⁵

Production alternatives

***, and ***.⁵⁶ The ability of U.S. producers to shift production between EMD and other products would enhance their supply flexibility in the short run in response to relative price changes between EMD and alternative products.

Imports from Australia

Based on available information, staff believes that the lone Australian producer of EMD, Delta EMD Australia (Delta), may have had the ability during January 2005-March 2008 to respond to changes in demand with relatively *** changes in shipments of Australian-produced EMD to the U.S. market for at least some periods during January 2005-March 2008. Factors contributing to this degree of responsiveness of supply are discussed below.

Delta reported that it closed its only Australian plant producing EMD in mid-March 2008 and laid off its workforce on March 28, 2008; the facility reportedly is currently ***. Delta's exports of its

⁵¹ U.S. producer questionnaire response, section IV-B-19a.

⁵² U.S. producer questionnaire responses, section IV-B-19c. *** (Ibid.).

⁵³ *** produced during the production of EMD (staff telephone interview with ***, July 15, 2008).

⁵⁴ U.S. producer questionnaire response, section II-9.

⁵⁵ U.S. producer questionnaire response, sections II-9 and IV-B-18.

⁵⁶ U.S. producer questionnaire responses, section II-3.

Australian-produced EMD to the United States reportedly *** and, according to Delta, ***.⁵⁷ In light of Delta's plant closure, the firm did not provide any projections for its operations in 2008 and 2009, other than to show final capacity and production figures for January-March 2008 and remaining shipments in 2008, most of which occurred in the first quarter.

HiTec Energy Limited in Australia has developed and patented a new EMD process that reportedly is more energy efficient, recovers a higher percentage of manganese so that a lower grade manganese ore can be used, and allows for better process control to obtain high purity EMD. Conceptual designs for a plant in Western Australia have begun, but further efforts reportedly are unlikely to proceed until mining boom related pressures on labor availability and equipment costs ease.⁵⁸ The petitioner asserts that ***,⁵⁹ whereas Spectrum asserts that ***.⁶⁰

Industry capacity

Delta reported total capacity utilization for EMD in Australia that fluctuated but remained *** during 2005-06, averaging *** percent during this period, then decreased to *** percent during 2007; capacity utilization was *** percent during January-March 2008 compared to *** percent during January-March 2007. The *** capacity utilization levels during 2007 and January-March 2008 occurred as Delta *** its inventory level. The levels of capacity utilization indicate that Delta had *** ability to increase production of EMD in the short run during 2005-06, in the event of a price change, *** to do so during 2007 and January-March 2008.

Inventory levels

Delta reported end-of-period inventory quantities of EMD in Australia that were *** during 2005-06, averaging *** percent of total shipments during this period, and then Delta's EMD inventories *** in 2007, to *** percent of total shipments; Delta's EMD inventories were *** percent of its total annualized shipments during January-March 2008,⁶¹ as it prepared to shut down *** its EMD production in Australia. These data indicate that Delta had *** inventories which may have provided a means to increase shipments to the U.S. market in the short run during 2005-06, but this ability fell *** in 2007 and January-March 2008. This flexibility may be restrained in the short run to the extent that Delta's Australian inventories consist of products not useable/acceptable in the U.S. market, or consist of products already committed to customers in third-country markets. Delta reported that about *** percent of its EMD inventory in Australia was committed to non-U.S. customers, but that *** of its inventory at the end of 2007 was committed to non-U.S. customers and could not be used to increase supply to the U.S. market.⁶²

In addition, Delta also reported end-of-period inventory quantities of its Australian-produced EMD in the United States. These U.S. inventories of the imported EMD from Australia *** somewhat in quantity during January 2005-March 2008, averaging *** short tons during this period. Delta's U.S.

⁵⁷ Foreign producer questionnaire response, section II-1. Delta indicated that its decision to close the plant was made in a public announcement on December 18, 2007 (Ibid.). Details of Delta's efforts in *** are discussed in Part VII.

⁵⁸ Petitioner's prehearing brief, exhibit 5.

⁵⁹ Petitioner's posthearing brief, p.11 and exhibit 3. The petitioner indicated that *** (Ibid.).

⁶⁰ Respondent Spectrum's posthearing brief, pp. 13-14.

⁶¹ In comparison, Delta's EMD inventories were *** percent of its total annualized shipments during January-March 2007.

⁶² Foreign producer questionnaire response, section III-3.

inventory quantities of its imported EMD from Australia increased from *** percent of its U.S. shipment quantities of such imports in 2005 to *** percent in 2007, as its shipments decreased; such inventory shares of annualized U.S. shipments were *** percent during January-March 2008, compared to *** percent during January-March 2006. Delta reported that *** were available to increase supply in the face of increased U.S. demand.⁶³

Alternate markets

Delta reported that its EMD produced in Australia was shipped *** to the United States and *** to third-country markets during January 2005-March 2008; there was no home-market demand for EMD. During January 2005-March 2008, Delta's shipments of EMD to the U.S. market averaged *** percent of its total shipment quantities of EMD, and exports to third-country markets averaged the remaining *** percent of the total. These data for alternate markets indicate that Delta had *** third-country markets for its EMD from which it could possibly shift shipments of EMD to the United States in the short run in the event of a price change in the U.S. market. Delta reported that *** would have restricted its ability to shift third-country exports to the United States. Despite such restrictions, Delta indicated that a market shift of *** percent of its non-U.S. exports to the U.S. market could have occurred during January 2005-March 2008, but that such a shift would have ***.⁶⁴

Production alternates

Delta reported producing *** EMD at its Australian facility, with ***.⁶⁵ The ability of Delta to shift production between EMD and other products would have enhanced its supply responsiveness in the short run in response to relative price changes between EMD and alternative production products during January 2005-March 2008.

Imports from China

Based on available information, staff believes that Chinese producers of EMD have the ability to respond to changes in demand with at least moderate changes in shipments of EMD to the U.S. market. Factors contributing to this degree of responsiveness of supply are discussed below.

Industry capacity

The two responding Chinese producers of EMD, ***, reportedly accounted for over *** percent of Chinese EMD exported to the United States during January 2005-March 2008. Based on these Chinese producers' reported capacity and production, the Chinese industry's annual capacity utilization for EMD fluctuated but remained *** during 2005-07, averaging *** percent during this period; capacity utilization was *** percent during January-March 2008 compared to *** percent during January-March 2007. The two Chinese producers' combined capacity utilization level is estimated to *** to *** percent for all of 2008 and to *** percent during 2009, while production capacity levels are estimated to *** during both periods. These levels of capacity utilization indicate that Chinese producers of EMD had *** available capacity with which they could increase production of EMD in the short run in the event of a price change during 2005-07, *** ability to increase production of EMD during January-March 2008, when ***. This ability to increase production of EMD is estimated to *** during the full year of 2008

⁶³ U.S. importer questionnaire response, section III-B-15. *** (Ibid.).

⁶⁴ *** foreign producer questionnaire response, section III-4.

⁶⁵ *** foreign producer questionnaire responses, section II-3.

and during 2009, based on estimated *** capacity utilization rates, despite *** projected production capacity each year.

Inventory levels

The two responding Chinese producers of EMD reported combined end-of-period inventories that increased steadily in quantity during 2005-07, but decreased as a share of total shipments; such inventories fluctuated but decreased from *** percent of total shipments during 2005 to *** percent during 2007; the Chinese producers' EMD inventories were *** percent of their annualized total shipments during January-March 2008, compared to *** percent during January-March 2007. These data indicate that the Chinese producers had *** inventories that may have been used to increase shipments to the U.S. market in the short run during January 2005-March 2008.⁶⁶

Based on incomplete U.S. importer questionnaire responses, there were no reported importer end-of-period inventory quantities of the Chinese-produced EMD in the United States.

Alternate markets

The two responding Chinese producers of EMD reported that their products were shipped *** to their home market, *** to third-country markets, *** to the U.S. market, and the remainder was used for internal consumption/transfers during January 2005-March 2008; this shipment pattern was *** in 2008 and 2009, but with *** shipments to the United States projected during 2008 and 2009. During January 2005-March 2008, Chinese producers' shipments of EMD to the home market averaged *** percent of their total shipment quantities of EMD; exports to third-country markets averaged *** percent of the total; exports to the U.S. market averaged *** percent of the total; and internal consumption/transfers accounted for the remaining less than *** percent. These data for alternate markets indicate that Chinese EMD producers had *** home market and other non-U.S. export markets from which they could possibly shift shipments of EMD to the United States in the short run in the event of a price change in the U.S. market. This flexibility may be restrained in the short run to the extent that Chinese producers' sales of EMD in their home market and/or exports to third-country markets were not used/acceptable in the U.S. market, or to the extent that Chinese producers have binding supply agreements 12 months or longer with customers in the home and/or third-country markets. Both responding Chinese producers reported that *** of their home market and third-country shipments of the Chinese EMD could have been shifted to the United States during January 2005-March 2008; *** asserted that each customer has ***.⁶⁷

Production alternates

The two responding Chinese producers of EMD reported that they produced ***.

⁶⁶ This flexibility may be restrained in the short run to the extent that the Chinese producers' inventories consist of products not useable/acceptable in the U.S. market, or consist of products already committed to customers in home and/or third-country markets. ***. Foreign producer questionnaire responses, section IV-3.

⁶⁷ Foreign producer questionnaire responses, section IV-2.

Supply of Nonsubject Imports of EMD to the U.S. Market

Based on import statistics presented in Part IV, suppliers in a total of two nonsubject countries exported EMD to the United States during January 2005-March 2008. Imports of EMD from nonsubject countries accounted for *** percent of the quantity of total U.S. imports of EMD during this period. The share of total U.S. imports of EMD from nonsubject countries fluctuated but increased from *** percent in 2005 to *** percent in 2007, while the quantity of total U.S. imports of EMD decreased by 25.2 percent. Japan was the principal nonsubject country supplier ***.

U.S. Demand

U.S. demand for EMD, as measured by annual U.S. apparent consumption, decreased steadily during 2005-07, by a total of 14.3 percent on a quantity basis during this period;⁶⁸ U.S. apparent consumption was almost 10.0 percent higher in January-March 2008 than in January-March 2007.

EMD is used almost exclusively in the production of dry-cell batteries, with most of these batteries involving the production of alkaline batteries.⁶⁹ As a result, U.S. demand for EMD is derived almost wholly from the downstream demand for U.S.-produced alkaline batteries, which, in turn, is derived from demand for the wireless/portable electronic devices using these batteries,⁷⁰ such as various remote controls, digital cameras, MP3 players, wall clocks, smoke alarms, flashlights, radios, etc. Although EMD production is not seasonal, shipment volumes of batteries can be affected by increases in battery consumption at Christmas and in response to natural disasters, such as hurricanes.⁷¹ Four U.S. firms—Tronox, Delta, Duracell, and Spectrum—provided detailed responses concerning drivers for U.S. EMD/alkaline battery demand, which are shown in the following tabulation.⁷²

* * * * *

Changes in U.S. Demand For EMD

U.S. EMD producers and importers, and U.S. battery producers, which purchase EMD in the United States, were requested to comment on changes in demand for EMD in the United States since January 1, 2005.⁷³ *** responding U.S. EMD producers (***) and one of the four responding U.S. battery producers (***) cited increased U.S. demand; *** EMD producers (***) and one of the battery producers (***) cited decreased demand; one of the four responding U.S. importers (***) and the

⁶⁸ U.S. demand for EMD, as measured by EMD usage reported by five of six U.S. battery producers, fluctuated but decreased during 2005-07, by a total of *** percent on a quantity basis during this period.

⁶⁹ Petition, p. 8; and Tronox's postconference brief, exhibit 1, p. 3. In addition, lithium-grade EMD is used in a few types of batteries, including the common 3-volt "coin" type batteries, but the volume of EMD used for this application reportedly is so small as to render it immaterial (Tronox's postconference brief, exh. 1, p. 6). According to Delta, the "coin" cells reportedly *** (Letter from ***, September 19, 2007).

⁷⁰ Conference transcript, p. 115 (Reilly) and p. 116 (McGrath).

⁷¹ *** reported that in 2005 a series of unprecedented hurricanes drove incremental demand for batteries. The long-term weather forecasts for both 2006 and 2007 predicted similar hurricane patterns as 2005 and extra EMD was ordered accordingly. The predicted weather patterns did not materialize in either year and a huge surplus of EMD inventory had to be consumed (U.S. purchaser questionnaire response, section IV-3).

⁷² Tronox's postconference brief, exh. 1, p. 2; letter from ***, September 19, 2007; letter/supplementary questionnaire response from ***, September 19, 2007; and Spectrum's postconference brief, exh. 1, p. 3.

⁷³ U.S. producer and importer questionnaire responses, sections IV-B-22a and III-B-16a, respectively, and U.S. purchaser questionnaire responses, section IV-5a.

remaining battery producer (***) cited unchanged demand; one of the responding importers (***) reported fluctuating demand; and the two remaining importers (***) and the remaining battery producer (***) reported that they were unable to comment. All eight responding firms that reported some change in U.S. EMD demand provided additional comments, which are shown in the tabulation on the following page.

* * * * *

Based on available information, U.S. end users of EMD are likely to respond to changes in the price of EMD with small to moderate changes in their purchases of EMD, such that U.S. demand may be price inelastic or somewhat price elastic. A major contributing factor to this level of responsiveness of demand is the apparent lack of any close substitutes for EMD and the relatively low-to-moderate cost share, whereas the existence of some substitutes in the downstream market for batteries, such as other types of batteries with non-EMD chemistries, and imported EMD batteries, and some ability of U.S. battery producers to shift U.S. production to their offshore facilities, tend to enhance the responsiveness of U.S. demand for EMD.

Substitute Products for EMD

U.S. EMD producers and importers and U.S. EMD battery producers were requested to discuss substitution in demand, based on their experience in the U.S. market, between EMD and alternative inputs (other than EMD).⁷⁴ *** responding U.S. producers of EMD, *** responding U.S. importers of EMD, and *** responding U.S. EMD battery producers reported that no substitutes exist for EMD.⁷⁵

U.S. EMD producers and importers and U.S. EMD battery producers were requested to discuss substitution in demand, based on their experience in the U.S. market, among various EMD formulations.⁷⁶ *** responding U.S. producers of EMD, three of five responding U.S. importers of EMD, and two of four responding U.S. EMD battery producers reported that no substitution exists among the various EMD formulations.⁷⁷ On the other hand, *** responding U.S. EMD producers, the remaining two responding U.S. importers, and the remaining two responding U.S. battery producers indicated that substitution

⁷⁴ U.S. producer and importer questionnaire responses, sections IV-B-25 and III-B-19, respectively, and U.S. purchaser questionnaire responses, section IV-9. The producers and importers were requested to provide examples of the top two economic substitutes for EMD and this request was preceded by the following explanation: “Substitution in demand refers to products that can, based on market price considerations and consumer/industrial user preferences/technical requirements, reasonably be expected to substitute for each other when the price of one product changes vis-a-vis the price of the other product—some consumers/ industrial users may require greater price changes than others before they switch among the alternative products.”

⁷⁵ One of the responding U.S. battery producers (***) provided additional responses. Although *** believes that there are no substitutes for EMD (whether a manganese dioxide or not) that are suitable for use in consumer alkaline batteries, chemical manganese dioxide (CMD) and natural manganese dioxide (NMD) can be used but face the following difficulties. CMD has significantly lower performance than EMD in alkaline batteries, such that an alkaline battery made with CMD, rather than EMD, would never meet the market expectations for battery performance. NMD, while suitable for use in the acid electrolyte of zinc carbon batteries, is entirely too impure to even be considered for use with alkaline batteries, because alkaline batteries using NMD instead of EMD would exhibit an unacceptable and unworkable level of gassing/leakage.

⁷⁶ U.S. producer and importer questionnaire responses, sections IV-B-26 and III-B-20, respectively, and U.S. purchaser questionnaire responses, section IV-11. The producers and importers were requested to provide examples of the top two pairs of EMD formulations that were substitutes for each other.

⁷⁷ The responding U.S. EMD producer *** (U.S. producer questionnaire response, section IV-B-26).

occurs among EMD formulations and they cited examples (***). Responses of these five firms (*** is represented twice) are shown in the following tabulation.

* * * * *

Substitute Products for EMD Batteries

Because demand for EMD is derived almost exclusively from the demand for alkaline batteries, the extent to which other types of batteries could substitute for U.S.-produced alkaline batteries could affect the demand for U.S.-produced alkaline batteries, and, in turn, U.S. demand for EMD. U.S. EMD battery producers were requested to discuss in their questionnaire responses substitution in demand, based on their experience in the U.S. market, between EMD batteries and batteries that use other chemistries (non-EMD batteries).⁷⁸ Three of the four responding U.S. EMD battery producers identified non-EMD batteries that may substitute for EMD batteries; the remaining U.S. battery producer (*** reported that there were no substitutes of EMD batteries. Responses of the three U.S. battery producers identifying non-EMD batteries as substitutes for EMD batteries are shown in the tabulation below.

* * * * *

U.S. EMD battery producers were also requested to report the total number of non-EMD batteries that they produced domestically, by category of battery, during January 2005-2008.⁷⁹ *** reported producing non-EMD batteries, whereas *** reported that *** did not produce non-EMD batteries in the United States. The responding U.S. battery producers reported *** categories of non-EMD batteries that they produced domestically during January 2005-March 2008-***. The ***, which were produced by ***, were also mentioned above by *** as competing with the EMD batteries of these cell sizes.

During the preliminary phase of these investigations, U.S. EMD producers and importers were requested in their questionnaire responses to discuss substitution between EMD and non-EMD batteries.⁸⁰ Comments of the firms that responded in the preliminary phase are shown here. *** asserted that U.S. EMD demand has decreased, at least partially, because of the shift from alkaline batteries to rechargeable batteries. *** reported that in low-drain applications there is no competition from other chemistries. According to Tronox, in high-drain applications, such as digital cameras,⁸¹ rechargeable batteries with non-EMD chemistries are used as competing alternatives to disposable EMD-containing alkaline batteries. Tronox also reported that in the lithium segment of the battery market, various types that do not use EMD also compete with lithium-grade EMD batteries.⁸² *** asserted that in the U.S. market no other

⁷⁸ U.S. purchaser questionnaire responses, section IV-13 and IV-14. The EMD battery producers were requested to provide examples of the top two pairs of EMD and non-EMD batteries that were substitutes for each other.

⁷⁹ U.S. purchaser questionnaire response, section III-6.

⁸⁰ U.S. producer and importer questionnaire responses (preliminary phase), sections IV-B-16 and III-B-16, respectively.

⁸¹ According to Tronox, digital cameras are a relatively new part of the market, such that EMD demand growth from this segment has been fairly small, as the batteries are small cells and there is substantial competition from rechargeable batteries (Tronox's postconference brief, exh. 1, p. 3). On the other hand, Panasonic asserted that market demand for rechargeable batteries is on the decrease versus alkaline batteries. For some reason, according to Panasonic, the U.S. market would rather use a disposable battery than a rechargeable battery, so the rechargeable battery demand has declined (conference transcript, p. 131 (Stevens)).

⁸² Tronox's postconference brief, exh. 1, p. 3.

types of batteries compete with the batteries that use EMD, primarily alkaline batteries.⁸³ A U.S. importer of EMD, ***, asserted that a non-alkaline battery, nickel oxy-hydroxide (NiOOH), is used in very high performance batteries, primarily for digital cameras. According to ***, NiOOH batteries are very expensive and really a separate niche market from standard or even premium alkaline batteries, hence at this stage there is little impact on the price or demand for EMD. Potentially, over the next three years, NiOOH batteries may increase market share in the premium battery market, but it will depend upon the price of the NiOOH batteries, which is driven significantly by the price of nickel.

Imported Batteries as Substitutes for U.S.-Produced EMD Batteries

Imports of alkaline batteries and imports of non-EMD batteries that could substitute for U.S.-produced alkaline batteries, could affect the demand for U.S.-produced alkaline batteries, and, in turn, U.S. demand for EMD. U.S. EMD battery producers were requested to report in their questionnaire responses their total imports and purchases of imported EMD and non-EMD batteries by the categories of batteries, and the latter by the chemistry of the battery, during January 2005-March 2008.⁸⁴ *** responding U.S. battery producers reported imports and purchases of the imported batteries, whereas *** reported no such imports. The reported imports and purchases of imported EMD batteries are shown in table II-2 and imports and purchases of non-EMD batteries are shown in table II-3. In both tables, the quantity of batteries and, in table II-2, the quantity of EMD contained in the imported/purchased EMD batteries, are shown separately for groups of batteries comparable in cell sizes and types to those produced by the U.S. EMD battery producers. As can be seen in both tables, the majority of the imported and purchased imported batteries are those similar in cell sizes and types to the EMD batteries produced by the U.S. battery producers.⁸⁵

**Table II-2
EMD batteries: U.S. EMD battery producers' total imports and purchases of imported EMD batteries, by categories of batteries, January 2005-March 2008**

* * * * *

**Table II-3
Non-EMD batteries: U.S. EMD battery producers' total imports and purchases of imported non-EMD batteries, by categories of batteries, January 2005-March 2008**

* * * * *

During the preliminary phase of these investigations, U.S. EMD producers provided some discussion of the impact of imported batteries on U.S. demand for EMD. *** reported that U.S. demand for EMD has decreased, at least partially, because of increased U.S. imports of primary alkaline batteries.⁸⁶ *** asserted that it has not observed a major increase in U.S. demand for EMD used in small

⁸³ Conference transcript, p. 113 (Stevens) and (McGrath).

⁸⁴ U.S. purchaser questionnaire responses, sections III-5 and III-7.

⁸⁵ Delta asserted that there was a low cross-price elasticity of demand between the AA/AAA EMD batteries and the C/D EMD batteries because of different demand drivers for these two categories of battery sizes (conference transcript, p. 117 (Reilly)).

⁸⁶ *** U.S. producer questionnaire response (preliminary phase), section IV-B-16.

cell batteries, perhaps due to increasing volumes of imported small cell batteries, particularly from China.⁸⁷

Shifts in U.S. EMD Battery Production Offshore

U.S. EMD battery producers were requested to discuss any shifting of their U.S. battery production offshore during January 2005-March 2008 and any plans to shift in the future, at least partially, their U.S. battery production offshore.⁸⁸ *** of the five responding U.S. EMD battery producers (***) reported at least some shifting of domestic battery production offshore, whereas *** U.S. battery producers (***) reported no such shifting.⁸⁹ The comments of *** U.S. EMD battery producers reporting some shifting of domestic battery production are shown in the tabulation below.

* * * * *

Cost Share

As noted, EMD is used in the production of primarily alkaline batteries. The four major U.S. battery producers reported the 2007 share of EMD costs to the total cost to produce each of their four top EMD batteries by cell size (the top four types of EMD batteries were based on their total EMD battery production during January 2005-March 2008);⁹⁰ all of the reported batteries were 1.5 volt alkaline batteries of four different cell sizes. The cost shares of EMD ranged from a low of *** percent for *** battery to *** percent for *** battery. The cost shares of EMD reported by each of the four U.S. battery producers are shown in the following tabulation.

* * * * *

The four U.S. battery producers were also requested to indicate how U.S. demand has changed since January 2005 for each of their top four EMD batteries and to explain the cumulative effect of this demand change on the firms' total U.S. demand for EMD during January 2005-March 2008.⁹¹ The responses of each firm are shown in the following tabulation.

* * * * *

Changes in Demand For EMD Outside the United States

U.S. EMD producers and importers, and U.S. battery producers, which purchase EMD both in the United States and at their offshore locations, were requested to comment on changes in demand for EMD outside of the United States since January 1, 2005.⁹² *** responding U.S. EMD producers (***), one of the four responding U.S. EMD importers (***), and two of the four responding U.S. battery producers (***) cited increased foreign demand; one of the EMD importers (***) cited decreased demand; one of

⁸⁷ ***.

⁸⁸ U.S. purchaser questionnaire responses, sections III-8 and III-9.

⁸⁹ ***; the names and locations of offshore battery production plants *** are shown in appendix H.

⁹⁰ U.S. purchaser questionnaire responses, section IV-2.

⁹¹ U.S. purchaser questionnaire responses, section IV-3.

⁹² U.S. producer and importer questionnaires, sections IV-B-22b and III-B-16b, respectively, and U.S. purchaser questionnaire responses, section IV-5b.

the battery producers (***) cited unchanged demand; and *** battery producer (***) and the two remaining U.S. importers (***) reported that they were unable to comment. *** responding U.S. EMD producers (***), two of the responding U.S. EMD importers (***), and two of the responding U.S. battery producers (***) provided additional comments, which are shown in the following tabulation.

* * * * *

SUBSTITUTABILITY ISSUES

The degree of substitution in demand between EMD produced in the United States and that imported from Australia and from China depends upon such factors as relative prices, conditions of sales (order lead times, payment terms etc.), purchaser supply requirements, qualified status of supplier, and product differentiation. Product differentiation depends on factors such as the range of products, quality (formulation standards, defect rates, product consistency, etc.), availability, reliability of supply, product services, and the market perception of these factors. Based on the reported information in these investigations, there appears to be at least moderate substitution in demand between EMD produced domestically and that imported from Australia and possibly less substitution between U.S.-produced EMD and that imported from China.

EMD Qualification

U.S. EMD producers and importers reported that EMD suppliers must be qualified for each of their EMD formulations by the U.S. battery producers, who in turn, separately qualify the EMD for each type of battery and each producing location of the battery producers, including offshore battery production facilities.⁹³ *** reported that its standard alkaline grade EMD reportedly is qualified for use in all cell sizes with its current U.S. customers (***)⁹⁴. On the other hand, Panasonic asserted that, depending on the size and characteristics of different batteries containing EMD (EMD batteries), differing formulations of EMD may be used.⁹⁵ Qualification requirements may result in reduced substitutability among suppliers as EMD from a particular source may be the only EMD qualified for a certain type of battery. The extent to which U.S. battery producers are able to qualify EMD from different sources may depend at least partially on the production process of the battery producers.⁹⁶ The *** qualify EMD from

⁹³ U.S. producer and importer questionnaire responses, sections IV-A-6 through IV-A-8 and III-A.1-4 through III-A.1-6, respectively.

⁹⁴ ***. ***.

⁹⁵ Conference transcript, pp. 83-84 and 106-107 (Stevens). EMD is used by U.S. battery producers to produce the cathode part of the battery, which includes EMD, graphite, and an electrolyte. This cathode formulation may be different from one type of battery cell size to another and from one battery producer to another (Ibid.).

⁹⁶ Panasonic asserted that the production process that is used by one U.S. battery producer versus another is different, and in some cases contaminants that are in the EMD may still allow a particular U.S. battery producer to use that particular EMD. In Panasonic's case, those specific contaminants in its process are not allowed, otherwise it causes another problem, which is an impact on the actual quality of its battery. (Conference transcript, pp. 105-106 (Stevens)). In addition, Spectrum asserted that, in testing the Tronox product, Spectrum incurred significantly more tool wear than with other producers of EMD. Similarly, abrasion is the result of specific crystallinity in a given EMD, which causes accelerated wearing of cathode dyes and ultimately leads to out of specification cathode pellets. This requires frequent tooling changes and substantially increases the cost to the battery manufacturer. (Conference transcript, p. 92 (McGrath)). In addition, Spectrum asserted that at no *** (respondent Spectrum's prehearing brief, p. 14).

*** during January 2005-March 2008.⁹⁷ On the other hand, the *** qualified EMD from *** throughout January 2005-March 2008. *** qualified EMD from China during at least some portion of the period⁹⁸ January 2005-March 2008, and *** qualified EMD from Australia during this period.⁹⁹

EMD Blending

*** blend their EMD from various sources, whereas *** blend EMD from various sources.¹⁰⁰ Such blending may suggest that EMD from several sources either exhibits no differences in physical and/or performance characteristics or is differentiated by these factors; if the former, the products may be substitutable and if the latter the products may also be complements. *** provided additional comments, which are shown in the following tabulation.

* * * * *

Changes in Product Range and Marketing of EMD

U.S. EMD producers and importers of the subject EMD were requested to describe any significant changes in the product range or marketing of EMD in the United States since January 2005.¹⁰¹ *** responding U.S. producers and one of the four responding U.S. importers reported some changes, whereas *** U.S. EMD producers and the three remaining U.S. importers reported no such changes. *** reported that foreign producers aggressively market EMD to take market share (volume) from domestic producers with increasing price pressure from 2004-08. ***.

Factors Affecting Purchases

U.S. EMD battery producers, purchasers of EMD, were requested to rank 15 specified purchase factors as very important, somewhat important, or not important.¹⁰² Four U.S. battery producers responded (***); their responses are summarized in table II-4 for each purchase factor. Availability,

⁹⁷ ***. (Petitioner's posthearing brief, exhibit 1, pp. 19-20).

On the other hand, ***. (Respondent Spectrum's posthearing brief, pp. 8-13).

⁹⁸ ***. *** also noted that *** indicated that substitutability of domestic and subject imported EMD is *** (respondent Spectrum's prehearing brief, pp. 15-16).

⁹⁹ *** qualified *** during January 2005-March 2008, and *** appears to have qualified EMD *** during this period.

¹⁰⁰ U.S. purchaser questionnaire responses, section III-13. *** asserted that blending would increase performance variability, and *** reported that it found that blending caused more problems than it solved. According to ***, blending causes poor tableting and inconsistent quality, and it could not insure that the ratios remain constant.

¹⁰¹ U.S. producer and importer questionnaire responses, sections IV-B-14 and III-B-14, respectively.

¹⁰² U.S. purchaser questionnaire responses, section IV-24.

Table II-4
EMD: Importance of purchase factors

Purchase factors	Number of purchasers reporting--		
	Very important	Somewhat important	Not important
Availability	4	-	-
Delivery terms	1	3	-
Delivery time	4	-	-
Discounts offered	1	2	1
Extension of credit	-	3	1
Price	3	1	-
Minimum quantity requirements	2	2	-
Packaging	3	1	-
Product consistency	4	-	-
Product quality equals standard	3	-	1
Product quality exceeds standard	2	1	1
Product range	1	2	1
Reliable supply	4	-	-
Technical support	2	2	-
U.S. transportation costs	-	3	1

Source: Compiled from data submitted in response to Commission questionnaires.

delivery time, product consistency, and reliable supply were listed as very important by all four responding U.S. battery producers, followed by price, packaging, and product quality equals standard as very important by three responding U.S. battery producers.

U.S. EMD battery producers were also requested to list the top three purchase factors that they consider when deciding from whom to purchase EMD from its qualified suppliers.¹⁰³ Four U.S. battery producers responded and identified a variety of purchase factors, which made it difficult to group the responses by specific factors. As a result, the factors considered the most important, second in importance, and third in importance are shown by each responding firm in the following tabulation.

* * * * *

¹⁰³ U.S. purchaser questionnaire responses, section IV-25.

Three responding U.S. battery producers (***) also reported the characteristics that they consider when determining the quality of EMD, which included moisture, density, alkalinity, impurities, chemical properties, meeting specifications, particle size distribution, and performance of EMD in testing.¹⁰⁴

Comparisons Between the U.S.-Produced and Imported EMD

U.S. EMD producers and importers and U.S. EMD battery producers were requested in their questionnaires to report on the extent of interchangeability (products from different countries physically capable of being used in the same applications) of EMD produced domestically, imported from Australia, China, and from third countries.¹⁰⁵ U.S. EMD producers and importers were also asked to report the extent of any non-price differences that would affect sales/purchases in the U.S. market among these various sources of EMD.¹⁰⁶ Responses of the U.S. EMD producers, importers, and U.S. battery producers regarding the degree of interchangeability between domestic and imported EMD are summarized in table II-5, and responses of U.S. EMD producers and importers regarding differences other than price affecting competition are summarized in table II-6.

For responses regarding the degree of interchangeability, three U.S. producers of EMD, five U.S. importers of EMD, and four U.S. battery producers reported the requested information (table II-5). U.S. EMD producers asserted most frequently that EMD produced in the United States, and imported from Australia, China, and from third countries was always or frequently interchangeable among each other. U.S. importers of EMD were more divided in describing interchangeability as always or frequent compared to sometimes or never. U.S. battery producers asserted most frequently that the EMD from these sources was sometimes or never interchangeable.

¹⁰⁴ U.S. purchaser questionnaire responses, section IV-26.

¹⁰⁵ U.S. producer and importer questionnaire responses, sections IV-B-27 and III-B-21, respectively, and U.S. purchaser questionnaire responses, section V-3.

¹⁰⁶ U.S. producer and importer questionnaire responses, sections IV-B-28 and III-B-22, respectively. Nonprice factors referred to in the questionnaire request included, but were not necessarily restricted to, quality, availability, transportation network, product range, and technical support.

Table II-5

EMD: Perceived degree of interchangeability of EMD produced in the United States, imported from Australia, China, and from third countries that was sold in the U.S. market

Country pair	Number of U.S. producer responses ¹					Number of U.S. importer responses ²					Number of U.S. battery producer responses ³				
	A	F	S	N	O	A	F	S	N	O	A	F	S	N	O
United States vs.--															
Australia	***	***	***	***	***	2	-	1	-	-	1	-	3	1	-
China	***	***	***	***	***	1	1	1	1	-	1	-	1	2	-
Third countries	***	***	***	***	***	4	1	2	1	-	1	1	1	4	-
Australia vs.--															
China	***	***	***	***	***	1	1	1	1	-	1	-	1	2	-
Third countries	***	***	***	***	***	4	1	4	1	-	1	2	1	2	-
China vs.--															
Third countries	***	***	***	***	***	3	2	4	2	-	1	-	-	4	-
<p>¹ All three U.S. EMD producers responded, providing responses for specific third-countries and for third countries as a group (unspecified); all such responses are shown in the category of third countries. The third countries specified by one or more U.S. producers are Japan and South Africa.</p> <p>² The five responding U.S. importers provided responses for specific third-countries and for third countries as a group (unspecified); all such responses are shown in the category of third countries. The third countries specified by one or more firms are Japan and South Africa.</p> <p>³ The four responding U.S. EMD battery producers provided responses for specific third-countries and for third-countries as a group (unspecified); all such responses are shown in the category of third countries. The third countries specified by one or more firms are Japan and South Africa. One U.S. battery producer, ***, provided separate responses for C/D batteries and for AA/AAA batteries; all such responses are shown in the table.</p> <p>Note.--A = Always, F = Frequently, S = Sometimes, N = Never, O = No familiarity.</p> <p>Source: Compiled from data submitted in response to Commission questionnaires.</p>															

For responses regarding differences in factors other than price affecting competition, two U.S. producers of EMD and three U.S. importers of EMD reported the requested information (table II-6).¹⁰⁷ The responding U.S. EMD producers and importers asserted similarly that differences in nonprice factors among EMD produced in the United States and imported from Australia, China, and from third countries were generally never or sometimes important among sales of the domestic and imported products.

¹⁰⁷ The two responding U.S. EMD producers were ***. One of the responding U.S. importers was ***, whereas the remaining two responding importers were ***.

Table II-6

EMD: Perceived importance of differences in factors other than price between EMD produced in the United States, imported from Australia, China, and from third countries that was sold in the U.S. market

Country pair	Number of U.S. producer responses ¹					Number of U.S. importer responses ²				
	A	F	S	N	O	A	F	S	N	O
United States vs.--										
Australia	***	***	***	***	***	-	1	-	1	-
China	***	***	***	***	***	1	-	-	1	-
Third countries	***	***	***	***	***	1	2	-	3	-
Australia vs.--										
China	***	***	***	***	***	1	-	-	1	-
Third countries	***	***	***	***	***	2	-	1	3	-
China vs.--										
Third countries	***	***	***	***	***	2	1	-	3	-
<p>¹ Two of the three U.S. producers responded and provided responses for specific third-countries and for third countries as a group (unspecified); all such responses are shown in the category of third countries. The third countries specified by one or more U.S. producers are Japan and South Africa.</p> <p>² The three responding U.S. importers provided responses for specific third-countries and for third countries as a group (unspecified); all such responses are shown in the category of third countries. The third countries specified by one or more U.S. importers/purchasers are Japan and South Africa.</p> <p>Note.--A = Always, F = Frequently, S = Sometimes, N = Never, O = No familiarity.</p> <p>Source: Compiled from data submitted in response to Commission questionnaires.</p>										

U.S. EMD producers, importers, and U.S. battery producers were also requested to provide any comments where products are sometimes or never interchangeable,¹⁰⁸ and U.S. EMD producers and importers were requested to provide any comments where nonprice factors were always or frequently significant in competition between the domestic and imported EMD.¹⁰⁹ The comments of the responding U.S. EMD producers and importers and U.S. battery producers reporting on interchangeability and comments of the responding U.S. importers commenting on nonprice factors are shown in the following two tabulations, respectively.¹¹⁰

* * * * *

U.S. EMD battery producers were also requested to make country-of-origin comparisons among the U.S.-produced and imported EMD in terms of the 15 specified purchase factors discussed earlier and indicate for each factor whether product from one country was superior, comparable, or inferior to product from another country.¹¹¹ The U.S. battery producer responses are shown in table II-7a for comparisons between the U.S.-produced EMD and that imported from Australia, China, Japan, and South Africa. The U.S. battery producer responses are shown in table II-7b for comparisons between the imported EMD from Australia and that imported from Japan and South Africa.

¹⁰⁸ U.S. producer and importer questionnaire responses, sections IV-B-27 and III-B-21, respectively, and U.S. purchaser questionnaire response, section V-3.

¹⁰⁹ U.S. producer and importer questionnaire responses, sections IV-B-28 and III-B-22, respectively.

¹¹⁰ U.S. producers of EMD did not provide any additional responses regarding nonprice factors.

¹¹¹ U.S. purchaser questionnaire responses, section V-7.

Table II-7a

EMD: Comparisons of purchase factors between U.S.-produced and imported EMD

Purchase factors	Number of purchasers' responses comparing the United States with--											
	Australia			China			Japan			South Africa		
	S	C	I	S	C	I	S	C	I	S	C	I
Availability	-	2	2	-	1	2	***	***	***	***	***	***
Delivery terms	1	3	-	1	2	-	***	***	***	***	***	***
Delivery time	2	2	-	2	1	-	***	***	***	***	***	***
Discounts offered	-	1	2	-	-	2	***	***	***	***	***	***
Extension of credit	-	4	-	-	3	-	***	***	***	***	***	***
Price ¹	-	1	3	-	-	3	***	***	***	***	***	***
Minimum quantity requirements	-	4	-	-	3	-	***	***	***	***	***	***
Packaging	-	4	-	-	3	-	***	***	***	***	***	***
Product consistency	-	4	-	-	3	-	***	***	***	***	***	***
Product quality equals standard	-	4	-	-	3	-	***	***	***	***	***	***
Product quality exceeds standard	-	4	-	1	2	-	***	***	***	***	***	***
Product range	-	3	1	1	2	-	***	***	***	***	***	***
Reliable supply	1	2	1	1	2	-	***	***	***	***	***	***
Technical support	1	2	1	2	1	-	***	***	***	***	***	***
U.S. transportation costs ¹	-	3	1	-	3	-	***	***	***	***	***	***

¹ A rating of superior means that the price (or U.S. transportation costs) is generally lower.

Note.--S=superior, C=comparable, and I=inferior.

Note.--Responding purchasers did not necessarily report for every country pair or every purchase factor.

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-7b

EMD: Comparisons of purchase factors among imported EMD

* * * * *

A total of four U.S. battery producers responded for comparisons between the domestic and imported Australian products, three U.S. battery producers responded for comparisons between the domestic and imported Chinese products, two U.S. battery producers responded for comparisons between the domestic and imported Japanese products, and a single U.S. battery producer responded for comparisons between the domestic and imported South African products, but not necessarily for every purchase factor (table II-7a). For all four country comparisons, the U.S. battery producers asserted that

the domestic and imported EMD was generally comparable. Two notable exceptions involved the domestic EMD and that imported from Australia and China, where the domestic product was rated inferior to the imported products for the purchase factor, price (i.e., the U.S.-produced EMD was higher priced).

A total of two U.S. battery producers responded for comparisons between the imported EMD from Australia and the imported EMD from China, and two U.S. battery producers responded for comparisons between the imported EMD from Australia and the imported EMD from Japan, but not necessarily for every purchase factor (table II-7b). For both country comparisons, the U.S. battery producers asserted that the imported EMD from Australia and the imported EMD from China and Japan was ***. Notable exceptions involved the purchase factor, ***, where the Australian EMD was rated *** to the Chinese EMD by one purchaser (i.e., the Australian EMD was ***), but rated *** to the Japanese EMD by another purchaser (i.e., the Australian EMD was ***).

ELASTICITY ESTIMATES¹¹²

U.S. Supply Elasticity

The domestic supply elasticity for EMD measures the sensitivity of the quantity supplied by the U.S. producers to a change in the U.S. market price of these products. The elasticity of domestic supply depends on several factors including the U.S. producers' level of excess capacity, the ease with which the U.S. producers can alter their productive capacity, the existence of inventories, and the availability of alternate markets for U.S.-produced EMD.¹¹³ Analysis of these factors indicates that, overall, the U.S. producers had flexibility in the short run to alter their supply of EMD to the U.S. market in response to relative changes in the demand for their products. The domestic elasticity of supply for EMD is estimated to be in the range of 3-7. The higher end of the range for supply elasticity for EMD, however, depends critically on the required increase in prices necessary for capacity expansion; the higher the price increase required the lower the supply elasticity.

U.S. Demand Elasticity

The U.S. price elasticity of demand for EMD measures the sensitivity of the overall quantity demanded for EMD to changes in the U.S. market price of EMD. The price elasticity of demand depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products for EMD, the component cost share of EMD in the production of downstream products (i.e., primarily alkaline batteries), the viability of substitutes for U.S.-produced alkaline batteries (including imported batteries),¹¹⁴ and the price elasticity of demand for the down-stream electronic products that use the batteries. Based on available information, the demand elasticity for EMD is estimated to be in the range of -0.5 to -1.5.

¹¹² The suggested ranges for the various elasticities were presented in the prehearing report for purposes of discussion in the prehearing briefs, hearing testimony, and/or posthearing briefs. There were no comments on the elasticities other than the petitioner's comments on the demand elasticity range, which is discussed in the text. The elasticity responses in this section refer to changes that could occur within 12 months, unless otherwise indicated.

¹¹³ Domestic supply response is generally assumed to be symmetrical for both an increase and a decrease in demand for the domestic product. Exceptions to this assumption occur when the supply response is restricted when demand increases (e.g., the domestic firm(s) operate near or at full capacity and any likely expansion in capacity would take more than 12 months to complete), or, more rarely, when demand decreases (e.g., the domestic firm(s) must operate at or near full capacity due to very high fixed costs).

¹¹⁴ The viability of imported alkaline batteries substituting for U.S.-produced alkaline batteries is enhanced by U.S. battery producers' ability to move U.S. battery production offshore.

The petitioner indicated that the demand elasticity range of -0.5 to -1.5 suggests no substitutes for EMD and that demand for EMD is highly inelastic.¹¹⁵ Actually, this range suggests that EMD demand could be inelastic to somewhat elastic and takes into consideration substitution in downstream products,¹¹⁶ including non-EMD batteries and imports of batteries, and EMD cost shares in batteries, as well as substitution between EMD and alternatives.

Substitution Elasticity¹¹⁷

The elasticity of substitution largely depends upon the degree to which there is an overlap of competition between U.S.-produced and imported EMD, and the extent of product differentiation. Product differentiation, in turn, depends on such factors as physical characteristics (e.g., formulations and quality) and conditions of sale (e.g., delivery lead times, reliability of supply, technical support/service, etc.). Based on available information discussed earlier, the elasticity of substitution between domestic EMD and that imported from Australia is estimated to be in the range of 3-5, whereas that imported from China is estimated to be in the range of 2-4.

¹¹⁵ Petitioner's posthearing brief, p. 7.

¹¹⁶ As indicated earlier, U.S. demand for EMD is derived mostly from demand for U.S.-produced alkaline batteries. Such a strong and direct connection in demand for EMD and demand for U.S.-produced alkaline batteries provides the basis for also considering downstream substitution among batteries with different chemistries and imports of batteries in evaluating the U.S. demand elasticity for EMD.

¹¹⁷ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the imports and the U.S. domestic like product to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the imported product (or vice versa) when prices change.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

Information presented in this section of the report is based on the questionnaire responses of three firms. These firms are believed to account for all of the U.S. production of EMD during the period for which data were collected (January 2005-March 2008).

U.S. PRODUCERS

The Commission sent producers' questionnaires to all three firms identified as U.S. producers of EMD in the petition. Table III-1 presents the list of U.S. producers with each company's production location, share of U.S. production in 2007, and position on the petition.

Table III-1

EMD: U.S. producers, U.S. production locations, shares of U.S. production in 2007, and positions on the petition

Firm	Production location	Share of production (percent)	Position on the petition	
			Australia	China
Energizer ¹	Westlake, OH	***	***	***
Erachem ²	New Johnsonville, TN	***	***	***
Tronox ³	Henderson, NV	***	Petitioner	Petitioner

¹ Energizer is primarily a U.S. producer of alkaline batteries headquartered in St. Louis, MO.
² Erachem is a wholly owned subsidiary of Comilog U.S., Inc. of Baltimore, MD.
³ Tronox is a wholly owned subsidiary of Tronox Inc. of Oklahoma City, OK.

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

Data on U.S. producers' capacity, production, and capacity utilization are presented in table III-2. Total U.S. capacity increased from 2005 to 2007 by 0.6 percent, but is well below apparent U.S. consumption of EMD. Total U.S. production of EMD decreased by 11.7 percent from 2005 to 2007 ***, and continued to decrease for all three producers in January-March 2008 compared with their production levels in January-March 2007. Capacity utilization decreased by 12.1 percentage points from 2005 to 2007, and decreased by 3.6 percentage points between the January-March periods.¹

¹ Tronox stated that since EMD has a capital-intensive manufacturing process with high fixed costs, EMD producers need to operate at high levels of capacity utilization to reduce pre-unit fixed costs and operate profitably. Tronox's postconference brief, p. 13.

Table III-2
EMD: U.S. producers' capacity, production, and capacity utilization, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
Capacity (short tons)					
Energizer	***	***	***	***	***
Erachem	***	***	***	***	***
Tronox	***	***	***	***	***
Total	70,024	69,998	70,475	17,603	17,625
Production (short tons)					
Energizer	***	***	***	***	***
Erachem	***	***	***	***	***
Tronox	***	***	***	***	***
Total	69,582	68,412	61,468	16,592	15,976
Capacity utilization (percent)					
Energizer	***	***	***	***	***
Erachem	***	***	***	***	***
Tronox	***	***	***	***	***
Average	99.4	97.7	87.2	94.3	90.6
Source: Compiled from data submitted in response to Commission questionnaires.					

***.

Constraints that set the limits on production capabilities were reported as follows: ***.²

In September 2005, Kerr-McGee Chemical LLC changed its name to Tronox LLC. Ownership of Tronox LLC's ultimate parent company, Tronox Inc., subsequently changed during the November 2005 through March 2006 period pursuant to a spin-off.³ ***.⁴

***.⁵

***.⁶

² U.S. producers' questionnaire responses (section II-4).

³ Ibid.

⁴ Ibid.

⁵ ***'s producers' questionnaire response (section II-2).

⁶ Ibid.

***.⁷

***.⁸

***.⁹ *** produce EMD using titanium anodes.¹⁰

The domestic producers reported *** toll agreements *** U.S. production of EMD in U.S. foreign trade zones.¹¹

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORT SHIPMENTS

As detailed in table III-3, the volume of U.S. producers' U.S. shipments of EMD (*** of which were of alkaline-grade EMD) decreased steadily by 14.3 percent from 2005 to 2007. The value of their U.S. shipments also decreased steadily by 9.4 percent during the same time period. However, the volume and value of U.S. shipments increased by 14.0 percent and 16.0 percent, respectively, between the January-March periods. *** of the internal consumption shipments are those of Energizer, which consumes *** of the EMD it produces in the production of its dry cell batteries.¹² The *** volume of export shipments made by U.S. producers decreased irregularly by *** percent between 2005 and 2007, while the value of those export shipments decreased irregularly by *** percent during the same period. *** reported export shipments, which were made to ***.¹³ Energizer, which internally consumes *** the EMD it produces, ***. *** reported transfers at market prices. ***.

CAPTIVE CONSUMPTION

Section 771(7)(C)(iv) of the Act states that—

If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that—

- (I) *the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,*
- (II) *the domestic like product is the predominant material input in the production of that downstream article, and*
- (III) *the production of the domestic like product sold in the merchant market is not generally used in the production of that downstream article,*

*then the Commission, in determining market share and the factors affecting financial performance . . . , shall focus primarily on the merchant market for the domestic like product.*¹⁴

⁷ Ibid.

⁸ ***'s producers' questionnaire response (section II-2).

⁹ U.S. producers' questionnaire responses (section II-3 and section II-5).

¹⁰ U.S. producers' questionnaire responses (section II-11 and section II-12).

¹¹ U.S. producers' questionnaire responses (section II-6 and section II-7).

¹² ***.

¹³ ***.

¹⁴ 19 U.S.C. § 1677(7)(C)(iv).

Table III-3

EMD: U.S. producers' shipments, by type, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-June	
	2005	2006	2007	2007	2008
Quantity (short tons)					
Commercial shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	70,553	61,968	60,485	12,820	14,613
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
Value (\$1,000)					
Commercial shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	94,407	88,667	85,501	18,221	21,129
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
Unit value (per short ton)					
Commercial shipments	\$***	\$***	\$***	\$***	\$***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	1,338	1,431	1,414	1,421	1,446
Export shipments	***	***	***	***	***
Average	***	***	***	***	***
¹ Not applicable.					
Source: Compiled from data submitted in response to Commission questionnaires.					

Captive consumption (internal shipments) accounted for *** percent of the volume of U.S. producers' U.S. shipments of EMD in 2005, *** percent in 2006, *** percent in 2007, *** percent in January-March 2007, and *** percent in January-March 2008; *** captive consumption was accounted for by Energizer. Commercial (merchant) shipments accounted for *** percent of U.S. producers' U.S. shipments in 2005, *** percent in 2006, *** percent in 2007, *** percent in January-March 2007, and *** percent in January-March 2008. Transfers to related firms accounted for *** percent of U.S. producers' U.S. shipments in each of the years 2005, 2006, and 2007. There were *** reported transfers to related firms in the interim January-March periods.

The first requirement for application of the captive consumption provision is that the domestic like product that is internally transferred for processing into a downstream article not enter the merchant market for the domestic like product. Energizer consumes *** of the EMD it produces in the production of its dry cell batteries; *** of its production is sold on the merchant market. ***.

The second criterion of the captive consumption provision concerns whether the domestic like product is the predominant material input in the production of the downstream article that is captively produced. EMD amounts to between *** and *** percent of the total cost of manufacturing a battery, depending on the type of battery.¹⁵

The third criterion of the captive consumption provision is that the production of the domestic like product sold in the merchant market is generally not used in the production of the downstream article produced from the domestic like product that is internally transferred for processing (captively produced). Virtually all, if not all, U.S.-produced EMD, whether sold in the U.S. merchant market or captively consumed, is used in the production of dry-cell batteries.

U.S. PRODUCERS' IMPORTS AND PURCHASES OF IMPORTS

One of the three U.S. producers, ***, reported that it purchased subject imports from *** during the period examined ***.¹⁶ Table III-4 presents purchases of imports and domestic product by ***, along with its U.S. production.

Table III-4
EMD: *'s production and purchases, 2005-07, January-March 2007, and January-March 2008**

	*	*	*	*	*	*	*
***. ¹⁷							
***. ¹⁸							
***.							

U.S. PRODUCERS' INVENTORIES

Data on end-of-period inventories of EMD for the period examined are presented in table III-5.

¹⁵ U.S. battery producers were asked to provide the share of EMD in their total cost of producing batteries. Duracell responded that EMD accounted for *** of costs. For Energizer, ***. For Panasonic, ***. For Spectrum, ***.

¹⁶ ***'s producers' questionnaire response (section II-11). ***.

¹⁷ ***'s producers' questionnaire response (section II-11).

¹⁸ ***'s importers' questionnaire response.

Table III-5
EMD: U.S. producers' end-of-period inventories, 2005-07, January-March 2007, and January-March 2008

* * * * *

***.¹⁹

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Data provided by U.S. producers on the number of production and related workers (“PRWs”) engaged in the production of EMD, the total hours worked by such workers, and wages paid to such workers during the period for which data were collected in these investigations are presented in table III-6.

Table III-6
EMD: Average number of production and related workers producing EMD, hours worked, wages paid to such employees, and hourly wages, productivity, and unit labor costs, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
PRWs (<i>number</i>)	212	213	211	215	208
Hours worked (<i>1,000</i>)	458	460	454	115	114
Hours worked per worker	2,160	2,160	2,152	535	548
Wages paid (<i>\$1,000</i>)	12,050	12,697	13,105	3,182	3,424
Hourly wages	\$26.31	\$27.60	\$28.87	\$27.67	\$30.04
Productivity (<i>short tons per 1,000 hours</i>)	151.9	148.7	135.4	144.3	140.1
Unit labor costs (<i>per short ton</i>)	\$173.18	\$185.60	\$213.20	\$191.78	\$214.32
Source: Compiled from data submitted in response to Commission questionnaires.					

¹⁹ ***'s producers' questionnaire response (section II-8).

PART IV: U.S. IMPORTS, APPARENT CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission sent importer questionnaires to 18 firms believed to be importers of EMD from the subject countries, as well as to all three U.S. producers.¹ Questionnaire responses were received from seven companies that are believed to account for virtually all U.S. imports of EMD.² Questionnaire respondents were located in Australia, Connecticut, Japan, New Jersey, New York (2), and Wisconsin.³ *** firms reported imports from nonsubject countries.

The Commission received importer questionnaires from virtually all importers of EMD. *** was discovered in Commerce statistics for the period for which data were gathered, and as a result, Commission staff elected to compile U.S. import data in this report from questionnaire responses.⁴

Table IV-1 lists all responding U.S. importers of EMD and their quantity of imports, by source, in 2007. *** U.S. importers entered the subject product into or withdrew it from foreign trade zones or bonded warehouses.

Table IV-1
EMD: Reported U.S. imports, by importer and by source of imports, 2007

* * * * *

U.S. IMPORTS

Table IV-2 shows that the volume of U.S. imports of EMD from subject countries combined decreased by *** percent from 2005 to 2007, then increased by *** percent between January-June 2007 and January-June 2008. Taken separately, the volume of imports from Australia fluctuated downward by *** percent and from China decreased irregularly by *** percent from 2005 to 2007. The volume of U.S. imports from Australia *** short tons in 2005 to *** short tons in 2006, then rose to *** short tons in 2007. Interim period comparisons show that imports of EMD from Australia increased by *** short tons in interim 2008 as compared to *** short tons in interim 2007. The volume of EMD imports from China increased by *** short tons or *** percent between 2005 and 2006 before a decrease of *** short tons or *** percent in 2007. A comparison of EMD imports from China for the interim periods *** to interim period EMD imports from Australia. Interim EMD imports from China decreased by *** short tons, from *** short tons in interim 2007 to *** short tons, or by *** percent, in interim 2008.

¹ The Commission sent questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection (“Customs”) (formerly the U.S. Customs Service), may have imported EMD since 2004.

² ***. Further, the Commission received responses from *** which reported no imports of subject EMD during the period for which data were collected.

³ ***.

⁴ ***.

Table IV-2
EMD: U.S. imports, by source, 2005-07, January-March 2007, and January-March 2008

Source	Calendar year			January-March	
	2005	2006	2007	2007	2008
Quantity (short tons)					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal	***	***	***	***	***
All others ¹	***	***	***	***	***
Total	43,844	40,647	32,809	4,541	5,561
Value (\$1,000)²					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal	***	***	***	***	***
All others ¹	***	***	***	***	***
Total	52,743	48,200	43,704	8,447	9,703
Unit value (per short ton)					
Australia	\$***	\$***	\$***	\$***	\$***
China ¹	***	***	***	***	***
Average	***	***	***	***	***
All others ¹	***	***	***	***	***
Average	1,203	1,186	1,332	1,860	1,745
Share of quantity (percent)					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal	***	***	***	***	***
All others ¹	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0

Table continued on next page.

Table IV-2--Continued

EMD: U.S. imports, by source, 2005-07, January-March 2007, and January-March 2008

Source	Calendar year			January-March	
	2005	2006	2007	2007	2008
Share of value (percent)					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal	***	***	***	***	***
All others ¹	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0
¹ ***. ² Landed, duty-paid. Source: Compiled from data submitted in response to Commission questionnaires and from confidential Customs data.					

*** U.S. shipments of imports of EMD from Australia and China were alkaline grade EMD. U.S. shipments of imports of EMD from all other sources were *** alkaline-grade EMD; ***.

Nonsubject imports of EMD are presented in table IV-3. Two countries (Japan and South Africa) accounted for all reported nonsubject imports of EMD during 2005-07.

Table IV-3

EMD: U.S. imports from nonsubject countries, by sources, 2005-07, January-March 2007, and January-March 2008

* * * * *

NEGLIGENCE

The Tariff Act provides for the termination of an investigation if imports of the subject product from a country are less than 3 percent of total imports, or, if there is more than one such country, their combined share is less than or equal to 7 percent of total imports, during the most recent 12 months for which data are available preceding the filing of the petition—in this case August 2006 through July 2007. The shares (in *percent*) of the total quantity of U.S. imports for each of the subject countries for the period of August 2006 through July 2007 are shown in table IV-4. The Commission did not collect monthly import data for the August 2006-July 2007 period; therefore, imports have been compiled using Commerce data.

Table IV-4

EMD: U.S. imports and shares of total imports, by source, August 2006-July 2007

Country	Imports (short tons)	Share of total imports (percent)
Australia	18,919	48.5
China	12,725	32.6
Subtotal	31,644	81.2
All other countries	7,336	18.8
Total	38,980	100.0

Source: Compiled from official Commerce statistics.

CUMULATION CONSIDERATIONS

In assessing whether imports compete with each other and with the domestic like product, the Commission has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical market, (3) common or similar channels of distribution, and (4) simultaneous presence in the market.

Fungibility

Tronox contends that all EMD from the two subject countries and domestically produced EMD is “generally fungible.”⁵ It states that Chinese EMD is unquestionably fungible with Australian EMD, such that Australian EMD has been replaced by Chinese EMD and vice-versa, in direct competition for sales to U.S. customers in 2006 and 2007.⁶ Australian EMD sold in the United States allegedly is used in all major cell sizes - AA, AAA, and C and D batteries, as is the EMD made by U.S. producer Tronox.⁷ Moreover, if EMD from a particular supplier does not meet the requirements of a specific battery manufacturer, the EMD can be blended with EMD from other sources in order to satisfy the battery manufacturer’s specifications.⁸ “Blending” is a process by which battery manufacturers may mix or blend EMD from various sources and various grades together to achieve a desired EMD grade.

Duracell said that ***.⁹

Energizer stated that “***.”¹⁰

Spectrum argued that EMD is not fungible.¹¹ It stated that EMD is produced for specific battery manufacturers and that it is not interchangeable between end users. Spectrum cannot use domestic EMD

⁵ Petitioner’s postconference brief in the preliminary phase of these investigations, p. 8.

⁶ Ibid., pp. 8-9.

⁷ Ibid., p. 9.

⁸ Ibid.

⁹ ***.

¹⁰ ***.

¹¹ Spectrum’s postconference brief in the preliminary phase of these investigations, pp. 7 and 14.

interchangeably with EMD imported from Australia and China.¹² Further, it contends that Chinese EMD is not directly substitutable for EMD originating in any other country for physical reasons, as Chinese producers add EMD particulates to the electrolysis cell to enhance deposit yields. This produces more manganese dioxide for a given applied current, but results in a lower grade EMD with reduced performance. To address these performance issues, ***.¹³ *** and it does not believe that Chinese EMD is interchangeable with those of its other sources of EMD.¹⁴ It also stated that it does not believe that EMD imported from Australia and China compete directly with each other or with domestically produced EMD.¹⁵

Furthermore, Panasonic has stated that “it’s simply not correct to say that all EMD is the same.”¹⁶

Geographical Market Segmentation

Two responding U.S. producers, ***, reported selling their EMD nationally, whereas the responding U.S. importers of EMD from Australia and China reported selling their EMD to the Midwestern and Southeastern United States.¹⁷ Imports of EMD from the subject countries enter the United States through select Customs districts; however, the product competes for end user sales without regard to geographical location in the United States.¹⁸ Table IV-5 presents information on shares of U.S. imports of EMD entered by regions and customs districts during 2005-07. Imports of EMD from Australia entered through the Customs districts of Baltimore, MD, and Norfolk, VA, while imports of EMD from China principally entered through the Customs districts of Savannah, GA, Chicago, IL, and Los Angeles, CA.

Common or Similar Channels of Distribution

All imports from both subject countries and domestic production of EMD are sold directly to end users, the battery manufacturers, by sales representatives of the producers or the importers.¹⁹ However, not all sources of EMD compete at each battery manufacturer (see Part II of this report, *Channels of Distribution and Market Characteristics*).

Simultaneous Presence in the Market

Imports generally have been simultaneously present in the U.S. market throughout the period examined. Imports of EMD from Australia and China entered the United States in all months from January 2005 through March 2008, with the following exceptions: no imports of EMD from Australia in April, May, June, and July 2005; March 2006; January 2007; and March 2008; no imports of EMD from China in May 2005 or February and March 2008.

¹² Ibid.

¹³ Ibid., p. 8.

¹⁴ Ibid., fn. 25.

¹⁵ Ibid., p. 14.

¹⁶ Conference transcript, p. 83 (Stevens).

¹⁷ U.S. producer and importer questionnaire responses, (sections IV-B-11 and III-B-11), respectively.

¹⁸ ***. Tronox’ postconference brief, p. 17.

¹⁹ U.S. producers’ questionnaire responses (section II-9) and U.S. importers’ questionnaire responses (section II-5).

Table IV-5**EMD: U.S. imports by sources and Customs districts, 2005-07**

Region	Australia			China		
	2005	2006	2007	2005	2006	2007
Shares of total quantity (percent)						
Baltimore, MD	0.0	37.3	96.8	0.0	0.0	0.0
Chicago, IL	0.0	0.0	0.0	3.0	1.5	23.6
Los Angeles, CA	0.0	0.0	0.0	92.2	94.9	13.9
Norfolk, VA	100.0	62.7	3.2	0.0	0.0	0.0
Philadelphia, PA	0.0	0.0	0.0	0.0	0.0	0.0
Savannah, GA	0.0	0.0	0.0	4.9	3.7	62.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Note.—Because of rounding, figures may not add to the totals shown.						
Source: Compiled from official Commerce statistics.						

APPARENT U.S. CONSUMPTION

Data on apparent U.S. consumption of EMD are presented in table IV-6.

Tronox submitted that the reported EMD usage data compiled provide the most accurate and reliable data series for assessing trends in consumption and market share during the period for which data were gathered.²⁰ Accordingly, table C-3 presents apparent consumption based on compiled usage data.

²⁰ Tronox's posthearing brief, p. 4.

Table IV-6

EMD: U.S. shipments of domestic product, U.S. imports by source, and apparent U.S. consumption, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
Quantity (short tons)					
U.S. producers' U.S. shipments	70,553	61,968	60,485	12,820	14,613
U.S. shipments of imports from--					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal, subject	***	***	***	***	***
All other countries ¹	***	***	***	***	***
Total	39,066	38,894	33,422	6,673	6,808
Apparent U.S. consumption	109,619	100,862	93,907	19,493	21,421
Value (\$1,000)					
U.S. producers' U.S. shipments	94,407	88,667	85,501	18,221	21,129
U.S. shipments of imports from--					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal, subject	***	***	***	***	***
All other countries ¹	***	***	***	***	***
Total	48,324	49,113	45,441	8,958	9,944
Apparent U.S. consumption	142,731	137,780	130,942	27,179	31,073
1 ***					
Source: Compiled from data submitted in response to Commission questionnaires and from confidential Customs data.					

U.S. MARKET SHARES

Data on market shares in the total U.S. market for EMD are presented in table IV-7.

Table IV-7

EMD: Apparent U.S. consumption and market shares, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
Quantity (short tons)					
Apparent U.S. consumption	109,619	100,862	93,907	19,493	21,421
Value (\$1,000)					
Apparent U.S. consumption	142,731	137,780	130,942	27,179	31,073
Share of quantity (percent)					
U.S. producers' U.S. shipments	64.4	61.4	64.4	65.8	68.2
U.S. shipments of imports from--					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal, subject	***	***	***	***	***
All other countries ¹	***	***	***	***	***
Total	35.6	38.6	35.6	34.2	31.8
Share of value (percent)					
U.S. producers' U.S. shipments	66.1	64.4	65.3	67.0	68.0
U.S. shipments of imports from--					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal, subject	***	***	***	***	***
All other countries ¹	***	***	***	***	***
Total	33.9	35.6	34.7	33.0	32.0
1 ***					
Source: Compiled from data submitted in response to Commission questionnaires and from confidential Customs data.					

RATIO OF IMPORTS TO U.S. PRODUCTION

Data on ratio of imports to total U.S. production of EMD are presented in table IV-8.

Table IV-8

EMD: U.S. production, U.S. imports, and ratios of imports to production, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
Quantity (short tons)					
U.S. production	69,582	68,412	61,468	16,592	15,976
U.S. imports from--					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal, subject	***	***	***	***	***
All other countries ¹	***	***	***	***	***
Total	43,844	40,647	32,809	4,541	5,561
Ratio of imports to U.S. production (percent)					
U.S. imports from--					
Australia	***	***	***	***	***
China ¹	***	***	***	***	***
Subtotal, subject	***	***	***	***	***
All other countries ¹	***	***	***	***	***
Total	63.0	59.4	53.4	27.4	34.8
¹ ***					
Source: Compiled from data submitted in response to Commission questionnaires and from confidential Customs data.					

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICING

U.S. prices of EMD can fluctuate based on demand factors such as overall U.S. economic activity, use of consumer electronic devices requiring batteries, and catastrophic events such as hurricanes, forest fires, etc., that require electronic devices such as flashlights and portable radios, which use batteries.¹ On the supply side, prices of EMD can also fluctuate based on the cost of manganese ore, natural gas, and other inputs, and possibly due to a number of product specifications, including, but not restricted to, grain size, uniformity, freedom from impurities, abrasiveness, pH, and moisture levels.² In addition, the prices of EMD can fluctuate due to quantities contracted and the relative bargaining strength between relatively few purchasers and suppliers.³

Raw Material Costs

Total raw material costs averaged 29.1 percent of the three U.S. producers' total costs of goods sold for EMD in the United States during January 2005-March 2008.⁴ The principal raw material input used to produce domestic EMD is manganese ore (***),⁵ while energy (natural gas, electricity, and steam) is also an important input cost to produce EMD. Costs of manganese ore averaged 22.9 percent of the three U.S. producers' total cost of goods sold for EMD during January 2005-March 2008, while energy costs averaged 18.6 percent of the three U.S. producers' total cost of goods sold.⁶

Tronox stated that its costs of manganese ore increased during January 2005-December 2007, *** increases in selling prices of its EMD during this period.⁷ In addition, Tronox reported that it is concerned that it will not be able to *** in the face of unfairly traded subject imports.⁸

¹ Conference transcript, pp. 114-115 (Stevens) and pp. 115-116 (Reilly).

² Conference transcript, p. 67 (Reilly).

³ There do not appear to be readily available substitutes for EMD, thus relative price changes of potential substitute products for EMD do not appear to affect the price of EMD. On the other hand, batteries that do not contain EMD and imported batteries, the latter including EMD and non-EMD batteries, may substitute for U.S.-produced EMD batteries. As a result, such downstream substitution may affect the U.S. demand and price of EMD. Part II discusses in detail substitution between EMD and alternative input products and substitution among downstream products.

⁴ U.S. producers' questionnaire responses, section III-16.

⁵ Raw manganese ore has over 50 percent impurities (primarily dirt) that must be removed, *** (staff telephone interview with ***).

⁶ U.S. producer questionnaire responses, section III-16.

⁷ U.S. producer questionnaire response, section IV-B-16b.

⁸ By far the major use of manganese ore is in steel production, such that as steel production has risen it has led to the increase in the price of manganese ore; EMD producers' demand for manganese ore accounts for a tiny proportion of total manganese ore sales (petitioner's prehearing brief, exhibit 2). As a result, EMD producers must pay ore prices that result from (currently robust) steel demand, not from demand for EMD.

Quarterly purchase prices of manganese ore and energy reported by the three U.S. EMD producers are shown in table V-1 and figure V-1 for manganese ore and figure V-2 for energy.^{9 10} In addition, Energizer and Tronox provided some information regarding their price trends and purchase agreements for manganese ore and energy used to produce EMD.¹¹

Table V-1

Manganese ore: U.S. EMD producers' net delivered purchase prices of manganese ore, by specific types or units of manganese ore, by U.S. producers, by quarters, January 2005-March 2008

* * * * *

Figure V-1

Manganese ore: U.S. EMD producers' net delivered purchase prices of manganese ore, by specific types or units of manganese ore, by U.S. producers, by quarters, January 2005-March 2008

* * * * *

Figure V-2

Natural gas, electricity, and steam: U.S. EMD producers' net purchase prices of energy, by type of energy, by quarters, January 2005-March 2008

* * * * *

*** reported quarterly delivered purchase prices of raw manganese ore *** during January 2005-March 2008, while *** reported quarterly delivered purchase prices of raw manganese ore *** (table V-1 and figure V-1). As shown, quarterly delivered purchase prices of the raw manganese ore fluctuated but

⁹ U.S. producers' questionnaire responses, section IV-B-17a.

¹⁰ Manganese ore and energy are important inputs to produce EMD, accounting for a total of approximately 41.5 percent of the cost of goods sold to produce EMD in the United States during January 2005-March 2008. Because annual EMD sales contracts typically fix prices, changes in a U.S. EMD producer's input prices within a year may not be reflected in its selling prices of EMD during that year. Statistical correlation can quantify the degree to which the purchase prices of these inputs and the selling prices of EMD move together. A frequent measure of statistical correlation is a linear correlation coefficient, where a coefficient of 1 indicates perfect correlation, declining values indicate progressively decreasing correlation, and a correlation coefficient of zero indicates no correlation between the data series. A positive correlation coefficient indicates that changes in the two data series move in the same direction (increase or decrease), whereas a negative correlation coefficient indicates that changes in the two data series tend to move in opposite directions.

The correlation coefficient was ** between *** reported quarterly selling prices of EMD and its quarterly purchase prices of manganese ore during January 2005-March 2008, while the correlation coefficient was *** between *** reported quarterly selling prices of EMD and its quarterly purchase prices of manganese ore during this period. The quarterly EMD selling prices of *** were *** during this period, thus changes in *** raw material costs may have been ***. The correlation coefficient of *** between quarterly purchase prices of manganese ore reported by *** indicate that quarterly changes in ***.

The correlation coefficients between *** reported quarterly selling prices of EMD and its quarterly purchase prices of ** were *** and ***, respectively, during January 2005-March 2008. The correlation coefficient between *** reported quarterly selling prices of EMD and its quarterly purchase prices of *** was *** during this period.

¹¹ U.S. producers' questionnaire responses, section IV-B-16b.

increased during the periods reported: based on dry short tons, by ***¹² and ***;¹³ and based on wet short tons, by ***.¹⁴

*** also reported its quarterly delivered purchase prices of *** manganese ore in dry short tons during January 2005-March 2008 (table V-1 and figure V-1).¹⁵ *** quarterly purchase prices of *** manganese ore began the period at \$*** per short ton during January-March 2005, then fluctuated during the period and ended *** percent lower than the initial-period value. According to ***.¹⁶

*** reported quarterly purchase prices of natural gas during January 2005-March 2008, while *** also reported quarterly purchase prices of electricity (its second source of energy), and *** reported quarterly purchase prices of steam,¹⁷ *** to produce EMD (figure V-2).¹⁸ As shown, weighted-average quarterly purchase prices of natural gas generally fluctuated but ended *** percent higher than the initial-period value.¹⁹ *** reported quarterly purchase prices of electricity fluctuated but ended the period *** percent higher than the initial-period value. *** reported quarterly purchase prices of steam fluctuated without a clear trend during January 2005-March 2008, and its ending value was *** the initial-period value.²⁰

Tariff Rates and Transportation Costs to the U.S. Market

The U.S. import duty rate under the Australian Free Trade Agreement for HTS subheading 2820.10.00 was free for imports of EMD from Australia during January 2005-March 2008,²¹ and the U.S. normal trade relations *ad valorem* import duty rate was 4.7 percent for imports from China during this period. Transportation charges to ship EMD from Australia and from China to the U.S. ports of entry, as a ratio to the U.S. official customs value, averaged 5.4 percent and 12.8 percent, respectively, during January 2005-March 2008.²² These transport cost ratios fluctuated but decreased during 2005-2007.

¹² ***. U.S. producer questionnaire response, section IV-B-17a, appendix, pp. 1-2.

¹³ *** (see Part VI, Financial Experience of the U.S. Producers, for a complete discussion of manganese ore costs).

¹⁴ ***. U.S. producer questionnaire response, section IV-B-16b.

¹⁵ ***. U.S. producer questionnaire response, section IV-B-17a, appendix, pp. 1-2.

¹⁶ ***. U.S. producer questionnaire response, section IV-B-17a, appendix, p. 2.

¹⁷ *** (staff telephone interview with ***).

¹⁸ Pounds of steam can be converted to Btus based on the pressure and temperature of the steam, as both are measures of heat energy (staff telephone conversation with ***).

¹⁹ ***. U.S. producer questionnaire response, section IV-B-16b.

²⁰ ***. U.S. producer questionnaire response, section IV-B-16b and staff telephone interview with ***.

²¹ This duty-free rate was available for Australia provided the EMD was properly entered under the U.S.-Australia Free Trade Agreement; if not, it received the general duty rate.

²² As a ratio to the landed duty-paid value of EMD, these transportation charges averaged 5.2 percent for Australia and 10.9 percent for China during this period.

U.S.-Inland Transportation Costs²³

Two responding U.S. producers of EMD (***), one responding U.S. importer of EMD from Australia (***), and two responding U.S. importers of EMD from China (Chori America and ***) reported in their questionnaire responses the average U.S. freight costs to their U.S. customers' locations.²⁴ U.S.-inland freight costs for the domestic products averaged *** percent of the delivered prices,²⁵ U.S.-inland freight costs of the imported EMD from Australia averaged *** percent of the delivered prices,²⁶ and U.S. inland freight costs of the imported EMD from China averaged *** percent during January 2005-March 2008.²⁷ The responding two U.S. producers of EMD, one U.S. importer of EMD from Australia, and the two U.S. importers of EMD from China estimated their U.S. shipments of the domestic and subject imported EMD, during January 2005-March 2008, that were shipped to U.S. customers in three specified distance categories.²⁸ The U.S. producers' and importers' reported shipment shares of the domestic and subject imported EMD, by distance categories from their U.S. selling locations, are shown in the following tabulation.

²³ U.S. producers sell their EMD from their U.S. production locations, but frequently ship their EMD from warehouse locations that are close to their U.S. battery-producer customers. Similarly, U.S. importers of EMD frequently ship their imported EMD from the U.S. ports of entry to U.S. warehouse locations that are close to their U.S. battery-producer customers. As requested, U.S. producers reported their U.S. shipping costs based on sales from their U.S. production locations, and U.S. importers of the Australian and Japanese EMD reported their U.S. shipping costs from their U.S. ports of entry. On the other hand, importers of the Chinese EMD reported their U.S. shipping costs from their U.S. warehouse locations and indicated that they were unable to report such costs from the U.S. ports of entry.

²⁴ U.S. producers' and importers' questionnaire responses, sections IV-B-10a and III-B-10a, respectively; the responding U.S. producers and importers of EMD generally reported arranging U.S.-inland freight to their U.S. customers, although ***.

²⁵ *** reported that U.S.-inland freight costs averaged *** percent of the delivered price of its U.S. shipments of EMD during January 2005-March 2008, while *** reported U.S.-inland freight costs of *** percent during this period (U.S. producers' questionnaire responses, section IV-B-10). *** also reported quarterly U.S.-inland freight costs from its U.S. production location along with its reported selling price data for U.S. shipments of its domestically produced EMD to all its U.S. battery-producer customers during January 2005-March 2008 (U.S. producer's questionnaire response, section IV-A). These reported U.S. freight costs averaged \$*** per pound, or *** percent of *** average delivered price during this period. *** was unable to report its quarterly U.S. freight costs.

²⁶ U.S. imports of the EMD from Australia entered the United States through the *** during January 2005-March 2008 (letter from ***, June 30, 2008). *** reported quarterly U.S.-inland freight costs from its U.S. port(s) of entry along with its reported selling price data for U.S. shipments of its *** EMD to all its U.S. battery-producer customers during January 2005-March 2008 (U.S. importer's questionnaire response, section III-A). These reported U.S. freight costs averaged \$*** per pound, or *** percent of *** average delivered price during this period.

²⁷ The U.S.-inland freight cost shares reported in importer questionnaire responses to question III-B-10a for the imported EMD from China do not reflect U.S. importers' full U.S. freight costs from the U.S. port(s) of entry to U.S. battery-producer customers. U.S. imports of the Chinese EMD enter West Coast ports and, therefore, U.S. freight costs to the U.S. customers should be at least comparable to those reported by Tronox. Two U.S. importers of the imported Japanese EMD (***) reported quarterly U.S.-inland freight costs from their West Coast ports of entry directly to their U.S. battery-producer customers and through their U.S. warehouses to these customers that averaged \$*** per pound, or *** percent of their delivered prices during January 2005-March 2008 (U.S. importers' questionnaire response, section III-A). The U.S. importers of the Chinese EMD were not able to report quarterly U.S.-inland freight costs from their U.S. port(s) of entry to their U.S. warehouses in their reported selling price data for U.S. shipments of the imported Chinese EMD to U.S. battery-producer customers during January 2005-March 2008 (U.S. importers' questionnaire response, section III-A).

²⁸ U.S. producer and importer questionnaire responses, sections IV-B-10c and III-B-10c.

Distance shipped	Share of U.S. commercial shipments (<i>percent</i>)		
	U.S.-produced EMD	Imported Australian EMD	Imported Chinese EMD ¹
Within 100 miles	***	***	***
101 to 1,000 miles	***	***	***
Over 1,000 miles	***	***	***
Total	100.0	100.0	100.0
¹ The imported Chinese EMD enters the United States through West Coast ports and shipment distances from the West Coast and then through the U.S. importers' U.S. warehouses to U.S. battery producers are greater than 1,000 miles. As a result, reported shipments in these distance categories understate the total U.S. shipment distance for the imported Chinese EMD. Source: Compiled from data submitted in response to Commission questionnaires.			

The two responding U.S. producers of EMD, one U.S. importer of EMD from Australia, and two U.S. importers of EMD from China reported the U.S. geographic market area(s) during January 2005-March 2008 that were served by the firms' domestic and subject imported EMD;²⁹ some U.S. importers reported for more than a single geographic area. The two responding U.S. EMD producers, ***, reported selling their EMD nationally, whereas the responding U.S. importers of EMD from Australia and China reported selling their EMD to the Midwestern and Southeastern United States.³⁰ The market areas for the U.S.-produced and subject imported EMD are the U.S. regions where the U.S. battery production facilities are located, which is mainly in the Midwestern and Southeastern United States, with some production in the Northeastern United States. U.S. production facilities for batteries that use EMD are located in the following seven states: ***. U.S. production facilities for EMD that enters the U.S. merchant market are located in Nevada (Tronox) and Tennessee (Erachem). *** is located quite far from the majority of U.S. battery producers, ***.

Exchange Rates³¹

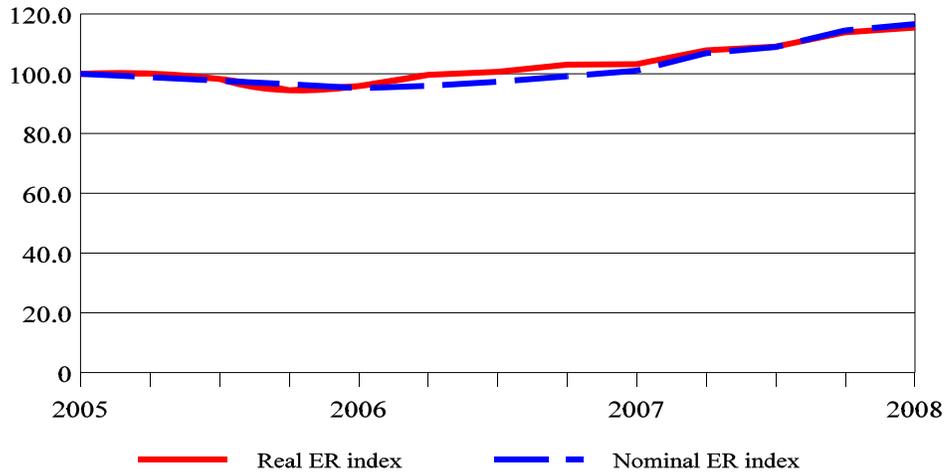
Figure V-3 shows quarterly nominal and real exchange rate indices (the latter are nominal exchange rates adjusted for relative rates of inflation) of the Australian dollar relative to the U.S. dollar during January 2005-March 2008, while figure V-4 shows the quarterly nominal exchange rate index of

²⁹ U.S. producer and importer questionnaire responses, sections IV-B-11 and III-B-11, respectively.

³⁰ *** commented on any changes in its U.S. market areas and reported that no changes have occurred since January 2005 (Ibid.).

³¹ The quarterly nominal and/or real exchange rates were calculated from quarterly-average nominal exchange rates and, for the real exchange rate, producer price indices reported by the IMF; a producer price index was not available for China such that only the nominal exchange rate index could be shown for this country.

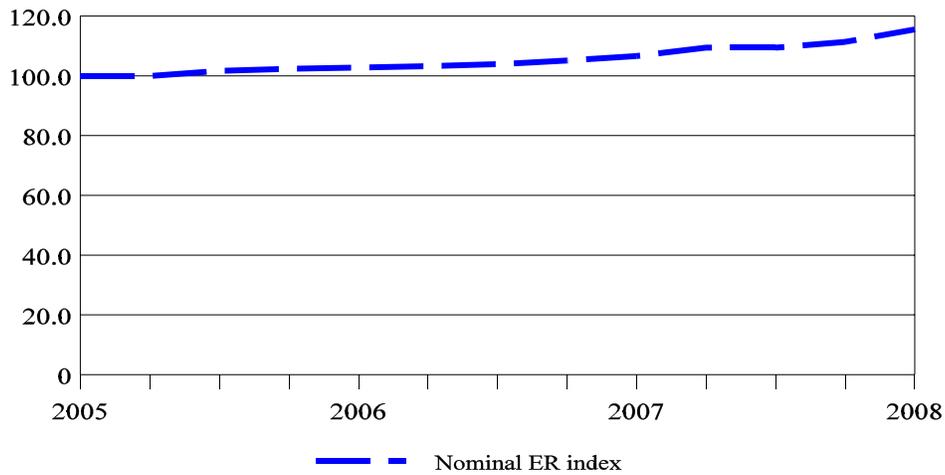
Figure V-3
Nominal and real exchange rate indices of the Australian dollar relative to the U.S. dollar, by quarters, January 2005-March 2008



Note.--Index (Jan.-Mar. 2005=100). Exchange rates are in U.S. dollars per Australian dollar.

Source: International Monetary Fund, *International Financial Statistics*, June 2008.

Figure V-4
Nominal exchange rate index of the Chinese yuan relative to the U.S. dollar, by quarters, January 2005-March 2008



Note.--Index (Jan.-Mar. 2005=100). Exchange rates are in U.S. dollars per Chinese yuan.

Source: International Monetary Fund, *International Financial Statistics*, June 2008.

the Chinese yuan relative to the U.S. dollar during this period.³²

The quarterly nominal value of the Australian dollar initially depreciated against the U.S. dollar during January 2005-March 2006, by 4.8 percent, and then steadily appreciated against the U.S. dollar during April 2006-March 2008, or by 20.6 percent during this latter period; since the beginning of period, January-March 2005, the nominal value of the Australian dollar appreciated by a total of 16.7 percent against the U.S. dollar through January-March 2008 (figure V-3). The quarterly real value of the Australian dollar fluctuated similarly against the U.S. dollar during January 2005-March 2008 compared to the fluctuation in the nominal value of the Australian dollar. The real value of the Australian dollar initially depreciated by 5.4 percent during January-December 2005, and then steadily appreciated against the U.S. dollar during January 2006-March 2008, or by 22.2 percent during this latter period; since the beginning of the period, January-March 2005, the real value of the Australian dollar appreciated by a total of 15.5 percent against the U.S. dollar through January-March 2008, while the nominal value of the Australian dollar appreciated by 16.7 percent against the U.S. dollar during this period.

The quarterly nominal exchange rate for the Chinese yuan against the U.S. dollar remained stable during January-June 2005, but then appreciated by 15.6 percent during July 2005-March 2008 as well as for the full period (figure V-4).

PRICING PRACTICES

U.S. producers and importers of EMD sell almost exclusively in the U.S. market directly to U.S. battery producers, which account for almost all U.S. consumption of EMD. The majority of U.S. sales of EMD is typically negotiated between the EMD suppliers and U.S. battery producers as annual contracts/agreements, with negotiations occurring in the fourth quarter of the previous year for shipments throughout the following year. Spot sales may also occur during the contract year when the purchaser requires an additional quantity beyond the contracted quantity. Two U.S. producers of EMD (Erachem and Tronox), one U.S. importer of EMD from Australia (Delta), and one U.S. importer of EMD from China (Chori America) reported their 2007 U.S. shipments by type of sale.³³ Shares of the 2007 U.S. commercial shipment quantities of the domestically produced and subject imported EMD, by type of sale, are shown in the tabulation on the following page.³⁴

³² The Chinese government effectively pegged the nominal value of the yuan to the U.S. dollar at 8.28 yuan per dollar during the early part of this period. On July 21, 2005, the Chinese government announced that it would no longer peg the yuan to the U.S. dollar but would tie the yuan to a basket of currencies. Within this new basket, the yuan was directly revalued upward against the U.S. dollar by 2.1 percent, or from 8.28 yuan per dollar under the old peg to 8.11 yuan per dollar under the new exchange rate policy. The Chinese government has not disclosed which currencies are in the new basket, but indicated that the weight of the U.S. dollar represented less than 50 percent of the new basket of currencies.

³³ U.S. producer and importer questionnaire responses, sections IV-B-1 and III-B-1, respectively.

³⁴ Spot sales are usually one-time delivery within 30 days of the purchase agreement; short-term sales are for multiple deliveries for up to 12 months after the purchase agreement; and long-term sales are for multiple deliveries for more than 12 months after the purchase agreement. Short-term and long-term sales can be arranged by contracts or verbal agreements.

Type of sale	Share of 2007 U.S. commercial shipments (<i>percent</i>)		
	U.S.-produced EMD	Imported Australian EMD	Imported Chinese EMD
Spot sales	***	***	***
Short-term sales	***	***	***
Long-term sales	***	***	***
Total	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

Short-Term Contracts/Agreements³⁵

U.S. producers and importers of EMD reported the terms of short-term contract/agreement sales and described how prices were negotiated.³⁶ U.S. EMD producers and importers of the subject EMD reported that their short-term contracts typically were for 12 months.

There were mixed responses about whether prices could be renegotiated during the contract period, although all responding firms reported that the short-term contracts/agreements do not have meet-or-release provisions and typically fix quantity and price.³⁷ *** reported that prices can be renegotiated during the contract period,³⁸ *** reported that prices could not be renegotiated; and *** reported that prices are flexible and can be renegotiated. *** also asserted that, even though the contract fixes quantity and price, the customer can adjust quantity and *** has no ability to enforce the original contract because the customer wields the market power in the relationship. In addition, *** asserted that small-volume allowances are permitted if market demand for batteries fluctuates.

The two responding U.S. producers of EMD, the single responding U.S. importer of EMD from Australia, and the single responding U.S. importer of EMD from China explained how they negotiate prices for short-term contracts/agreements for EMD.³⁹ ***⁴⁰ ***,⁴¹ ***⁴² *** asserted that, since large volumes of qualified imports of EMD have become available, its major customers, ***, can effectively dictate the volume and price levels that are acceptable to them. *** reported that it may tender bids and, in some cases, ***. Ultimately, however, *** asserted that it must decide whether to accept *** demands, which allegedly are based, in large part, upon the availability of competing imports from

³⁵ U.S. battery producers provided detailed information on contract negotiations in purchaser questionnaire responses that are discussed later in Part V in the section, Annual EMD Contract/Agreement Price Offers and Awards.

³⁶ U.S. producers' and importers' questionnaire responses, sections IV-B-3, 4, 5 and III-B-3, 4, 5, respectively; responding firms were two U.S. producers of EMD (Erachem and Tronox), one U.S. importer of EMD from Australia (Delta), and one U.S. importer of EMD from China (Chori America).

³⁷ The one exception was ***, which indicated that quantity and price are not fixed.

³⁸ ***.

³⁹ U.S. producer and importer questionnaire responses, sections IV-B-5 and III-B-5, respectively.

⁴⁰ ***.

⁴¹ ***.

⁴² U.S. producer questionnaire response, section IV-A-3.

Australia and China that are priced at less than fair value.⁴³ *** also asserted that the negotiating dynamic has improved since the filing of the petition in August 2007. For 2008, ***, although *** reportedly is still unable to pass through adequate price increases to offset rising costs. But, for the first time, according to ***.⁴⁴

***.⁴⁵

Other Pricing Practices

U.S. producers of EMD and U.S. importers of EMD from Australia, China, and from nonsubject countries reported shipping domestically *** their merchant market EMD to end users, the latter almost exclusively to U.S. battery producers.⁴⁶ In addition, *** responding U.S. producers and importers of EMD reported that they did not sell their EMD over the internet.⁴⁷

*** reported quoting prices on a U.S. f.o.b. plant basis, whereas *** reported quoting prices on a delivered basis.⁴⁸ *** reported offering payment terms of net 30 days and net 30-45 days, respectively, while *** reported offering payment terms of net 30-45 days and *** offered payment terms of net 60 days.⁴⁹

The majority of responding U.S. producers and importers of the domestic and subject imported EMD reported that they have no set quantity discount policies, but most reported that in price negotiations discounts are made to larger-volume customers.⁵⁰ *** provided some additional explanation.⁵¹ ***.

*** and *** reported selling their domestic EMD and imported EMD from Australia, respectively, from U.S. inventory. *** reported selling its imported EMD from China from Chinese production or inventory.⁵² The two responding U.S. producers reported order-lead-times of *** for *** and *** for ***, and *** reported an order-lead-time of *** for the imported Australian EMD.⁵³ *** reported order lead times of ***. All of the responding firms reported that lead times have not changed since January 2005.

PRICE DATA

Annual EMD Contract/Agreement Price Offers and Awards

U.S. battery producers that used EMD to produce alkaline batteries were requested in their purchaser questionnaire responses to report details of annual contract/agreement (contract) price and

⁴³ U.S. producer questionnaire response, section IV-B-5.

⁴⁴ U.S. producer questionnaire response, section IV-A-3.

⁴⁵ U.S. importer questionnaire response, section III-B-5.

⁴⁶ U.S. producer questionnaire responses, sections II-9 and IV-C; and U.S. importer questionnaire responses, sections II-6 and III-C-1.

⁴⁷ U.S. producers' and importers' questionnaire responses, sections IV-B-13 and III-B-13, respectively.

⁴⁸ U.S. producers' and importers' questionnaire responses, sections IV-B-8 and III-B-8, respectively. *** reported arranging U.S.-inland freight to their U.S. customers, whereas *** arranged freight *** (Ibid.).

⁴⁹ U.S. producers' and importers' questionnaire responses, sections IV-B-7 and III-B-7, respectively.

⁵⁰ U.S. producers' and importers' questionnaire responses, sections IV-B-9 and III-B-9, respectively.

⁵¹ ***.

⁵² U.S. producers' and importers' questionnaire responses, sections IV-B-12 and III-B-12, respectively.

⁵³ ***.

quantity quotes and awards involving the individual qualified participating suppliers of each U.S. battery producer during the contract years 2005-2009.⁵⁴ The four responding U.S. battery producers (Duracell, Energizer, Panasonic,⁵⁵ and Spectrum) provided price and quantity offer information on a total of *** EMD offers, *** of which were accepted. The total number of EMD offers and awards made, the total quantity awarded, and the average unit value, by country of origin, are shown in the following tabulation for all reported contract years combined (2005-08). The average unit values for the contracted EMD were based on awarded values that were reported on a delivered basis.

* * * * *

U.S. EMD battery producers typically solicit price and quantity offers for their EMD requirements for the following year in the latter half of the previous year and strive to complete negotiations and sign contracts by December. These solicitations are made only to those suppliers already qualified by each battery producer. The U.S. EMD battery producers generally award supply contracts to all of their qualified suppliers. Because of the expense and time required to qualify an EMD supplier, the U.S. battery producers strive to maintain active supply relationships with their qualified EMD suppliers. A summary of annual contract awards for EMD, by U.S. battery producer, by country of origin of EMD, and by contract year are shown in table V-2; the detailed reported price offer and contract award information are shown by each of the four responding U.S. battery producers in appendix I.

Table V-2
EMD: Summary of annual contract awards for EMD by U.S. battery producers, by country-of-origin of EMD, by contract year, 2005-08

* * * * *

The U.S. battery producers were requested to discuss the reason(s) why they awarded the reported contracts to the winning bidders, and why any bidders that were not the lowest priced were awarded contracts.⁵⁶ The comments of the three U.S. battery producers providing responses (***) are shown in the tabulation beginning below.

* * * * *

U.S. battery producers were also requested to explain the contract award process in their purchaser questionnaire responses.⁵⁷ The responses of the four responding U.S. battery producers are shown in the tabulation beginning below.

* * * * *

⁵⁴ U.S. purchaser questionnaire responses, section VI-3; no information was reported for 2009. U.S. EMD battery producers were requested in the purchaser questionnaire to provide price and quantity EMD offers and the dates applicable for initial and final quotes and to provide awarded prices and quantities and the award dates, with award prices shown as quoted and on a delivered basis. The responding firms were also requested to indicate whether the quoted prices were on a U.S. f.o.b. or delivered basis. In addition, the responding firms were requested to provide this contract/agreement price data by contract year and for each category of EMD battery.

⁵⁵ *** (e-mail from ***, July 17, 2008).

⁵⁶ U.S. purchaser questionnaire responses, section VI-4.

⁵⁷ U.S. purchaser questionnaire responses, section VI-2.

Questionnaire Quarterly Selling Price Data⁵⁸

U.S. selling value and quantity data were requested from U.S. EMD producers and importers for sales to U.S. battery producers for the following EMD product category produced in the United States and imported from Australia and China:⁵⁹

Product category 1.--Standard alkaline grade electrolytic manganese dioxide in powder form.

The price data were based on quarterly net U.S. f.o.b. selling price data of U.S. producers and U.S. importers for their shipments of the specified domestic and imported Australian and Chinese EMD product category 1 during January 2005-March 2008, to each of their U.S. battery producer customers unrelated to the selling firms.⁶⁰ In addition, U.S. importers were requested to provide the selling price data for the specified EMD product category that they imported from their largest nonsubject country source. U.S. battery producers that imported their EMD directly and used the EMD captively were also requested to provide their quarterly purchase price data for these direct imports.⁶¹

⁵⁸ The selling price information discussed in this section of the report represents quarterly shipments reported by U.S. producers and importers of EMD, which is related to their annual bid awards that were reported by the U.S. battery producers and were discussed in the previous section of this part of the report.

⁵⁹ The petitioners suggested this product category and three additional product categories for collecting price data during the preliminary phase, but indicated that the standard alkaline EMD product category represents nearly the entire U.S. market for EMD (petition, p. 27). In the final phase, draft questionnaire comments of parties did not address the pricing product description.

⁶⁰ Although the U.S. producers reported selling their EMD ***. In addition, *** indicated in their draft questionnaire comments (the only two firms providing comments) that U.S. f.o.b. prices were the most appropriate basis for comparing price data of the domestic and subject imported EMD. Net selling price data were requested on a U.S. f.o.b. basis (from U.S. EMD producers' plants and from U.S. EMD importers' ports of entry) that excludes U.S. inland freight, which could affect price comparisons where freight cost differences exist among some U.S. producers and importers. In addition, U.S. producers and importers were requested to provide their quarterly U.S.-inland freight costs of their EMD to U.S. customers from U.S. producers' plants and from importers' U.S. port(s) of entry. To develop U.S. f.o.b. prices for any sales the U.S. producers and importers made on a delivered basis, the supplying firms' were requested to deduct from the delivered price any U.S.-inland freight and shipping charges from their U.S. shipping point(s) (as described here) to their U.S. battery-producer customers. The U.S. producers and importers were requested not to report transactions where they were unable to report values, either actual or adjusted, on a U.S. f.o.b. point(s) of shipment basis.

⁶¹ Any such import price data for the subject imported EMD were asked similarly as the selling price data. The only exception was that instead of selling values on a U.S. f.o.b. price basis, import values were requested on a U.S. c.i.f., landed, duty-paid basis. *** was the *** U.S. battery producer that reported imports of commercial quantities of EMD (U.S. importer questionnaire responses, section III-A.2 and III-A.2-2). *** reported *** pounds of EMD from *** during *** at a price of \$*** per pound, valued at the c.i.f., landed, duty-paid U.S. port of entry. *** asserted that ***. According to ***, the *** has not imported any other EMD from ***. The *** that reportedly cleared *** of the Chinese EMD through U.S. customs and arranged all U.S. freight to *** during January 2005-March 2008 (staff telephone interview with ***, June 24, 2008), has not submitted its U.S. importer questionnaire in the final phase. As a result, the staff sent a supplemental request for selling price data to ***, that *** contracted with for Chinese EMD; neither ***. In addition, *** reported importing a total of *** pounds of EMD from *** during *** for testing purposes. *** reported that it did not import commercial quantities of EMD, but imported limited quantities of EMD for testing from ***, which totaled *** pounds from Australia and China during January 2005-March 2008 and *** pounds from the *** countries during this period (U.S. importer questionnaire response, sections II-5, II-6, II-7, and III-A.2).

Two U.S. producers of EMD (Erachem and Tronox),⁶² one U.S. importer of EMD from Australia (Delta), and two U.S. importers of EMD from China (***) reported useable selling price information, but not necessarily for all periods. In addition, two other U.S. importers of EMD (***) also reported the requested quarterly selling price data for one nonsubject country, Japan.⁶³ The responding U.S. producers reported total sales quantities of the U.S.-produced EMD for pricing purposes during January 2005-March 2008 that amounted to *** short tons, or *** percent of their total reported U.S. commercial shipments of the U.S.-produced EMD during this period. The responding U.S. importers reported total sales quantities for pricing purposes during January 2005-March 2008 that amounted to approximately *** short tons of EMD from Australia, which accounted for *** percent of total reported U.S. commercial shipments of the imported EMD from Australia during this period; and approximately *** short tons of EMD from China, which accounted for *** percent of total reported U.S. commercial shipments of the imported EMD from China during this period.

Based on the reported pricing data, U.S. producers and importers sold the domestic and subject EMD to a total of *** U.S. battery producers during January 2005-March 2008. The total reported quantities of EMD shipped, by country of origin and supplier, to each U.S. battery-producer customer during January 2005-March 2008 are shown in the following tabulation.

* * * * *

Net U.S. f.o.b. selling price trends and price comparisons of the domestic and subject imported EMD are shown for sales to all U.S. battery-producer customers combined (price data for sales to each U.S. battery-producer customer are presented in appendix J).⁶⁴ Price trends and price comparisons will be discussed for the selling price data combining all the U.S. battery-producer customers, because price trends and price comparisons by each U.S. battery-producer customer are similar to those for all such customers combined.⁶⁵

Price Trends

Trends in weighted-average selling prices of the domestic, imported Australian, and imported Chinese EMD and comparisons of the weighted-average prices between the domestic and subject imported EMD are based on the responding firms' reported quarterly net f.o.b. U.S. selling price data to all U.S. battery-producer customers combined. Quarterly trends in weighted-average selling prices and quantities of the domestic and subject imported product category 1 are shown in table V-3; price comparisons between the domestic and the subject imported product category 1 are also shown in this table. The quarterly weighted-average selling prices and quantities of the domestic and subject imported

⁶² Energizer produces EMD in the United States, but *** for its own use in producing alkaline batteries. As a result, Energizer had *** selling price data to report for its U.S.-produced EMD.

⁶³ These U.S. importers reported total sales quantities for pricing purposes during January 2005-March 2008 that amounted to *** short tons of EMD from Japan, which accounted for *** percent of total reported U.S. commercial shipments of the imported EMD from Japan during this period.

⁶⁴ In addition, delivered selling prices of the U.S.-produced EMD sold by *** and the imported EMD from *** sold by *** for the specified EMD product category 1 shipped to *** and to *** are also shown in appendix J. These are the only two suppliers that were able to report the requested quarterly U.S.-inland freight costs for the domestic and subject imported EMD to their U.S. battery-producer customers. *** were the only two U.S. customers where the delivered selling prices were reported for both the domestic and subject imported EMD.

⁶⁵ The reported selling price data of the U.S.-produced EMD was dominated by sales to ***, such that price data for the domestic EMD sold to the other *** U.S. battery producers involved fewer price comparisons and generally incomplete price trends of the domestic product.

EMD product category 1 for all U.S. battery producer customers combined are also shown in figure V-5. In addition, selling price data for EMD produced domestically and imported from Japan and sold to *** are shown in appendix K.

Table V-3

EMD: Net weighted-average U.S. f.o.b. selling prices and quantities of domestic and subject imported EMD product category 1 sold to all U.S. battery producer customers combined, and margins of underselling/(overselling), by quarters, January 2005-March 2008

* * * * *

Figure V-5

EMD: Net weighted-average U.S. f.o.b. selling prices and quantities of U.S.-produced and subject imported product category 1, sold to all U.S. battery producer customers combined by quarters, January 2005-March 2008

* * * * *

The weighted-average quarterly selling prices of the U.S.-produced and imported Australian EMD product category 1 fluctuated but tended to trend upward during January 2005-March 2008 (table V-3 and figure V-5).⁶⁶ The quarterly selling prices of the imported Chinese EMD product category 1 fluctuated without much trend during this period and generally remained below its initial-period value (table V-3 and figure V-5). For the U.S.-produced and imported Australian EMD, selling prices during January-March 2008 reached or equaled their highest levels of the period, while the selling price of the imported Chinese EMD during January-March 2008 was less than its highest level of the period.

Quarterly selling prices of the U.S.-produced EMD increased from \$*** per pound during January-March 2005 to a period high of \$*** per pound by ***, or by *** percent, and remained at this latter level throughout 2006, before decreasing somewhat to \$*** per pound by January-March 2007, then increasing to \$*** per pound during April-June 2007 and remaining at this level during the remainder of 2007, and then ended the period equaling *** of \$*** per pound during January-March 2008, about *** percent higher than the initial-period value.⁶⁷

Quarterly selling prices of the EMD imported from Australia fluctuated but increased from \$*** per pound during January-March 2005 to \$*** per pound by ***, or by *** percent, and remained at this latter level throughout ***, before decreasing to \$*** per pound by October-December 2007, and then ending at *** of \$*** per pound by January-March 2008, or *** percent above the initial-period value.

Quarterly selling prices of the EMD imported from China fluctuated but decreased from \$*** per pound during January-March 2005 to *** of \$*** per pound by October-December 2006, or by *** percent below the initial period value, then increased to \$*** per pound by October-December 2007, before decreasing somewhat to end the period at \$*** per pound during January-March 2005, or equal to the initial period value.⁶⁸

Total quarterly sales quantities reported by the U.S. producers and importers of the subject imported EMD product category 1 fluctuated during January 2005-March 2008, with the quarterly

⁶⁶ Selling prices of the U.S.-produced EMD showed less quarter-to-quarter fluctuations than selling prices of the EMD imported from Australia.

⁶⁷ *** (U.S. producer questionnaire responses, section IV-A-4).

⁶⁸ The generally higher U.S. quarterly selling prices of the imported EMD from Australia compared to prices of the EMD from China was also reflected in the higher U.S. average unit values for the imported EMD from Australia compared to that from China. *** asserted during the preliminary phase that ***. Letter from ***, September 19, 2007.

quantities of the domestic EMD generally remaining below the initial-period level and trending downward during this period, while quarterly quantities of the EMD imported from Australia and China generally remained above their respective initial-period levels, but did not show definitive trends (table V-3 and figure V-5). It should be noted that quarterly shipment quantities of the domestic EMD showed the highest quarterly quantity levels for each year during 2005-07 in the third quarter of those years; this quarter is the peak of the U.S. hurricane season and reportedly results in increased demand for batteries and, hence, EMD. Quarterly shipment quantities of the imported EMD from Australia showed the highest quarterly quantity for each year during 2005 and 2006 in the third quarter of those years, while the imported EMD from China showed the highest quarterly quantity during 2006 in the third quarter of that year.⁶⁹

U.S. EMD battery producers were requested to indicate how prices of EMD in the U.S. market have changed since January 1, 2005 and provide the reasons for any changes.⁷⁰ Three of the four responding U.S. battery producers (***) reported that prices of EMD have increased, and the remaining responding U.S. battery producer (***) reported that prices generally stayed the same, but are expected to increase in the future. The comments of the four responding U.S. battery producers are shown in the following tabulation.

* * * * *

U.S. EMD producers and importers, and U.S. EMD battery producers, were also requested to discuss any impact of the abolished commodity export tax rebate by the Chinese government, effective on July 1, 2007, on U.S. prices and quantities of EMD.⁷¹ Useable responses were received by *** U.S. EMD producers (***), two U.S. importers (***), and two U.S. EMD battery producers (***). The *** responding U.S. EMD producers asserted that the tax rebate appeal had no effect, whereas the two responding U.S. importers and two responding U.S. battery producers reported that the repeal of the tax rebate increased prices in the U.S. market. The comments of the responding firms are shown in the tabulation below.

* * * * *

⁶⁹ The year 2005 included a period of violent hurricanes on the U.S. East and Gulf Coasts; natural disasters reportedly result in an increase in demand for alkaline batteries and hence EMD (conference transcript, p. 48 (Gutwald), p. 40 (Boyce), and p. 114 (Stevens)). The decreased levels of U.S. producers' quarterly shipments of EMD during 2006 and 2007 compared with 2005, especially during the July-September quarters of each of these years, may be due, at least partially, to quieter U.S. hurricane seasons in 2006 and 2007 compared to 2005 (***) purchaser questionnaire response, section IV-3).

⁷⁰ U.S. purchaser questionnaire responses, section VI-6.

⁷¹ U.S. producer and importer questionnaire responses, sections IV-A-13 and III-A.1-11, respectively, and U.S. purchaser questionnaire responses, section II-7.

Price Comparisons

A total of 25 quarterly net weighted-average U.S. f.o.b. selling price comparisons were possible between the domestic EMD product category 1 and that imported from Australia and China, based on shipments to all U.S. battery-producer customers combined, during January 2005-March 2008. Twelve of the 13 selling price comparisons involving the domestic and imported Australian specified EMD product category 1 showed that the imported product was priced less than the domestic product, whereas the single remaining price comparison showed that the imported Australian EMD was priced higher than the domestic product. All 12 selling price comparisons involving the domestic and imported Chinese specified EMD product category 1 showed that the imported product was priced less than the domestic product.⁷² The selling price comparisons involving the imported Australian and Chinese EMD are shown by country and period in table V-4.

Table V-4

EMD: Number of quarterly net weighted-average U.S. f.o.b. selling price comparisons between U.S.-produced and imported Australian and Chinese product category 1 sold to all U.S. battery producer customers combined, during January 2005-March 2008

* * * * *

Prices of EMD in the U.S. Market Compared to Prices in Other Countries

U.S. EMD producers and importers, U.S. EMD battery producers, and foreign EMD producers were requested to compare prices of EMD in the United States with EMD prices in other countries during January 2005-March 2008.⁷³ *** U.S. EMD producers (***, one U.S. importer (***, and two U.S. EMD battery producers (***) provided useable comments, which are shown in the following tabulation.

* * * * *

LOST REVENUES AND LOST SALES

In the petition, Tronox reported seven lost revenue allegations and four lost sales allegations due to competition from imports of EMD from Australia and/or China during January 2005-March 2008. The seven lost revenue allegations involved a total value of \$*** for *** of EMD, while the four lost sales allegations involved a total value of \$*** for *** short tons of EMD. *** was unable to provide competing transaction-specific prices of the subject imported EMD, and noted *** that the four U.S. purchasers of EMD do not release information on prices they pay for their purchases of imported EMD,⁷⁴ although the purchasers will frequently ***. According to the petitioner, U.S. purchasers routinely use

⁷² As noted earlier in this part of the report, the reported net U.S. f.o.b. selling prices reported by U.S. importers of the Chinese EMD included U.S. transportation costs from the West Coast port(s) of entry to U.S. warehouses in the Midwestern and/or Southeastern United States. Consequently, the resulting margins of underselling of the imported Chinese EMD may be understated.

⁷³ U.S. producer and importer questionnaire responses, sections IV-A-14 and III-A.1-12, respectively; U.S. purchaser questionnaire responses, section VI-5; and foreign producer questionnaire responses, section IV-8. The responding firms were requested to provide the basis for any price comparisons, and note the specific information as to price levels, products, time periods, and countries or regions for any price comparisons.

⁷⁴ ***.

competitive offers from other suppliers as leverage in price negotiations with their principal suppliers.⁷⁵ On the other hand, Panasonic *** reported that the firms do not use prices of various qualified suppliers as leverage to obtain lower prices.⁷⁶

In EMD producer questionnaire responses,⁷⁷ ***.⁷⁸ During the preliminary phase, ***. ***. During the final phase, ***. These two lost revenue allegations involved a total value of \$*** for *** short tons of EMD.

The responding U.S. producers, which supply EMD to ***, identified *** in their allegations;⁷⁹ as a result, some double-counting may have occurred in the allegations involving these purchasers. The total of *** reported lost revenue allegations involved an aggregate value of \$*** for *** of EMD, while the total of *** lost sales allegations involved an aggregate value of \$*** for *** short tons of EMD.

The U.S. purchasers cited in the lost revenue and lost sales allegations in the petition and in questionnaire responses, the transaction information supplied by the U.S. producers, and whether the responding purchasers agreed or disagreed with the allegations are shown in table V-5 for lost revenue allegations and table V-6 for lost sales allegations. Any additional comments of the responding purchasers are discussed below.

Table V-5
EMD: U.S. producers' lost revenue allegations

* * * * *

Table V-6
EMD: U.S. producers' lost sales allegations

* * * * *

*** disagreed with *** of the *** lost revenue allegations and *** of the *** lost sales allegations involving the firm and was not able to agree or disagree with the remaining *** lost revenue allegations and *** lost sales allegations (tables V-5 and V-6).^{80 81} In *** lost revenue allegations with which *** disagreed (involving ***), *** provided the following explanation.

“***.”

In the *** lost revenue allegation with which *** disagreed (involving ***), *** provided the following explanation.

“***.”

⁷⁵ Petition p. 31. *** lost revenue and lost sales allegations, suggesting that purchasers do not disclose specific competing prices.

⁷⁶ Conference transcript, p. 121 (Stevens) and (McGrath); and ***.

⁷⁷ U.S. producer questionnaire responses, sections IV-D (lost revenues) and IV-E (lost sales).

⁷⁸ In addition, another U.S. EMD producer, ***, responding in its questionnaire response for information regarding lost revenues and lost sales, reported that ***.

⁷⁹ In addition, *** also reported lost revenue and lost sales allegations involving ***. The lost sales and lost revenue allegations involved *** U.S. battery producers.

⁸⁰ E-mail from ***, September 14, 2007.

⁸¹ *** not only provided specific comments on the lost revenue and lost sales allegation where it disagreed, but it also referenced, during the preliminary phase, its importer questionnaire responses to sections III-A.4-2 and III-B-15 as additional comments. In its importer questionnaire responses, *** indicated that ***. In addition, *** discussed ***, if it is unsuccessful in maintaining a cost-effective manufacturing solution in the United States, then inevitably a strategic reassessment of *** manufacturing strategy will be necessary.

In the *** lost sales allegations on which *** disagreed (involving ***), *** asserted that the reported volume was lost *** with equal or better pricing. In the remaining *** lost revenue allegations (involving ***) and *** lost sales allegations (involving ***), *** did not agree or disagree but provided the following explanation.

“***.”

*** disagreed with all *** lost revenue allegations and *** lost sales allegations involving the firm (tables V-5 and V-6).⁸² For the lost revenue and lost sales allegations, *** asserted that comparative pricing of other suppliers is not the determining factor for *** in accepting or rejecting offered prices. According to ***, each discussion with an EMD supplier is unique to that supplier’s cost drivers and *** requirements.⁸³ In addition to these comments, *** also referred to its sourcing strategy, ***, which is discussed earlier in Part V in the discussion of bid prices.

*** disagreed with the *** lost revenue allegations and *** lost sales allegations involving the firm (tables V-5 and V-6).⁸⁴ For the lost revenue allegations, *** asserted that the reported price comparisons are not good estimates of the actual prices of EMD from Australia or China that *** paid. *** reported that it did not use the Chinese material (***) in ***. *** asserted that the loss alleged for the domestic *** during *** was due to poor performance of the domestic product vis-a-vis the product from Australia. *** asserted that the ***, cited for ***, has lower ***. For *** lost sales allegations involving ***, the U.S. battery producer asserted that the lost sales were due to poor quality and performance compared to ***. *** also asserted that prices of the domestic and imported *** were ***.

*** disagreed with the *** lost revenue allegations and *** lost sales allegations involving the firm (tables V-5 and V-6).⁸⁵ The *** lost revenue allegations involved ***. The *** lost sales allegations involved ***.

*** provided the following explanations for each lost revenue allegation. For the first lost revenue allegation (***) , *** reported that--

“***.”

For the *** lost revenue allegation (***) , *** reported that --

“***.”

For the *** lost revenue allegation (***) , *** reported that --

“***.”

*** provided the following explanations for each lost sales allegation. For the *** lost sales allegations involving ***, *** reported that--

“***.”

For the lost sales allegation involving ***, *** reported that--

“***.”

For the lost sales allegation involving ***, *** reported that--

“***.”

For the lost sales allegation involving ***, *** reported that--

“***.”

⁸² Fax from ***, September 4 and 7, 2007.

⁸³ ***. Ibid.

⁸⁴ Fax from ***, September 7, 2007.

⁸⁵ Letter from ***, September 13, 2007.

PART VI: FINANCIAL EXPERIENCE OF THE U.S. PRODUCERS

BACKGROUND

Three U.S. producers reported their EMD financial results on the basis of U.S. generally accepted accounting principles (“GAAP”). Energizer reported its EMD financial results on a fiscal year basis ending September 30, while Erachem and Tronox reported their financial results for calendar-year periods.

The majority of overall EMD revenue reflects commercial sales reported by Erachem and Tronox. In addition to ***, the balance of EMD sales was accounted for by Energizer’s EMD internal consumption.^{1 2} On July 7 through 8, 2008 staff verified the U.S. producer questionnaire response of Tronox.³ Changes resulting from verification are reflected in this and other affected sections of the staff report.

MERCHANT-MARKET OPERATIONS ON EMD

Income-and-loss data for merchant-market operations on EMD, representing the combined operations of Erachem and Tronox, are presented in table VI-1 and on an average unit basis in table VI-2. Table VI-3 presents selected company-specific financial information for merchant-market operations on EMD. A variance analysis of the financial results for merchant-market operations on EMD is presented in table VI-4.

Sales volume and corresponding revenue declined during the full-year periods, while interim 2008 reflected an increase in both volume and revenue compared to interim 2007. As shown in the variance analysis in table VI-4, the overall decline in EMD revenue during the full-year period was primarily due to negative sales volume variances; i.e., with the exception of the 2006-07 period, EMD price variances were positive.⁴ In interim 2008 compared to interim 2007, overall EMD revenue

¹ ***.

² Tronox was formed in May 2005 and primarily represents Kerr-McGee’s former chemical business segment. The initial public offering of Tronox’s common stock was completed in late November 2005. Tronox 2006 10-K, p. 30. According to a company official at the staff conference, Tronox’s EMD manufacturing and marketing operations were not affected by the divestiture from Kerr-McGee. Conference transcript, pp. 47-48 (Stater). Tronox’s EMD operations take place within the company’s “other business” operations which also include the production of sodium chlorate as well as boron-based and other specialty chemicals. The majority of Tronox’s overall activity takes place within its one reportable business segment, Pigment, which produces and markets titanium dioxide pigment. Tronox 2007 10-K, p. 30.

The U.S. EMD operations of Erachem, which is a subsidiary of Eramet, are part of Eramet’s overall Manganese division. Eramet’s two other divisions were identified as the Nickel division and Alloys division. “Eramet a global company profile,” <http://www.eramet.fr>, retrieved June 17, 2008.

³ Tronox verification report.

⁴ ***. In its 2006 10-K, Tronox stated that “. . . sales {of manganese dioxide in 2006} declined primarily due to a decrease in volume of 17.4 percent which is the result of record volumes in 2005 brought about by hurricane Katrina.” Tronox’s 2006 10-K, p. 33. While acknowledging the above-referenced statement, Tronox asserted during the preliminary phase of these investigations that the decline in its sales volume in 2006 was primarily due to subject imports. Tronox’s postconference brief, exh. 1, p. 8.

*** are generally consistent with narrative statements in the company’s 2007 10-K and 2008 10-Q (first quarter), respectively. Tronox’s 2007 10-K states that the increase in revenue for its electrolytic and other chemical products operations was “. . . due to higher selling prices for sodium chlorate which was partially offset by lower sales prices and volumes of manganese dioxide.” Tronox’s 2007 10-K, p. 33 (emphasis added). Tronox’s 2008 10-

(continued...)

Table VI-1

EMD: Results of merchant-market operations, 2005-07, January-March 2007, and January-March 2008

* * * * *

Table VI-2

EMD: Results of merchant-market operations (per short ton), 2005-07, January-March 2007, and January-March 2008

* * * * *

Table VI-3

EMD: Results of merchant-market operations by firm, 2005-07, January-March 2007, and January-March 2008

* * * * *

Table VI-4

EMD: Variance analysis of merchant-market financial results of operations, 2005-07, January-March 2007, and January-March 2008

* * * * *

increased due to positive sales volume variance and to a lesser degree to a positive price variance. While both Erachem and Tronox followed this general pattern, Tronox's ***. With respect to period-to-period changes in volume and corresponding EMD revenue, ***, as shown in table VI-3, is ***.⁵

As shown in table VI-3, the average sales values reported by Erachem and Tronox were *** throughout the period until interim 2008 when ***. Tronox reported that it primarily produced ***,⁶ while Erachem reported that it ***.⁷ (Note: As described below, the 2007 total standard costs of both Erachem and Tronox ***)⁸

As shown in table VI-1 and table VI-2, respectively, gross profit margins and gross profit on a per-short-ton basis declined primarily due to higher cost of goods sold ("COGS") offset only partially by higher average sales values between 2005 and 2006. As noted previously, average sales values declined in 2007 which further contributed to the decline in overall gross profit margin.

⁴(...continued)

Q (first quarter) attributed the sales increase reported by electrolytic and other chemical products operations ". . . to higher prices on manganese dioxide and sodium chlorate as well as higher volumes on boron, lithium manganese oxide and sodium chlorate." Tronox's 2008 10-Q (first quarter), p. 29 (emphasis added).

⁵ ***. E-mail with attachment from ***, June 19, 2008.

⁶ ***. Tronox's U.S. producer questionnaire response, III-5.

⁷ ***. E-mail with attachment from ***, June 11, 2008.

⁸ ***.

For the entire period Tronox's average EMD COGS was ***. This pattern was due to a combination of ***. With regard to total energy costs, Tronox also generally reported ***.^{9 10}

Both Erachem and Tronox reported 2007 EMD standard costs unadjusted for manufacturing variances which were ***.¹¹

While Erachem and Tronox reported increases in average COGS during the full-year period, Tronox's average COGS ***. Both companies also reported declines in their average COGS in interim 2008 compared to interim 2007 with Erachem ***.¹² In contrast, the more ***.

As shown in table VI-3, the *** was the largest component of EMD COGS after the all other factory costs item.^{13 14} Both Erachem and Tronox ***. According to Erachem, ***.¹⁵

In contrast with ***.¹⁶ According to Tronox, it ***.¹⁷

Table VI-8, in the following "Overall Operations on EMD" section, presents average manganese ore purchase cost and associated average separate/discrete transportation costs by company. ***.¹⁸

While differences in total average COGS are ultimately related to factors such as the absolute cost of manufacturing inputs and relative efficiencies, ***.¹⁹ ***.²⁰

Operating income in both absolute terms and as a percent of sales declined *** in 2007. Although the pattern of gross profit noted above is the primary factor explaining changes in operating income during the period, SG&A expenses in absolute terms and as a percent of sales increased *** in interim 2008 compared to interim 2007. According to Erachem, ***.²¹

Tronox, ***.²²

OVERALL OPERATIONS ON EMD

Income-and-loss data for overall operations on EMD are presented in table VI-5 and on an average unit basis in table VI-6.²³ Table VI-7 presents selected company-specific financial information for overall operations on EMD. Table VI-8 presents average purchase cost of manganese ore by company with a separate line item for separate/discrete transportation costs. A variance analysis of the financial results for overall operations on EMD is presented in table VI-9.

⁹ ***. Tronox's U.S. producer questionnaire response, III-8. ***. Ibid. ***. Ibid.

¹⁰ ***. Erachem's U.S. producer questionnaire response, III-8.

¹¹ June 20, 2008 letter with attachments from Trade Law International on behalf of Tronox.

¹² ***. E-mail with attachment from ***, June 19, 2008.

¹³ ***. E-mail with attachment from ***, June 19, 2008.

***. June 20, 2008 letter from Trade Law International on behalf of Tronox.

¹⁴ ***. June 20, 2008 letter with attachments from Trade Law International on behalf of Tronox. ***. E-mail with attachment from ***, June 19, 2008.

¹⁵ E-mail with attachment from ***, June 19, 2008.

¹⁶ E-mail with attachment from Trade Law International on behalf of Tronox, June 11, 2008.

¹⁷ Letter with attachments from Trade Law International on behalf of Tronox, June 20, 2008.

¹⁸ ***. Tronox verification report. ***.

¹⁹ ***. E-mail with attachment from ***, June 19, 2008. ***. E-mail from ***, June 25, 2008.

²⁰ ***. Tronox's U.S. producer questionnaire response, III-9.

²¹ E-mail with attachment from ***, June 19, 2008.

²² Letter with attachments from Trade Law International on behalf of Tronox, June 20, 2008.

²³ Overall operations on EMD represent the financial results of Energizer, Erachem, and Tronox.

Table VI-5

EMD: Results of overall operations, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
Quantity (short tons)					
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers	***	***	***	***	***
Total net sales quantity	70,835	62,208	60,203	12,820	14,734
Value (\$1,000)					
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers	***	***	***	***	***
Total net sales value	94,808	87,136	83,113	17,623	21,043
Cost of goods sold:					
Manganese ore	18,158	18,795	19,845	4,389	4,910
All other raw material	4,614	5,334	5,194	1,541	1,504
Direct labor	9,881	9,339	10,068	1,975	2,385
Natural gas	11,207	11,248	8,358	1,816	1,794
Electricity	4,881	5,249	5,681	1,183	1,523
All other factory costs	34,229	32,030	34,756	7,765	7,949
Total cost of goods sold	82,970	81,995	83,902	18,669	20,065
Gross profit or (loss)	11,838	5,141	(789)	(1,046)	978
SG&A expenses	8,228	8,543	8,812	2,286	2,654
Operating income or (loss)	3,610	(3,402)	(9,601)	(3,332)	(1,676)
Interest expense	1,640	1,908	1,954	359	429
Other expenses	68	0	0	0	0
Other income items	3	43	7	1	0
Net income or (loss)	1,905	(5,267)	(11,548)	(3,690)	(2,105)
Depreciation/amortization	9,712	9,224	8,842	2,049	2,306
Estimated cash flow	11,617	3,957	(2,706)	(1,641)	201

Table continued on next page.

Table VI-5--Continued

EMD: Results of overall operations, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
Ratio to net sales (percent)					
Manganese ore	19.2	21.6	23.9	24.9	23.3
All other raw material	4.9	6.1	6.2	8.7	7.1
Direct labor	10.4	10.7	12.1	11.2	11.3
Natural gas	11.8	12.9	10.1	10.3	8.5
Electricity	5.1	6.0	6.8	6.7	7.2
All other factory costs	36.1	36.8	41.8	44.1	37.8
Cost of goods sold	87.5	94.1	100.9	105.9	95.4
Gross profit or (loss)	12.5	5.9	(0.9)	(5.9)	4.6
SG&A expenses	8.7	9.8	10.6	13.0	12.6
Operating income or (loss)	3.8	(3.9)	(11.6)	(18.9)	(8.0)
Net income or (loss)	2.0	(6.0)	(13.9)	(20.9)	(10.0)
Number of producers reporting					
Operating losses	***	***	***	***	***
Data	3	3	3	3	3
Source: Compiled from data submitted in response to Commission questionnaires.					

The primary difference between the overall EMD operations and the previous merchant-market section is the inclusion of Energizer. As noted previously, Energizer consumes *** of its EMD in the production of batteries. Unlike Tronox or Erachem, whose sales volume *** during the period, Energizer's sales volume was ***.

As shown in table VI-7, Energizer's average sales values (e.g., fair market values assigned by the company) were ***. Like Tronox, Energizer reported ***.²⁴ Notwithstanding the *** average sales value assigned to Energizer's EMD internal consumption, Energizer reported ***. ***.²⁵

As compared to both Erachem and Tronox, ***.²⁶ ***.²⁷

Table VI-8 indicates that *** average purchase cost of manganese ore. ***.²⁸ ***. In addition to generally higher average manganese ore costs, ***.²⁹

²⁴ Energizer's U.S. producer questionnaire response, III-5.

²⁵ E-mail from ***, September 20, 2007.

²⁶ ***.

²⁷ ***. Fax from ***, June 19, 2008. ***.

²⁸ ***. Energizer's U.S. producer questionnaire response, III-8.

²⁹ Fax from ***, June 19, 2008.

Table VI-6

EMD: Results of overall operations (per short ton), 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			January-March	
	2005	2006	2007	2007	2008
Unit value (per short ton)					
Commercial sales	\$***	\$***	\$***	\$***	\$***
Internal consumption	***	***	***	***	***
Transfers	***	***	***	***	***
Total net sales	1,338	1,401	1,381	1,375	1,428
Cost of goods sold:					
Manganese ore	256	302	330	342	333
All other raw material	65	86	86	120	102
Direct labor	139	150	167	154	162
Natural gas	158	181	139	142	122
Electricity	69	84	94	92	103
All other factory costs	483	515	577	606	540
Total cost of goods sold	1,171	1,318	1,394	1,456	1,362
Gross profit or (loss)	167	83	(13)	(82)	66
SG&A expenses	116	137	146	178	180
Operating income or (loss)	51	(55)	(159)	(260)	(114)
Source: Compiled from data submitted in response to Commission questionnaires.					

While Energizer's average natural gas costs ***,³⁰

Given Energizer's ***, the company was asked to provide alternative sales values based on the upstream product's gross profit margin.³¹ While this alternative methodology results in ***,

³⁰ Energizer's U.S. producer questionnaire response, III-8.

³¹ Using the alternative sales values provided by Energizer, the company and the overall industry, respectively, would generate the following pro forma operating income margins:

* * * * *

Table VI-7

EMD: Results of overall operations by firm, 2005-07, January-March 2007, and January-March 2008

* * * * *

Table VI-8

EMD: Purchase cost of manganese ore by firm, 2005-07, January-March 2007, and January-March 2008

* * * * *

Table VI-9

EMD: Variance analysis of overall financial results of operations, 2005-07, January-March 2007, and January-March 2008

Item	Calendar year			Jan.-March
	2005-07	2005-06	2006-07	2007-08
Value (\$1,000)				
Total net sales:				
Price variance	2,535	3,875	(1,215)	789
Volume variance	(14,230)	(11,546)	(2,808)	2,631
Total net sales variance	(11,695)	(7,672)	(4,023)	3,420
Net cost of sales:				
Cost variance	(13,385)	(9,130)	(4,550)	1,391
Volume variance	12,453	10,105	2,643	(2,787)
Total net cost of sales variance	(932)	975	(1,907)	(1,396)
Gross profit variance	(12,627)	(6,697)	(5,930)	2,024
SG&A expenses:				
Expense variance	(1,819)	(1,317)	(544)	(27)
Volume variance	1,235	1,002	275	(341)
Total SG&A variance	(584)	(315)	(269)	(368)
Operating income variance	(13,211)	(7,012)	(6,199)	1,656
Summarized as:				
Price variance	2,535	3,875	(1,215)	789
Net cost/expense variance	(15,204)	(10,447)	(5,094)	1,365
Net volume variance	(542)	(440)	110	(497)
Source: Compiled from data submitted in response to Commission questionnaires.				

**CAPITAL EXPENDITURES, RESEARCH AND DEVELOPMENT EXPENSES,
ASSETS, AND RETURN ON INVESTMENT**

Data on capital expenditures, research and development (“R&D”) expenses, assets, and return on investment (“ROI”) are presented in table VI-10.

Both Erachem and Energizer reported ***,³² ***.

***,³³ ***.³⁴ As shown in table VI-10, Erachem’s R&D expenses were *** throughout the period. *** reported that *** R&D expenses.

Table VI-10

Overall EMD operations: Capital expenditures, R&D expenses, assets, and return on investment, by firms, 2005-07, January-March 2007, and January-March 2008

* * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers to describe any actual or anticipated negative effects of imports of EMD from Australia and China, respectively, on their firms’ growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments.

Actual Negative Effects (Australia)

Energizer	***.
Erachem	***.
Tronox	***.

Anticipated Negative Effects (Australia)

Energizer	***.
Erachem	***.
Tronox	***.

Actual Negative Effects (China)

Energizer	***.
Erachem	***.
Tronox	***.

Anticipated Negative Effects (China)

Energizer	***.
Erachem	***.
Tronox	***.

³² ***.

³³ Ibid.

³⁴ E-mail with attachments from DLA Piper on behalf of Tronox, September 17, 2007.

PART VII: THREAT CONSIDERATIONS AND BRATSK INFORMATION

The Commission analyzes a number of factors in making threat determinations (see 19 U.S.C. § 1677(7)(F)(i)). Information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V, and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for use in the Commission's consideration pursuant to *Bratsk* rulings.

THE INDUSTRY IN AUSTRALIA

Delta EMD Australia Pty Limited

Table VII-1 presents data for reported production and shipments of EMD in Australia. The data were provided by the sole producer of EMD in Australia, Delta EMD Australia Pty Limited ("Delta Australia").¹ The firm reported that *** percent of its total sales in the most recent fiscal year were sales of EMD. In 2007, *** percent of Delta Australia's total shipments were exported to the United States. Approximately *** percent of its shipments of EMD were to other export markets such as ***. From 2005 to 2007, Delta Australia's volume of shipments exported to the United States fluctuated downward by *** percent, and its volume of shipments exported to other world markets also fluctuated downward by *** percent. Delta Australia's capacity remained the same from 2005 to 2007. It reported that ***. Its production decreased steadily from 2005 to 2007 by *** percent as previously stated ***. Delta Australia reported an increase in production in January-March 2008 of *** percent over January-March 2007 levels ***.

Table VII-1

EMD: Australia's reported production capacity, production, shipments, and inventories, 2005-07, January-March 2007, January-March 2008, and projections for 2008 and 2009

* * * * *

Delta Australia's EMD plant in Australia ceased production in mid-March 2008 following a decision made public on December 18, 2007, citing the strength of the Australian dollar, the likely imposition of antidumping duties in its key markets, and the oversupplied state of the world EMD market.² The workforce was laid off on March 28, 2008. It appears that Delta's Australian facility is no longer operable and is awaiting possible demolition. ***.³

Delta provided the following summary of its progress, as of June 2008, to demolish its Australian EMD production facility.⁴

***.

¹ Another Australian firm, Hitec Energy Limited, has failed to successfully commercialize its EMD operations to date (petition, p. 10). It reportedly does not have an operational facility and is not an active producer of EMD (conference transcript, p. 129 (Moore)).

² Stephen Elliott, General Manager, Delta EMD Australia Pty. Ltd., "Restructuring at Newcastle Facility," Delta Australia Press Release, December 18, 2007.

³ Delta Australia's foreign producers' questionnaire (section II-1).

⁴ Letter from ***, June 17, 2008.

Prior to closure of its Australian EMD plant, Delta Australia projected its exports to the United States to ***. It stated that ***.⁵ ***.⁶

Second quarter 2008 data from Australian producer Delta are presented in table VII-2.

Table VII-2

EMD: Australia's reported production capacity, production, shipments, and inventories, April-June 2007 and April-June 2008

* * * * *

Delta PLC's Annual Results for 2007, issued on March 17, 2008, refer to the "decision to close the Australian plant during 2008 and Delta's exit from EMD production in Australia."⁷

Delta reported the ***.⁸ Delta also reported the ***.⁹ ***.¹⁰

Delta ***.¹¹ In addition, Delta reported that it submitted an "application for the demolition of buildings and infrastructure" to the Newcastle municipal authorities on June 19, 2008, for authorization of the *** and anticipates that the Newcastle Council will give approval for the demolition within 16 weeks of the June 2008 submission of the application.¹²

Delta reported that it is ***.¹³ While the half-year cash flows do not include proceeds from the sale of the Group's land, plant, or equipment in Australia, opportunities for realizing value from those assets continue to be developed with favorable prospects.¹⁴

According to the London Stock Exchange Aggregated Regulatory News Service, interest in the purchase of Delta's Australian plant site has been expressed by several parties although provisions remain for the de-commissioning of the Australian plant and the restoration and rehabilitation of the plant and residue disposal sites.¹⁵

⁵ Delta Australia's postconference brief, p. 14.

⁶ ***.

⁷ Delta's posthearing brief, p. A-3 and attachment 4.

⁸ Ibid., p. A-4 and attachment 5.

⁹ Ibid., p. A-4 and attachment 6.

¹⁰ Ibid., p. A-2.

¹¹ Ibid., pp. A-3-A-4.

¹² Ibid., p. A-2.

¹³ Ibid., pp. A-2-A-3.

¹⁴ Delta plc - Delta Electrical Industries Limited: Trading Statement, June 23, 2008, http://www.deltapl.com/Investor_Centre/Press_Centre/News/Latest_News/Trading_Statement_/News, retrieved August 12, 2008.

¹⁵ Delta PLC Delta Electrical Industries Ltd -4- London Stock Exchange Aggregated Regulatory News Service (ARNS), August 11, 2008.

HiTec Energy Limited

HiTec Energy Limited is an Australian company with patented control of hydrometallurgical process technology designed to facilitate the production of manganese electrolytic products and fertilizer products from low grade manganese dioxide ores and high tenor manganese wastes. Its patented processes include a sulfur dioxide leach process to generate manganese sulfate electrolyte from lower grade manganese oxide ores than is tolerated in roasting based processes. In addition, HiTec stated that its manganese extraction process is environmentally superior to others currently in use as it consumes 50 percent less energy and eliminates carbon dioxide and virtually all particulate and metal ion emissions.¹⁶

HiTec's annual reports for 2005, 2006, and 2007 provide a chronology of its pursuit of demonstration of its patented EMD leaching technology. HiTec's 2005 annual report states that HiTec pursued an acquisition opportunity of an existing U.S. EMD plant with existing markets owned by an oil and gas company due to the relatively lower capital cost to purchase an existing plant versus greenfield development. The purchase was not realized.¹⁷ Concurrent with its efforts to acquire an existing EMD plant, HiTec continued in its efforts to secure approvals for the development of an EMD plant in Western Australia.¹⁸

HiTec's annual report for 2006 stated that its efforts to acquire, develop, or joint venture in an EMD production facility based on HiTec's patented hydrometallurgical process was on track awaiting a counterparty's dictation of requirements. Along with its previously mentioned pursuit of acquisition of a U.S. EMD plant as a viable option, HiTec also reported other viable options in active discussions with parties in India, China, and Georgia. HiTec further stated that the principal activity of the company continued to be the commercialization of its mineral processing technologies through the development of an EMD project or through licensing to third parties.¹⁹

The HiTec annual report for 2007 stated that the company continued to develop and advance a number of opportunities under which its patented sulfur dioxide leach process might be incorporated in new or existing electrolytic manganese dioxide plants. HiTec reported that it signed an agreement with M/s Cube Mines and Minerals Pvt. Ltd. ("Cube") under which the parties will seek to incorporate HiTec's patented process in a new EMD plant to be built at Halol in the Panchmahals district of Gujarat State in India. The company further reported that the licensee for the HiTec intellectual property would be a joint venture company, Gujarat Manganese Ltd. ("GML"), whose main shareholders would be Cube and Gujarat Minerals Developments Corp., a Gujarat State government enterprise, with HiTec to take a minor stake in GML on a free carry basis. HiTec reported that its main return on investment in this project would come through production royalties. HiTec further stated that the principal activity of the company continued to be the commercialization of its mineral processing technologies through the development of an EMD project or through licensing to third parties.²⁰

THE INDUSTRY IN CHINA

Table VII-3 presents data for reported production and shipments of EMD in China. The Commission sent questionnaires to 36 possible producers of EMD in China and received completed

¹⁶ "HiTec Energy Limited," <http://hitec-energy.com.au/>, retrieved July 29, 2008.

¹⁷ Tronox's posthearing brief, attachment 3, HiTec Energy Limited: 2005 Annual Report, p. 2.

¹⁸ *Ibid.*, p. 4.

¹⁹ HiTec Energy Limited: 2006 Annual Report, pp. 2-3 and 5.

²⁰ HiTec Energy Limited: 2007 Annual Report, pp. 2-3 and 5.

responses from two firms,²¹ which together estimated that in 2007 they accounted for approximately *** percent of all EMD production in China. *** Chinese producers that responded, Redstar and Xiangtan, exported EMD to the United States during the period examined and in the aggregate estimate that they accounted for *** percent of all EMD exports from China to the United States in 2007.²²

Table VII-3
EMD: China’s reported production capacity, production, shipments, and inventories, 2005-07, January-March 2007, January-March 2008, and projections for 2008 and 2009

* * * * *

***.²³

In 2007, *** percent of reported shipments of Chinese EMD were exported to the United States while *** percent of reported shipments were made in the Chinese home market. Producers of EMD in China reported that in 2007 *** percent of their shipments of EMD were to other export markets (***).²⁴ From 2005 to 2007, Chinese EMD producers’ volume of shipments exported to the United States increased irregularly by *** percent while their volume of shipments exported to other world markets increased steadily by *** percent. Producers’ capacity in China *** from 2005 to 2007 and is projected to ***.²⁵ Production increased from 2005 to 2007 by *** percent and is projected to ***.

In June 2007, the Chinese Ministry of Finance and the State Administration of Taxation announced the elimination of the export rebate on multiple products, including EMD, effective in July 2007.²⁶ Usable comments by U.S. EMD producers and importers and by U.S. battery producers concerning the impact of the elimination of the export tax rebate on U.S. prices and quantities of EMD are presented in the section entitled “Questionnaire Quarterly Selling Price Data” in Part V of this report.

Second quarter 2008 data from Chinese producers *** are presented in table VII-4.

Table VII-4
EMD: China’s reported production capacity, production, shipments, and inventories, April-June 2007 and April-June 2008

* * * * *

THE INDUSTRIES IN AUSTRALIA AND CHINA COMBINED

Tables VII-5 and VII-6 present reported data on the EMD industries in Australia and China combined.

²¹ These firms are: (1) Guizhou Redstar Developing Import & Export (“Redstar”); and (2) Xiangtan Electrochemical Scientific, Ltd. (“Xiangtan”). ***.

²² Foreign producers’ questionnaire responses (section II-8). Xiangtian’s web site states that Xiangtian produces 40,000 tons of EMD per year and that its EMD plant’s production is the largest in the world. www.chinaemd.com, retrieved September 22, 2007.

²³ Foreign producers’ questionnaire responses (section I-3); importers’ questionnaire responses (section II-5); Customs Net Import File pivot table.

²⁴ Foreign producers’ questionnaire responses (section II-8).

²⁵ ***. Foreign producers’ questionnaire responses (section II-1).

²⁶ Spectrum’s postconference brief, p. 32 and exh. 11.

Table VII-5

EMD: Australia and China's combined reported production capacity, production, shipments, and inventories, 2005-07, January-March 2007, January-March 2008, and projections for 2008 and 2009

* * * * *

Table VII-6

EMD: Australia and China's reported combined production capacity, production, shipments, and inventories, April-June 2007 and April-June 2008

* * * * *

U.S. IMPORTERS' INVENTORIES

Reported inventories held by U.S. importers of subject merchandise from Australia and China are shown in table VII-7.

Table VII-7

EMD: U.S. importers' end-of-period inventories of subject imports, by source, 2005-07, January-March 2007, and January-March 2008

* * * * *

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO MARCH 31, 2008

The Commission requested importers to indicate whether they imported or arranged for the importation of EMD from Australia or China after March 31, 2008. *** responding importers reported that they had arranged for the importation of EMD from a subject country subsequent to March 31, 2008.

ANTIDUMPING INVESTIGATIONS IN THIRD-COUNTRY MARKETS

On April 27, 2007, Japan initiated antidumping investigations on EMD from Australia, China, South Africa, and Spain. According to Delta Australia, the investigations are ongoing and provisional (preliminary) findings are expected in October 2008. However, on June 13, 2008, Japan unexpectedly issued an ordinance imposing provisional antidumping duties on EMD, effective June 14, 2008 to October 13, 2008. The final phase of the Japanese investigation is ongoing, and the final decision is not expected for many months.²⁷

On December 21, 2006, the European Commission ("EC") initiated an antidumping investigation on EMD from South Africa. On September 18, 2007, the EC imposed a 14.9-percent provisional antidumping duty on imports of "certain manganese dioxides" from South Africa. On March 10, 2008, the EU imposed a definitive antidumping duty on certain manganese dioxides from South Africa, in the amount of 17.1 percent.²⁸

²⁷ Correspondence from counsel for Delta Australia to Commission staff, July 3, 2008.

²⁸ Official Journal of the European Union, Council Regulation (EC) No. 221/2008 of 10 March 2008, p. L 69/1.

INFORMATION ON NONSUBJECT SOURCES

“Bratsk” Considerations

As a result of the Court of Appeals for the Federal Circuit (“CAFC”) decision in *Bratsk Aluminum Smelter v. United States* (“Bratsk”), the Commission is directed to:

*undertake an “additional causation inquiry” whenever certain triggering factors are met: “whenever the antidumping investigation is centered on a commodity product, and price competitive non-subject imports are a significant factor in the market.” The additional inquiry required by the Court, which we refer to as the Bratsk replacement / benefit test, is “whether non-subject imports would have replaced the subject imports without any beneficial effect on domestic producers.”*²⁹

Nonsubject Source Information

During the final phase of these investigations, the Commission sought pricing data from U.S. importers of EMD from Australia, China, and from all other countries. Those data are presented in Part V (China and Australia) and appendix K (all other countries) of this report. With respect to nonsubject foreign industry data, the Commission sought both questionnaire responses and publicly available information regarding nonsubject foreign producers of EMD for the period for which data were collected. Nonsubject foreign producers’ questionnaire responses were sought from Brazil, Greece, Japan, Spain, and South Africa and public information was gathered on Brazil, Colombia, India, Greece,³⁰ Japan, Spain, and South Africa.³¹ The information obtained is presented in the following sections.

Overview

Although EMD is believed to be produced in substantial quantities in nonsubject countries Brazil, Greece, Japan, and South Africa, quantitative production data for global EMD production are not generally available.³² World production capacity for 2003 and 2007 is shown table VII-8.³³

²⁹ *Silicon Metal from Russia, Inv. No. 731-TA-991 (Second Remand)*, USITC Publication 3910, March 2007, p. 2; citing *Bratsk Aluminum Smelter v. United States*, 444 F.3d at 1375. Tronox expressed the opinion that for the purpose of the *Bratsk* analysis, because qualification is required, EMD is not considered to be a commodity (Tronox’s prehearing brief, p. 34, and posthearing brief, exh. 1, p. 11).

³⁰ There are no public trade data presented for Greece. The Global Trade Atlas reports that Greece has declared trade data for manganese dioxide confidential.

³¹ Ireland was a major producer of EMD until its one plant was closed in 2003. According to Delta Industries, “In July 2003, a Japanese competitor, Mitsui Mining & Smelting Ltd., announced that they would close their plant in Ireland in September 2003 which has since taken place.” *Delta Electrical Industries Limited - Audited Group Results for the Year Ended December 2003*, retrieved on Sept. 19, 2007 from <http://www.netassets.co.za/equities/naSens/nasensArticle.asp?sensID=19347>.

³² ***.

³³ Citic Dameng Mining Industries Limited, *2006 EMD Market Review and Forecast*, March 30, 2007, retrieved on September 19, 2007 from <http://www.manganese.org/documents/2.IMnIEPD0307Tongqing.pdf>, (partially supplied in exh. 29 of the petition); *The Changing Patterns of the Global EMD Business* (exh. 32 of the petition); and *The Economics of Manganese*, 2003 (exh. 4 of the petition). According to Tronox Inc.’s Form 10-K for its fiscal year ended December 31, 2006 (p. 10), Tronox had approximately 8 percent of global EMD production capacity and
(continued...)

Table VII-8
EMD: World production capacity, 2003 and 2007, by country

Country	2003	2007	Capacity share 2007 (in percent)
	Quantity (<i>short tons</i>)		
Subject:			
Australia	25,353	29,763	7.0
China	55,115	231,467	54.1
Subtotal subject	80,468	261,230	61.1
Nonsubject:			
Brazil	(¹)	(¹)	(¹)
Colombia	(¹)	(¹)	(¹)
India	661	1,113	0.3
Greece	19,841	19,828	4.6
Japan	82,893	37,471	8.8
Spain	(¹)	6,595	1.5
South Africa	36,376	33,060	7.7
United States	64,264	68,904	16.1
Subtotal nonsubject	204,035	166,971	39.0
Total	284,503	428,201	100.0
¹ Not available.			
Source: Citic Dameng Mining Industries Limited, <i>Li Tongqing, Citic Dameng Mining Industries Limited, 2007: Hard Times for EMD Business</i> , located at http://www.manganese.org/2008_EP_D_Conference_Presentations.php , May 21, 2008; retrieved June 19, 2008.; <i>2006 EMD Market Review and Forecast</i> , March 30, 2007, retrieved on September 19, 2007 from http://www.manganese.org/documents/2_IMnIEPD0307Tongqing.pdf , (partially supplied in petition exh. 29); <i>The Changing Patterns of the Global EMD Business</i> (petition exh. 32); and <i>The Economics of Manganese, 2003</i> (petition, exh. 4).			

³³ (...continued)

Erachem had 7 percent. Other significant producers and their estimated global capacity shares included Delta (17 percent), Tosoh (15 percent), Xiangtan (11 percent), and Mitsui (7 percent), with the remainder essentially consisting of additional producers in China (Ibid.).

According to the petition, global EMD production capacity was estimated to be 367,800 metric tons (405,426 short tons) as of the end of 2006, with global demand for EMD in 2006 estimated at 310,000 metric tons (341,713 short tons).³⁴ According to a report by Citic Dameng Mining Industries Limited, shown in table VII-8, global EMD production capacity amounted to 388,461 metric tons (428,201 short tons) in 2007. Tronox cited a statement in Delta's July 2007 interim report to the effect that global production capacity for EMD more than satisfies existing demand.³⁵ *** domestic producers (***) opined that the global EMD market continued to be oversupplied; ***, did not express an opinion on the issue but noted that there was a reduction in the number of known EMD suppliers.³⁶

There are a number of economic factors dampening interest in or the ability of nonsubject countries to export to the United States. They include: (1) substantial EMD raw material cost increases in 2007 not covered by EMD price increases; (2) the weak U.S. dollar; (3) continued EMD oversupply; and (4) capacity reduction caused by shutdown of plants operating at less than optimum conditions.³⁷ On the other hand, an expected increased demand for batteries due to growing use of electronic devices coupled with predictions of reduced excess capacity should result in improved economic performance of the global EMD industry and increased prices.³⁸ In the foreseeable future, these factors could spur exports from nonsubject countries to the United States.

Further information on the likelihood that trade measures against subject countries could spur EMD imports from nonsubject countries to the United States are found in the responses of U.S. battery producers to Commission questionnaires. ***. ***. This may indicate that at least some U.S. battery producers would be more likely to consider nonsubject imports as a source of supply in response to U.S. trade measures which limit imports from subject countries.

According to Delta Australia, ***.³⁹

Net trade data for the nonsubject EMD-producing countries are shown in table VII-9.

³⁴ Petition, p. 42.

³⁵ Tronox's postconference brief, pp. 10-11.

³⁶ U.S. producers' questionnaire responses, section IV-B-23. ***.

³⁷ Li Tongqing, Citic Dameng Mining Industries Limited, 2007: *Hard Times for EMD Business*, located at http://www.manganese.org/2008_EMD_Conference_Presentations.php, May 21, 2008; retrieved June 19, 2008.

³⁸ Ibid.

³⁹ Delta Australia's September 19, 2007 Response to Supplemental Questions in the preliminary phase of these investigations, p. 5.

Table VII-9

EMD: Net trade from major nonsubject producing countries, 2005-07

Country	2005	2006	2007
Quantity (short tons)			
Imports:			
Brazil	1,001	2,399	5,121
Colombia	1,489	2,037	1,820
India	5,401	8,197	6,819
Japan	14,769	15,487	20,172
South Africa	343	33	99
Spain	208	405	526
Exports:			
Brazil	9,022	2,867	1,364
Colombia	0	6	122
India	767	859	474
Japan	32,061	32,342	26,608
South Africa	35,613	28,332	25,533
Spain	2,674	6,001	7,053
Trade balance:			
Brazil	8,021	468	(3,757)
Colombia	(1,489)	(2,032)	(1,698)
India	(4,634)	(7,338)	(6,345)
Japan	17,292	16,855	6,436
South Africa	35,271	28,298	25,434
Spain	2,466	5,596	6,527
Source: Global Trade Atlas, importer and exporter records (HTS subheading 2820.10).			

Brazil

Brazil is estimated to have accounted for about 3 percent of world production capacity of EMD at the end of 2007.⁴⁰ Two companies were producing in Brazil, SBEL and EML.⁴¹ The following tabulation shows Brazil's exports of EMD to its major markets:⁴²

Market	2005	2006	2007
	Quantity (<i>short tons</i>)		
United States	1,398	934	320
Italy	419	400	218
Colombia	685	283	0
Mexico	43	220	0
Pakistan	119	208	208
All other	6,359	820	618
Total	9,022	2,867	1,364

Table VII-10 presents data reported by SBEL, Brazil, concerning the EMD industry in Brazil. SBEL reported that ***.⁴³ ***.⁴⁴ ***.⁴⁵

Table VII-10

EMD: Brazil's reported production capacity, production, shipments, and inventories, 2005-07, January-March 2007, January-March 2008, and projections for 2008 and 2009

* * * * *

Colombia

One producer of EMD is located in Colombia, Quintal, S.A. ***.⁴⁶ The following tabulation shows Colombia's exports of EMD to its major markets:⁴⁷

⁴⁰ Citic Dameng Mining Industries Limited, *2006 EMD Market Review and Forecast*, March 30, 2007.

⁴¹ Ibid.

⁴² Global Trade Atlas.

⁴³ SBEL's nonsubject foreign producers' questionnaire response (section II-1).

⁴⁴ ***.

⁴⁵ ***.

⁴⁶ ***.

⁴⁷ Global Trade Atlas.

Market	2005	2006	2007
	Quantity (short tons)		
Guatemala	0	6	0
Ecuador	0	(¹)	0
Peru	0	0	54
United States	0	0	2
Brazil	0	0	66
All other	0	0	0
Total	0	6	122
¹ Less than 0.5 short ton.			

Greece

Table VII-11 presents data reported by Tosoh Hellas concerning the EMD industry in Greece.

Table VII-11

EMD: Greece's reported production capacity, production, shipments, and inventories, 2005-07, January-March 2007, January-March 2008, and projections for 2008 and 2009

* * * * *

Tosoh Hellas reported that ***.⁴⁸

India

During 2005-07 there were several companies producing EMD in India.⁴⁹ As of 2006, Mitsui (Japan) discontinued its production in India, and the Eveready Industries India EMD facility in Thane was designated to discontinue production in 2007, citing that the facility had become "uneconomical and unviable."⁵⁰ The remaining active producer of EMD in India is Manganese Ore of India Limited. The following tabulation shows India's exports of EMD to its major markets.⁵¹

⁴⁸ Tosoh Hellas' nonsubject foreign producers' questionnaire response (section III-1).

⁴⁹ Citic Dameng Mining Industries Limited, *2006 EMD Market Review and Forecast*, March 30, 2007.

⁵⁰ "Audited Financial Results for the Year Ended March 31, 2006," retrieved on September 19, 2007 from: http://www.evereadyindustries.com/financial_results_05-06.shtm.

⁵¹ Global Trade Atlas. Trade data for India are incomplete for 2007. The Commission did not request a nonsubject foreign producers' questionnaire response from Manganese Ore of India Limited.

Market	2004	2005	2006
	Quantity (short tons)		
Saudi Arabia	24	247	165
Kenya	3	23	146
Tanzania	77	104	140
Philippines	60	21	74
Thailand	6	33	57
All other	547	340	277
Total	717	767	859

Note.--2007 trade data for India are incomplete and are not presented here.

Japan

During 2005-07, both Tosoh and Mitsui Mining and Smelting produced EMD in Japan; however, Mitsui Mining and Smelting ***.⁵² Japan's exports of EMD to its major markets are:⁵³

Market	2005	2006	2007
	Quantity (short tons)		
Indonesia	10,609	11,374	9,325
United States	5,438	6,979	4,008
China	2,884	5,403	3,676
South Korea	2,291	2,884	1,584
Singapore	7,638	2,441	4,828
All other	3,201	3,260	3,186
Total	32,061	32,342	26,608

Table VII-12 presents data reported by Mitsui Mining and Smelting Co. and Tosoh Corp. concerning the EMD industry in Japan.

Table VII-12

EMD: Japan's reported production capacity, production, shipments, and inventories, 2005-07, January-March 2007, January-March 2008, and projections for 2008 and 2009

* * * * *

⁵² Mitsui ***.

⁵³ Global Trade Atlas.

Mitsui Mining and Smelting reported that ***.⁵⁴ Mitsui Mining and Smelting reported that ***.⁵⁵
 ***.⁵⁶
 Tosoh Corp. (“Tosoh Japan”) reported that ***.⁵⁷
 Tosoh Japan further reported that ***.⁵⁸

South Africa

During 2004-06, Delta was the sole producer of EMD in South Africa. The following tabulation shows South Africa’s exports of EMD to its major markets:⁵⁹

Market	2005	2006	2007
	Quantity (<i>short tons</i>)		
France	25,968	23,235	15,332
Japan	5,429	3,083	4,080
Brazil	421	750	1,600
Colombia	551	595	114
United States	0	2	204
China	1,190	155	595
Belgium	728	0	1,898
All other	1,326	512	1,710
Total	35,613	28,331	25,533

***.⁶⁰

Table VII-13 presents data reported by Delta South Africa concerning the EMD industry in South Africa. Delta South Africa reported that ***.⁶¹ Delta indicated that ***.⁶² Delta South Africa reported that ***.⁶³ ***.⁶⁴ ***.

⁵⁴ Mitsui Mining and Smelting Co.’s nonsubject foreign producers’ questionnaire response (section II-1 and section II-7).

⁵⁵ Ibid. (section II-7).

⁵⁶ Ibid. (section III-3).

⁵⁷ Tosoh Japan’s nonsubject foreign producers’ questionnaire response (section III-1).

⁵⁸ Ibid.

⁵⁹ Global Trade Atlas.

⁶⁰ Delta Australia’s September 19, 2007 Response to Supplemental Questions in the preliminary phase of these investigations, p. 5.

⁶¹ Delta South Africa’s nonsubject foreign producers’ questionnaire response (section II-1 and section I-5).

⁶² Ibid. (section III-1).

⁶³ Ibid.

⁶⁴ Delta South Africa’s nonsubject foreign producers’ questionnaire response (section II-7).

Table VII-13

EMD: South Africa's reported production capacity, production, shipments, and inventories, 2005-07, January-March 2007, January-March 2008, and projections for 2008 and 2009

* * * * *

According to the London Stock Exchange Aggregated Regulatory News Service, EMD exports from South Africa to Europe are subject to a 17.1 percent antidumping duty and EMD exports from South Africa to Japan are now subject to a provisional antidumping duty of 14.5 percent.⁶⁵ Production in South Africa was hampered by electrical power load shedding and operational inefficiencies which caused a production shortfall with higher costs of production and substantially higher input costs.⁶⁶

Spain

During 2005-07 there was one company producing EMD in Spain, Cegassa. The following tabulation shows Spain's exports of EMD to its major markets:⁶⁷

Market	2005	2006	2007
	Quantity (<i>short tons</i>)		
Japan	606	2,756	2,404
Belgium	0	1,495	2,540
Poland	786	1,420	1,775
Colombia	69	93	69
United States	0	0	0
All other	1,213	238	265
Total	2,674	6,001	7,053

The Commission requested a nonsubject foreign producers' questionnaire response from Cegasa, Spain. Cegasa responded that ***.⁶⁸ Cegasa ***.⁶⁹

⁶⁵ Delta PLC Delta Electrical Industries Ltd -4- London Stock Exchange Aggregated Regulatory News Service (ARNS), August 11, 2008.

⁶⁶ Ibid.

⁶⁷ Global Trade Atlas.

⁶⁸ ***.

⁶⁹ ***.

APPENDIX A
***FEDERAL REGISTER* NOTICES**

ACTION: Scheduling of the final phase of antidumping investigations.

SUMMARY: The Commission hereby gives notice of the scheduling of the final phase of antidumping investigation Nos. 731-TA-1124 and 1125 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of less-than-fair-value imports from Australia and China of electrolytic manganese dioxide ("EMD"), provided for in subheading 2820.10.00 of the Harmonized Tariff Schedule of the United States.¹

For further information concerning the conduct of this phase of the investigations, hearing procedures, and rules of general application, consult the

Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

EFFECTIVE DATE: March 26, 2008.

FOR FURTHER INFORMATION CONTACT: Cynthia Trainor (202-205-3354), Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (<http://www.usitc.gov>). The public record for these investigations may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION:

Background.—The final phase of these investigations is being scheduled as a result of affirmative preliminary determinations by the Department of Commerce that imports of electrolytic

**INTERNATIONAL TRADE
COMMISSION**

[Investigation Nos. 731-TA-1124 and 1125
(Final)]

**Electrolytic Manganese Dioxide From
Australia and China**

AGENCY: United States International
Trade Commission.

¹ For purposes of these investigations, the Department of Commerce has defined the subject merchandise as "All manganese dioxide ("MnO₂") that has been manufactured in an electrolysis process, whether in powder, chip, or plate form ("EMD"). Excluded from the scope are natural manganese dioxide ("NMD") and chemical manganese dioxide ("CMD")."

manganese dioxide from Australia and China are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigations were requested in a petition filed on August 22, 2007, by Tronox, LLC, Oklahoma City, OK.

Participation in the investigations and public service list.—Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the final phase of these investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, no later than 21 days prior to the hearing date specified in this notice. A party that filed a notice of appearance during the preliminary phase of the investigations need not file an additional notice of appearance during this final phase. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in the final phase of these investigations available to authorized applicants under the APO issued in the investigations, provided that the application is made no later than 21 days prior to the hearing date specified in this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the investigations. A party granted access to BPI in the preliminary phase of the investigations need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report.—The prehearing staff report in the final phase of these investigations will be placed in the nonpublic record on July 10, 2008, and a public version will be issued thereafter, pursuant to section 207.22 of the Commission's rules.

Hearing.—The Commission will hold a hearing in connection with the final phase of these investigations beginning at 9:30 a.m. on July 24, 2008, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before July 16, 2008. A nonparty who has testimony that may aid the

Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on July 18, 2008, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), and 207.24 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 business days prior to the date of the hearing.

Written submissions.—Each party who is an interested party shall submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.23 of the Commission's rules; the deadline for filing is July 17, 2008. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.25 of the Commission's rules. The deadline for filing posthearing briefs is August 12, 2008; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the investigations may submit a written statement of information pertinent to the subject of the investigations, including statements of support or opposition to the petition, on or before August 12, 2008. On September 8, 2008, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before September 10, 2008, but such final comments must not contain new factual information and must otherwise comply with section 207.30 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission's rules, as amended, 67 Fed. Reg. 68036 (November 8, 2002). Even where electronic filing of a document is permitted, certain documents must also

be filed in paper form, as specified in II (C) of the Commission's Handbook on Electronic Filing Procedures, 67 FR 68168, 68173 (November 8, 2002).

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission's rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: These investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.21 of the Commission's rules.

By order of the Commission.
Issued: April 24, 2008.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E8-9417 Filed 4-29-08; 8:45 am]

BILLING CODE 7020-02-P

Case History

On March 26, 2008, the Department of Commerce (the Department) published its preliminary determination of sales at less than fair value in the antidumping duty investigation of electrolytic manganese dioxide (EMD) from Australia. See *Notice of Preliminary Determination of Sales at Less Than Fair Value and Affirmative Preliminary Determination of Critical Circumstances: Electrolytic Manganese Dioxide from Australia*, 73 FR 15982 (March 26, 2008) (*Preliminary Determination*). On April 18, 2008, we postponed the deadline for the final determination under section 735 (a)(2)(A) of the Act by 60 days to August 8, 2008. See *Postponement of Final Determination of Antidumping Duty Investigation: Electrolytic Manganese Dioxide from Australia*, 73 FR 21108 (April 18, 2008).

We invited parties to comment on the *Preliminary Determination*. We received a case brief from the respondent, Delta EMD Australia Pty. Limited (Delta), on May 19, 2008; the petitioner, Tronox LLC, filed a rebuttal brief on May 27, 2008. At the request of Delta, we held a hearing on June 17, 2008.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this antidumping investigation are addressed in the "Issues and Decision Memorandum for the Antidumping Duty Investigation of EMD from Australia for the Period of Investigation July 1, 2006, through June 30, 2007" (Decision Memorandum) from Stephen J. Claeys, Deputy Assistant Secretary for Import Administration, to David M. Spooner, Assistant Secretary for Import Administration, dated August 8, 2008, which is hereby adopted by this notice. This Decision Memorandum is attached to this notice as an appendix and is on file in the Central Records Unit (CRU) in room 1117. In addition, a complete version of the Decision Memorandum can be accessed directly on the Web at <http://ia.ita.doc.gov/>. The paper copy and electronic version of the Decision Memorandum are identical in content.

Scope of Investigation

The merchandise covered by this investigation includes all manganese dioxide (MnO₂) 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 this investigation 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 this investigation is dispositive.

Period of Investigation

The period of investigation is from July 1, 2006, through June 30, 2007.

Adverse Facts Available

For the final determination, we continue to find that, by failing to provide information we requested, Delta did not act to the best of its ability in responding to our requests for information. Thus, the Department continues to find that the use of adverse facts available is warranted for this company under sections 776(a)(2) and (b) of the Act. See *Preliminary Determination*, 73 FR at 15983. As a result of our analysis of comments received, we have changed the adverse facts-available rate for the final determination. Specifically, we have assigned Delta a rate of 83.66 percent based on the rate alleged in the petition, as recalculated in this final determination. See Final Determination Analysis Memorandum (August 8, 2008). Further, pursuant to section 776(c) of the Act and as discussed in the *Preliminary Determination*, we corroborated the key elements of the export-price and normal-value calculation used in the petition to derive an estimated margin from which we have derived the adverse facts-available rate.

Termination of Critical Circumstances Investigation

On February 19, 2008, the petitioner in this investigation, Tronox LLC, submitted an allegation of critical circumstances with respect to imports of electrolytic manganese dioxide from Australia. On March 19, 2008, we issued the *Preliminary Determination*, stating that we had reason to believe or suspect critical circumstances exist with respect to imports of EMD from Australia. See *Preliminary Determination*, 73 FR at 15986-88. On July 17, 2008, the petitioner withdrew its critical circumstances allegation and requested that the Department terminate its critical circumstances inquiry. Therefore, we are terminating the critical circumstances investigation and we have not addressed any comments regarding critical circumstances for the final determination. We will instruct U.S. Customs and Border Protection (CBP) to terminate the suspension of liquidation of all imports of subject

DEPARTMENT OF COMMERCE**International Trade Administration**

[A-602-806]

Notice of Final Determination of Sales at Less Than Fair Value and Termination of Critical- Circumstances Investigation: Electrolytic Manganese Dioxide from Australia

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: August 14, 2008.

SUMMARY: The Department of Commerce determines that imports of electrolytic manganese dioxide from Australia are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (the Act). The final weighted-average dumping margins are listed below in the section entitled "Final Determination of Investigation."

FOR FURTHER INFORMATION CONTACT: Hermes Pinilla or Minoo Hatten, AD/CVD Operations, Office 5, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482-3477 and (202) 482-1690, respectively.

SUPPLEMENTARY INFORMATION:

merchandise produced and exported by Delta entered, or withdrawn from warehouse, for consumption on or after December 27, 2007, which is 90 days prior to the date of publication of the *Preliminary Determination* (March 26, 2008), and entered before March 26, 2008. CBP shall refund any cash deposits and release any bond or other security previously posted in connection with merchandise produced and exported by Delta, the only known producer and exporter of EMD during this investigation.

All-Others Rate

Section 735(c)(5)(B) of the Act provides that, where the estimated weighted-average dumping margins established for all exporters and producers individually investigated are zero or *de minimis* margins or are determined entirely under section 776 of the Act, the Department may use any reasonable method to establish the estimated all others rate for exporters and producers not individually investigated. This provision contemplates that, if the data do not permit weight-averaging margins other than the zero, *de minimis*, or total facts available margins, the Department may use any other reasonable method. See also *Statement of Administrative Action* accompanying the Uruguay Round Agreements Act, H. Doc. No. 103-316, at 873 (1994). As discussed above, Delta is the sole respondent in this investigation and has been assigned a margin based on total adverse facts available. Because the petition contained only one estimated dumping margin and because there are no other respondents in this investigation, there are no additional estimated margins available for purposes of establishing an all-others rate. Therefore, with this final determination we are establishing 83.66 percent as the all-others rate.

Final Determination of Investigation

We determine that the following weighted-average dumping margins exist for the period July 1, 2006, through June 30, 2007:

Manufacturer or Exporter	Margin (percent)
Delta	83.66
All Others	83.66

Continuation of Suspension of Liquidation

Pursuant to section 735(c)(1)(B) of the Act and 19 CFR 351.211(b)(1), we will instruct CBP to continue to suspend liquidation of all entries of subject merchandise from Australia entered, or

withdrawn from warehouse, for consumption on or after March 26, 2008, the date of publication of the *Preliminary Determination*. We will instruct CBP to require a cash deposit or the posting of a bond equal to the weighted-average margin, as indicated in the chart above, as follows: (1) the rate for Delta will be 83.66 percent; (2) if the exporter is not a firm identified in this investigation but the producer is, the rate will be the rate established for the producer of the subject merchandise; (3) the rate for all other producers or exporters will be 83.66 percent. These suspension-of-liquidation instructions will remain in effect until further notice.

International Trade Commission Notification

In accordance with section 735(d) of the Act, we have notified the International Trade Commission (ITC) of our final determination. As our final determination is affirmative and in accordance with section 735(b)(2) of the Act, the ITC will determine, within 45 days, whether the domestic industry in the United States is materially injured, or threatened with material injury, by reason of imports or sales (or the likelihood of sales) for importation of the subject merchandise. If the ITC determines that material injury or threat of material injury does not exist, the proceeding will be terminated and all securities posted will be refunded or canceled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing CBP to assess antidumping duties on all imports of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the effective date of the suspension of liquidation.

Notification Regarding APO

This notice also serves as a reminder to parties subject to administrative protective order (APO) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

This determination is issued and published pursuant to sections 735(d) and 777(i)(1) of the Act.

Dated: August 8, 2008.
David M. Spooner,
Assistant Secretary for Import Administration.

Appendix

Comment: Profit for Constructed Value
 [FR Doc. E8-18848 Filed 8-13-04; 8:45 am]

Billing Code: 3510-DS-S

DEPARTMENT OF COMMERCE**International Trade Administration**

[A-570-919]

Electrolytic Manganese Dioxide From the People's Republic of China: Final Determination of Sales at Less Than Fair Value

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: August 18, 2008.

SUMMARY: On March 26, 2008, the Department of Commerce (the "Department") published its preliminary determination of sales at less than fair value ("LTFV") in the antidumping ("AD") investigation of electrolytic manganese dioxide ("EMD") from the People's Republic of China ("PRC"). The period of investigation ("POI") is January 1, 2007, through June 30, 2007. We invited interested parties to comment on our preliminary determination of sales at LTFV. Based on our analysis of the comments we received, we have made changes to our calculations for the mandatory respondent. We determine that EMD from the PRC is being, or is likely to be, sold in the United States at LTFV as provided in section 735 of the Tariff Act of 1930, as amended ("the Act"). The estimated margins of sales at LTFV are shown in the "Final Determination Margins" section of this notice.

FOR FURTHER INFORMATION CONTACT: Eugene Degnan or Robert Bolling, AD/CVD Operations, Office 8, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482-0414 or (202) 482-3434, respectively.

SUPPLEMENTARY INFORMATION:**Case History**

The Department published its preliminary determination of sales at LTFV on

March 26, 2008. See *Electrolytic Manganese Dioxide from the People's Republic of China: Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination*, 73 FR 15988 (March 26,

2008) (“*Preliminary Determination*”). Between April 21 and April 25, 2008, the Department conducted verification of Guizhou Redstar Developing Import and Export Company, Ltd. (“Redstar”). See Verification of the Sales and Factors Response of Redstar in the Antidumping Investigation of Electrolytic Manganese Dioxide from the People’s Republic of China, dated June 24, 2008 (“Redstar Verification Report”). See also the “Verification” section below for additional information.

We invited interested parties to comment on the *Preliminary Determination*. On May 22, 2008, multiple interested parties filed case briefs with respect to the scope of this AD and the concurrent countervailing duty (“CVD”) proceeding. On May 27, 2008, many of these same parties filed rebuttal comments regarding the scope of these two proceedings. In addition, on May 27, 2008, multiple interested parties filed case briefs with respect to issues specific to the AD proceeding. These same parties filed rebuttal briefs on June 2, 2008. The Department held two hearings on June 12, 2008, one solely related to the scope of the AD and CVD proceedings and the second to address issues related solely to the AD investigation.

Period of Investigation

The period of investigation (“POI”) is January 1, 2007, through June 30, 2007. This period corresponds to the two most recent fiscal quarters prior to the month of the filing of the petition, which was September 2007.¹

Scope of Investigation

The merchandise covered by this investigation includes all manganese dioxide (MnO₂) 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 this investigation 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 this investigation is dispositive.

Verification

As provided in section 782(i) of the Act, we verified the information submitted by Redstar for use in our final determination. See the Redstar Verification Report on the record of this

investigation in the Central Records Unit (“CRU”), Room 1117 of the main Department building. We used standard verification procedures, including examination of relevant accounting and production records, as well as original source documents provided by respondents.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this investigation are addressed in the Issues and Decision Memorandum for the Antidumping Duty Investigation of Electrolytic Manganese Dioxide from the People’s Republic of China, dated concurrently with this notice and, which is hereby adopted by this notice (“Issues and Decision Memorandum”). A list of the issues which parties raised and to which we respond in the Issues and Decision Memorandum is attached to this notice as Appendix II. The Issues and Decision Memorandum is a public document and is on file in the CRU, and is accessible on the Web at ia.ita.doc.gov/frn. The paper copy and electronic version of the memorandum are identical in content.

Changes Since the Preliminary Determination

Based on our analysis of information on the record of this investigation, we have made changes to the margin calculations for the final determination for all mandatory respondents.

General Issues

Based on an analysis of comments received, and the update of the PRC wage rate, the Department has made certain changes in the margin calculations. For the final determination, the Department has made the following changes with respect to Redstar:

- The Department is valuing the inputs manganese carbonate ore and manganese oxide ore using the publicly available price list from Manganese Ore India Ltd.’s (“MOIL”) website, and adjusting the value to account for the percentage of manganese content. See Electrolytic Manganese Dioxide from the People’s Republic of China: Surrogate Value Memorandum for the Final Determination (August 8, 2008) (“Surrogate Value Memo”); Issues and Decisions Memo at Comment 2.
- The Department is using the financial statements of MOIL to calculate the surrogate financial ratios. The Department is basing the overhead and profit on the EMD division of MOIL, and the selling,

general and administrative expenses ratio on the entire consolidated statements of MOIL. See Surrogate Value Memo; Issues and Decision Memorandum at Comment 3.

- The Department is valuing all steam used in the production of EMD, including that steam derived as a by-product from production of merchandise not under investigation. Electrolytic Manganese Dioxide from the People’s Republic of China: Analysis Memorandum for the Final Determination (August 8, 2008) (“Analysis Memo”); Issues and Decision Memorandum at Comment 4.
- The Department is using the Maharashtra Industrial Development Corporation (“MIDC”) updated water tariff schedule, effective June 1, 2007, to value water. See Surrogate Value Memo; Issues and Decision Memorandum at Comment 6.
- The Department is valuing Redstar’s coal using TERI data for grade C steam coal. See Surrogate Value Memo; Issues and Decision Memorandum at Comment 9.
- The Department is valuing labor using its revised labor rates published May 14, 2008. See Surrogate Value Memo; Issues and Decision Memorandum at Comment 10.
- The Department is including in its calculation of normal value (“NV”) the electricity consumed by lighting and appliances in Redstar’s workshops. See Analysis Memo; Issues and Decision Memorandum at Comment 11.

Surrogate Country

In the *Preliminary Determination*, we stated that we had selected India as the appropriate surrogate country to use in this investigation for the following reasons: (1) it is a significant producer of comparable merchandise; (2) it is at a similar level of economic development comparable to that of the PRC; and (3) we have reliable data from India that we can use to value the factors of production. See *Preliminary Determination*. For the final determination, we received no comments and have made no changes to our findings with respect to the selection of a surrogate country.

Separate Rates

In proceedings involving non-market-economy (“NME”) countries, the Department begins with a rebuttable presumption that all companies within

¹ See 19 CFR 351.204(b)(1).

the country are subject to government control and, thus, should be assigned a single antidumping duty deposit rate. It is the Department's policy to assign all exporters of merchandise subject to an investigation in an NME country this single rate unless an exporter can demonstrate that it is sufficiently independent so as to be entitled to a separate rate. *See Final Determination of Sales at Less Than Fair Value: Sparklers from the People's Republic of China*, 56 FR 20588 (May 6, 1991) ("Sparklers"), as amplified by *Notice of Final Determination of Sales at Less Than Fair Value: Silicon Carbide from the People's Republic of China*, 59 FR 22585 (May 2, 1994) ("Silicon Carbide"), and 19 CFR 351.107(d).

In the *Preliminary Determination*, we found that Redstar demonstrated its eligibility for separate-rate status. For the final determination, we continue to find that the evidence placed on the record of this investigation by Redstar demonstrates both *de jure* and *de facto* absence of government control with respect to its exports of the merchandise under investigation, and therefore, Redstar is eligible for separate-rate status.

Use of Facts Available

Section 776(a)(2) of the Act provides that, if an interested party: (A) withholds information that has been requested by the Department; (B) fails to provide such information in a timely manner or in the form or manner requested subject to sections 782(c)(1) and (e) of the Act; (C) significantly impedes a proceeding under the antidumping statute; or (D) provides such information but the information cannot be verified, the Department shall, subject to subsection 782(d) of the Act, use facts otherwise available in reaching the applicable determination.

Section 782(c)(1) of the Act provides that if an interested party "promptly after receiving a request from {the Department} for information, notifies {the Department} that such party is unable to submit the information requested in the requested form and manner, together with a full explanation and suggested alternative forms in which such party is able to submit the information," the Department may modify the requirements to avoid imposing an unreasonable burden on that party.

Section 782(d) of the Act provides that, if the Department determines that a response to a request for information does not comply with the request, the Department will inform the person submitting the response of the nature of the deficiency and shall, to the extent

practicable, provide that person the opportunity to remedy or explain the deficiency. If that person submits further information that continues to be unsatisfactory, or this information is not submitted within the applicable time limits, the Department may, subject to section 782(e), disregard all or part of the original and subsequent responses, as appropriate.

Section 782(e) of the Act states that the Department shall not decline to consider information deemed "deficient" under section 782(d) if: (1) the information is submitted by the established deadline; (2) the information can be verified; (3) the information is not so incomplete that it cannot serve as a reliable basis for reaching the applicable determination; (4) the interested party has demonstrated that it acted to the best of its ability; and (5) the information can be used without undue difficulties.

Furthermore, section 776(b) of the Act states that if the Department "finds that an interested party has failed to cooperate by not acting to the best of its ability to comply with a request for information from the administering authority or the Commission, the administering authority or the Commission ..., in reaching the applicable determination under this title, may use an inference that is adverse to the interests of that party in selecting from among the facts otherwise available." *See also Statement of Administrative Action (SAA) accompanying the Uruguay Round Agreements Act (URAA)*, H.R. Rep. No. 103-316, Vol. 1 at 870 (1994).

For this final determination, in accordance with sections 773(c)(3)(A) and (B) of the Act and sections 776(a)(2)(A), (B) and (D) and 776(b) of the Act, we have determined that the use of adverse facts available ("AFA") is warranted for the PRC entity, as discussed below.

The PRC-Wide Rate

Because we begin with the presumption that all companies within an NME country are subject to government control and because only the company listed under the "Final Determination Margin" section below has overcome that presumption, we are applying a single antidumping rate - the PRC-wide rate - to all other exporters of subject merchandise from the PRC. *See, e.g., Synthetic Indigo from the People's Republic of China: Notice of Final Determination of Sales at Less Than Fair Value*, 65 FR 25706 (May 3, 2000). The PRC-wide rate applies to all entries of subject merchandise except for entries from Redstar.

In the *Preliminary Determination*, the Department found that the PRC-wide entity (including Xiangtan Electrochemical Scientific Ltd.) failed to respond to the Department's questionnaires, withheld or failed to provide information in a timely manner or in the form or manner requested by the Department, and otherwise impeded the proceeding. Therefore, in the *Preliminary Determination* we treated these PRC producers/exporters as part of the PRC-wide entity because they did not demonstrate that they operate free of government control over their export activities. No additional information was placed on the record with respect to these entities after the *Preliminary Determination*. In addition, because the PRC-wide entity did not provide the Department with the requested information, pursuant to section 776(a)(2)(A) and (C) of the Act, the Department continues to find that the use of facts available is appropriate to determine the PRC-wide rate. Section 776(b) of the Act provides that, in selecting from among the facts otherwise available, the Department may employ an adverse inference if an interested party fails to cooperate by not acting to the best of its ability to comply with requests for information. *See Notice of Final Determination of Sales at Less Than Fair Value: Certain Cold-Rolled Flat-Rolled Carbon-Quality Steel Products from the Russian Federation*, 65 FR 5510, 5518 (February 4, 2000). *See also*, SAA at 870. We have determined that, because the PRC-wide entity did not respond to our request for information, it has failed to cooperate to the best of its ability. Therefore, the Department finds that, in selecting from among the facts otherwise available, an adverse inference is warranted.

Corroboration

Section 776(c) of the Act provides that, when the Department relies on secondary information in using the facts otherwise available, it must, to the extent practicable, corroborate that information from independent sources that are reasonably at its disposal. We have interpreted "corroborate" to mean that we will, to the extent practicable, examine the reliability and relevance of the information submitted. *See Notice of Final Determination of Sales at Less Than Fair Value: Certain Cold-Rolled Flat-Rolled Carbon-Quality Steel Products From Brazil*, 65 FR 5554, 5568 (February 4, 2000); *see, e.g., Tapered Roller Bearings and Parts Thereof, Finished and Unfinished, From Japan, and Tapered Roller Bearings, Four Inches or Less in Outside Diameter, and Components Thereof, From Japan*;

Preliminary Results of Antidumping Duty Administrative Reviews and Partial Termination of Administrative Reviews, 61 FR 57391, 57392 (November 6, 1996) (unchanged in the final results).

In the *Preliminary Determination*, we stated we used as AFA the higher of (a) the highest margin alleged in the petition, or (b) the highest calculated rate of any respondent in the investigation.² No parties commented

on the selection of the PRC-wide rate. In the instant investigation, as AFA for the final determination, we have assigned to the PRC-wide entity a margin of 149.92 percent, the highest calculated rate of any respondent in this proceeding, which is the calculated rate of the respondent Redstar. We determined that this information is the most appropriate from the available sources to effectuate the purposes of

AFA. Because the AFA rate for this investigation is a calculated rate from the respondent and is not based on secondary information, no corroboration is required within the meaning of section 776(c) of the Act.

Final Determination Margins

We determine that the following weighted-average percentage margin exists for the POI:

EXPORTER	PRODUCER	MARGIN
Guizhou Redstar Developing Import and Export Company, Ltd.	Guizhou Redstar Developing Dalong Manganese Industrial Co., Ltd.	149.92 %
PRC-Wide Entity	*149.92 %

* Xiangtan Electrochemical Scientific Ltd. is included in the PRC-wide entity

Disclosure

We will disclose the calculations performed within five days of the date of publication of this notice to parties in this proceeding in accordance with 19 CFR 351.224(b).

Continuation of Suspension of Liquidation

In accordance with section 735(c)(1)(B) of the Act, we are directing U.S. Customs and Border Protection (“CBP”) to continue to suspend liquidation of all imports of subject merchandise entered or withdrawn from warehouse, for consumption on or after March 26, 2008, the date of publication of the *Preliminary Determination in the Federal Register*. We will instruct CBP to continue to require a cash deposit or the posting of a bond for all companies based on the estimated weighted-average dumping margins shown above. The suspension of liquidation instructions will remain in effect until further notice.

ITC Notification

In accordance with section 735(d) of the Act, we have notified the International Trade Commission (“ITC”) of our final determination of sales at LTFV. As our final determination is affirmative, in accordance with section 735(b)(2) of the Act, within 45 days the ITC will determine whether the domestic industry in the United States is materially injured, or threatened with material injury, by reason of imports or sales (or the likelihood of sales) for importation of the subject merchandise. If the ITC determines that material injury or threat of material injury does not exist, the proceeding will be terminated and all securities posted will be refunded or canceled. If the ITC

determines that such injury does exist, the Department will issue an antidumping duty order and directing CBP to assess antidumping duties on all imports of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the effective date of the suspension of liquidation.

Notification Regarding APO

This notice also serves as a reminder to the parties subject to administrative protective order (“APO”) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

This determination and notice are issued and published in accordance with sections 735(d) and 777(i)(1) of the Act.

Dated: August 8, 2008.

David M. Spooner,
Assistant Secretary for Import Administration.

Appendix

- Comment 1:* Valuation of Manganese Ore as an Intermediate Input
- Comment 2:* Surrogate Value for Manganese Ore
- Comment 3:* Surrogate Financial Ratio Calculation
- Comment 4:* Steam Consumption
- Comment 5:* Electricity Inputs to Steam Production
- Comment 6:* Surrogate Value for Water
- Comment 7:* Surrogate Value Source for Truck Freight
- Comment 8:* Grinding Bars and Rings

Comment 9: Surrogate Value for Coal

Comment 10: Labor Wage Rate

Comment 11: Electricity used for Lighting and Appliances in Workshops [FR Doc. E8-19099 Filed 8-15-08; 8:45 am]

BILLING CODE 3510-DS-S

²See *Final Determination of Sales at Less Than Fair Value: Certain Cold-Rolled Carbon Quality*

Steel Products from the People's Republic of China, 65 FR 34660 (May 21, 2000), and accompanying

Issues and Decision Memorandum at “Facts Available.”

APPENDIX B
CALENDAR OF PUBLIC HEARING

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Electrolytic Manganese Dioxide from Australia and China

Inv. Nos.: 731-TA-1124 and 1125 (Final)

Date and Time: July 24, 2008 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioners (**Jack A. Levy**, Trade Law International, Chartered)

In Support of the Imposition of Antidumping Duties:

Trade Law International, Chartered
Washington, DC
on behalf of

Tronox LLC ("Tronox")

Paul Gutwald, General Manager, Electrolytic Division, Tronox
Rick Stater, EMD Plant Manager, Tronox
Richard Boyce, Economic Consultant, Econometrica International, Inc.
Joseph Derby, Business Consultant, Joseph M. Derby Business Consulting

Jack A. Levy – OF COUNSEL

CLOSING REMARKS:

Petitioners (**Jack A. Levy**, Trade Law International, Chartered)

APPENDIX C
SUMMARY DATA

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)

Item	Reported data			January-March		Period changes			Jan.-Mar. 2007-08
	2005	2006	2007	2007	2008	2005-07	2005-06	2006-07	
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

* * * * *

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

* * * * *

APPENDIX D

**U.S. BATTERY PRODUCERS' DISCUSSIONS OF BARGAINING
LEVERAGE IN NEGOTIATING PRICES OF EMD
AND
THEIR DISCUSSIONS OF EMD PRICE LEADERS IN
THE U.S. MARKET
DURING JANUARY 2005-MARCH 2008**

The following tabulation shows the comments of the four responding U.S. battery producers on bargaining strengths in negotiating purchase prices with their qualified EMD suppliers during January 2005-March 2008.¹

* * * * *

The following tabulation shows the comments of the four responding U.S. battery producers on price leaders for EMD in the U.S. market during January 2005-March 2008.²

* * * * *

¹ U.S. purchaser questionnaire responses, section IV-16.

² U.S. purchaser questionnaire responses, sections IV-17 and IV-18.

APPENDIX E

**U.S. BATTERY PRODUCERS' DISCUSSIONS OF THEIR
QUALIFICATION PROCESS FOR EMD SUPPLIERS**

The following tabulation shows the comments of the four responding U.S. battery producers involving their qualification process for EMD suppliers.¹

* * * * *

¹ U.S. purchaser questionnaire responses, sections III-17 and III-18.

APPENDIX F

**U.S. BATTERY PRODUCERS' USAGE OF EMD
FOR EACH CATEGORY OF EMD BATTERY THEY PRODUCED
DOMESTICALLY, BY GRADE OF EMD,
BY COUNTRY OF ORIGIN AND SUPPLIER OF EMD,
ANNUALLY DURING 2005-07 AND
DURING JANUARY-MARCH 2008**

The reported usage of EMD reported by U.S. battery producers is shown in detail in tables F-1a through F-1d, by the respective periods requested, for the U.S. battery producers' use of EMD for each EMD battery category that they produced domestically,¹ by the EMD and battery specifications requested.²

Table F-1a

EMD: U.S. battery producers' usage of EMD, by country of origin, supplier, and type of EMD battery, 2005

* * * * *

Table F-1b

EMD: U.S. battery producers' usage of EMD, by country of origin, supplier, and type of EMD battery, 2006

* * * * *

Table F-1c

EMD: U.S. battery producers' usage of EMD, by country of origin, supplier, and type of EMD battery, 2007

* * * * *

Table F-1d

EMD: U.S. battery producers' usage of EMD, by country of origin, supplier, and type of EMD battery, January-March 2008

* * * * *

¹ Premium and value line batteries are not shown separately, but are combined in these tables. *** (** U.S. purchaser questionnaire response, section III-3c).

² U.S. purchaser questionnaire responses, section III-4a.

APPENDIX G

**U.S. BATTERY PRODUCERS'
END-OF-PERIOD EMD INVENTORIES
BY COUNTRY OF ORIGIN
AND BY PERIOD,
JANUARY 2005-MARCH 2008**

Table G-1

EMD: U.S. battery producers' inventories of EMD, by country of origin and by period, January 2005-March 2008

* * * * *

Two U.S. EMD battery producers, ***, explained their inventory changes.¹ *** reported that most of its 2007 end-of-period EMD inventories, totaling *** short tons, was ***. *** reported that ***. *** reported that the *** in its EMD inventory at *** and *** involved mostly EMD from ***. According to ***, the *** end-of-period inventory at ***, was due to a receipt of *** metric tons of EMD on ***. This EMD amount would normally be held in ***, but was ***. *** reported that it ***. According to ***, such inventory was ***. In addition, *** reported that the *** inventory on ***, was due primarily ***.

¹ U.S. purchaser questionnaire responses, section II-8.

APPENDIX H

**OFFSHORE BATTERY PRODUCTION LOCATIONS
OF U.S. BATTERY PRODUCERS**

Four U.S. battery producers reported that they also produced batteries at offshore locations.¹ The names of these foreign firms and/or the locations of the facilities are shown in the following tabulation.

* * * * *

¹ U.S. purchaser questionnaire responses, section I-6.

APPENDIX I

**DETAILED PRICE OFFER AND CONTRACT
AWARD INFORMATION OF EACH RESPONDING
U.S. BATTERY PRODUCER
BY CONTRACT YEAR, 2005-08**

The reported detailed price offer and contract award information are shown by each of the four responding U.S. battery producers in tables I-1 through I-4, respectively.¹ Because each U.S. battery producer responded differently to the requested information, the level of detail and table formats differ by responding firm.²

Table I-1

EMD: Annual contract price offers and awards reported by * for alkaline-grade EMD for use in its U.S. EMD battery production during 2005-08**

* * * * *

Table I-2

EMD: Annual contract price offers and awards reported by * for alkaline-grade EMD for use in its U.S. battery production during 2005-08**

* * * * *

Table I-3

EMD: Annual contract price offers and awards reported by * for alkaline-grade EMD for use in its U.S. battery production during 2005-07**

* * * * *

Table I-4

EMD: Annual contract price offers and awards reported by * for alkaline-grade EMD for use in its U.S. battery production during 2005-08**

* * * * *

¹ U.S. purchaser questionnaire responses, section VI-3.

² Only *** reported the annual contract price/quantity offers and awards by battery cell sizes and by specific EMD formulations.

APPENDIX J

**NET U.S. SELLING PRICE DATA OF THE
DOMESTIC AND SUBJECT IMPORTED EMD
FOR SALES TO EACH
U.S. BATTERY-PRODUCER CUSTOMER**

Table J-1

EMD: Net weighted-average U.S. f.o.b. selling prices and quantities of domestic and subject imported EMD product category 1 sold to * and margins of underselling/(overselling), by quarters, January 2005-March 2008**

* * * * *

Table J-1a

EMD: Net U.S. delivered selling prices and quantities of U.S.-produced EMD supplied by * and imported EMD from *** for EMD product category 1 sold to ***, by quarters, January 2005-March 2008**

* * * * *

Table J-2

EMD: Net weighted-average U.S. f.o.b. selling prices and quantities of domestic and subject imported EMD product category 1 sold to * and margins of underselling/(overselling), by quarters, January 2005-March 2008**

* * * * *

Table J-2a

EMD: Net U.S. delivered selling prices and quantities of U.S.-produced EMD supplied by * and imported EMD from *** for EMD product category 1 sold to ***, by quarters, January 2005-March 2008**

* * * * *

Table J-3

EMD: Net U.S. f.o.b. selling prices and quantities of domestic and subject imported EMD product category 1 sold to * and margins of underselling/(overselling), by quarters, January 2005-March 2008**

* * * * *

Table J-4

EMD: Net U.S. f.o.b. selling prices and quantities of domestic and subject imported EMD product category 1 sold to * and margins of underselling/(overselling), by quarters, January 2005-March 2008**

* * * * *

Table J-5

EMD: Net U.S. f.o.b. selling prices and quantities of domestic EMD product category 1 sold to *, by quarters, January 2005-March 2008**

* * * * *

APPENDIX K

**QUESTIONNAIRE SELLING PRICE DATA
FOR THE SPECIFIED EMD PRODUCT CATEGORY 1
PRODUCED IN THE UNITED STATES AND
IMPORTED FROM NONSUBJECT COUNTRIES**

Table K-1

EMD: Net weighted-average U.S. f.o.b. and delivered selling prices and quantities of domestic EMD and imported EMD from Japan for product category 1 sold to *, by quarters, January 2005-March 2008**

* * * * *

Table K-2

EMD: Net weighted-average U.S. f.o.b. and delivered selling prices and quantities of imported EMD from Japan sold to *, by quarters, January 2005-March 2008**

* * * * *

Table K-3

EMD: Net weighted-average U.S. f.o.b. and delivered selling prices and quantities of domestic EMD and imported EMD from Japan for product category 1 sold to *, by quarters, January 2005-March 2008**

* * * * *

