

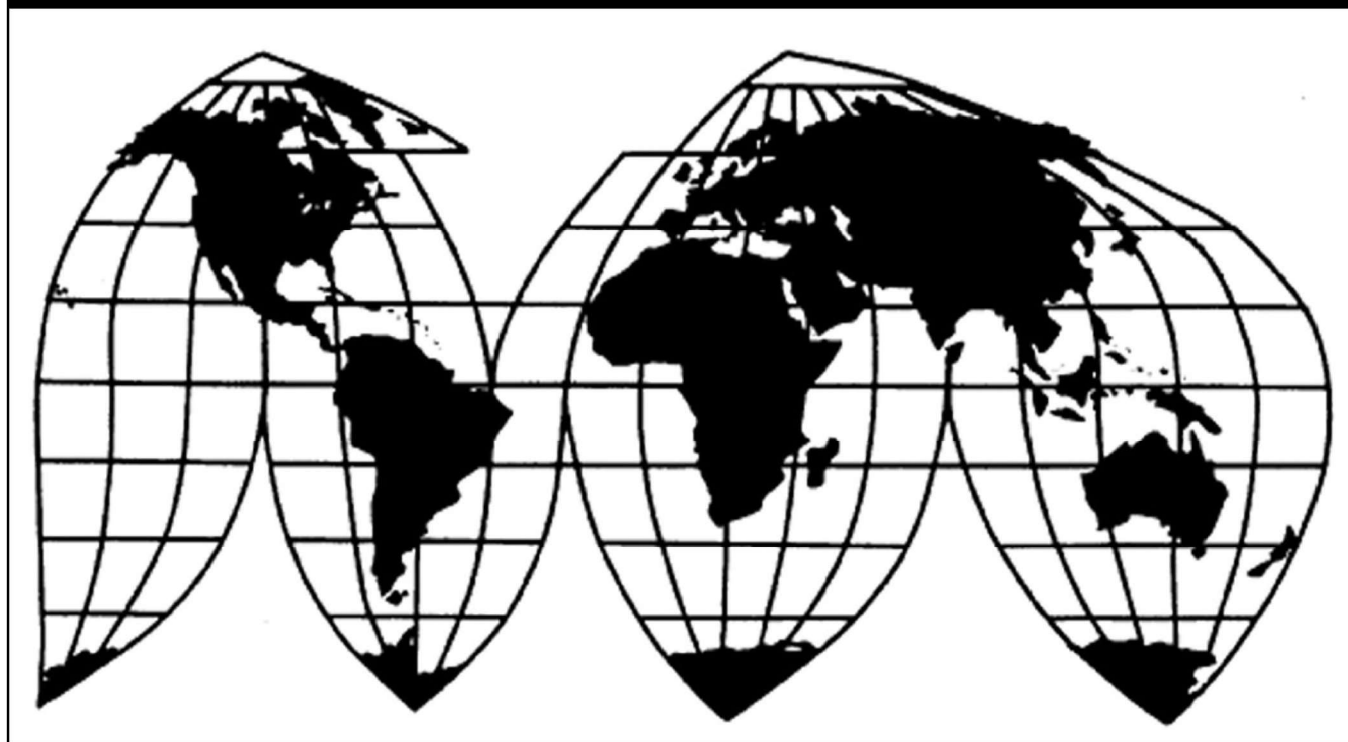
1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) from China

Investigation Nos. 701-TA-558 and 731-TA-1316 (Review)

Publication 5386

November 2022

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-558 and 731-TA-1316 (Review)

1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) from China

DETERMINATION

On the basis of the record¹ developed in the subject five-year reviews, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that revocation of the countervailing and antidumping duty orders on 1-hydroxyethylidene-1, 1-diphosphonic acid from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted these reviews on April 1, 2022 (87 FR 19125) and determined on July 5, 2022 that it would conduct expedited reviews (87 FR 64248, October 24, 2022).

¹ The record is defined in § 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 of these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended (“the Tariff Act”), that revocation of the antidumping and countervailing duty orders on 1-hydroxyethylidene-1, 1-diphosphonic acid (“HEDP”) from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigations: The Commission instituted the original investigations on March 31, 2016, in response to petitions filed by Compass Chemical International LLC, (“Compass”), a domestic producer and wholesaler of HEDP.¹ In May 2017, the Commission determined that an industry in the United States was materially injured by reason of imports of HEDP from China that the U.S. Department of Commerce (“Commerce”) found to be sold at less than fair value and subsidized by the government of China.² Commerce issued antidumping and countervailing duty orders on imports of HEDP from China on May 18, 2017.³

The Current Reviews: The Commission instituted these five-year reviews on April 1, 2022.⁴ Domestic Interested Party Compass responded to the notice of institution.⁵ No respondent interested party responded to the notice of institution or participated in these reviews. On July 5, 2022, the Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate.⁶ Finding no other circumstances that would warrant conducting full reviews, the Commission determined that it would conduct expedited reviews

¹ *1-Hydroxyethylidene-1, 1-Diphosphonic Acid From China; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*, 81 Fed. Reg. 20,416 (April 7, 2016).

² *1-Hydroxyethylidene-1, 1-Diphosphonic Acid from China*, Inv. Nos. 701-TA-558 and 731-TA-1316 (Final), USITC Pub. 4686 (May 2017) (“*Original Determinations*”).

³ *1-Hydroxyethylidene-1, 1-Diphosphonic Acid From the People’s Republic of China: Amended Final Determination of Sales at Less Than Fair Value, and Antidumping Duty Order*, 82 Fed. Reg. 22,807 (May 18, 2017); *1-Hydroxyethylidene-1, 1-Diphosphonic Acid From the People’s Republic of China: Countervailing Duty Order*, 82 Fed. Reg. 22,809 (May 18, 2017).

⁴ *1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) From China: Institution of Five-Year Reviews*, 87 Fed. Reg. 19,125 (April 1, 2022).

⁵ Compass’ Substantive Response to the Notice of Institution, May 2, 2022 (“Compass’ Substantive Response”).

⁶ *1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) From China: Scheduling of Expedited Five-Year Reviews*, 87 Fed. Reg. 64,248 (Oct. 24, 2022).

of the orders.⁷ Compass submitted final comments pursuant to Commission rule 207.62(d)(1) on October 26, 2022.⁸

U.S. industry data are based on information supplied by Compass in its response to the notice of institution, accounting for 100.0 percent of U.S. HEDP production in 2021.⁹ U.S. import data and related information are based on information supplied by Compass in its response to the notice of institution and information from the original investigations.¹⁰ Foreign industry data and related information are based on information supplied by Compass in its response to the notice of institution, information from the original investigations, and publicly available information gathered by the Commission.¹¹ Additionally, the Commission received responses to its adequacy phase questionnaire from three U.S. purchasers of HEDP: ***.¹²

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the “domestic like product” and the “industry.”¹³ The Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle.”¹⁴ The Commission’s practice in five-year reviews is to examine the domestic like product definition from the original

⁷ *1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) From China: Scheduling of Expedited Five-Year Reviews*, 87 Fed. Reg. 64,248 (Oct. 24, 2022).

⁸ Compass’ Final Comments, October 26, 2022.

⁹ Confidential Report, Memorandum INV-UU-069, June 23, 2022 (“CR”) at Table I-2; *1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) From China*, Inv. Nos. 701-TA-558 and 731-TA-1316 (Review), USITC Pub. 5386 (Nov. 2022) at Table I-2; Compass’ Substantive Response at 34, Exh. 12.

¹⁰ Compass submitted estimated subject import volumes based on data from the Port Import/Export Reporting Service (“PIERS”). Compass’ Substantive Response at 10, Exh. 2; CR/PR at I-11, n.30. We recognize that PIERS data may overstate HEDP imports due to the possible inclusion of out-of-scope merchandise.

¹¹ CR/PR at I-13-14.

¹² See CR/PR at Appendix D.

¹³ 19 U.S.C. § 1677(4)(A).

¹⁴ 19 U.S.C. § 1677(10); See, e.g., *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Dep’t. of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991); see also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

investigation and consider whether the record indicates any reason to revisit the prior findings.¹⁵

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

The subject merchandise includes all grades of aqueous acidic (non-neutralized) concentrations of HEDP, also referred to as hydroxyethylidenediphosphonic acid, hydroxyethanediphosphonic acid, acetodiphosphonic acid, and etidronic acid. The Chemical Abstract Service (CAS) registry number for HEDP is 2809–21–4.

The subject merchandise subject is currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheading 2931.90.9043. It may also enter under HTSUS subheadings 2811.19.6090, 2931.90.9041, 2931.90.9051, 2811.19.6190, and 2931.39.0018. While HTSUS subheadings and the CAS registry number are provided for convenience and customs purposes only, the written description of the scope is dispositive.¹⁶

HEDP is a chemical used in water treatment, detergents, cosmetics, and pharmaceuticals.¹⁷ HEDP is typically produced and sold in a 60 percent aqueous solution, and its applications include use in water as a stabilizing agent and rust preventative, an inhibitor of calcium carbonate scales in industrial water treatment, a stabilizing agent in industrial and household cleaners, and an additive to swimming pools to stabilize chlorine and prevent staining.¹⁸

¹⁵ See, e.g., *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

¹⁶ *1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) From the People's Republic of China: Final Results of the Expedited First Sunset Review of the Countervailing Duty Order*, 87 Fed. Reg. 42,707 (July 18, 2022); *1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) From the People's Republic of China: Final Results of the Expedited First Sunset Review of the Antidumping Duty Order*, 87 FR 42,705 (July 18, 2022).

¹⁷ CR/PR at I-6.

¹⁸ CR/PR at I-6.

HEDP is a type of phosphonate chemical and is unique among phosphonates because of its colorless appearance, iron and calcium sequestration properties, and chlorine stability.¹⁹ HEDP is also reported to be the only phosphonate used in municipal water treatment and for personal care products, such as bar soap.²⁰ HEDP generally has a long shelf life and is capable of use in many formulations and applications.²¹ At 60 percent purity, HEDP is considered to be technical grade, but is nonetheless considered safe for use in consumer applications, such as cleaning detergents, and is certified as a potable drinking water additive by the National Sanitation Foundation.²²

Original Investigations. In the preliminary phase of the investigations, the Commission declined to find that “high purity HEDP” was a separate domestic like product from the technical grade HEDP produced by Compass, as advocated by respondent Enviro Tech.²³ The Commission found that Enviro Tech had not defined the specifications of the domestically produced high purity HEDP that would be most similar to the product it imported.²⁴ It further found that record evidence indicated similarities in production facilities and channels of distribution and the lack of clear distinctions between the physical characteristics, end uses, or customer perceptions between all forms of HEDP.²⁵ Accordingly, the Commission defined a single domestic like product consisting of all HEDP that was coextensive with the scope of the investigations.²⁶ In the final phase of the investigations, in the absence of any new information or argument, the Commission again defined a single domestic like product encompassing all HEDP, coextensive with the scope of the investigations.²⁷

The Current Reviews. In these reviews, the record contains no new information suggesting that the characteristics and uses of domestically produced HEDP have changed since the original investigations so as to warrant revisiting the Commission’s domestic like product definition.²⁸ Compass agrees with the Commission’s definition of the domestic like product from the original investigations.²⁹ Consequently, we again define a single domestic like product encompassing all HEDP, coextensive with Commerce’s scope for these reviews.

¹⁹ CR/PR at I-7.

²⁰ CR/PR at I-7.

²¹ CR/PR at I-7.

²² CR/PR at I-7.

²³ *Original Determinations*, USITC Pub. 4686 at 6-7.

²⁴ *Original Determinations*, USITC Pub. 4686 at 7, n.24.

²⁵ *Original Determinations*, USITC Pub. 4686 at 7, n.24.

²⁶ *Original Determinations*, USITC Pub. 4686 at 6.

²⁷ *Original Determinations*, USITC Pub. 4686 at 7.

²⁸ See generally CR/PR at I-6-10.

²⁹ Compass’ Substantive Response at 36; *Original Determinations*, USITC Pub. 4686 at 7.

B. Domestic Industry

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

We must then determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.³¹ Exclusion of such a producer is within the Commission’s discretion based upon the facts presented in each investigation.³²

Original Investigations. There were no related parties issues in the original investigations.³³ Thus, the Commission defined a single domestic industry consisting of the sole U.S. producer of HEDP, Compass.³⁴

The Current Reviews. Compass agrees with the Commission’s definition of the domestic industry from the original investigations.³⁵ Since the original investigations, Compass’ parent

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

³¹ See *Torrington Co v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int’l Trade 1992), *aff’d without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int’l Trade 1989), *aff’d mem.*, 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int’l Trade 1987).

³² The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

- (1) the percentage of domestic production attributable to the importing producer;
- (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);
- (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;
- (4) the ratio of import shipments to U.S. production for the imported product; and
- (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int’l. Trade 2015); see also *Torrington Co. v. United States*, 790 F. Supp. at 1168.

³³ *Original Determinations*, USITC Pub. 4686 at 7.

³⁴ *Original Determinations*, USITC Pub. 4686 at 8.

³⁵ Compass’ Substantive Response at 36-37.

company, Italmatch Chemicals Group, has acquired Changzhou Italmatch Chemicals (formerly, Jiayou Chemical Co.), a producer of HEDP in China, and BWA Water Additives US LLC (“BWA”), a U.S. importer of HEDP from China.³⁶ Nonetheless, we find that Compass does not qualify as a related party through its affiliation with Changzhou Italmatch Chemicals because the information available indicates that this Chinese producer does not export HEDP to the United States.³⁷ Nor does Compass qualify as a related party through its affiliation with importer BWA, as the information available indicates that BWA imported no HEDP from China after its acquisition by Italmatch Chemicals Group in 2019.³⁸ Further, even if Compass were to satisfy the definition of a related party, the Commission typically has not found appropriate circumstances exist to exclude a related party when the related party is the sole U.S. producer, as is the case here.³⁹

In sum, consistent with our definition of the domestic like product, we define a single domestic industry consisting of the sole U.S. producer of HEDP, Compass.

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

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”⁴⁰

³⁶ Compass’ Substantive Response at 31-32. Changzhou Italmatch Chemicals was acquired in March 2018 and BWA was acquired in 2019. *Id.*

³⁷ Compass’ Substantive Response at 31-32. According to Compass, both prior to and after Italmatch Chemicals Group’s acquisition of Changzhou Italmatch Chemicals in March 2018, the Chinese producer has only served the Chinese domestic market, Asia-Pacific, and European regions. *Id.* at 31.

³⁸ Compass’ Substantive Response at 31-32. According to Compass, BWA imported subject merchandise in *** 2017 prior to its affiliation with Compass and is currently not operational. *Id.*

³⁹ See *Saccharin from China*, Inv. No. 731-TA-1013 (Review), USITC Pub. 4077 (May 2009) at 10, n.62; *Tetrahydrofurfuryl Alcohol from China*, Inv. No. 731-TA-1046 (Preliminary), USITC Pub. 3620 (August 2003) at n.20; see also *Industrial Nitrocellulose from Brazil, China, France, Germany, Japan, Korea, the United Kingdom, and Yugoslavia*, Inv. Nos. 731-TA-96 and 439-445 (Review), USITC Pub. 3342 (August 2000) at 8; *Drafting Machines from Japan*, Inv. No. 731-TA-432 (Review), USITC Pub. 3252 (November 1999) at 5.

⁴⁰ 19 U.S.C. § 1675a(a).

The SAA states that “under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports.”⁴¹ Thus, the likelihood standard is prospective in nature.⁴² The U.S. Court of International Trade has found that “likely,” as used in the five-year review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.⁴³

The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time.”⁴⁴ According to the SAA, a “‘reasonably foreseeable time’ will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”⁴⁵

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to “consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended

⁴¹ SAA at 883-84. The SAA states that “[t]he likelihood of injury standard applies regardless of the nature of the Commission’s original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed.” *Id.* at 883.

⁴² While the SAA states that “a separate determination regarding current material injury is not necessary,” it indicates that “the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked.” SAA at 884.

⁴³ See *NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int’l Trade 2003) (“‘likely’ means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)”), *aff’d mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) (“more likely than not” standard is “consistent with the court’s opinion;” “the court has not interpreted ‘likely’ to imply any particular degree of ‘certainty’”); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) (“standard is based on a likelihood of continuation or recurrence of injury, not a certainty”); *Usinor v. United States*, 26 CIT 767, 794 (2002) (“‘likely’ is tantamount to ‘probable,’ not merely ‘possible’”).

⁴⁴ 19 U.S.C. § 1675a(a)(5).

⁴⁵ SAA at 887. Among the factors that the Commission should consider in this regard are “the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities.” *Id.*

investigation is terminated.”⁴⁶ It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).⁴⁷ The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission’s determination.⁴⁸

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.⁴⁹ In doing so, the Commission must consider “all relevant economic factors,” including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.⁵⁰

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁵¹

⁴⁶ 19 U.S.C. § 1675a(a)(1).

⁴⁷ 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the antidumping duty order under review. See Department of Commerce memorandum from James Maeder to Lisa W. Wang, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Antidumping Duty Order on 1-Hydroxyethylidene-1, 1-Diphosphonic Acid from the People’s Republic of China*, July 11, 2022, at 3.

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

⁴⁹ 19 U.S.C. § 1675a(a)(2).

⁵⁰ 19 U.S.C. § 1675a(a)(2)(A-D).

⁵¹ See 19 U.S.C. § 1675a(a)(3). The SAA states that “{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices.” SAA at 886.

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.⁵² All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.⁵³

No respondent interested party participated in these expedited reviews. Therefore, the record contains limited new information with respect to the HEDP industry in China.⁵⁴ There is also limited information about the market for HEDP in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigations, and the new information contained in the record of these five-year reviews.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁵⁵ The following conditions of competition inform our determinations.

⁵² 19 U.S.C. § 1675a(a)(4).

⁵³ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

⁵⁴ See CR/PR at I-13-14.

⁵⁵ 19 U.S.C. § 1675a(a)(4).

1. Demand Conditions

Original Investigations. The Commission found that demand for HEDP depends on the demand for downstream products, such as soaps and shampoos, and demand for applications, such as commercial water treatment, in which HEDP is used.⁵⁶ The Commission observed that HEDP's largest single application was in commercial water treatment, in which HEDP is added to control scale and remove metals.⁵⁷ The Commission also noted that the majority of questionnaire respondents indicated that substitutes for HEDP were limited, identifying some products that could be substituted for HEDP in only certain applications.⁵⁸ Apparent U.S. consumption fluctuated during the period of investigation ("POI"), initially declining from *** pounds in 2014 to *** pounds in 2015, and then increasing to *** pounds in 2016.⁵⁹

The Current Reviews. Compass asserts that the Commission's observations concerning the factors influencing demand for HEDP and substitutes remain accurate today, and that it is not aware of any changes in demand for HEDP in the U.S. market since the original investigations.⁶⁰ The information available indicates that demand for HEDP continues to be driven by demand for downstream products in which HEDP is used, including commercial water treatment and personal care products such as soap.⁶¹ In 2021, apparent U.S. consumption of HEDP was *** pounds.⁶²

Responding purchaser *** reported that ***.⁶³ Responding purchaser *** also reported that ***.⁶⁴

⁵⁶ *Original Determinations*, USITC Pub. 4686 at 12.

⁵⁷ *Original Determinations*, USITC Pub. 4686 at 12.

⁵⁸ *Original Determinations*, USITC Pub. 4686 at 12.

⁵⁹ *Original Determinations*, USITC Pub. 4686 at 13; *Original Determinations Confidential Views* at 17 (EDIS Document No. 772203).

⁶⁰ Compass' Substantive Response at 4-5.

⁶¹ CR/PR at I-6-7.

⁶² CR/PR at Table I-6. Apparent U.S. consumption in 2021 may be overstated by the possible inclusion of out-of-scope merchandise in Compass' estimate of subject and nonsubject import volume during the period of review, based upon data from PIERS. *Id.* at I-11, n.30.

⁶³ CR/PR at D-4-5.

⁶⁴ CR/PR at D-4-5.

2. Supply Conditions

Original Investigations. The Commission found that the domestic like product, subject imports, and imports from nonsubject sources supplied the U.S. market during the POI.⁶⁵ Compass was the largest source of supply; its share of apparent U.S. consumption declined over the POI from *** percent in 2014 to *** percent in 2016.⁶⁶ The Commission observed that while subject import market share fluctuated over the POI, it increased overall from *** percent in 2014 to *** percent in 2016 and accounted for the second largest share of apparent U.S. consumption throughout the POI.⁶⁷ Imports from nonsubject sources accounted for the smallest share of apparent U.S. consumption over the POI; their share increased overall from *** percent in 2014 to *** percent in 2016.⁶⁸ Nearly all reported nonsubject imports were from India, with only minimal volumes reported from other countries in 2014 and 2015.⁶⁹

The Current Reviews. The information available indicates that Compass is now the second largest source of HEDP in the U.S. market, accounting for *** percent of apparent U.S. consumption in 2021.⁷⁰ According to Compass, there have been no major developments in the domestic industry since the original investigations.⁷¹

Subject imports were the smallest source of supply in 2021, accounting for *** percent of apparent U.S. consumption that year.⁷² Imports from nonsubject sources were the largest source of supply in 2021, accounting for *** percent of apparent U.S. consumption that year.⁷³ Compass observes that *** accounted for a part of the increase of nonsubject imports.⁷⁴ India

⁶⁵ *Original Determinations*, USITC Pub. 4686 at 13.

⁶⁶ *Original Determinations*, USITC Pub. 4686 at 13; *Original Determinations Confidential Views* at 17 (EDIS Document No. 772203). Compass accounted for *** percent of the U.S. market share in 2015. *Id.*

⁶⁷ *Original Determinations*, USITC Pub. 4686 at 13; *Original Determinations Confidential Views* at 18 (EDIS Document No. 772203). Subject imports accounted for *** percent of the U.S. market share in 2015. *Id.*

⁶⁸ *Original Determinations*, USITC Pub. 4686 at 13-14; *Original Determinations Confidential Views* at 18 (EDIS Document No. 772203). Nonsubject imports accounted for *** percent of the U.S. market share in 2015. *Id.*

⁶⁹ *Original Determinations*, USITC Pub. 4686 at 14.

⁷⁰ CR/PR at Table I-6. Compass' share of apparent U.S. consumption for 2021 may be understated due to the possible inclusion of out-of-scope merchandise in Compass' estimate of subject and nonsubject imports volume during the period of review, based on PIERS data. *Id.* at I-11, n.30.

⁷¹ CR/PR at I-8.

⁷² CR/PR at Table I-6. The data on subject imports may be overstated due to the data possibly including out-of-scope merchandise.

⁷³ CR/PR at Table I-6. The data on nonsubject imports may be overstated due to the data possibly including out-of-scope merchandise.

⁷⁴ Compass' Substantive Response at 19.

supplied *** pounds of nonsubject imports and all other sources supplied *** pounds in 2021.⁷⁵

Responding purchasers *** reported certain changes in supply conditions since imposition of the orders.⁷⁶ Responding purchaser *** reported that ***.⁷⁷ Responding purchaser *** reported that ***.⁷⁸ Responding purchaser ***.⁷⁹ However, *** reported that ***.⁸⁰ Further, it reported that ***.⁸¹

These purchasers also reported on anticipated changes to supply conditions for the U.S. market within a reasonably foreseeable time. Responding purchaser *** reported that ***.⁸² Responding purchaser *** reported that ***.⁸³ Responding purchaser *** reported that ***.⁸⁴

3. Substitutability and Other Conditions

Original Investigations. The Commission found a high degree of substitutability between domestically produced HEDP and subject imports, noting that Compass, as well as majorities of importers and purchasers, reported that the products were always or frequently interchangeable.⁸⁵ Respondent Chinese producer Shandong Taihe Water Treatment Technologies Co. Ltd. (“Taihe”) acknowledged that the quality of its HEDP and the HEDP produced by Compass were identical.⁸⁶ The Commission also found that price was an important factor in purchasing decisions.⁸⁷ A plurality of purchasers reported that price was the most important factor in purchasing decisions, and price was the only factor for which a majority of purchasers reported that the domestic like product and subject imports were not comparable.⁸⁸

The Current Reviews. The record in these reviews contains no new information to indicate that the degree of substitutability between the domestic like product and the subject imports or the importance of price in purchasing decisions have changed since the original

⁷⁵ CR/PR at Table I-5. The data on nonsubject imports may be overstated due to the data possibly including out-of-scope merchandise.

⁷⁶ CR/PR at D-3-4.

⁷⁷ CR/PR at D-3.

⁷⁸ CR/PR at D-3.

⁷⁹ CR/PR at D-4. According to ***, ***. *Id.*

⁸⁰ CR/PR at D-4.

⁸¹ CR/PR at D-4.

⁸² CR/PR at D-5.

⁸³ CR/PR at D-5.

⁸⁴ CR/PR at D-5. *** also reported that ***. *Id.*

⁸⁵ *Original Determinations*, USITC Pub. 4686 at 14.

⁸⁶ *Original Determinations*, USITC Pub. 4686 at 14.

⁸⁷ *Original Determinations*, USITC Pub. 4686 at 14.

⁸⁸ *Original Determinations*, USITC Pub. 4686 at 14.

investigations.⁸⁹ Compass claims that subject imports remain highly substitutable with domestically produced HEDP and that price remains an important factor in purchasing decisions.⁹⁰ Accordingly, we continue to find that there is a high degree of substitutability between domestically produced HEDP and subject imports, and that price remains an important factor in purchasing decisions for HEDP.

Compass notes that it has had to rely on imports of phosphorous acid, the principal raw material input for HEDP production, from China to meet its manufacturing quantity requirements, as there is no domestic production of phosphorous acid.⁹¹ According to Compass, imports of phosphorous acid from China have recently increased in value, magnifying the effect of the 25 percent Section 301 duty on such imports, causing higher manufacturing costs and increased prices for its HEDP products.⁹² While claiming that increased raw material costs have not limited its ability to increase production, Compass states that ***.⁹³ It also contends that Chinese HEDP producers face no such access barriers or trade measures in regard to raw materials, and in fact, maintain access to vast supplies of raw materials with which they could increase production and exports to the United States if the orders were revoked.⁹⁴

HEDP is imported under Harmonized Tariff Schedule statistical reporting number 2931.90.9051, which includes other products outside the scope of these reviews, and which is exempt from Section 301 duties.⁹⁵

C. Likely Volume of Subject Imports

Original Investigations. The Commission found that subject import volume was significant in absolute terms and relative to apparent U.S. consumption.⁹⁶ Although subject import volume declined from *** pounds in 2014 to *** pounds in 2016, U.S. shipments of subject imports increased from *** pounds in 2014 to *** pounds in 2016, resulting in an increase in subject imports' share of apparent U.S. consumption from *** percent in 2014 to

⁸⁹ Compass' Substantive Response at 7.

⁹⁰ Compass' Substantive Response at 7.

⁹¹ Compass' Substantive Response at 27-28.

⁹² Compass' Substantive Response at 27-29. "Compass has been able to introduce price increases on its HEDP ***." *Id.* at 29.

⁹³ Compass' Substantive Response at 34-35.

⁹⁴ Compass' Substantive Response at 18.

⁹⁵ Compass' Substantive Response at 9; CR/PR at I-5, n.13. HEDP imported from China enters the U.S. market at a column 1-general duty rate of 3.7 percent. Compass' Substantive Response at Exh. 1.

⁹⁶ *Original Determinations*, USITC Pub. 4686 at 15.

*** percent in 2016.⁹⁷ The Commission also found that the volume of subject imports in 2016 had been impacted by the pendency of the investigations, with subject import pricing product sales volume declining in the fourth quarter after Commerce’s imposition of provisional measures, and took this into account when evaluating the 2016 data.⁹⁸

The Current Reviews. The information available concerning subject import volume during the period of review, estimated by Compass based upon import data from PIERS, show that the orders have had a significant restraining effect on subject imports during the period.⁹⁹ Based on these data, subject import volume declined irregularly from *** pounds in 2017 to *** pounds in 2021.¹⁰⁰ By contrast, subject import volume peaked during the original investigations at *** pounds in 2016.¹⁰¹

The record in these expedited reviews contains limited information on the subject industry in China. The information available indicates that subject producers have the means and incentive to increase their exports of subject merchandise to the U.S. market to significant levels if the orders were revoked. Compass provided a list of six possible producers of HEDP in China, including four active and export-oriented producers and two that reportedly stopped production during the investigations but may still exist.¹⁰²

Compass also provided publicly available information on these producers, primarily gleaned from the producers’ websites, indicating that they possess large and in some cases increasing capacities for the production of HEDP. According to the firm’s website, subject producer Henan Qingshuiyuan Technology Co., Ltd. (“Henan Qingshuiyuan”) has an annual production capacity of 90,000 metric tons (“MT”) (equivalent to approximately 198.4 million pounds) for phosphonates like HEDP.¹⁰³ Henan Qingshuiyuan also began constructing a 180,000,000 MT (equivalent to 396.8 billion pounds) water treatment chemical program in October 2018, which Compass argues could further increase its HEDP capacity.¹⁰⁴ Subject producer Taihe’s website states that it has an annual HEDP production capacity of 40,000 tons

⁹⁷ *Original Determinations*, USITC Pub. 4686 at 15; *Original Determinations Confidential Views* at 20-21 (EDIS Document No. 772203).

⁹⁸ *Original Determinations*, USITC Pub. 4686 at 15.

⁹⁹ CR/PR at I-11, n.30.

¹⁰⁰ CR/PR at Table I-5.

¹⁰¹ CR/PR at Table I-6.

¹⁰² CR/PR at I-13; *see generally* Compass’ Substantive Response at 12-16.

¹⁰³ Compass’ Substantive Response at 13, Exh. 3.

¹⁰⁴ CR/PR at Table I-7; Compass’ Substantive Response at 13, Exh. 3. Henan Qingshuiyuan’s website states that the company’s annual capacity for producing water treatment chemicals is more than 110,000 MT (equivalent to 2.4 billion pounds). Compass’ Substantive Response at 13, Exh. 3.

(equivalent to approximately 88.2 million pounds).¹⁰⁵ Changzhou Kewei Fine Chemicals Co., Ltd. (“Changzhou Kewei”) reports on its website that its total annual capacity to produce water treatment chemicals, including HEDP, is 20,000 MT (equivalent to 44.1 million pounds) annually.¹⁰⁶ On the firm’s website, Jiangsu Yao’s Environmental Protection Technology Co., Ltd./Changzhou Yao’s Tongde Chemical lists “Organophosphorous Antiscale and Corrosion Inhibitors,” which includes HEDP, among its main export products, and reports that its total capacity has reached over 20,000 tons (equivalent to 40.1 million pounds).¹⁰⁷ Compass also contends that subject producers have access to vast supplies of raw materials in China, primarily phosphorus acid and trichloride, with which they could increase production and exports of HEDP.¹⁰⁸ Thus, the available information indicates that the subject industry in China maintains significant production capacity.

The publicly available information submitted by Compass also indicates that subject Chinese producers are export oriented. Subject producer Nantong Uniphos Chemicals Co., Ltd. (“Nantong Uniphos”) reports on its website that it has established a global presence worldwide with more than 70.0 percent of its turnover coming from foreign markets.¹⁰⁹ On its website, subject producer Hebei Longke Water Treatment Co. Ltd. reports that 40.0 percent of its production capacity is for export, and its products, which include HEDP, have been exported to Europe, North America, the Middle East, Southeast Asia, and other countries.¹¹⁰ Subject producer Taihe explains on its website that it registered for REACH as a means of promoting its sales of HEDP in the European Union.¹¹¹ Changzhou Kewei reports on its website that its products are currently exported to North America, European Union countries, and Southeast Asia.¹¹² Consistent with this information, Global Trade Atlas (“GTA”) data show that in 2021 China was the largest global exporter of organo-inorganic compounds, a category that includes HEDP and out-of-scope products, and that it had increased its exports of such products from 261.1 million pounds in 2017 to 404.0 million pounds in 2021.¹¹³ Thus, the available information indicates that the subject industry in China remains large and export oriented.

¹⁰⁵ Compass’ Substantive Response at 15. Taihe’s website identifies its total capacity to produce water treatment chemicals as more than 300,000 tons (equivalent to approximately 600.0 million pounds). *Id.*

¹⁰⁶ Compass’ Substantive Response at 16, Exh. 3.

¹⁰⁷ Compass’ Substantive Response at 16, Exh. 3.

¹⁰⁸ Compass’ Substantive Response at 17-18.

¹⁰⁹ Compass’ Substantive Response at 14, Exh. 3.

¹¹⁰ Compass’ Substantive Response at 15, Exh. 3.

¹¹¹ Compass’ Substantive Response at 13, 15, Exh. 3.

¹¹² Compass’ Substantive Response at 16, Exh. 3.

¹¹³ CR/PR at Table I-9.

Available information also indicates that the U.S. market remains attractive to subject producers. Even under the disciplining effect of the order, subject imports maintained a presence in the U.S. market throughout the period of review, accounting for *** percent of apparent U.S. consumption in 2021, indicating that subject producers have maintained distribution networks and customers in the U.S. market.¹¹⁴ Further, GTA data indicate that the United States was the second largest destination market for Chinese exports of organo-inorganic compounds in 2021.¹¹⁵

Given the significant volume and market penetration of subject imports during the original investigations, the significant restraining effect of the orders on subject imports, the continued presence of subject imports in the U.S. market during the period of review, the subject industry's substantial capacity and exports, and the attractiveness of the U.S. market to subject producers, we find that the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the orders were revoked.¹¹⁶

D. Likely Price Effects

Original Investigations. The Commission found a high degree of substitutability between subject imports and the domestic like product and that price was an important purchasing factor in the original investigations.¹¹⁷ It found that subject imports undersold the domestic like product in 24 of 36 quarterly comparisons, with an average underselling margin of 10.7 percent, and oversold the domestic like product in the remaining 12 quarters, with an average overselling margin of 5.5 percent.¹¹⁸ The Commission also found that *** pounds of subject imports were sold during quarters of underselling, while *** pounds of subject imports were sold during quarters of overselling.¹¹⁹ Based on the widespread underselling and the importance of price, the Commission found that underselling by subject imports was significant.¹²⁰

The Commission also found that lower prices enabled subject imports to obtain sales from the domestic industry over the POI.¹²¹ Purchasers reported decreasing the domestic

¹¹⁴ CR/PR at Tables I-5-6.

¹¹⁵ CR/PR at Table I-8.

¹¹⁶ The record of these expedited reviews does not contain data addressing existing inventories of the subject merchandise or the product shifting potential of subject producers.

¹¹⁷ *Original Determinations*, USITC Pub. 4686 at 18.

¹¹⁸ *Original Determinations*, USITC Pub. 4686 at 16-17.

¹¹⁹ *Original Determinations*, USITC Pub. 4686 at 17; *Original Determinations Confidential Views* at 22 (EDIS Document No. 772203).

¹²⁰ *Original Determinations*, USITC Pub. 4686 at 17.

¹²¹ *Original Determinations*, USITC Pub. 4686 at 17.

producer's share of their total purchases by 7.3 percentage points during the POI, while increasing the subject import's share of their total purchases by 5.7 percentage points over the same period.¹²² Fifteen of twenty-six responding purchasers reported purchasing subject imports rather than the domestic like product, including five that reported purchasing *** pounds of subject imports instead of domestic HEDP primarily due to price.¹²³

The Commission found that subject imports depressed prices for the domestic like product to a significant degree.¹²⁴ Prices for domestically produced products decreased notwithstanding an overall increase in apparent U.S. consumption over the POI, and purchaser correspondence provided by Compass corroborated that it had to match lower subject import pricing or risk losing business.¹²⁵ Based on the significant underselling and the fact that the significant volume of low-priced subject imports depressed domestic prices to a significant degree, the Commission found that subject imports had significant price effects.¹²⁶

The Current Reviews. As discussed in section III.B.3 above, we continue to find that there is a high degree of substitutability between domestically produced HEDP and subject imports, and that price is an important consideration for purchasers.

The record in these expedited reviews does not contain new product-specific pricing information.¹²⁷ Based on the information available, including the high degree of substitutability between subject imports and the domestic like product, the importance of price in purchasing decisions, and the likely significant increase in subject import volume, we find that subject producers would likely undersell the domestic like product in the event of revocation of the orders, consistent with their behavior in the original investigations. Absent the discipline of the orders, the significant volumes of low-priced subject imports would likely force the domestic industry to lower prices, restrain price increases necessary to cover increasing costs, or lose sales and market share to subject imports, as they did in the original investigations.

Accordingly, we find that if the orders were revoked, significant volumes of subject imports would likely undersell the domestic like product to a significant degree to gain market share and/or have a significant depressing or suppressing effect on prices for the domestic like product.

¹²² *Original Determinations*, USITC Pub. 4686 at 17.

¹²³ *Original Determinations*, USITC Pub. 4686 at 17. *Original Determinations Confidential Views* at 23 (EDIS Document No. 772203).

¹²⁴ *Original Determinations*, USITC Pub. 4686 at 17.

¹²⁵ *Original Determinations*, USITC Pub. 4686 at 17. Subject import prices declined by even greater percentages during the POI. *Id.*

¹²⁶ *Original Determinations*, USITC Pub. 4686 at 18.

¹²⁷ See CR/PR at I-4 (discussing decision to conduct expedite reviews).

E. Likely Impact

Original Investigations. The Commission found in the original investigations that, notwithstanding the net increase in demand, the domestic industry's output and total shipments declined over the POI, and its financial performance deteriorated.¹²⁸ The Commission found that significant volumes of low-priced subject imports resulted in the domestic industry losing sales over the POI.¹²⁹ Additionally, the significant price depression caused by subject imports resulted in the domestic industry obtaining lower prices for its sales, further decreasing its revenues.¹³⁰ As a result of subject imports, the Commission explained, the domestic industry's output, revenues, and financial performance were worse than they would have been otherwise.¹³¹ The Commission therefore concluded that subject imports had a significant impact on the domestic industry.¹³²

In its non-attribution analysis, the Commission considered the role of nonsubject imports. While recognizing that the domestic industry lost market share to nonsubject imports in 2016 based on annual data, the Commission observed that the quarterly pricing data showed that subject imports gained more sales than the domestic industry lost during the first three quarters of 2016 compared to the first three quarters of 2015, indicating that domestic producers lost substantial sales to subject imports notwithstanding the presence of nonsubject imports.¹³³ The Commission also found that the domestic industry's shipments of the pricing products were higher in the fourth quarter of 2016, after subject imports retreated from the market, compared to the fourth quarter of 2015, despite the increased market penetration of nonsubject imports in 2016 compared to 2015.¹³⁴ The Commission concluded that any adverse effects from nonsubject imports were distinguishable from those attributed to subject imports.¹³⁵

¹²⁸ *Original Determinations*, USITC Pub. 4686 at 18.

¹²⁹ *Original Determinations*, USITC Pub. 4686 at 20.

¹³⁰ *Original Determinations*, USITC Pub. 4686 at 20.

¹³¹ *Original Determinations*, USITC Pub. 4686 at 20.

¹³² *Original Determinations*, USITC Pub. 4686 at 20.

¹³³ *Original Determinations*, USITC Pub. 4686 at 21.

¹³⁴ *Original Determinations*, USITC Pub. 4686 at 21.

¹³⁵ *Original Determinations*, USITC Pub. 4686 at 21. The Commission also considered two arguments raised by respondent Taihe. First, Taihe argued that Compass' inefficient production process resulted in its HEDP being uncompetitive. *Original Determinations*, USITC Pub. 4686 at 21-22. The Commission found that even if the domestic industry's alleged inefficiencies may have contributed to the industry's poor financial performance, such inefficiencies did not explain the negative effects on output and revenues during the POI found to be caused by subject imports. *Id.* at 22. Second, Taihe argued that Compass' inability to supply purchasers, or purchasers' preference for a diverse supply chain, resulted in increased market share for subject imports and nonsubject imports. *Id.* The (Continued...)

The Current Reviews. The record in these expedited reviews contains limited new information on the domestic industry’s condition, consisting of data provided by Compass in its response to the notice of institution.

The information available indicates that the domestic industry’s performance in 2021 was generally stronger than its performance in 2016, the last full year of the original investigations. Although the domestic industry’s production, capacity utilization, and quantity of U.S. shipments were lower in 2021 than in 2016, its financial performance significantly improved.¹³⁶ Specifically, in 2021, the domestic industry’s capacity, production, and capacity utilization rate were *** pounds, *** pounds, and *** percent, respectively.¹³⁷ The domestic industry’s U.S. shipments were *** pounds, valued at \$***, and its net sales revenues were \$***, both higher than in 2016.¹³⁸ Similarly, the domestic industry’s gross profit of *** and its operating income of ***, equivalent to *** percent of net sales, were an improvement over 2016.¹³⁹

Based on the information available in these reviews, we find that revocation of the orders would likely result in a significant volume of subject imports that would likely undersell the domestic like product to a significant degree. Given the high degree of substitutability between the domestic like product and subject imports and the importance of price to purchasers, increasing volumes of low-priced subject imports would likely capture sales and market share from the domestic industry and/or force domestic producers to lower their prices to maintain their sales, thereby depressing or suppressing prices for the domestic like product to a significant degree. Consequently, subject imports would likely have a significant impact on the production, shipments, sales, market share, and revenue of the domestic industry. These declines would likely impact the domestic industry’s profitability and employment, as well as its ability to raise capital and make and maintain necessary capital investments.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute any injury from other factors to the subject imports. Nonsubject imports have increased their presence in the U.S. market since the

Commission found that the vast majority of purchasers reported that the domestic like product and subject imports had “comparable” availability, and that record evidence indicated that purchasers switched between the domestic like product and subject imports primarily because of price. *Id.* The Commission also noted that the price depression caused by subject imports could not have resulted from any purchaser preference for multiple suppliers. *Id.*

¹³⁶ CR/PR at Table I-4.

¹³⁷ CR/PR at Table I-4. In contrast, the domestic industry’s capacity, production, and capacity utilization in 2016 were *** pounds, *** pounds, and *** percent, respectively. *Id.*

¹³⁸ CR/PR at Table I-4. In 2016, the domestic industry’s U.S. shipments were ***, valued at \$***, and its net sales revenues were \$***. *Id.*

¹³⁹ CR/PR at Table I-4. In 2016, the domestic industry’s gross profit was *** and its operating income was ***, equivalent to *** percent of net sales. *Id.*

original investigations, accounting for *** percent of apparent U.S. consumption in 2021.¹⁴⁰ However, the record provides no indication that the presence of nonsubject imports would prevent subject imports from entering the U.S. market in significant volumes through significant underselling upon revocation of the orders. Given the fact that the domestic industry supplied *** percent of apparent U.S. consumption in 2021, the high degree of substitutability between the subject merchandise and the domestic like product, and the importance of price in purchasing decisions, we find it likely that the increase in low-priced subject imports would enter the U.S. market at least in part at the expense of sales by the domestic industry and/or depress or suppress prices for the domestic like product. Furthermore, the higher nonsubject import market share in 2021 compared to 2016 was accompanied by a substantial improvement in the domestic industry's financial performance.¹⁴¹ Consequently, we find that subject imports would likely have adverse effects on the domestic industry that are distinct from any by nonsubject imports in the event of revocation.

In sum, we conclude that if the orders were revoked, subject imports would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the foregoing reasons, we determine that revocation of the antidumping and countervailing duty orders on HEDP from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

¹⁴⁰ CR/PR at Table I-6. In contrast, the nonsubject import market share was *** percent in 2016. *Id.* However, as previously discussed, nonsubject import market share for 2021 may be overstated due to the inclusion of out-of-scope merchandise.

¹⁴¹ See CR/PR at Table I-4.

Information obtained in these reviews

Background

On April 1, 2022, the U.S. International Trade Commission (“Commission”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”),¹ that it had instituted reviews to determine whether revocation of antidumping and countervailing duty orders on 1-hydroxyethylidene-1, 1-diphosphonic acid (“HEDP”) from China would be likely to lead to continuation or recurrence of material injury.² All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.^{3 4} Table I-1 presents information relating to the background and schedule of this proceeding:

Table I-1
HEDP: Information relating to the background and schedule of this proceeding

Effective date	Action
April 1, 2022	Notice of initiation by Commerce (87 FR 19069, April 1, 2022)
April 1, 2022	Notice of institution by Commission (87 FR 19125, April 1, 2022)
July 5, 2022	Commission’s vote on adequacy
July 18, 2022	Commerce’s results of its expedited reviews
November 18, 2022	Commission’s determinations and views

¹ 19 U.S.C. 1675(c).

² 87 FR 19125, April 1, 2022. In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders. 87 FR 19069, April 1, 2022. Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission’s website (www.usitc.gov).

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

⁴ Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the domestic like product and the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

Responses to the Commission’s notice of institution

Individual responses

The Commission received one submission in response to its notice of institution in the subject reviews. It was filed on behalf of the following entity:

1. Compass Chemical International, LLC (“Compass”), domestic producer of HEDP (referred to herein as “domestic interested party”)

A complete response to the Commission’s notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

Table I-2

HEDP: Summary of completed responses to the Commission’s notice of institution

Interested party	Type	Number of firms	Coverage
U.S. producer	Domestic	1	100%

Note: The U.S. producer coverage figure presented is the domestic interested party’s estimate of its share of total U.S. production of HEDP during 2021. Domestic interested party’s response to the notice of institution, May 2, 2022, p. 34.

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews from Compass. Compass requests that the Commission conduct expedited reviews of the antidumping and countervailing duty orders on HEDP.⁵

⁵ Domestic interested party’s comments on adequacy, June 10, p. 2.

The original investigations

The original investigations resulted from petitions filed on March 31, 2016, with Commerce and the Commission by Compass.⁶ On March 23, 2017, Commerce determined that imports of HEDP from China were being sold at less than fair value (“LTFV”) and subsidized by the Government of China.⁷ The Commission determined on May 8, 2017, that the domestic industry was materially injured by reason of LTFV imports of HEDP from China.⁸ On May 18, 2017, Commerce issued its antidumping and countervailing duty orders with the final weighted-average dumping margins ranging from 63.80 to 167.58 percent and net subsidy rates ranging from 0.75 to 54.11 percent.

Previous and related investigations

The Commission has previously conducted one import relief investigation on HEDP or similar merchandise. Table I-3 presents information on the previous and related title VII investigation.^{9 10}

Table I-3
HEDP: Previous and related Commission proceedings and status of orders

Date	Number	Country	Determination	Current Status of Order
2007	731-TA-1138-1139	China and India	NA	Petition withdrawn during preliminary phase
2008	731-TA-1146-1147	China and India	Affirmative	Orders revoked during first reviews

Source: U.S. International Trade Commission publications and Federal Register notices.

Note: “Date” refers to the year in which the investigation or review was instituted by the Commission.

⁶ 1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) from China, Inv. Nos. 701-TA-558 and 731-TA-1316 (Final), USITC Publication 4686, May 2017 (“Original publication”), p. I-1.

⁷ 82 FR 14876 and 82 FR 14872, March 23, 2017.

⁸ 82 FR 22017, May 11, 2017.

⁹ On January 17, 2008, Compass notified Commerce and the Commission that it was withdrawing its petition. As a result, the Commission gave notice that its antidumping investigations concerning ATMP and HEDP from China and India were discontinued. 73 FR 5211, January 29, 2008.

¹⁰ On April 28, 2009, Commerce issued antidumping duty orders on HEDP from India and the PRC. On March 3, 2014, Commerce initiated sunset reviews of these orders but did not receive a notice of intent to participate from domestic interested parties by the deadline date. As a result, the antidumping duty orders on HEDP from China and India were revoked effective April 28, 2014. 79 FR 31301, June 2, 2014. Following Commerce’s notice of revocation, the Commission terminated its reviews of the antidumping duty orders on China and India. 79 FR 33595, June 11, 2014.

Commerce's five-year reviews

Commerce announced that it would conduct expedited reviews with respect to the orders on imports of HEDP from China with the intent of issuing the final results of these reviews based on the facts available not later than August 1, 2022.¹¹ Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at <http://enforcement.trade.gov/frn/>. Issues and Decision Memoranda contain complete and up-to-date information regarding the background and history of the order, including scope rulings, duty absorption, changed circumstances reviews, and anticircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping and countervailing duty orders on imports of HEDP from China are noted in the sections titled "The original investigations" and "U.S. imports," if applicable.

The product

Commerce's scope

Commerce has defined the scope as follows:

*The merchandise covered by this investigation includes all grades of aqueous acidic (non-neutralized) concentrations of 1-hydroxyethylidene-1, 1-diphosphonic acid (HEDP), also referred to as hydroxyethylidenediphosphonic acid, hydroxyethanediphosphonic acid, acetodiphosphonic acid, and etidronic acid. The Chemical Abstract Service (CAS) registry number for HEDP is 2809-21-4.*¹²

¹¹ Letter from Melissa G. Skinner, Senior Director, Office VII Office of AD/CVD Operations, U.S. Department of Commerce to Nannette Christ, Director of Investigations, May 24, 2022.

¹² 82 FR 22807, May 18, 2017.

U.S. tariff treatment

HEDP is currently imported under Harmonized Tariff Schedule of the United States (“HTS”) statistical reporting number 2931.90.9051, a category which includes other products outside the scope of the review. HEDP imported from China enters the U.S. market at a column 1-general duty rate of 3.7 percent.¹³ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

At the time of the original investigations, HEDP was imported under HTS statistical reporting number 2931.90.9043, covering unenumerated organo-inorganic compounds, and may have been imported under 2811.19.6090 and 2931.90.9041.¹⁴ Effective July 1, 2016, 2931.90.9043 was discontinued and 2931.90.9047 was established to cover unenumerated organo-inorganic compounds.¹⁵ Effective January 1, 2017, 2931.90.9047 was discontinued and 2931.90.9048 was established to cover unenumerated organo-inorganic compounds.¹⁶ Effective July 1, 2017, 2931.90.9048 was discontinued and 2931.90.9051 was established to cover unenumerated organo-inorganic compounds.¹⁷

¹³ Imports under statistical reporting number 2931.90.9051 from China were exempted from Section 301 duties. 83 FR 4794 September 21, 2018.

The domestic interested party noted that in a 2020 memo, Commerce updated the tariff classifications referenced in the scope of the HEDP orders to include statistical reporting numbers 2931.39.0018 and 2811.19.6190, in addition to 2931.90.9051. Domestic interested party’s response to the notice of institution, May 2, 2022, p. 18 n. 50. Imports under 2931.39.0018 were not subject to Section 301 duties. 84 FR 43304, 43444-45 August 20, 2019 and 84 FR 69447, December 18, 2019. Effective July 1, 2021, HTS 2931.39.0018 was discontinued. Harmonized Tariff Schedule of the United States (2022), Basic Edition, USITC publication 5277, January 2022, Change Record. Imports under 2811.19.6190 of product originating in China are subject to Section 301 duties of an additional 10 percent ad valorem. 83 FR 47974, 47982, September 21, 2018. However, the domestic interested party stated that since the imposition of Section 301 duties, HEDP from China has “only sporadically” entered the United States under this classification.

¹⁴ Original publication, p. I-8.

¹⁵ Harmonized Tariff Schedule of the United States (2016), Supplement 1, Update 1, USITC publication 4635, August 2016, Change Record.

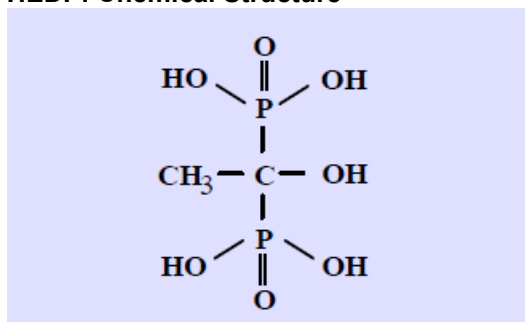
¹⁶ Harmonized Tariff Schedule of the United States (2017), Basic Edition, USITC publication 4660, February 2017, Change Record.

¹⁷ Harmonized Tariff Schedule of the United States (2017), Supplement 1, Update 1, USITC publication 4706, July 2017, Change Record.

Description and uses¹⁸

HEDP is an acidic organic industrial grade water treatment product with the phosphonate chemical structure illustrated in figure I-1, with the Chemical Abstracts Registry Service CAS Number 2809-21-4. This acidic phosphonate chemical is typically produced and sold as a 60-percent aqueous commodity grade industrial solution predominately for use as a stabilizing agent and rust preventative in cooling water and as a stabilizing agent in industrial and household cleaners and other applications.

Figure I-1
HEDP: Chemical Structure



While chemically similar to other phosphonate and polyphosphate compounds, HEDP can be differentiated from them by its end-use properties; colorless appearance; its ability to chelate, or sequester, iron, calcium and other metals; and its chlorine stability. HEDP as a chelating agent¹⁹ is said to be the only phosphonate product that can perform three critical functional applications principally in commercial water treatment, the largest application for HEDP:

- First, it can sequester metals ions such as iron and manganese oxides to prevent precipitation that would color water supplies and interference with the cleaning function of laundry soap or body soap.
- Second, it can act as a scale inhibiting agent that prevents scale formation in commercial heating/cooling systems such as steam boilers, air conditioners, and cooling towers.
- Third, it can prevent the breakdown of oxidizing agents such as peroxide bleach.

¹⁸ Unless otherwise noted, this information is based on original publication, pp. I-8—I-10.

¹⁹ Chelating agents, also known as chelants, complexing or sequestering agents, are compounds that can form stable complexes with metal ions. This is achieved through solubilization and inactivating the metal ions that would otherwise produce adverse effects in the system on which they are used.

HEDP is also reported to be the only phosphonate used in municipal water treatment and for personal care products, specifically bar soap preservation. HEDP in appropriate purity is certified by the National Sanitation Foundation (“NSF”) under its Standard 60 as a potable or drinking water additive.

Compass describes its 60 percent aqueous HEDP product, Mayoquest 1500 technical grade, as a clear, colorless to pale yellow liquid, which may have a slight odor, freely miscible with water, and miscible with alcohols and organic solvents. The aqueous product is strongly acidic with a pH value of less than 1, and also contains about 2 to 3 percent phosphorous acid (H_3PO_3), CAS No. 13598-36-2. Mayoquest 1500 is described as a very effective calcium carbonate scale inhibitor in industrial water treatment, industrial and institutional cleaning, personal care products and general-purpose metal ion control. It is stable when exposed to chlorine and is suited to swimming pool stain prevention application. The product also is described as a sequestering agent over a wide range of temperature and pH level, e.g., for the prevention of precipitation and scaling of calcium carbonate and other metal compounds.

Compass further describes the HEDP product as a technical grade, which is not further purified to become food grade or U.S. Pharmacopoeia (USP) Grade. It is characterized as a chelating agent with a long shelf life, often added to multi-purpose formulations, and very stable at high temperature (above 300 degrees Fahrenheit).

Manufacturing process²⁰

There are generally two commercial methods for producing HEDP. One method involves reacting phosphorous acid (H_3PO_3) with acetic anhydride, $(\text{CH}_3\text{CO})_2\text{O}$, while the second method reacts phosphorus trichloride (PCl_3) with acetic acid (CH_3COOH). Both production methods are said to result in identical HEDP products with the same chemical formulation, level of purity, and end uses. The products from the two methods are sufficiently similar that they can reportedly be comingled and sold as a single product.

One major difference in these two methods is the resulting salable byproducts. Compass reported that it uses the phosphorous acid method, which yields acetic acid as a byproduct, and that most Chinese producers use the phosphorus trichloride method that produces hydrochloric acid (HCl) as a byproduct. In the original investigation, respondent Shandong Taihe reported that its production process is similar to the phosphorus trichloride method but uses glacial acetic acid (concentrated acetic acid), which yields both HCl and a salable, high-margin acetyl chloride byproduct. This method is likely also used by other producers in China, India,

²⁰ Unless otherwise noted, this information is based on original publication, pp. I-10—I-13.

and Europe. Compass stated that the market for resulting byproducts affects choice of production method. The company believes that in the United States there is demand for acetic acid, but not acetyl chloride, while in China there is demand for acetyl chloride.²¹

The industry in the United States

U.S. producers

During the final phase of the original investigations, the Commission received a U.S. producer questionnaire from Compass, the sole producer of HEDP in the United States in 2016.²²

In response to the Commission's notice of institution in these current reviews, the domestic interested party stated that Compass is the only known and currently operating U.S. producer of HEDP today.²³

Recent developments

The domestic interested party identified no major developments in the HEDP industry since the imposition of the orders.

²¹ Compass, Response to Notice of Institution, footnote 69, pp. 25—26.

²² Original publication, p. I-4.

²³ Domestic interested party's response to the notice of institution, May 2, 2022, p. 31.

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution in the current five-year reviews.²⁴ Table I-4 presents a compilation of the trade and financial data submitted from Compass in the original investigations and in response to the notice of institution.

Table I-4
HEDP: Trade and financial data submitted by U.S. producers, by period

Quantity in 1,000 pounds; value in 1,000 dollars; unit value in dollars per pound; ratio is in percent

Item	Measure	2014	2015	2016	2021
Capacity	Quantity	***	***	***	***
Production	Quantity	***	***	***	***
Capacity utilization	Ratio	***	***	***	***
U.S. shipments	Quantity	***	***	***	***
U.S. shipments	Value	***	***	***	***
U.S. shipments	Unit value	\$***	\$***	\$***	\$***
Net sales	Value	***	***	***	***
COGS	Value	***	***	***	***
COGS to net sales	Ratio	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***
SG&A expenses	Value	***	***	***	***
Operating income or (loss)	Value	***	***	***	***
Operating income or (loss) to net sales	Ratio	***	***	***	***

Source: For the years 2014-16, data are compiled using data submitted in the Commission's original investigations. For the year 2021, data are compiled using data submitted by the domestic interested party. Domestic interested party's response to the notice of institution, May 2, 2022, exhibit 12.

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

²⁴ Individual company trade and financial data are presented in app. B.

Definitions of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. Under the related parties provision, the Commission may exclude a U.S. producer from the domestic industry for purposes of its injury determination if “appropriate circumstances” exist.²⁵

In its original determinations, the Commission defined a single domestic like product encompassing all HEDP, coextensive with Commerce's scope. In its original determinations, the Commission defined the domestic industry as the sole U.S. producer of HEDP, Compass.²⁶

U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from 11 firms, which accounted for a large majority of total U.S. imports of HEDP from China in 2016.²⁷ Import data presented in the original investigations are based on questionnaire responses.

Although the Commission did not receive responses from any respondent interested parties in these current reviews, in its response to the Commission's notice of institution, the domestic interested party provided a list of 21 potential U.S. importers of HEDP.^{28 29}

²⁵ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

²⁶ 87 FR 19125, April 1, 2022.

²⁷ Original confidential report, p. IV-1.

²⁸ The list of possible U.S. importers submitted by domestic interested party likely overstates the actual number of U.S. importers of HEDP because it appears to include numerous freight forwarding and logistics firms as well as duplicate entities. The domestic interested party also notes that their provided list is of consignees who “may or may not be the importers” of HEDP. Domestic interested party's response to the notice of institution, May 2, 2022, p. 33 and Exhibit 10.

²⁹ ***. Domestic interested party's response to the notice of institution, May 2, 2022, p. 19.

U.S. imports

Table I-5 presents the quantity of U.S. imports from China as well as the other top sources of U.S. imports, as estimated by the domestic interested parties in their response to the notice of institution.³⁰

Table I-5
HEDP: U.S. imports, by source and period

Quantity in 1,000 pounds

U.S. imports from	Measure	2017	2018	2019	2020	2021
China	Quantity	***	***	***	***	***
India	Quantity	***	***	***	***	***
All other sources	Quantity	***	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***	***
All import sources	Quantity	***	***	***	***	***

Source: Domestic interested party's response to the notice of institution, May 2, 2022, p. 10 and Exhibit 2.

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

³⁰ The domestic interested party submitted data concerning the approximate quantity of imports of HEDP, which may include some out-of-scope merchandise, compiled from bill of lading information for U.S. maritime imports obtained from the Port Import/Export Reporting Service (PIERS). Effective July 1, 2017, the HTSUS statistical reporting numbers in which HEDP had been classified were consolidated into a new statistical reporting number, 2931.90.9051, a "basket" category. In their response to the notice of institution, the domestic interested party notes that statistical reporting number 2931.90.9051 includes a greater proportion of out-of-scope imports than the import statistics presented in the Petition, thus making isolating the impact of changes in the volume of subject imports more difficult. In the original investigations, U.S. import data were based on questionnaire responses. Domestic interested party's response to the notice of institution, May 2, 2022, pp. 9-11.

Apparent U.S. consumption and market shares

Table I-6 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

Table I-6
HEDP: Apparent U.S. consumption and market shares, by source and period

Quantity in 1,000 pounds; value in 1,000 dollars; shares in percent

Source	Measure	2014	2015	2016	2021
U.S. producers	Quantity	***	***	***	***
China	Quantity	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***
All import sources	Quantity	***	***	***	***
Apparent U.S. consumption	Quantity	***	***	***	***
U.S. producers	Value	***	***	***	***
China	Value	***	***	***	NA
Nonsubject sources	Value	***	***	***	NA
All import sources	Value	***	***	***	NA
Apparent U.S. consumption	Value	***	***	***	NA
U.S. producers	Share of quantity	***	***	***	***
China	Share of quantity	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***
All import sources	Share of quantity	***	***	***	***
U.S. producers	Share of value	***	***	***	NA
China	Share of value	***	***	***	NA
Nonsubject sources	Share of value	***	***	***	NA
All import sources	Share of value	***	***	***	NA

Source: For the years 2014-16, data are compiled using questionnaire data submitted in the Commission's original investigations. For the year 2021, data are compiled from the domestic interested party's response to the Commission's notice of institution.

Note: Share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent. For 2014-2016, apparent U.S. consumption is derived from U.S. shipments of imports, rather than U.S. imports. For a discussion of data coverage, please see "U.S. producers" and "U.S. importers" sections

The industry in China

During the final phase of the original investigations, the Commission received a foreign producer/exporter questionnaire from one firm, Shandong Taihe, which accounted for approximately *** percent of production of HEDP in China during 2016.³¹

Although the Commission did not receive responses from any respondent interested parties in these five-year reviews, the domestic interested party provided a list of six possible producers of HEDP in China, including four “active and export-oriented” producers and two that reportedly stopped production during the investigations but may still exist.³²

Table I-7 presents events in the Chinese industry since the last five-year reviews.

Table I-7
HEDP: Recent developments in the Chinese industry

Item	Firm	Event
Expansion	Henan Qingshuiyuan	Firm started constructed on a 180 million metric ton water treatment chemical program in October 2018.
Inputs	Industry wide	In September 2021, production of yellow phosphate in China decreased roughly 45 percent due to environmental policies.

Source: Domestic interested party’s response to the notice of institution, May 2, 2022, p. 13. Unglesbee, Amy, “Ag Input Crunch Ahead.” *Progressive Farmer*, September 22, 2021. <https://www.dtnpf.com/agriculture/web/ag/crops/article/2021/09/22/ag-chem-supplies-four-things-know>. Li, David, “China Price Index: Supply Shortages Loom As Energy, Environmental Policies Collide.” *Agribusiness Global*, November 22, 2021. <https://www.agribusinessglobal.com/sourcing-insider/supply-shortages-loom-chinas-energy-environmental-policies-to-collide-to-further-disrupt-manufacturing/>

³¹ Original confidential report, p. VII-3.

³² Domestic interested party’s response to the notice of institution, May 2, 2022, pp. 12-16.

Table I-8 presents export data for organo-inorganic compounds, a category that includes HEDP and out-of-scope products, from China (by export destination in descending order of quantity for 2021).

Table I-8
Organo-Inorganic compounds: Quantity of exports from China, by destination and period

Quantity in 1000 pounds

Destination market	2017	2018	2019	2020	2021
South Korea	29,332	35,192	30,880	39,149	59,093
United States	38,458	48,771	30,046	29,353	51,275
Japan	42,639	41,679	29,476	26,130	43,457
Netherlands	24,644	35,369	29,109	28,450	43,360
India	18,934	28,246	37,273	31,396	41,407
Germany	12,104	13,146	15,813	13,503	21,942
Indonesia	1,760	1,619	4,220	5,494	17,065
Taiwan	10,073	10,872	8,675	8,614	11,386
Ukraine	6,857	12,622	8,573	6,213	10,843
United Arab Emirates	7,561	9,069	7,036	6,896	9,990
All other markets	68,780	81,857	74,370	69,227	94,222
All markets	261,142	318,441	275,470	264,426	404,040

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 2931.90, accessed June 1, 2022. These data may be overstated as HS subheading 2931.90 may contain products outside the scope of these reviews.

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

Third-country trade actions

Based on available information, HEDP from China has not been subject to other antidumping or countervailing duty investigations outside the United States.

The global market

Table I-9 presents global export data for organo-inorganic compounds, a category that includes HEDP and out-of-scope products, by source in descending order of quantity for 2021.

Table I-9
Organo-Inorganic compounds: Quantity of global exports by country and period

Quantity in 1000 pounds

Exporting country	2017	2018	2019	2020	2021
China	261,142	318,441	275,470	264,426	404,040
Germany	126,677	142,436	135,897	131,413	142,641
United States	441,044	161,839	134,614	123,964	125,048
India	103,720	119,470	122,813	124,572	135,483
United Kingdom	155,230	178,357	117,596	121,172	86,886
Thailand	99,210	86,857	86,642	111,902	169,455
Netherlands	78,712	80,891	79,697	75,750	80,740
Japan	69,600	71,194	62,434	68,459	85,529
Belgium	44,872	46,642	47,891	37,421	33,307
Italy	34,397	33,743	30,667	28,973	33,343
All other exporters	77,080	67,623	62,204	54,334	115,466
All exporters	1,491,685	1,307,493	1,155,926	1,142,385	1,411,937

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 2931.90, accessed June 1, 2022. These data may be overstated as HS subheading 2931.90 may contain products outside the scope of these reviews.

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

APPENDIX A
FEDERAL REGISTER NOTICES

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

Citation	Title	Link
87 FR 19069 April 01, 2022	<i>Initiation of Five-Year (Sunset) Reviews</i>	https://www.govinfo.gov/content/pkg/FR-2022-04-01/pdf/2022-06923.pdf
87 FR 19125 April 01, 2022	<i>1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP) From China; Institution of Five-Year Reviews</i>	https://www.govinfo.gov/content/pkg/FR-2022-04-01/pdf/2022-06562.pdf

APPENDIX B
COMPANY-SPECIFIC DATA

* * * * *

APPENDIX C
SUMMARY DATA

Table C-1

HEDP: Summary data concerning the U.S. market, 2014-16

(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	2014	2015	2016	2014-16	2014-15	2015-16
U.S. consumption quantity:						
Amount.....	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***
Importers' share (fn1):						
China.....	***	***	***	***	***	***
India.....	***	***	***	***	***	***
All other sources.....	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	***
U.S. consumption value:						
Amount.....	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***
Importers' share (fn1):						
China.....	***	***	***	***	***	***
India.....	***	***	***	***	***	***
All other sources.....	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from:						
China:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
India:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
All other sources:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
Nonsubject sources:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
All import sources:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
U.S. producers':						
Average capacity quantity.....	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***
U.S. shipments:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Export shipments:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***
Hourly wages (dollars).....	***	***	***	***	***	***
Productivity (pounds per hour).....	***	***	***	***	***	***
Unit labor costs.....	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued

HEDP: Summary data concerning the U.S. market, 2014-16

(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	2014	2015	2016	2014-16	2014-15	2015-16
U.S. producers.--Continued						
Net sales:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Cost of goods sold (COGS).....	***	***	***	***	***	***
Gross profit or (loss).....	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***
Net income or (loss).....	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***
Unit COGS.....	***	***	***	***	***	***
Unit SG&A expenses.....	***	***	***	***	***	***
Unit operating income or (loss).....	***	***	***	***	***	***
Unit net income or (loss).....	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Undefined.

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

APPENDIX D
PURCHASER QUESTIONNAIRE RESPONSES

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

1. Have there been any significant changes in the supply and demand conditions for HEDP that have occurred in the United States or in the market for HEDP in China since January 1, 2016?

Purchaser	Yes / No	Changes that have occurred
***	***	***
***	***	***

Table continued on next page.

Purchaser	Yes / No	Changes that have occurred
***	***	***

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

Purchaser	Yes / No	Anticipated changes
***	***	***
***	***	***
***	***	***

