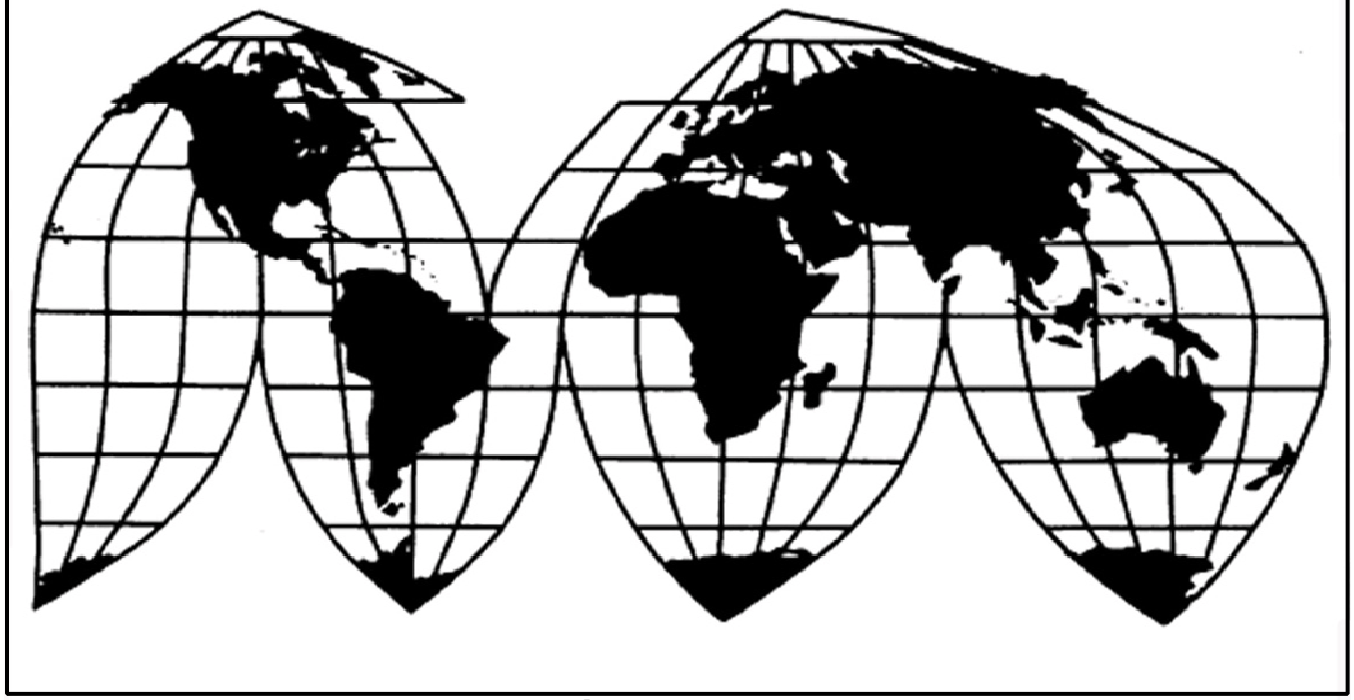
Certain Ammonium Nitrate From Ukraine

Investigation No. 731-TA-894 (Review)

Publication 3924 **June 2007**

U.S. International Trade Commission



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U.S. International Trade Commission

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Note.–Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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 No. 731-TA-894 (Review)

CERTAIN AMMONIUM NITRATE FROM UKRAINE

DETERMINATION

On the basis of the record[1] developed in the subject five-year review, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)) (the Act), that revocation of the antidumping duty order on certain ammonium nitrate from Ukraine would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on August 1, 2006 (71 F.R. 43516) and determined on November 6, 2006 that it would conduct a full review (71 F.R. 67366, November 21, 2006). Notice of the scheduling of the Commission's review 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* on December 15, 2006 (71 F.R. 75579). The hearing was held in Washington, DC, on April 17, 2007, 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 this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended (the Act), that revocation of the antidumping duty order on certain ammonium nitrate from Ukraine 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

On August 23, 2001, the Commission made an affirmative determination that an industry in the United States was being materially injured by reason of imports of ammonium nitrate from Ukraine.[1] On September 12, 2001, Commerce issued an antidumping duty order on subject imports from Ukraine.[2]

On August 1, 2006, the Commission instituted the present review, pursuant to section 751(c) of the Act, to determine whether revocation of the antidumping duty order on ammonium nitrate from Ukraine would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.[3] [4]

The Commission received four substantive responses to the notice of institution. The Committee for Fair Ammonium Nitrate Trade (COFANT) filed a response on behalf of two domestic producers of subject ammonium nitrate, El Dorado Chemical Co. (El Dorado) and Terra Industries Inc. (Terra).[5] Ukrainian producers CJSC Severodonetsk Azot Assoc. (Severodonetsk) and OJSC Azot (Azot) also filed responses, as did the Trade and Economic Mission of Ukraine, Embassy of Ukraine to the United States of America (Ukraine Embassy) (collectively, Ukrainian Respondents).

On November 6, 2006, the Commission found that the domestic interested party group response and the respondent interested party group response were adequate. The Commission therefore determined to conduct a full review.[6]

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[1] Certain Ammonium Nitrate from Ukraine, Inv. No. 731-TA-894 (Final), USITC Pub. 3448 (Aug. 2001) (original investigation). The Commission also investigated imports of ammonium nitrate in Certain Ammonium Nitrate From Russia, Inv. No. 731-TA-856 (Final), USITC Pub. 3338 (Aug. 2000) (affirmative determination), and in the five-year review in that case, Certain Ammonium Nitrate from Russia, Inv. No. 731-TA-856 (Review), USITC Pub. 3844 (Mar. 2006) (affirmative determination) (Russia review).

[2] 66 Fed. Reg. 47451 (Sept. 12, 2001).

[3] 71 Fed. Reg. 43516 (Aug. 1, 2006).

[4] In five-year reviews, the Commission initially determines whether to conduct a full review (which would include a public hearing, the issuance of questionnaires, and other procedures) or an expedited review. In order to make this decision, the Commission first determines whether individual responses to the notice of institution are adequate. Next, based on those responses deemed individually adequate, the Commission determines whether the collective responses submitted by two groups of interested parties – domestic interested parties (such as producers, unions, trade associations, or worker groups) and respondent interested parties (such as importers, exporters, foreign producers, trade associations, or subject country governments) – demonstrate a sufficient willingness among each group to participate and provide information requested in a full review. If the Commission finds the responses from both groups of interested parties adequate, or if other circumstances warrant, it will determine to conduct a full review. See 19 C.F.R. § 207.62(a); 63 Fed. Reg. 30599, 30602-05 (June 5, 1998).

[5] Since 2005, domestic interested parties El Dorado and Terra have been the only domestic producers of ammonium nitrate in operation.

[6] 71 Fed. Reg. 67366 (Nov. 21, 2006). See Confidential Staff Report, INV-EE-051 (May 16, 2007) (CR) and its public version (PR) at App. A (Explanation of Determination on Adequacy).

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. Domestic Like Product

In making its determination under section 751(c), the Commission defines the "domestic like product" and the "industry."[7] The Act defines the "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."[8]

Commerce has defined the scope of the review as

> solid, fertilizer grade ammonium nitrate ("ammonium nitrate" or "subject merchandise") products, whether prilled, granular or in other solid form, with or without additives or coating, and with a bulk density equal to or greater than 53 pounds per cubic foot. Specifically excluded from this scope is solid ammonium nitrate with a bulk density of less than 53 pounds per cubic foot (commonly referred to as industrial or explosive grade ammonium nitrate).[9]

The scope thus remains unchanged from the original investigation and excludes low-density ammonium nitrate (also referred to as LDAN) for industrial/explosive uses and liquid ammonium nitrate.[10] Subject ammonium nitrate (also referred to as high-density ammonium nitrate, or HDAN)[11] is a dry, solid agricultural fertilizer that contains approximately 34 percent nitrogen by weight. The product is fast acting because its nitrate form is an immediate source of plant-available nitrogen, while its ammonium form is converted more slowly to nitrate in the soil and continues to feed the plant for a relatively prolonged period. It is popularly used for direct application to the soil surface on pasture grass and for hay production in the warmer, more humid southern-tier regions of the United States where rapid growth and protein development are paramount for the feeding of cattle and nitrogen losses to the atmosphere via volatilization are minimized. HDAN is also popular for direct soil-surface application to vegetable and citrus crops where multiple crops are produced and rapid growth is important and to traditional crops such as corn, wheat, cotton, milo, and tobacco that may be cultivated under "no-till" applications (that is, on acreage that is not plowed).[12]

In the original investigation, the Commission found a single domestic like product co-extensive with the subject merchandise: fertilizer-grade ammonium nitrate products with a bulk density equal to or greater than 53 pounds per cubic foot.[13] No party to this review takes issue with the Commission's domestic like product definition from the original investigation, and COFANT argues that the Commission should continue to find a single domestic like product co-extensive with the scope.[14] The record contains no information that would warrant a departure from the definition from the original

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[7] 19 U.S.C. § 1677(4)(A).

[8] 19 U.S.C. § 1677(10). See 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).

[9] 71 Fed. Reg. 70508 (Dec. 5, 2006).

[10] 66 Fed. Reg. 38632 (Jul. 25, 2001).

[11] We will refer to the product in this opinion as ammonium nitrate or, as in the Report, HDAN.

[12] CR at I-10-I-12, PR at I-8-I-10.

[13] USITC Pub. 3448 at 5.

[14] COFANT Prehearing Brief at 5-7. Ukrainian Respondents did not file briefs or participate in the hearing.

investigation.[15] Accordingly, we define a single domestic like product consisting of all ammonium nitrate, corresponding to the scope.[16]

B. Domestic Industry

Section 771(4)(A) of the Act defines the relevant domestic industry as the "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."[17] In the original investigation, the Commission defined the domestic industry as all domestic producers of the domestic like product.[18] COFANT's response to the notice of initiation expressed concurrence with that definition, and no party raised objections to the definition from the original investigation. Consistent with the original determination and our definition of the domestic like product in this review, we define the domestic industry as all producers of subject ammonium nitrate.[19]

III. LIKELIHOOD OF CONTINUATION OR RECURRENCE OF MATERIAL INJURY IF THE ANTIDUMPING DUTY ORDER IS REVOKED

A. Legal Standard In A Five-Year Review

In a five-year review conducted under section 751(c) of the Act, Commerce will revoke an antidumping duty order unless: (1) it makes a determination that dumping is likely to continue or recur, and (2) the Commission makes a determination that revocation of antidumping duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[20] The Statement of Administrative Action states that "under the likelihood standard, the Commission will engage in a counter-factual 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."[21] Thus, the likelihood standard is prospective in nature.[22] The U.S. Court of International Trade has found that "likely," as used in the

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[15] CR at I-14-I-16, PR at I-11-I-12.

[16] This is also the same definition that the Commission applied in the Russia review, USITC Pub. 3844 at 5.

[17] 19 U.S.C. § 1677(4)(A). 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, provided that adequate production-related activity is conducted in the United States. See United States Steel Group v. United States, 873 F. Supp. 673, 682-83 (Ct. Int'l Trade 1994), aff'd, 96 F.3d 1352 (Fed. Cir. 1996).

[18] USITC Pub. 3448 at 5.

[19] No related party issues are presented under section 771(4)(B) of the Act. That provision allows the Commission to exclude from the domestic industry, if appropriate circumstances exist, any producers that are related to an exporter or importer of subject merchandise or that are themselves importers. 19 U.S.C. § 1677(4)(B).

[20] 19 U.S.C. § 1675a(a).

[21] Statement of Administrative Action, H.R. Rep. No. 103-316, vol. I (SAA), at 883-84 (1994). The SAA states that "[t]he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." SAA at 883.

[22] 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

(continued...)

sunset review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[23] [24] [25]

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."[26] 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 antidumping investigations]."[27]

Although the standard in a five-year review is not the same as the standard applied in an original antidumping investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[28] 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 the suspended investigation is terminated or the suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[29]

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[22] (...continued)
making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[23] 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 without opinion, 05-1019 (Fed. Cir. Aug. 3, 2005); Nippon Steel Corp. v. United States, Slip Op. 02-153 at 7-8 (Ct. Int'l Trade Dec. 24, 2002) (same); Usinor Industeel, S.A. v. United States, Slip Op. 02-152 at 4 n.3 & 5-6 n.6 (Ct. Int'l Trade Dec. 20, 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, Slip Op. 02-105 at 20 (Ct. Int'l Trade Sept. 4, 2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); Usinor v. United States, Slip Op. 02-70 at 43-44 (Ct. Int'l Trade July 19, 2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[24] For a complete statement of Commissioner Okun's interpretation of the likely standard, see Additional Views of Vice Chairman Deanna Tanner Okun Concerning the "Likely" Standard in Certain Seamless Carbon and Alloy Steel Standard, Line and Pressure Pipe from Argentina, Brazil, Germany, and Italy, Inv. Nos. 701-TA-362 and 731-TA-707-710 (Review) (Remand), USITC Pub. 3754 (Feb. 2005).

[25] Commissioner Lane notes that, consistent with her views in Pressure Sensitive Plastic Tape from Italy, Inv. No. AA1921-167 (Second Review), USITC Pub. 3698 (June 2004) at 15-17, she does not concur with the U.S. Court of International Trade's interpretation of "likely" but she will apply the Court's standard in this review and all subsequent reviews until either Congress clarifies the meaning or the U.S. Court of Appeals for the Federal Circuit addresses the issue.

[26] 19 U.S.C. § 1675a(a)(5).

[27] 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.

[28] 19 U.S.C. § 1675a(a)(1).

[29] 19 U.S.C. § 1675a(a)(1). 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. 19 U.S.C. § 1675a(a)(5). While the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry, 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."[30]

Original Investigation. The Commission identified several conditions of competition and aspects of the business cycle as relevant to its analysis. The Commission found that ammonium nitrate is a commodity product, without readily identifiable variations or grades.[31] The Commission found that ammonium nitrate is distinguished from the other nitrogen-based fertilizers by its fast action, good solubility, and low volatility at ambient temperatures. The Commission further found that competition with other nitrogen-based fertilizers did not explain ammonium nitrate pricing in the U.S. market. Exogenous factors – such as seasonal demand patterns and other downstream demand factors such as acreage planted, crop prices, and farm income – appeared to affect the overall fertilizer market, although individual nitrogen-based fertilizers may be affected somewhat differently.[32]

The Commission found that demand for ammonium nitrate is seasonal, peaking in the spring planting season, usually between February and June. Given the capital intensive nature of the industry, producers operate production facilities throughout the year in order to maximize production efficiencies. During the off-season, they build up inventories equivalent to one or two months of production and might store an additional month's worth of production on barges.[33]

The Commission found that demand for fertilizers is generally considered to be mature and that demand for ammonium nitrate is affected principally by planted acreage and application rates, which in turn are influenced by crop prices and weather. Most U.S. suppliers, the Commission noted, considered that demand was steady during the period of investigation (POI). Apparent U.S. consumption of ammonium nitrate was 2.38 million short tons in 1998 and 2.31 million short tons in 2000. On a value basis, apparent U.S. consumption was $278.3 million in 1998 and $261.8 million in 2000.[34]

The Commission found a moderately high degree of substitutability between ammonium nitrate from Ukraine and the domestic like product and that price is an important factor in purchasing decisions for ammonium nitrate. The Commission also found a moderately high degree of substitutability among subject imports, the domestic like product, and non-subject imports, which also supplied the U.S. market.[35]

Imports of ammonium nitrate from Russia accounted for the largest share of total imports of ammonium nitrate into the United States in 1998 and 1999 and were the subject of an antidumping duty petition filed on July 23, 1999, by the same petitioners as in the original investigation detailed here.[36] As a result of this petition and subsequent relief in the form of a suspension agreement, ammonium nitrate imports from Russia fell from the high levels in 1998 and 1999 to virtually zero in 2000, while imports from Ukraine rapidly increased their volume.[37] The total volume of non-subject imports was *** lower in

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[30] 19 U.S.C. § 1675a(a)(4).

[31] USITC Pub. 3448 at 6.

[32] USITC Pub. 3448 at 7 & n.27.

[33] USITC Pub. 3448 at 7.

[34] USITC Pub. 3448 at 7-8. Apparent U.S. consumption by volume was lower in interim 2001 than in interim 2000; by value it was higher in interim 2001 than in interim 2000.

[35] USITC Pub. 3448 at 8-9.

[36] USITC Pub. 3448 at 9.

[37] Commerce published its preliminary affirmative determination on January 7, 2000, and suspended liquidation on imports of ammonium nitrate from Russia. On May 19, 2000, Commerce entered into a suspension agreement

(continued...)

2000 than in previous years. The level of non-subject import shipments in interim 2001 was *** higher than in interim 2000. The Commission found that the increased volume of non-subject imports in interim 2001 (as compared to interim 2000) was the result of imports from non-subject countries that previously had no presence in the U.S. market, such as Bulgaria, Romania, Spain, and Turkey, starting to sell in the U.S. market, while imports from other non-subject countries (aside from Russia) continued their presence.[38] The Commission found, however, that the average unit values (AUVs) of non-subject imports were *** higher than those of subject imports of ammonium nitrate from Ukraine.[39]

The Commission also noted the significance of natural gas costs in the production of ammonium nitrate. Ammonia is the primary raw material in the manufacture of ammonium nitrate, and the basic feedstock for producing ammonia is natural gas. The Commission calculated that the cost of natural gas accounted for approximately 70 to 80 percent of the cost of producing ammonia and about 30 to 50 percent of the cost of producing ammonium nitrate. Natural gas prices and ammonia costs fell early in the POI and rose sharply in 2000.[40]

In addition to the conditions noted in the original investigation, the following conditions of competition during the period of review are relevant to our determination in this five-year review.

Demand. In last year's five-year review of whether to terminate the suspended investigation on ammonium nitrate from Russia, the Commission found that ammonium nitrate demand in the U.S. market appeared to have declined since 2003 and would likely experience further declines in the reasonably foreseeable future.[41] The data collected in this review support the same findings. Between 2001 and 2003, apparent U.S. consumption increased from 1.89 million short tons to 2.16 million short tons. Since then, apparent U.S. consumption has steadily declined. In 2004, apparent U.S. consumption declined to the same level as 2001. In each year thereafter, 2005 and 2006, it declined further.[42] In 2006, apparent U.S. consumption was *** million short tons, a decline overall from the start of the period of review of *** percent.[43] Security measures that have recently been imposed or proposed by Federal and State governments on ammonium nitrate and its transport and storage reportedly have contributed importantly to the decrease in demand for ammonium nitrate between 2001 and 2006.[44]

The trend of reported declining demand for ammonium nitrate is consistent with data regarding its share of the broader nitrogen fertilizer market. The principal uses for ammonium nitrate are for forage

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[37] (...continued)
with the Government of Russia that included quantity and price restrictions. The Commission made an affirmative determination in the same investigation on August 2, 2000. USITC Pub. 3448 at 9.

[38] USITC Pub. 3448 at 9.

[39] USITC Pub. 3448 at 9-10. The Commission attributed the higher volume of non-subject imports in interim 2001 to a response to the high natural gas costs in the U.S. market and subsequent increase in prices for ammonium nitrate. Id. at 9 n.45.

[40] USITC Pub. 3448 at 10.

[41] Russia Review, USITC Pub. 3844 at 8.

[42] CR, PR at Table I-7.

[43] CR, PR at Table C-1.

[44] CR at II-4-II-6, PR at II-3-II-5; see also CR at III-12, PR at III-8 (noting reports of the impact on the U.S. market of security and liability issues). Due to its nature as an oxidizer, ammonium nitrate has long been regulated as a hazardous material, but since September 11, 2001, security awareness and regulation have increased, as discussed in the Russia review. Russia Review, USITC Pub. 3844 at 10-11. Since the period of that review, new bills concerning the handling of ammonium nitrate have been introduced in the U.S. House and Senate, but none of these has passed. CR at II-6, PR at II-5.

(pasture and hay), cotton, corn, wheat, citrus/vegetables, and tobacco crops.[45] Other single-nutrient nitrogen fertilizers are also used on these crops, including urea for forage; anhydrous ammonia, urea ammonium nitrate (UAN), and urea for corn; and UAN and urea for cotton, wheat, and citrus/vegetables.[46] Substitution appears to be based on a number of factors, including weather, types of crops, relative prices, and the availability of ammonium nitrate and its alternatives.[47] While there will always be regions of the country and certain crops for which ammonium nitrate is the preferred source of nitrogen, it is the only one of the four major single-nutrient nitrogenous fertilizers that decreased in consumption from crop year 2001 to crop year 2006 (it decreased by 38.1 percent).[48] In the same period, total U.S. nitrogen fertilizer consumption increased from 11.5 million short tons of contained nitrogen to 12.0 million short tons of contained nitrogen, or by approximately 4.4 percent.[49]

In addition, the consensus among industry participants and analysts appears to be that demand for ammonium nitrate will continue to decline going forward. El Dorado and Terra, for example, forecast such declines.[50] FERTECON Limited, an independent provider of market information and analyses on fertilizers and fertilizer raw materials, predicts that U.S. annual consumption will ***.[51]

Based on all of the available evidence, we find that, although ammonium nitrate is a specialty, niche-market nitrogen fertilizer that continues to be favored in selected applications, the demand for it has declined since 2003 and will likely decline further in the reasonably foreseeable future.

Supply. From 2001 through 2005, the domestic industry was the largest supplier of ammonium nitrate to the U.S. market. Its share of the quantity of apparent U.S. consumption declined irregularly from 73.8 percent in 2001 to 71.1 percent in 2005. In 2006, the domestic industry's share of apparent U.S. consumption declined *** percentage points to *** percent.[52]

The domestic industry has undergone significant consolidation and restructuring during the period of review. During the original investigation, there were 10 U.S. producers and a total capacity of 2.7 million short tons.[53] Since then, two firms have gone out of business, Wil-Gro in 2000 and Nitram in 2003, and their production capacity was eliminated from the industry. Additional capacity closures include the facilities of Coastal Chem, which switched to LDAN production after being acquired by Dyno Nobel in 2003; the closure of the Crystal City, Missouri facility formerly owned by LaRoche, then

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[45] Planted acreage and application rates are discussed in CR at II-22-II-26, PR at II-14-II-17. Recently, ethanol use reportedly has become a driving force in acres planted for corn, and there are projections of significant increases in the acreage of planted corn. CR at II-23-II-24, PR at II-14-II-16. COFANT argues that this is not expected to have a significant positive effect on U.S. demand for ammonium nitrate and that increased corn acreage is coming at the expense of other crops that also consume nitrogen fertilizers. COFANT Prehearing Brief at 16-17; COFANT Posthearing Brief Exh. 1 at 13-15.

[46] CR at II-22, PR at II-14.

[47] CR at II-7, PR at II-4.

[48] CR at II-28, PR at II-18; CR, PR at Table II-2. Ammonium nitrate averaged 5.4 percent of consumption of the four major single-nutrient nitrogenous fertilizers, whereas anhydrous ammonia averaged 35.4 percent, UAN 31.6 percent, and urea 27.5 percent. CR at II-28, PR at II-18. We note that the available data do not itemize ammonium nitrate used in bulk blends such as "NPK," which are identified separately as "multinutrients." CR, PR at Table II-2.

[49] CR at II-28-II-29, PR at II-18-II-19; CR, PR at Table II-2.

[50] They predict that demand will eventually level off in the range of *** short tons annually, with the majority of consumption remaining in the southeastern United States. CR at II-21, PR at II-13.

[51] FERTECON estimates that ammonium nitrate consumption will *** short tons by 2010. CR at II-21, PR at II-13.

[52] CR, PR at Table C-1. Domestic production of HDAN has declined *** since 2002, when it was *** 1.58 million short tons. In 2006, the remaining two companies, Terra and El Dorado, produced *** short tons. CR, PR at Table III-1. ***. CR, PR at Table III-1. ***. ***. CR at III-13 n.29, PR at III-9 n.29.

[53] CR, PR at Tables I-1 & I-4.

acquired by El Dorado in 2000; and the cessation of HDAN production by Potash Corp. in 2004 ***.[54] Additionally, Air Products decommissioned and dismantled its HDAN plant in July 2005 after damage from Hurricanes Ivan (September 2004) and Dennis (July 2005). Agrium, which had acquired the fertilizer production assets of Prodica in 2000, discontinued production and sales in 2005.[55]

The *** during the original investigation, MCC, was acquired in 2004 by Terra, the newest producer in the HDAN market. In July 2005, Terra announced that it had entered into a 10-year renewable agreement to supply LDAN and ammonium nitrate solution to Orica USA Inc. As part of the agreement, Terra modified one of its ammonium nitrate prill towers to enable the production of either HDAN or LDAN. ***.[56]

El Dorado, which has operated since the original investigation, ceased production of HDAN at its Cherokee, Alabama plant in 2004 in order to ***.[57] The Cherokee plant ***.[58]

Thus, since the original investigation, the domestic industry has consolidated from 10 to 2 producers, with Terra and El Dorado the only domestic producers of HDAN since 2005. The domestic industry's production capacity in 2000 was 2.67 million short tons. During the period of review, production capacity has declined *** from 2.05 million short tons in 2001 to *** million short tons in 2006 (which includes the capacity at El Dorado's Cherokee plant).[59] *** the closures, U.S. production capacity *** apparent U.S. consumption in 2006.[60]

Subject imports from Ukraine peaked in volume in 2000 at *** short tons. Under the restraining effects of the antidumping duty order, there were no imports of ammonium nitrate from Ukraine during the period of review.[61]

In their absence, non-subject imports have increased irregularly in volume during the period of review, from 521,552 short tons in 2001 to 557,674 short tons in 2006.[62] As apparent U.S. consumption has declined over the period of review, shipments of non-subject imports have increased their share overall from 26.2 percent in 2001 to 28.9 percent in 2005, before increasing further to *** percent in 2006.[63] The major sources of non-subject imports during the period of review were, in descending order, Romania, the Netherlands, Bulgaria, Russia,[64] Spain and, in 2006, newer entrant Georgia.[65] Imports of HDAN arrive in the United States in ships, with an increasing percentage (since 2003) reportedly entering at Tampa, Florida, and Wilmington, North Carolina, in addition to the traditional port for fertilizers, New

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[54] CR, PR at III-1 & Table I-5.

[55] CR, PR at Table I-5.

[56] CR, PR at III-1, Table I-5; CR at III-5, PR at III-3.

[57] CR, PR at Table I-5. El Dorado's Cherokee plant ***. CR at III-2, PR at III-1.

[58] CR at III-4-III-5, PR at III-3.

[59] CR, PR at Table III-1.

[60] CR, PR at Table C-1 (*** million short tons in 2006).

[61] CR, PR at IV-1 & Table IV-1.

[62] CR, PR at Table IV-1. Non-subject import volume in 2000 was ***.

[63] CR, PR at Tables I-1, I-8.

[64] Imports of ammonium nitrate from Russia, as noted above, have been regulated since 2000 by the terms of a suspension agreement that sets export limits and establishes weekly reference prices. The agreement is set forth in Appendix 1 to Commerce's original notice of suspension of the Russia investigation. 65 Fed. Reg. 37759 (June 16, 2000).

[65] CR at II-19, PR at II-12.

Orleans, Louisiana.[66] Importers, like domestic producers, sell their HDAN almost exclusively to fertilizer distributors and dealers.[67]

Exports of ammonium nitrate to the United States are predominantly arranged and transported by global trading companies. *** alone accounted for almost *** of U.S. imports of HDAN from all sources in 2006.[68] Companies *** Ukraine in the original investigation included ConAgra and Transammonia.[69] Among the companies listed by Ukrainian producers as their largest export purchasers in this review were ***, companies that are currently trading HDAN in the United States.[70] In the Russia review, the Commission found that, "[f]or the global trading companies that drive the flow of imports, profit is a function of total margin and total volume, so they have a strong incentive to move as much volume as feasible so long as their margins that cover their purchase price and transportation costs are maintained."[71] The economic interests of the trading companies have not changed since the original investigation or the Russia review – they have an incentive to ship volumes of HDAN that are as large as possible at any price that would cover their margins.[72]

Raw material costs remain a significant factor in industry profitability, and natural gas is the principal raw material used to produce HDAN.[73] The cost of natural gas has continued to be volatile and generally high in the United States during the period of review.[74] Domestic producers' purchase prices of natural gas began the period at $*** per MMBtu[75] during January-March 2001, generally decreased to a period low of $*** per MMBtu during July-September 2002, then increased to a period high of $*** per MMBtu in October-December 2005. Natural gas prices then decreased to $*** per MMBtu in July-September 2006, before increasing to end the period at $*** per MMBtu.[76]

Forecasts indicate continuing volatile and high prices for natural gas in the U.S. market. The Energy Information Agency of the Department of Commerce (EIA) forecasts quarterly fluctuations in 2007 and 2008 and, on an annual basis, higher prices to industrial users in each year, averaging $8.43 per MMBtu during 2007 and $8.90 per MMBtu during 2008.[77]

Ukrainian producers of HDAN, in contrast, have had access to natural gas at lower and less volatile prices than U.S. producers throughout the period of review.[78] Prices reported by Ukrainian

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[66] CR at II-3, PR at II-2. The Mississippi River system has served as an important means for distributing HDAN, as a portion of both domestically produced and imported HDAN is transported in bulk by barge to storage and distribution locations throughout the Farm Belt. *** reported that ammonium nitrate imports to Tampa and Wilmington are shipped by rail and truck to warehouses in the Southeast. CR at II-3, PR at II-2.

[67] CR at II-44, PR at II-28.

[68] CR, PR at Table IV-1; Questionnaire Responses of *** and ***.

[69] USITC Pub. 3448 at IV-1.

[70] CR at IV-2, PR at IV-1; Foreign Producers' Questionnaire Response at I-3. *** reported that almost all producers of HDAN usually export their product through trading companies. CR at IV-19, PR at IV-10.

[71] Russia Review, USITC Pub. 3844 at 17; see also id. at 10.

[72] See, e.g., Revised and Corrected Hearing Transcript (Apr. 17, 2007) (Tr.) at 20 (Mr. Elliott) ("Given what I see in the market and our interactions with traders handling imports, there is no question that . . . [t]he trading companies handling this product, as they did in 2000, will move as much as they can as fast as they can as long as they can cover their costs.").

[73] CR at III-19, PR at III-9.

[74] CR at II-4, PR at II-2.

[75] MMBtu refers to one million British thermal units, a unit of measure of heat energy.

[76] CR, PR at Table V-1, Figure V-1.

[77] CR at V-5-V-6, PR at V-2-V-3.

[78] CR, PR at Figure V-3.

HDAN producers were *** before increasing late in the period.[79] Reported natural gas prices of these producers averaged $2.07 per MMBtu during January 2001 to December 2006, or *** percent less than the reported average natural gas purchase price of U.S. HDAN producers of $*** per MMBtu during this period.[80]

Substitutability. Domestically produced HDAN and HDAN from Ukraine and other import sources are generally substitutable.[81] Four out of five responding purchasers and all responding U.S. producers and importers reported that domestically produced product and Ukrainian product are "always interchangeable."[82] In addition, four out of five responding purchasers and three out of four responding U.S. producers and importers reported that Ukrainian product and ammonium nitrate sourced from other countries were "always interchangeable."[83] Purchasers frequently were not able to identify the country of origin of HDAN that they purchased from their U.S. suppliers and assumed that HDAN purchased from U.S. producers was produced domestically.[84]

Price remains an important factor in purchasing decisions for this commodity product. Purchasers most frequently identified price as the primary consideration in making purchasing decisions.[85] In addition, 10 out of 12 purchasers identified price as a "very important" factor in purchasing decisions, and 11 out of 12 purchasers identified discounts as "very important."[86]

We find that these conditions in the ammonium nitrate market provide us with a reasonable basis on which to assess the likely effects of revocation of the antidumping duty order.

C. Likely Volume of Subject Imports

In evaluating the likely volume of imports of subject merchandise if the antidumping duty order is revoked, 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.[87] 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,

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[79] CR, PR at Figure V-3.

[80] CR at V-6-V-7, PR at V-3. COFANT argues that natural gas prices in Ukraine are artificially suppressed and that recent reported natural gas price increases will be offset under Ukrainian government policy. COFANT Prehearing Brief at 21-22 & Exh. 8. *** reported in their questionnaire responses that there were no Ukrainian government programs that affect the price or availability of natural gas to Ukrainian HDAN producers. CR at V-7, PR at V-3. Although we are unable to make a finding on the extent of Ukrainian government involvement in the Ukrainian natural gas market, we rely on the price information submitted by domestic and Ukrainian producers, above, as probative.

[81] CR at II-41, PR at II-27.

[82] CR, PR at Table II-4.

[83] CR, PR at Table II-4. ***. CR at III-8, PR at III-6; CR, PR at Table III-6.

[84] CR at II-43, PR at II-28.

[85] CR at II-42, PR at II-27. Quality was reported most frequently as the second most important factor, and availability the third most important.

[86] CR, PR at Table II-3. Other purchase factors identified frequently as very important were availability, whether the product meets quality standards, and reliable supply.

[87] 19 U.S.C. § 1675a(a)(2).

which can be used to produce the subject merchandise, are currently being used to produce other products.[88]

In the original investigation, the Commission found that the volume of subject imports increased significantly overall from 1998 to 2000, more than *** in absolute terms, from *** short tons in 1998 to *** short tons in 2000. Subject imports also increased *** percentage points in terms of market penetration, from *** percent of apparent U.S. consumption in 1998 to *** percent in 2000. Such imports ceased as of December 2000, which the Commission attributed to the pendency of the original investigation. The Commission also found that the increase in subject imports between 1999 and 2000 prevented the domestic industry from capturing any additional market share notwithstanding the virtual disappearance of imports of ammonium nitrate from Russia from the U.S. market in 2000 after Commerce made its preliminary affirmative determination and suspended liquidation on imports from Russia. The Commission thus determined that subject import volume and the increase in that volume in absolute terms and relative to consumption in the United States were significant.[89]

Under the discipline of the antidumping duty order, there were no imports of ammonium nitrate from Ukraine during the period of review. Based on the record in this investigation, we find that the Ukrainian industry has the ability and incentive to export large and significant volumes of ammonium nitrate to the United States and would likely do so if the antidumping duty order were revoked.

The Ukrainian industry is the second largest producer and exporter of ammonium nitrate in the world, trailing only the industry in Russia. In 2006, the Ukrainian industry accounted for *** percent of global HDAN production and *** percent of global HDAN exports.[90] In the original investigation, the capacity of the *** reporting companies, ***, increased from *** million short tons in 1998 to *** million short tons in 2000.[91] Production by the reporting producers expanded from *** million short tons in 1998 to *** million short tons in 2000, and their capacity utilization increased from *** percent to *** percent.[92] With all four Ukrainian companies reporting data in this review, the picture of a large industry with significant excess capacity is unchanged.[93] In 2006, the Ukrainian industry's capacity was *** million short tons for all four companies, with production of *** million short tons and capacity utilization of *** percent.[94] Excess capacity in Ukraine in 2006 thus was equivalent to *** of apparent U.S. consumption.[95] *** projected no increase or decrease in capacity in 2007-2008.[96]

The Ukrainian HDAN industry also has a significant export orientation. As noted above, it ranks second in the world in HDAN exports. With the exception of export-leading Russia, no other country approaches Ukraine in total exports of HDAN.[97] In 2000, the available data showed that exports

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[88] 19 U.S.C. § 1675a(a)(2)(A-D).

[89] USITC Pub. 3448 at 10-11; Confidential Views at 14-16.

[90] CR, PR at Table IV-4. Together with Russia, the two accounted for *** of world production and *** percent of world exports of HDAN in 2006. CR at IV-6, PR at IV-3.

[91] CR, PR at Table IV-9.

[92] CR, PR at Table IV-9.

[93] ***.

[94] CR, PR at Table IV-10.

[95] CR, PR at Tables I-7, IV-10 (*** short tons of Ukrainian excess capacity constituted *** percent of apparent U.S. consumption in 2006).

[96] Memorandum INV-EE-059 (June 4, 2007), Table IV-10. *** did not report a capacity projection for 2008. ***.

[97] Under *** estimates, the Ukrainian industry exports approximately *** the volume exported by any other significant HDAN-producing foreign industry. CR, PR at Table IV-4.

constituted *** percent of total commercial shipments of the Ukrainian industry.[98] In 2005 and 2006, the only years for which ***, exports constituted *** percent and *** percent, respectively, of such shipments.[99] The Ukrainian industry's consistent reliance on export markets for a substantial portion of its commercial shipments demonstrates the Ukrainian industry's export orientation.

In addition, the Ukrainian industry is facing significantly increased competition from Russian imports of HDAN in its domestic market. *** reported that during January-May 2006, there was a large increase in imports of Russian ammonium nitrate into Ukraine at lower prices than those for the domestic Ukrainian product. ***.[100] Reports of substantially increased competition from Russian imports in the Ukrainian home market are consistent with trade data published by UN Comptrade. At the time of the original investigation, Ukrainian imports from Russia were minor, less than 10,000 metric tons (MT) during each year from 1998 to 2000. In 2006, Ukrainian imports of HDAN from Russia exceeded 350,000 MT, more than eight times their volume in 2004, and equivalent to *** of Ukrainian producers' home-market shipments.[101] Moreover, only limited improvement is predicted in Ukrainian home market demand.[102] The substantial increase in competition from Russian imports in the Ukrainian home market and the limited improvement expected in that market's demand indicate that export markets will remain an important part of the Ukrainian industry's commercial future and that pressure from Russian imports, if unabated, will likely displace a growing share of Ukrainian producers' home market sales and intensify those producers' search for export markets.[103]

The Ukrainian industry's competition from Russian HDAN extends beyond its home market. The top export markets for Ukrainian HDAN are also major export markets for Russian HDAN.[104] The Ukrainian industry has been all but eliminated from the Brazilian market, which absorbed over 215,000 MT of Ukrainian HDAN as recently as 2003, while Russian product has rapidly increased its presence in that market.[105] The industries in Russia and Ukraine are the top foreign HDAN suppliers in Turkey, Morocco, and Argentina and appear to compete aggressively in these markets on the basis of price.[106] The likelihood that Ukrainian HDAN producers would target the U.S. market is increased given the competitive pressures that the Ukrainian industry is facing from Russian product in its home market and export markets and the fact that Russian imports are subject to a suspension agreement in the U.S. market.

In addition, the U.S. market remains an attractive market for foreign producers and exporters, including those in Ukraine, because of its size and the prices it commands.[107] According to ***, the United States accounted for nearly *** percent of total world HDAN consumption in 2006. The only country that *** was Russia.[108] Even with U.S. consumption projected to decline, the United States will continue to be one of the largest consumers of HDAN in the world.[109] Moreover, in 2006, the U.S.

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[98] CR, PR at Table IV-9.

[99] Export shipments increased and total commercial shipments to the home market decreased from 2005 to 2006, resulting in the increased percentage of shipments directed to exports 2006. CR, PR at Table IV-10.

[100] CR at IV-21-IV-22, PR at IV-11. As of the close of the record, ***.

[101] COFANT Prehearing Brief Exh. 9 (43,231 MT in 2004; 353,097 MT in 2006); CR, PR at Table IV-10.

[102] ***. CR, PR at Table IV-4.

[103] See also Response of *** at Question II-16b (***); Response of *** at Questions II-14-15 (***).

[104] COFANT Prehearing Brief Exh. 10.

[105] COFANT Prehearing Brief Exh. 13. Brazil imposed antidumping duty orders on both Ukrainian and Russian HDAN in 2002, ***. CR, PR at Table IV-11; COFANT Prehearing Brief Exh. 14 at 4.

[106] COFANT Prehearing Brief Exh. 20.

[107] See Russia Review, USITC Pub. 3844 at 13. ***. CR at IV-19, PR at IV-10.

[108] CR, PR at Table IV-4 (Russia consumed *** million short tons in 2006).

[109] CR, PR at Table IV-4.

market was the second largest import market in the world, accounting for over *** percent of total world imports.[110]

Reports of price comparisons between U.S. and non-U.S. markets consistently show HDAN commanding a higher price in the U.S. market. For example, ***.[111] *** reported that in 2006 the average bulk Black Sea price was $*** per short ton, the average bulk New Orleans price was $*** per short ton, and the average local Ukrainian price at which it sold was $*** per short ton.[112]

AUVs for U.S. shipments of imported HDAN are consistent with the reported price premiums in the U.S. market and show that AUVs in the United States are much higher than AUVs of Ukrainian product in alternative Ukrainian export markets. In 2006, for example, the AUV for U.S. shipments of imports was $*** per short ton.[113] AUVs for Ukrainian product shipped to the Ukrainian industry's export markets reportedly averaged $120.96 per short ton in 2006 and were $122.03 per short ton to its largest export market, Turkey.[114]

Finally, exports of subject merchandise from Ukraine are subject to a ban in China and to antidumping duty orders in Brazil and the European Union (EU), which further increase the attractiveness of the U.S. market as a target for increased exports from Ukraine.[115] Most recently, the EU determined in April 2007 to continue its antidumping duty order on ammonium nitrate from Ukraine.[116]

Given the demonstrated ability of the Ukrainian HDAN industry to increase imports into the U.S. market rapidly during the original investigation, the substantial production capability and unused capacity of the Ukraine industry as the world's second largest producer and exporter of HDAN, the Ukrainian industry's dependence on export markets despite numerous barriers, the competition it faces from Russian-produced HDAN in its home market and export markets, and the attractiveness of the U.S. market as a target for Ukrainian supply, we find that the likely volume of subject imports, both in absolute terms and relative to production and consumption in the United States, would be significant if the order were revoked.

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[110] CR, PR at Table IV-4.

[111] CR at V-21-V-22, PR at V-12. *** noted that, based on ocean freight of around $*** per metric ton, the U.S. market carries a $***-$*** per metric ton premium for product sold out of the Baltic/Black Sea area.

[112] CR at V-22, PR at V-12.

[113] CR, PR at C-1. We note that there are no product mix issues for ammonium nitrate, which is a commodity product without readily identifiable variations or grades.

[114] CR, PR at Table IV-7 (Global Trade Information Service data). Questionnaire responses did not itemize shipments and values by particular country. The reported AUV for Ukrainian shipments to all export markets in 2006, according to questionnaire responses, was $*** per short ton. CR, PR at Table IV-10.

[115] CR, PR at Table IV-11.

[116] CR at IV-22, PR at IV-11. Under all of the circumstances, as we find below, the likely volume of subject imports from Ukraine would be significant if the order were revoked. We note that the significant likely volume of HDAN from Ukraine would displace domestic HDAN production as well as non-subject imports from the U.S. market. The HDAN industry in Ukraine is significantly larger than *** and has significantly greater production and export volumes. CR, PR at Table IV-4. Moreover, the HDAN industry in Ukraine has ***. CR, PR at Table IV-10. Also, the Commission found in the original investigation that subject imports significantly undersold the U.S. product and that AUVs for Ukrainian imports were lower than AUVs for non-subject imports during the POI, when Ukrainian imports took market share from the domestic industry. USITC Pub. 3448 at 9-10, 13, 16. We would expect similar volume effects today, and the effects of such significant additional subject HDAN in the U.S. market would significantly adversely impact the domestic industry.

D. Likely Price Effects of Subject Imports

In evaluating the likely price effects of subject imports if the antidumping duty order is revoked, 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.[117]

In the original investigation, the Commission found that subject imports undersold the domestic like product by large margins and in all but one quarter.[118] Given the substitutability of Ukrainian and domestically produced ammonium nitrate and the importance of price in purchasing decisions, the Commission concluded that the underselling by subject imports was significant. Numerous instances of confirmed lost sales and lost revenue allegations supported this conclusion.[119]

The Commission further found that ammonium nitrate prices declined between 1997 and 1999, when there was little Ukrainian product in the U.S. market. In 2000, as injurious levels of Russian ammonium nitrate exited the U.S. market, a significant volume of subject imports from Ukraine surged into the U.S. market. Prices for ammonium nitrate in the U.S. market generally were higher in 2000 than in 1999 but, the Commission noted, prices did not recover to meet unprecedented production costs, driven by natural gas price increases, and the industry experienced a cost-price squeeze. Even though rising prices after the entry into force of the suspension agreement on imports of ammonium nitrate from Russia allowed domestic producers to pass on at least some of their increasing costs, the price increases were not sufficient to return domestic prices to profitable levels. The Commission concluded that subject imports suppressed price increases that otherwise would have occurred to a significant degree.[120]

In the instant review, the record shows that price remains an important factor in purchasing decisions for this commodity product and that domestically produced ammonium nitrate and ammonium nitrate from Ukraine remain substitutable products.[121] The record also shows that under the discipline of the antidumping duty order, there were no imports of ammonium nitrate from Ukraine during the period of review, and thus no pricing data are available for subject imports.[122]

During the period of review, U.S. producers' net quarterly f.o.b. selling prices for HDAN and their net quarterly purchase prices for natural gas followed similar trends. The HDAN quarterly selling price began at $151.19 per short ton during January-March 2001, then generally decreased to a period low of $99.91 per short ton by October-December 2002, while the purchase price of natural gas reached a period low of $*** per MMBtu by July-September 2002.[123] The HDAN selling price then generally increased and *** $*** per short ton by January-March 2006, while the purchase price of natural gas *** of $*** per MMBtu by October-December 2005. The HDAN selling price then decreased to end the

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[117] 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.

[118] USITC Pub. 3448 at 12. Subject imports from Ukraine undersold the domestic like product in *** comparisons at margins often exceeding *** percent. Original Investigation, Confidential Staff Report at Tables V-1-V-2.

[119] USITC Pub. 3448 at 11-12 & n.66.

[120] USITC Pub. 3448 at 12-13.

[121] CR, PR at Tables II-3-II-4.

[122] CR, PR at Table IV-1.

[123] CR, PR at Tables V-1-2 & Figure V-5.

period at $*** per short ton during October-December 2006.[124] U.S. shipment AUVs of non-subject imports were *** U.S. producers' shipment AUVs throughout the period.[125]

High prices in the U.S. market contribute to making it an attractive market for global competition from HDAN imports. As noted above, price comparisons between U.S. and non-U.S. markets consistently show HDAN commanding higher prices in the U.S. market.[126] Moreover, Ukrainian producers of HDAN have had access to lower-priced natural gas throughout the period of review, with purchase prices below $*** per MMBtu through much of the period before increasing late in the period to approximately $*** per MMBtu.[127] Ukrainian producers' reported natural gas purchase prices averaged $2.07 per MMBtu during the period of review as compared to $*** per MMBtu for U.S. producers.[128]

Existing infrastructure and market conditions in the United States, as well as competitive pressure in the Ukrainian home market and other export markets, would readily facilitate a significant increase in HDAN import volumes from Ukraine. The global trading companies that would transport and sell Ukrainian HDAN in the U.S. market would have a financial incentive to undercut prevailing U.S. price levels, and Ukrainian producers will likely sell at prices that will enable trading companies to do so. During 2000, when HDAN imports from Ukraine surged into the U.S. market, they undersold U.S. producers and non-subject imports by $*** per short ton and $*** per short ton, respectively.[129] There is no evidence to suggest that trading companies will exercise self-discipline in response to revocation of the order. The large volumes of HDAN available from Ukraine at attractive margins will likely lead trading companies, as they did in 2000, to bring in as much subject product as they can as quickly as possible.

Given the significant likely volume of imports, the importance of price in the AN market, the substitutability of subject imports and the domestic like product, the price effects of low-priced subject imports in the original investigation, and the incentive that exists for subject imports to enter the U.S. market, we find a likelihood of significant negative price effects from the subject imports. We conclude that, if the antidumping duty order were revoked, significant volumes of subject imports from Ukraine likely would significantly undersell the domestic like product. Since ammonium nitrate is a bulk commodity product, those volumes would likely have a depressing or suppressing effect on domestic prices.

E. Likely Impact of Subject Imports

In evaluating the likely impact of imports of subject merchandise if the antidumping duty order is revoked, 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: (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

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[124] CR, PR at Tables V-1-2 & Figure V-5. We note that the total cost of goods sold (COGS), which includes raw materials, direct labor, and other factory costs, declined overall as a ratio to net sales from 2001 to 2006. CR, PR at Table III-8.

[125] CR, PR at Table C-1. The record contains no specific pricing information by country of origin. See PR at V-18-V-21, PR at V-9-V-11 (comments of producers and importers regarding U.S. prices).

[126] CR at V-21-V-22, PR at V-12; CR, PR at Figure V-3.

[127] CR, PR at Figure V-3.

[128] CR at V-7, PR at V-3.

[129] Original Investigation, Confidential Staff Report at Tables IV-1-IV-2.

product.[130] 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.[131] 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 antidumping duty order and whether the industry is vulnerable to material injury if the antidumping duty order is revoked.[132]

In the original investigation, the Commission found that unfairly traded imports of ammonium nitrate from Ukraine prevented the domestic industry from recovering from its already injured condition at the end of 1999 and impeded the domestic industry's ability to respond to the rapid and unprecedented increases in natural gas costs that occurred in 2000 and early 2001. A number of domestic industry performance indicators declined throughout the POI and, importantly, continued to decline in 2000. While capacity increased marginally during the POI, production and capacity utilization decreased significantly. The record showed that, rather than accept lower prices to maintain market share and continue production at higher capacity utilization levels, several producers stopped producing ammonium nitrate for extended periods due to the presence of low-priced subject imports and increasing gas costs. One producer ceased production, another filed for bankruptcy, and two additional plants were acquired by another producer, but only one of these remained in operation at the end of the POI.[133]

Domestic producers' shipments and net sales quantities declined during the POI, attributable to competition from lower-priced Ukrainian product not only during the regular planting season, but also during the domestic industry's off-season, fall-fill period. The domestic industry experienced operating losses in 1999 and 2000.[134] Employment, wages, and worker productivity all fell during the POI. Capital expenditures declined dramatically, and at least three producers reported that they were having, or anticipated having, difficulty raising capital to finance needed improvement projects.[135]

The Commission found that these performance declines were attributable to the significant volume increases of ammonium nitrate imports from Ukraine and their significant negative price effects, all of which were directed at a domestic industry that had not yet fully recovered from the injury previously inflicted by unfairly traded imports of ammonium nitrate from Russia. The Commission thus concluded that subject imports had had a significant adverse impact on the domestic industry.[136]

While several domestic producers have ceased production, shrinking the size of the industry, we find that the domestic industry experienced a steady improvement of its condition in several respects after issuance of the antidumping duty order. During the original investigation, the AUV of domestic

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[130] 19 U.S.C. § 1675a(a)(4).

[131] 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Act states that "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887. In the final results of its expedited investigation, Commerce found that revocation of the antidumping duty order on subject imports from Ukraine would likely lead to continuation or recurrence of dumping at the rate of 156.29 percent for J.S.C. "Concern" Stirol and all others. 71 Fed. Reg. at 70509. Commerce has not issued a duty absorption determination with respect to this order.

[132] 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.

[133] USITC Pub. 3448 at 14-15.

[134] USITC Pub. 3448 at 15.

[135] USITC Pub. 3448 at 16.

[136] USITC Pub. 3448 at 16.

producers' shipments reached a low of approximately $103 per short ton in 1999, but it has since exceeded that level in every year and consistently increased, except in 2002.[137] Although the domestic industry's condition initially worsened after imposition of the order, this financial decline was attributable in large part to the lingering effects of unfairly traded Ukrainian imports that entered the U.S. market in 2000 but remained in the distribution system through the 2001 spring season, at the same time that natural gas prices were spiking.[138] Beginning in 2002, the domestic industry experienced a steady increase in profitability and, in 2006, a much smaller industry experienced ***.[139] As a result of relief from unfairly traded imports from Russia and Ukraine, the remaining U.S. producers have been able to *** and have experienced financial improvement despite the pressures of contracting demand and high natural gas prices.[140]

The industry, however, which at present consists of El Dorado and Terra, remains vulnerable to material injury if the order is revoked. Structural changes during the period of review resulting from the imposition of security measures that increased costs to produce, store, and transport HDAN in the U.S. market contribute to that vulnerability. Such measures will only continue or increase for this significantly regulated market. In addition, volatile and generally high natural gas costs during the period of review, conditions that are expected to continue, contribute to the industry's ongoing vulnerability. Finally, contracting U.S. demand for HDAN also leaves the industry vulnerable. Although the domestic industry is attempting to adjust to this vulnerability by downsizing and switching to producing other products, such as LDAN, the industry's condition is such that its *** and was achieved at the cost of shuttering higher-cost capacity and reducing employment.

Based on the record in this review, we conclude that revocation of the antidumping duty order would likely lead to a significant increase in the volume of subject imports that would significantly undersell the domestic like product and would significantly suppress or depress U.S. prices. We find that these volume and price effects of the subject imports would have an adverse impact on the production, shipments, sales values, employment, and market share of the domestic industry and would necessarily have a significant adverse impact on the likely revenues of the domestic industry. These reductions, in turn, would have a direct adverse impact on the industry's profitability as well as its ability to raise capital and to make and maintain necessary capital investments.[141] Accordingly, we conclude that, if the antidumping duty order were revoked, subject imports would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

CONCLUSION

For the above-stated reasons, we determine that revocation of the antidumping duty order on ammonium nitrate from Ukraine would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

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[137] CR, PR at Table I-1.

[138] COFANT Posthearing Brief Exh. 1 at 45 & Exh. 15.

[139] CR, PR at Table I-1.

[140] CR, PR at Tables I-1, I-7, V-2.

[141] COFANT's attempt to quantify the impact of revocation relies upon economic modeling that we do not credit. See, e.g., COFANT Prehearing Brief Exh. 23. All of the inputs are based on outdated trade data that are not reflective of current trade conditions. Moreover, the COMPAS model in general is a short-run, static-equilibrium model that estimates domestic market and import conditions that could exist if unfair imports were not in the U.S. market. The model estimates these data for a specific year, based on actual data and suggested elasticities for that specific year. Frequently, as here, the level of subject imports is so low (or zero) that the model's counterfactual results are not useful.

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On August 1, 2006, the Commission gave notice, pursuant to section 751(c) of the Tariff Act of 1930 (the Act), that it had instituted a review to determine whether revocation of the antidumping duty order on certain (high density) ammonium nitrate ("HDAN") from Ukraine would likely lead to the continuation or recurrence of material injury to a domestic industry. Effective November 6, 2006, the Commission determined that it would conduct a full review pursuant to section 751(c)(5) of the Act. Information relating to the background and schedule of the review is provided in the following tabulation.[1]

Effective date	Action
September 12, 2001	Commerce's antidumping duty order (66 FR 47451, September 12, 2001)
August 1, 2006	Commission's institution of review (71 FR 43516, August 1, 2006)
November 6, 2006	Commission's decision to conduct a full review (71 FR 67366, November 21, 2006)
December 5, 2006	Commerce's final results of expedited review (71 FR 70508, December 5, 2006)
December 8, 2006	Commission's scheduling of the review (71 FR 75579, December 15, 2006)
April 17, 2007	Commission's hearing[1]
June 6, 2007	Commission's vote
June 19, 2007	Commission's determination transmitted to Commerce
[1] App. B is a list of witnesses who appeared at the hearing.	

The Original Investigation

On October 13, 2000, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured and threatened with material injury by reason of dumped imports of certain ammonium nitrate from Ukraine.[2] On July 25, 2001, Commerce made a final affirmative dumping determination, with weighted-average margins as follows: J.S.C. "Concern" Stirol, 156.29 percent and all others, 156.29 percent. The Commission made its final affirmative injury determination in August 2001 and Commerce issued an antidumping duty order on September 12, 2001.

[1] The Commission's notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy appear in app. A and may also be found at the Commission's web site (internet address *www.usitc.gov*). Commissioners' votes on whether to conduct an expedited or full review may also be found at the web site.

[2] The petition was filed by the ad hoc Committee for Fair Ammonium Nitrate Trade ("COFANT") including Air Products & Chemicals, Inc. ("Air Products"), Allentown, PA; El Dorado Chemical Co. ("El Dorado"), Oklahoma City, OK; LaRoche Industries, Inc. ("LaRoche"), Atlanta, GA; Mississippi Chemical Corp. ("MCC"), Yazoo City, MS; and Nitram, Inc. ("Nitram"), Tampa, FL. On November 1, 2000, El Dorado acquired the LaRoche nitrogen plants at Crystal City, MO, and Cherokee, AL.

Previous Investigations

The subject product was included in an investigation of all ammonium nitrate that the Commission instituted on April 27, 1998. This investigation, No. 332-393, was instituted under section 332(g) of the Tariff Act of 1930 in response to a request from the Committee on Finance of the U.S. Senate. The results are contained in USITC Publication 3135 (October 1998): *Ammonium Nitrate: A Comparative Analysis of Factors Affecting Global Trade.* Further, on July 23, 1999, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of dumped imports of certain ammonium nitrate from Russia.[3] On May 19, 2000, before the Commission reached a final determination, Commerce entered into a suspension agreement with Russia and suspended the antidumping investigation. On June 29, 2000, the petitioners requested a continuation of the investigation and both Commerce and the Commission resumed their investigations. On July 11, 2000, Commerce made a final affirmative dumping determination, with margins as follows: 253.98 percent *ad valorem* for JSC Azot Nevinnomyssk ("Nevinka") and Russia-wide. Critical circumstances were found also with respect to Nevinka and Russia-wide. The Commission made its final affirmative injury determination on August 14, 2000, and also determined that critical circumstances did not exist with respect to the subject imports. Commerce did not issue an antidumping duty order because of the suspension agreement. On March 31, 2005, the Commission gave notice, pursuant to section 751(c) of the Tariff Act of 1930 (the Act), that it had instituted a review to determine whether termination of the suspended investigation on certain ammonium nitrate from Russia would likely lead to the continuation or recurrence of material injury to a domestic industry. Effective July 5, 2005, the Commission determined that it would conduct a full review pursuant to section 751(c)(5) of the Act. In March 2006, the Commission determined that termination of the suspended investigation on ammonium nitrate from Russia would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.[4] In April 2006, Commerce ordered the continuation of the suspension agreement and of the suspended antidumping duty investigation on ammonium nitrate from Russia.[5]

Summary Data

Table I-1 presents a summary of data from the original investigation and from this review.

[3] The petition was filed by Air Products, MCC, El Dorado, Nitram, LaRoche, and Wil-Gro Fertilizer, Inc. ("Wil-Gro"), Celina, TX.

[4] 71 FR 16177, March 30, 2006.

[5] 71 FR 17080, April 5, 2006.

Table I-1
HDAN: Summary data from the original investigation and the current review, 1998-2000 and 2001-06

(Quantity=*short tons*; value=*1,000 dollars*; unit values, unit labor costs, and unit financial data are *per short ton*)

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
U.S. consumption quantity: Amount	2,381,218	2,555,054	2,305,727	1,888,260	2,034,755	2,162,963	1,890,360	1,504,608	***
Producers' share[1]	82.3	78.9	78.4	73.8	76.2	64.8	68.5	71.1	***
Importer's share: Ukraine[1]	***	***	***	0.0	0.0	0.0	0.0	0.0	***
All other countries[1]	***	***	***	26.2	23.8	35.2	31.5	28.9	***
Total imports[1]	17.7	21.1	21.6	26.2	23.8	35.2	31.5	28.9	***
U.S. consumption value: Amount	278,332	253,871	261,796	263,846	230,117	326,164	326,558	314,899	***
Producers' share[1]	85.6	81.7	83.6	73.2	76.5	65.8	68.8	69.9	***
Importer's share: Ukraine[1]	***	***	***	0.0	0.0	0.0	0.0	0.0	***
All other countries[1]	***	***	***	26.8	23.5	34.2	31.2	30.1	***
Total imports[1]	14.4	18.3	16.4	26.8	23.5	34.2	31.2	30.1	***
Shipments of U.S. imports from-- Ukraine:									
Quantity	***	***	***	0	0	0	0	0	0
Value	***	***	***	0	0	0	0	0	0
Unit value	$***	$***	$***	([2])	([2])	([2])	([2])	([2])	([2])
All other countries:									
Quantity	***	***	***	494,848	484,658	760,971	595,790	434,571	667,781
Value	***	***	***	70,619	54,008	111,453	102,044	94,918	157,481
Unit value	$***	$***	$***	$142.71	$111.44	$146.46	$171.28	$218.42	$235.83
All countries:									
Quantity	421,429	540,200	498,582	494,848	484,658	760,971	595,790	434,571	667,781
Value	40,011	46,363	42,918	70,619	54,008	111,453	102,044	94,918	157,481
Unit value	$94.94	$85.83	$86.08	$142.71	$111.44	$146.46	$171.28	$218.42	$235.83

Table continued on next page.

Table I-1--*Continued*
HDAN: Summary data from the original investigation and the current review, 1998-2000 and 2001-06

(Quantity=*short tons*; value=*1,000 dollars*; unit values, unit labor costs, and unit financial data are *per short ton*)

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
U.S. producers'-- Capacity quantity	2,585,210	2,673,064	2,666,251	2,047,578	2,039,125	2,074,340	2,050,042	1,747,368	***
Production quantity	2,126,197	1,970,942	1,679,379	1,432,727	1,581,114	1,368,676	1,282,263	1,066,799	***
Capacity utilization[1]	82.2	73.7	63.0	70.0	77.5	66.0	62.5	61.1	***
U.S. shipments: Quantity	1,959,789	2,014,854	1,807,145	1,393,412	1,550,097	1,401,992	1,294,570	1,070,037	***
Value	238,321	207,508	218,878	193,227	176,109	214,711	224,514	219,981	***
Unit value	$121.61	$102.99	$121.12	$138.67	$113.61	$153.15	$173.43	$205.58	***
Ending inventory quantity	352,614	247,435	97,376	105,499	104,719	65,491	42,963	***	***
Inventories/total shipments[1]	***	***	***	***	***	***	***	***	***
Production workers	426	422	389	293	290	287	277	179	***
Hours worked (*1,000 hours*)	942	927	852	658	664	636	604	378	***
Wages paid (*1,000 dollars*)	18,833	18,841	17,442	13,898	14,505	13,914	13,870	8,707	***
Hourly wages	$19.99	$20.33	$20.48	$21.12	$21.84	$21.88	$22.96	$23.03	***
Productivity (*short tons per 1,000 hours*)	2,257.1	2,126.4	1,873.6	***	***	***	***	***	***
Net sales: Quantity	1,996,912	2,039,952	1,821,094	***	***	***	***	***	***
Value	240,189	208,916	219,625	***	***	***	***	***	***
Unit value	$120.28	$102.41	$120.60	***	***	***	***	***	***
Cost of goods sold	203,688	201,592	209,720	***	***	***	***	***	***
Gross profit or (loss)	36,501	7,324	9,905	***	***	***	***	***	***
Operating income or (loss)	16,826	(8,258)	(5,510)	***	***	***	***	***	***
Unit cost of goods sold	$102.00	$98.82	$115.16	***	***	***	***	***	***
Unit operating income or (loss)	$8.43	($4.05)	($3.03)	***	***	***	***	***	***
Cost of goods sold/sales[1]	84.8	96.5	95.5	***	***	***	***	***	***
Operating income or (loss)/sales[1]	7.0	(4.0)	(2.5)	***	***	***	***	***	***

[1] In *percent*.
[2] Not applicable.

Source: Compiled from data submitted in response to Commission questionnaires and from adjusted official Commerce statistics obtained in the original investigation.

Statutory Criteria and Organization of the Report

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation "would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury."

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

> *(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--*
>
> *(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,*
>
> *(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,*
>
> *(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and*
>
> *(D) in an antidumping proceeding . . ., (Commerce's findings) regarding duty absorption . . ..*
>
> *(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--*
>
> *(A) any likely increase in production capacity or existing unused production capacity in the exporting country,*
>
> *(B) existing inventories of the subject merchandise, or likely increases in inventories,*
>
> *(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and*
>
> *(D) 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.*
>
> *(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--*
>
> *(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and*

(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to--

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

(C) 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.

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement."

Information obtained during the course of the review that relates to the above factors is presented throughout this report. A summary of data collected in the review is presented in appendix C. U.S. industry data are based on questionnaire responses of five firms that accounted for virtually all of U.S. production of agricultural grade HDAN during 2001-06. U.S. import data are based on questionnaire responses of 10 importers of HDAN from all other sources.[6] Responses by U.S. producers, importers, and purchasers of HDAN and producers of HDAN in Ukraine to a series of questions concerning the significance of the existing antidumping duty order and the likely effects of revocation are presented in appendix D.

COMMERCE'S RESULTS OF EXPEDITED REVIEW

On December 5, 2006, Commerce found that revocation of the antidumping duty order on "solid agricultural grade ammonium nitrate" from Ukraine would likely lead to continuation or recurrence of dumping. Table I-2 presents the margins calculated by Commerce in its original investigation and this review.[7]

[6] There were no imports of HDAN from Ukraine during the period for which data were collected.

[7] Commerce's notice is presented in app. A.

Table I-2
HDAN: Commerce's original and five-year review antidumping duty margins for producers/exporters from Ukraine

Producers/exporters	Original margin (*percent*)	Five-year review margin (*percent*)
J.S.C. "Concern" Stirol	156.29	156.29
All others	156.29	156.29

Source: Antidumping duty order, 66 FR 47451, September 12, 2001, and final results of first expedited review, 71 FR 70508, December 5, 2006.

Commerce has not issued a duty absorption determination with respect to this order.

COMMERCE'S ADMINISTRATIVE REVIEWS

Commerce completed no antidumping duty administrative reviews for solid agricultural grade ammonium nitrate from the Ukraine.

DISTRIBUTION OF CONTINUED DUMPING AND SUBSIDY OFFSET ACT FUNDS

The Continued Dumping and Subsidy Offset Act of 2000 ("CDSOA") (also known as the Byrd Amendment) provides that assessed duties received pursuant to antidumping or countervailing duty orders must be distributed to affected domestic producers for certain qualifying expenditures that these producers incur after the issuance of such orders.[8] During the review period, qualified U.S. producers of HDAN were eligible to receive disbursements from U.S. Customs and Border Protection ("Customs") under CDSOA relating to the antidumping duty order on the subject product beginning in Federal fiscal year 2001.[9] No antidumping duties were paid during 2001-06, so there were no disbursements of CDSOA funds for ammonium nitrate from Ukraine since the passing of the Byrd Amendment in 2001.

THE SUBJECT PRODUCT

According to Commerce's scope, the imported product subject to the antidumping order under review is defined by Commerce as follows:

> "*Solid, fertilizer grade ammonium nitrate ("ammonium nitrate" or "subject merchandise") products, whether prilled, granular or in other solid form, with or without additives or coating, and with a bulk density equal to or greater than 53 pounds per cubic foot. Specifically excluded from this scope is solid ammonium nitrate with a bulk density less than 53 pounds per cubic foot (commonly referred to as industrial or explosive grade ammonium nitrate). The merchandise subject to this investigation is classified in the Harmonized Tariff Schedule of the United States ("HTSUS") at subheading 3102.30.00.00. HTSUS subheadings are provided for convenience and customs purposes. The written description of the scope of the order is dispositive.*"[10]

[8] Section 754 of the Tariff Act of 1930, as amended (19 U.S.C. § 1675(c)).

[9] 19 CFR 159.64 (g).

[10] 71 FR 70508, December 5, 2006.

U.S. Tariff Treatment

Imports of this product are classifiable under Harmonized Tariff Schedule of the United States ("HTS") subheading 3102.30.00 as set forth in the following tabulation:

HTS provision	Article description	General[1]	Special[2]	Column 2[3]
		Rates *(percent ad valorem)*		
3102	Mineral or chemical fertilizers, nitrogenous:			
3102.30.00	Ammonium nitrate, whether or not in aqueous solution	Free	([2])	Free

[1] Normal trade relations, formerly known as the most-favored-nation duty rate, applicable to Ukraine.
[2] No special rates apply to imports of ammonium nitrate from certain trading partners to the United States.
[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 (2007).

Physical Characteristics and Uses

In its purest form, ammonium nitrate ("AN") is a white crystalline solid inorganic compound containing 35 percent N by weight, which melts at 337 degrees Fahrenheit, and is highly soluble in water. The product is synthesized from ammonia and nitric acid, and has the chemical composition NH_4NO_3. Commercial grade AN is produced in three major forms: (1) subject high-density fertilizer grade HDAN;.[11] (2) non-subject low-density industrial explosives grade LDAN;[12] and (3) nonsubject molten AN synthesis solution (75-89 percent AN).[13] Synthesis solution is sold commercially for use in emulsion explosives and for other industrial applications.[14] It is also used in the production of urea ammonium nitrate ("UAN") fertilizer solutions.

HDAN, which is the product covered by the scope of this review and was also the domestic like product found by the Commission in the original investigation, is produced in the United States predominately as spherical fertilizer prills averaging about 2.4 millimeters,[15] with a guaranteed minimum analysis of 34 percent plant available N by weight, equally divided between ammonium (NH_4^+) nitrogen and nitrate (NO_3^-) nitrogen.[16] [17] The nitrate form is fast-acting and becomes immediately available to

[11] HDAN is also known as "34-0-0," referring to the percent of the individual nutrients in the formulation (34 percent nitrogen by weight with no added phosphorus or potassium, respectively). In comparison, the nonsubject product NP 33-3-0 has 33 percent nitrogen by weight and a phosphorus content of at least 3 percent. USITC Publication 3844, *Ammonium Nitrate from Russia, Inv. No. 731-TA-856 (Review)* March 2006, p. I-10.

[12] The addition of approximately 6 percent fuel oil to the more porous LDAN sensitizes the product to detonate via an initiator, e.g., blasting caps.

[13] *Material Safety Data Sheet, MSDS No. 2005,* U.S. producer Terra, December 7, 2006 (http://www.terraindustries.com, retrieved March 9, 2007).

[14] Selected other industrial uses of AN synthesis solution reportedly include ***. ***.

[15] *Standard Sales Specification,* Terra Nitrogen (UK) Limited, February 5, 2001 (http://www.terraindustries.com, retrieved March 9, 2007).

[16] Granular HDAN, an irregularly shaped particle typically produced by the drum granulation process, was formerly produced in the United States by ***. Blue, Johnson and Associates, Inc., September 12, 2006.

[17] Ukrainian HDAN product was variably reported as prills and granular product. *** mentioned granular product produced in towers, which would imply prills. *** specifically mentioned prills. *** referred to granular

(continued...)

fertilized plants, while the ammonium form is slower acting. The product contains magnesium oxide (MgO), an internal stabilizing agent which adds strength and integrity to the prills, and prevents product degradation which may occur via expansion and contraction of the crystal structure at given ambient temperatures, especially around 90 degrees Fahrenheit. The prills may also be lightly coated with an external conditioning agent which prevents atmospheric moisture absorption and provides for free-flowing, anti-caking characteristics, as HDAN tends to be hygroscopic (subject to moisture uptake). Uncoated HDAN product is also used to a limited extent in cased or packaged explosives and emulsions, and in selected specialty industrial markets.[18] [19] HDAN by itself is a relatively benign compound, but the product is a strong oxidizer which contains its own oxygen for burning, and which will support the combustion of given materials under the proper conditions. Therefore, it is important to prevent the contamination of the product with oxidizable organic materials such as fuel oil and other hydrocarbons which may potentially create fires and also cause HDAN to decompose and detonate. Charcoal, wood chips, chlorates, nitrated compounds, finely divided metals, acids, phosphorus, and sulfur should also be avoided.[20] [21]

HDAN is a specialty niche market nitrogen fertilizer that continues to be favored in selected applications, although its use has declined during recent years. HDAN may be used by itself for crop fertilization, or bulk blended with phosphorus ("P") and potassium ("K") to produce N-P-K bulk blends.[22] The product is fast-acting because its nitrate form is an immediate source of plant-available nitrogen, while its ammonium form is converted more slowly to nitrate in the soil, and continues to feed the plant for a relatively prolonged period. The product is popularly used for direct application to the soil surface on pasture grass and for hay production in the warmer, more humid southern-tier regions of the country where rapid growth and protein development are paramount for the feeding of cattle, and where nitrogen losses to the atmosphere via volatilization are minimized, especially compared to solid urea, a higher N analysis fertilizer.[23] It is also popular for direct soil surface application to vegetables and citrus crops where multiple crops are produced and where rapid growth is important, and also to traditional row crops:

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[17] (...continued)
product produced in prilling towers, which would imply prills. *** referred to granular product, but did not provide details regarding in what form it was produced. Product specifications, e.g., particle size, etc., were not disclosed. Producers variably reported the incorporation of MgO stabilizer and surface conditioning agents, similar to that contained in U.S. product. Foreign producer questionnaire responses (section II-5).

[18] El Dorado's E-2 (high-density) ammonium nitrate reportedly remains the industry standard in packaged explosive materials because of its density, purity, and ability to withstand degradation during storage. These same purity and storage qualities, as well as excellent solubility, make it ideal for the specialty industrial markets (http://www.eldoradochemical.com, retrieved February 27, 2007).

[19] *** of uncoated HDAN is reportedly sold *** for use in emulsion explosives. ***.

[20] *Fertilizer Manual*, United Nations Industrial Development Organization (UNIDO), Vienna, Austria, and International Fertilizer Development Center (IFDC) Muscle Shoals, AL, 1998, pp. 220-226.

[21] *Material Safety Data Sheet, MSDS No. 004*, Terra (http://www.terraindustries.com, retrieved March 9, 2007).

[22] El Dorado's E-2 ammonium nitrate prills are developed to meet the needs of the fertilizer industry's bulk blenders. Its high density is comparable to the weight and shape of the potassium and phosphorus components, allowing for easier mixing and reduced separation during transportation to the farmer's field (http://www.eldoradochemical.com, retrieved March 5, 2007).

[23] When urea is applied to a dry soil surface under hot, humid conditions, urease soil enzyme rapidly hydrolyzes urea to volatile ammonia and gaseous carbon dioxide unless there is rainfall within a short period of time. For this reason, urea is typically plowed down, or surface-applied predominately in more temperate climates.

corn, wheat, cotton, milo, and tobacco, for example, that may be cultivated under no-till applications rather than to traditional plow-down.[24]

Drawbacks of HDAN are its higher cost per unit N compared to the more widely available higher analysis solid urea (46 percent N) and to the versatile UAN solutions of similar analysis range (28-32 percent N).[25] No known new HDAN plants of significance have been built globally in several years, while new urea and UAN plants continue to be built and proliferate outside the United States. Other factors are the rapid growth in U.S. LDAN demand, and security issues.[26] [27]

Manufacturing Processes and Channels of Distribution

The HDAN manufacturing process in the United States is similar for the two current producers, El Dorado and Terra, as both produce prilled products. Product is also moved similarly to downstream warehouses or other facilities in 1,500 short ton capacity barges, 100 ton rail cars, and 25 ton trucks. El Dorado's HDAN is sold under the E-2 trade name, while Terra's product is sold under the Amtrate® registered trade mark. The products are believed to be interchangeable for most applications.

A typical ammonium nitrate synthesis scheme involves the chemical reaction of ammonia with nitric acid in four basic steps: (1) ammonia synthesis; (2) nitric acid synthesis; (3) ammonium nitrate synthesis solution production and concentration; and (4) prilling and finishing. Ammonia may be synthesized onsite, or purchased. Terra produces its ammonia onsite, ***.

The basic HDAN process is initiated by the production of anhydrous ammonia (NH_3), formed by the reaction of hydrogen–stripped from natural gas feedstock–with nitrogen from the air, under conditions of high temperature and pressure. In a second section of the plant, nitric acid (HNO_3) is produced by transforming ammonia into nitrogen oxides via passage over a platinum gauze catalyst under high temperature and pressure, and dissolving in water to produce a 57-63 percent nitric acid solution. In a third section of the plant, ammonium nitrate synthesis solution (85-90 percent AN) is produced by reacting the nitric acid solution with ammonia in a neutralizer vessel. Next, magnesium oxide (MgO) stabilizer is injected into the molten ammonium nitrate synthesis solution before it is concentrated to a 99-percent AN melt and pumped to the top of a multistory prilling tower where AN is sprayed out into spherical droplets. As the molten droplets fall downward through the tower in a countercurrent upward flow of air, they cool and solidify by the time they hit the base of the tower. The product is further cooled at the base of the tower and then may be coated with moisture-inhibiting conditioner in a rotating drum before screening to size. Alternately, granular HDAN may be produced in some plants by spraying

[24] ***'s U.S. producer questionnaire response (sections IV-B-14; IV-B-16) and ***'s U.S. producer questionnaire response (sections IV-B-11; IV-B-14).

[25] UAN solutions are more versatile due to the fact that herbicides and pesticides can be incorporated and distributed with the fertilizer in one pass over the field, and also potentially because of more uniform application.

[26] ***. ***'s U.S. producers' questionnaire response (sections II-2, II-3a, and II-3b).

[27] Terra has modified one of its HDAN prill towers to alternately produce LDAN, principally because of a supply contract for LDAN and synthesis solution with Orica. Terra press release, July 22, 2005 (http://www.terraindustries.com, retrieved March 5, 2007).

molten AN into a rotating drum, pan, or fluid bed granulator.[28] HDAN may also be derived from the nitrophosphate process by reacting precipitated calcium nitrate with ammonia and carbon dioxide to yield AN and calcium carbonate byproduct. Prilled or granular HDAN is produced from concentrated AN following the removal of calcium carbonate. *** reportedly produces granular HDAN by this process in ***.[29]

DOMESTIC LIKE PRODUCT ISSUES

In the original investigation, the Commission found a single domestic like product consisting of high-density ammonium nitrate (also referred to as HDAN), coextensive with the scope of subject merchandise as solid fertilizer grade ammonium nitrate products with a bulk density equal to or greater than 53 pounds per cubic foot.[30] In response to a question soliciting comments regarding the appropriate domestic like product in the Commission's notice of institution of this review, COFANT agreed with the definitions of domestic like product and domestic industry stated in the Commission's Notice of Institution.[31]

There are no known domestic like product issues. LDAN could potentially be substituted for HDAN as it is produced by a similar process and has the same relative nitrogen content. However, LDAN is more porous and friable, and more susceptible to product degradation than HDAN. Also, LDAN is heavily regulated by federal agencies such as the Bureau of Alcohol, Tobacco, Firearms, and Explosives ("ATFE"). Unlike HDAN, a potential buyer must present a certified explosives license to a qualified distributor to gain access to the product.[32] Solid urea is a potential substitute for direct application HDAN on pasture and hay and other no-till crops in more temperate climates, but the product is subject to significant volatilization losses on dry soil and in the warm, humid southern-tier climates where HDAN continues to be the product of choice.[33] Additionally, solid HDAN and urea are incompatible, and cannot be bulk-blended because of their combined propensity to absorb atmospheric moisture and go into solution under ambient conditions. Furthermore, urea is an organic compound produced from ammonia and carbon dioxide in separate plants, using different equipment and personnel. Urea ammonium nitrate solution ("UAN") is a nonsubject aqueous liquid physical mixture of ammonium nitrate synthesis solution and urea.[34] Thus, it is produced from a nonsubject ammonium nitrate synthesis solution, an intermediate product used in the production of HDAN, and nonsubject urea, which is produced using different process equipment and personnel. Anhydrous ammonia is a high analysis nitrogen fertilizer which is a gas under ambient conditions, and, as such, must be knifed in under the soil using specialty equipment.[35] Its use is largely confined to the midwestern Corn Belt region of the United States. Ammonium sulfate is a solid nitrogen product produced from ammonia and sulfuric acid. It does not contain nitrate nitrogen, has a lower nitrogen content (21 percent N), is acidic in nature, and is manufactured on different process equipment and personnel relative to HDAN. Calcium ammonium

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[28] Process description based on staff industry technical experience and ***.

[29] ***, interview with Commission staff, April 30, 2007.

[30] *Certain Ammonium Nitrate from Ukraine, Inv. No. 731-TA-894 (Final)*, USITC Publication 3448, August 2001, pp. 4-5.

[31] COFANT's Response to Notice of Institution, September 20, 2006, p. 28.

[32] Staff telephone interview with ***.

[33] ***'s U.S. producers' questionnaire response (section IV-B-16, supplement).

[34] UAN is a liquid fertilizer and specialty application equipment is required, which may not be readily available to dry fertilizer dealers. It is more expensive to make mixed fertilizer with UAN solution; losses in warm, humid climates can be significant compared to HDAN. ***'s U.S. producer questionnaire response (section IV-B-16).

[35] ***'s U.S. producer questionnaire response (section IV-B-16).

nitrate ("CAN") is a homogeneous chemically mixed fertilizer product composed typically of slightly less than 80 percent HDAN maximum and 20 percent limestone minimum. CAN contains about 27 percent by weight of plant-available nitrogen.[36] Nonsubject CAN, unlike HDAN, is not a potentially hazardous oxidizer subject to regulation.[37] CAN may be prepared by the direct injection of ground limestone in the AN melt prior to prilling or granulation. Physically mixed bulk blends of solid ammonium nitrate with limestone are not classified as CAN product.[38]

U.S. MARKET PARTICIPANTS

U.S. Producers

According to domestic interested parties,[39] there were two U.S. firms producing HDAN during 2006;[40] the Commission received U.S. producer questionnaire responses from five producers that manufactured HDAN during 2001-06.[41] Relevant information on these firms is presented in table I-3.

Table I-3
HDAN: U.S. producers, production locations, shares of reported 2006 production, positions on continuation of the antidumping duty order, parent companies, and production status in 2006

Producer	Production location(s)	Share of reported production *(percent)*	Position on continuation	Parent company	Production status 2006
Agrium	Homestead, NE Kennewick, WA	***	([1])	Agrium (Canada)	No
Air Products	Pace, FL	***	***	Air Products, Allentown, PA	No
El Dorado	Cherokee, AL El Dorado, AR	***	Support	LSB Industries, Oklahoma City, OK	Yes
Potash Corp.	Augusta, GA	***	***	Potash Corp. of Saskatchewan, (Canada)	***
Terra	Yazoo City, MS	***	Support	Terra Industries, Inc., Sioux City, IA	Yes

[1] In a submission dated February 16, 2007, Agrium stated that ***.

Note.–Although Simplot was noted as a U.S. producer of AN by the International Fertilizer Development Center ("IFDC"), Simplot ***.

Source: Compiled from data submitted in response to Commission questionnaires, except as noted.

The industry has consolidated since the original investigation when eight firms reported AN production. Information on the producers during the original investigation is presented in table I-4.

[36] Domestic interested parties describe CAN as a product containing approximately 80 percent ammonium nitrate and 20 percent calcium/magnesium carbonate (dolomitic limestone), which typically yields a nitrogen content in the finished product in the range of 25 to 28 percent. COFANT's posthearing brief, p. 37.

[37] ***, e-mail correspondence with Commission staff, April 30, 2007.

[38] ***, e-mail correspondence with Commission staff, April 4, 16, and 24, 2007.

[39] Domestic interested parties in this review are El Dorado and Terra, individual members of the Committee for Fair Ammonium Nitrate Trade ("COFANT"), represented by the law firm of Akin Gump Strauss Hauer & Feld LLP.

[40] COFANT's Response to Notice of Institution, September 20, 2006, p. 24.

[41] Of the five, *** also produced LDAN.

Table I-4
HDAN: U.S. producers, production locations, shares of reported 2000 production, positions on the petition, and parent companies

Producer	Production location	Share of reported production *(percent)*	Position on petition	Parent company
Agrium	Homestead, NE	***	Support	Agrium (Canada)
Air Products	Pace Junction, FL	***	Support	Air Products, Pensacola, FL
Coastal Chem	Cheyenne, WY	***[1]	***	Coastal Chem, Houston, TX
El Dorado	El Dorado, AR	***	Support	LSB Industries, Oklahoma City, OK
LaRoche[2]	Cherokee, AL, Crystal City, MO	***	Support	El Dorado[3] Oklahoma City, OK
Mississippi Chemical	Yazoo City, MS	***	Support	Mississippi Chemical, Yazoo City, MS
Nitram	Tampa, FL	***	Support	Nitram was owned by a statewide Florida cooperative of chemical fertilizer producers. The producer with the largest share was *** with a ***-percent share. No other producer had a share greater than *** percent.
PCS Nitrogen	Augusta, GA	***	***	Potash Corp., Canada
Prodica LLC (formerly UNOCAL)	Kennewick, WA	***	Support	Union Oil Co. of California,[4] El Segundo, CA
Wil-Gro	Prior, OK	([5])	([6])	Williard Grain & Feed, Celina, TX

[1] Coastal Chem did not respond to the questionnaire in the final phase of the original investigation; its share of reported production is based on the questionnaire response provided in the preliminary phase of the original investigation.
[2] On October 31, 2000, LaRoche sold its HDAN business to LSB Industries.
[3] El Dorado acquired the LaRoche nitrogen plants at Crystal City, MO and Cherokee, AL on November 1, 2000.
[4] Effective September 30, 2000, Agrium US acquired the fertilizer production assets of Prodica.
[5] Wil-Gro ceased production in December 1999. ***.
[6] Unknown.

Source: Compiled from data submitted in response to Commission questionnaires and from *Certain Ammonium Nitrate from Ukraine (731-TA-894 (Final))–Staff Report*.

Since the original investigation, the industry has contracted, with two producers closing and several acquisitions and capacity reductions. Significant industry events are noted in table I-5.

Table I-5
HDAN Important industry events, 2000-06

Year	Company	Description of event
2000	Wil-Gro	**Closure, capacity loss:** Closed February 2000 after being idle since December 1999.
	Prodica LLC	**Acquisition:** Kennewick, WA facility was acquired by Agrium in October 2000.
	LaRoche	**Bankruptcy, divestiture, ***:** Filed for Chapter 11 bankruptcy protection in May 2000 and sold production facitities in Cherokee , AL, and Crystal City, MO to Orica LLC in August 2000. Subsequently, Orica LLC sold the facilities to LSB Industries (parent company of El Dorado). ***.
2001	Coastal Chem	**Acquisition:** Acquired by El Paso Energy Corp. in January 2001.
	Wil-Gro	**Acquisition:** LSB (parent company of El Dorado) acquired Wil-Gro's Pryor, OK facility; however, it did not restart production.
2003	MCC	**Bankruptcy:** Filed for Chapter 11 bankruptcy protection in May 2003.
	El Paso Energy Corp. (Coastal Chem)	**Acquisition, capacity loss:** Dyno Nobel ASA acquired the HDAN facilities of the former Coastal Chem. HDAN capacity was lost as these facilities now produce LDAN.
	Nitram	**Bankruptcy, closure, capacity loss:** Closed Tampa, FL facility after filing for bankruptcy protection. Capacity permanently lost as facility was liquidated.
2004	MCC	**Acquisition:** Acquired by Terra in December 2004.
	Potash Corp.	**Capacity loss:** Ceased HDAN production in December 2004 in favor of LDAN *** production.
	El Dorado	**Capacity loss:** Production at Cherokee, AL, was shifted from HDAN to UAN.
2005	Agrium	**Capacity loss:** Ceased HDAN production. The Homestead, NE facility will operate as a distribution terminal for ammonia and other nitrogen products and the Kennewick, WA facility will produce nitrogen solutions.
	Air Products	**Capacity loss:** The HDAN plant was decommissioned and dismantled after damage from Hurricanes Ivan (September 2004) and Dennis (July 2005).

Source: *Ammonium Nitrate from Russia*, USITC Publication 3844, April 2006, table I-5, p. I-14; Ammonium Nitrate from Russia–Staff Report, p. I-21; and from responses to Commission questionnaires.

U.S. Importers

Importers' questionnaires were sent to 26 firms identified in proprietary Customs data as importing ammonium nitrate.[42] The importers were importing ammonium nitrate from countries other than Ukraine, as there were no imports from Ukraine since the antidumping duty order in 2001. Ten firms reported imports of HDAN, and six firms reported imports of LDAN. Responding firms' imports of HDAN and LDAN together account for an average of approximately *** percent of the value of official ammonium nitrate import statistics from all other sources for the period for which data were collected (2001-06).[43]

Table I-6
HDAN: U.S. importers, their locations, and their shares of reported U.S. imports in 2006

* * * * * * *

U.S. Purchasers

Purchasers' questionnaires were sent to 27 firms identified as purchasers of HDAN. Twelve of the 13 responding firms reported their HDAN purchases, which totalled 2,366,490 short tons during 2001-06.[44] The largest of these purchasers was ***, which reported purchasing *** short tons of HDAN during the period for which data were collected, but it reported purchases from multiple suppliers and did not know the countries of origin of its HDAN purchases.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table I-7 presents apparent U.S. consumption for the review period and table I-8 presents U.S. market shares for the same period.

[42] In addition, importers' questionnaires were sent to all domestic producers; ***.

[43] Many items other than HDAN enter the United States under HTS subheading 3102.30, such as LDAN, ammonium nitrate synthesis ("ANS") used principally in emulsion explosives, liquid ammonium nitrate in less than 50 percent solution for use in the manufacture of photographic products, mixtures of ammonium nitrate in water used in hot and cold therapy products, and misclassified UAN solutions (HTS subheading 3102.80).

[44] Six of these 12 firms generally did not know the countries of origin of their HDAN purchases and they reported purchases from all suppliers, such that some double-counting is likely.

Table I-7
HDAN: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 1998-2000 and 2001-06

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
Quantity (*short tons*)									
U.S. producers' U.S. shipments	1,959,789	2,014,854	1,807,145	1,393,412	1,550,097	1,401,992	1,294,570	1,070,037	***
U.S. shipments of imports from--									
Ukraine	***	***	***	0	0	0	0	0	0
Other sources	***	***	***	494,848	484,658	760,971	595,790	434,571	667,781
Total imports	421,429	540,200	498,582	494,848	484,658	760,971	595,790	434,571	667,781
Apparent consumption	2,381,218	2,555,054	2,305,727	1,888,260	2,034,755	2,162,963	1,890,360	1,504,608	***
Value (*$1,000*)									
U.S. producers' U.S. shipments	238,321	207,508	218,878	193,227	176,109	214,711	224,514	219,981	***
U.S. shipments of imports from--									
Ukraine	***	***	***	0	0	0	0	0	0
Other sources	***	***	***	70,619	54,008	111,453	102,044	94,918	157,481
Total imports	40,011	46,363	42,918	70,619	54,008	111,453	102,044	94,918	157,481
Apparent consumption	278,332	253,871	261,796	263,846	230,117	326,164	326,558	314,899	***

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

Table I-8
HDAN: U.S. market shares, 1998-2000 and 2001-06

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
Quantity (*short tons*)									
Apparent consumption	2,381,218	2,555,054	2,305,727	1,888,260	2,034,755	2,162,963	1,890,360	1,504,608	***
Value (*1,000 dollars*)									
Apparent consumption	278,332	253,871	261,796	263,846	230,117	326,164	326,558	314,899	***
Share of quantity (*percent*)									
U.S. producers' U.S. shipments	82.3	78.9	78.4	73.8	76.2	64.8	68.5	71.1	***
U.S. shipments of imports from--									
Ukraine	***	***	***	0.0	0.0	0.0	0.0	0.0	***
All other sources	***	***	***	26.2	23.8	35.2	31.5	28.9	***
Total imports	17.7	21.1	21.6	26.2	23.8	35.2	31.5	28.9	***
Share of value (*percent*)									
U.S. producers' U.S. shipments	85.6	81.7	83.6	73.2	76.5	65.8	68.8	69.9	***
U.S. shipments of imports from--									
Ukraine	***	***	***	0.0	0.0	0.0	0.0	0.0	***
All other sources	***	***	***	26.8	23.5	34.2	31.2	30.1	***
Total imports	14.4	18.3	16.4	26.8	23.5	34.2	31.2	30.1	***

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

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

CHANNELS OF DISTRIBUTION AND MARKET CHARACTERISTICS

U.S. producers and importers sold their HDAN primarily to fertilizer distributors, secondarily to fertilizer dealers and blenders, and two U.S. producers, ***, also sold some HDAN for use in explosives during 2001-06.[1] Distributors typically sell HDAN to fertilizer dealers who,[2] in turn, sell to farmers. Dealer facilities are located in farming areas. During 2001-06, responding U.S. HDAN producers reported selling approximately 78.7 percent of the quantity of their U.S. HDAN shipments to distributors and 21.3 percent to dealers and blenders. The responding U.S. importers of HDAN from nonsubject countries[3] reported selling approximately 97.7 percent of the quantity of their U.S. shipments of the imported products to distributors and the remaining 2.3 percent to dealers and blenders during this period.

Currently, two U.S. producers, El Dorado and Terra, produce HDAN and sell their products *** to the U.S. market.[4] During 2001-06, five U.S. producers accounted for most U.S. production of HDAN,[5] but due to several factors, including a combination of volatile and generally high natural gas costs plus increasing costs of handling HDAN due to the introduction of security regulations for the production, transport, and inventory of HDAN, several U.S. producers either switched from producing HDAN to producing other products or closed/sold their facilities. While the number of wholesale HDAN suppliers to the U.S. market appears to have fallen between 2001 and 2006, resulting in increased concentration between these two years, the supply may have become more competitive when taking into consideration the size distribution of sellers. Based on reported U.S. shipments of HDAN from U.S. producers and importers, a Herfindahl (H) index involving the top seven U.S. suppliers fell from 0.2854 in 2001 to 0.2766 in 2006;[6] the H index measures both concentration and size distribution of firms, such that an H

[1] These latter sales were shipped to explosive manufacturers, but such HDAN shipments were not broken out separately from HDAN shipments for fertilizer use. El Dorado reported that its E-2 HDAN remains the industry standard in packaged explosive materials because of its density, purity, and ability to withstand degradation during storage, *http://www.eldoradochemical.com/acmina.html*, retrieved May 14, 2007. ***.

[2] In addition to HDAN and other types of fertilizers, dealers frequently sell seeds, feed, and farm equipment.

[3] There were no reported imports of HDAN from Ukraine during 2001-06.

[4] In 2006, *** accounted for *** percent of the total quantity of U.S. HDAN production and *** accounted for the remaining *** percent. Although there were no U.S. imports of HDAN from Ukraine during 2001-06, imports of HDAN from Russia, the Netherlands, Romania, and Bulgaria have been some of the important sources of foreign supply to the U.S. market during this period.

[5] Mississippi Chemical was *** bought by Terra in November 2004; prior to this purchase, Terra did not produce solid HDAN but produced other types of nitrogenous fertilizers. In all of its U.S. producer questionnaire responses, *** reported for *** U.S.-produced HDAN (***) and *** U.S.-produced HDAN (***) as all *** production. During 2001-06, *** (and ***) accounted for approximately *** percent of the total quantity of U.S.-produced HDAN, *** accounted for *** percent, *** accounted for *** percent, *** for *** percent, and *** for the remaining *** percent (these figures are based on individual firm data reported during the current investigation).

[6] The H index is also expressed in units of 10,000 such that the H index for HDAN fell from 2854 in 2001 to 2766 in 2006. 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).

value of 1 suggests a monopoly and successive values less than 1 and approaching zero suggest increasingly less concentration/more competition.[7]

As the number of U.S. HDAN producers fell to two by 2006, the reported net income for all U.S. HDAN production, which was a net loss each year during 2001-05, ***. *** commented that ***.[8] Purchasers cited first Terra and then El Dorado most frequently as price leaders and one purchaser, ***, asserted that the firms are the first to raise prices and the last to lower prices.[9] A purchaser-importer, ***, asserted that *** and the importer *** are the dominant U.S. price leaders by virtue of their large HDAN production and import quantities, respectively.[10] On the other hand, a purchaser-producer, ***, asserted that *** tend to be aggressive, low-priced sellers of HDAN in the U.S. market because, according to ***, they take small margins and are quick to liquidate a position.[11]

U.S. producers transport HDAN from their plants to their own or their customers' storage/ distribution terminals, typically located in or near farm areas. Imports of HDAN arrive in the United States in ships, with an increasing percentage reportedly entering at Tampa, FL, and Wilmington, NC, ports,[12] in addition to the traditional port for fertilizers, New Orleans, LA. The Mississippi River system serves as an important means for distributing HDAN as a portion of both U.S.-produced and imported HDAN is transported in bulk by barge to storage and distribution locations throughout the Farm Belt.[13] Substantial freight costs relative to product values and the predominance of natural gas as a share of production costs may limit the marketing range of HDAN suppliers; those HDAN suppliers with favorable transportation networks and access to low-cost natural gas/ammonia have an advantage over suppliers subject to high freight rates and using high-cost natural gas/ammonia.

An important characteristic of the U.S. HDAN market has been the volatile and generally high cost of natural gas and ammonia in the United States during 2001-06 and forecasts of a continuation in the future of such price patterns. U.S. HDAN producers' purchase prices of natural gas and/or ammonia to produce HDAN and forecasts of U.S. prices of these inputs are discussed in detail in Part V. Two U.S. purchasers, ***, U.S. distributors and/or dealers of fertilizers, commented on the changes in the U.S. HDAN industry due to high natural gas costs.[14] *** asserted that domestic producers have been shutting down or cutting production due to the high cost of natural gas and the lower cost of imported material.

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[7] A related concentration measure to the H index is the numbers-equivalent (N) measure, which is the reciprocal of the H index (expressed in decimal form), and is a measure of the competitive structure of an industry. N measures the number of equally sized firms that would yield a particular H index. For HDAN, N increased from 3.50 in 2001 to 3.61 in 2006, suggesting that in 2001 it would have required 3.50 equally sized firms to yield the 2001 H index, while in 2006 it would have required 3.61 equally-sized firms to yield the 2006 H index. These N measures suggest that competition may have increased from 2001 to 2006 by the increase in the required number of equally sized firms consistent with the respective H indexes.

[8] *** U.S. producer questionnaire response, section IV-B-34a. ***. *** asserted that recently distributors and dealers outside of key HDAN markets have moved away from handling it due to added safety requirements imposed by the U.S. Coast Guard and state governments. In these areas, according to ***, customers have been forced to use other forms of nitrogen. However, *** asserted that in the key HDAN consuming areas, farmers demand HDAN and distributors and dealers continue to supply it (U.S. producer questionnaire response, section IV-B-16a).

[9] U.S. purchaser questionnaire response, section III-35.

[10] During 2006, ***, in descending order, were by far the largest suppliers of HDAN to the U.S. market.

[11] *** purchaser questionnaire response, section III-35.

[12] *** reported that these imports are shipped by rail and truck to warehouses in the Southeast; the firm asserted that imported HDAN arriving in Tampa, FL, started arriving shortly after ***, and that HDAN imports into Wilmington, NC, started a few months ago (U.S. producer questionnaire response, section IV-B-30b).

[13] The Mississippi River system includes the Mississippi River itself and other navigable rivers feeding into the Mississippi River, such as the Missouri, Ohio, Illinois, and Arkansas rivers.

[14] U.S. purchaser questionnaire responses, section III-39.

*** asserted that, due to high natural gas prices and regulations from the explosive nature of HDAN, there are only two producers of HDAN left in the United States and the price of U.S.-produced HDAN has increased to the point where the producers are no longer competitive. *** reported that this year it has reduced its purchases from *** tons of HDAN to *** tons and,[15] if present prices continue, it will not be handling HDAN at all. *** also asserted that, due to high natural gas prices in the United States and very low natural gas prices in several foreign countries, there have been several new nitrogen fertilizer plants built and to be built in foreign countries (such countries reportedly include, Egypt, Iran, Russia, Saudi Arabia, and the United Arab Emirates). According to ***, these foreign countries have the ability to price urea so low as to drive HDAN out of the market, and they have the ability to drive all the U.S. urea producers out of the market. *** asserted that HDAN is a dying product domestically anyway so it does not make any difference if the tariff is lifted on the HDAN from Ukraine.

Since September 11, 2001, Federal, State, and Local governments have been imposing a variety of security measures to protect the U.S. public; some of these measures involve HDAN due to its nature as an oxidizer. For a number of years, HDAN has been classified by the U.S. Department of Transportation as a class 9 hazardous material,[16] and recently was designated by the U.S. Coast Guard as "Certain Dangerous Cargo."[17] Recently imposed and potential security measures on HDAN production, transport,[18] and inventory by Federal and State governments reportedly have contributed importantly to the substantial decrease in both U.S. production and consumption of HDAN during 2001-06.[19] U.S. producers and importers of HDAN were requested in their questionnaire responses to identify the security measures put in place on HDAN since January 1, 2001 and to discuss the impact of these measures;[20] in addition, U.S. purchasers were also requested to identify such security measures and explain the impact on their purchases of HDAN.[21] The comments of the responding U.S. producers, importers, and purchasers are shown in the tabulation on the following page.

Another characteristic of the U.S. HDAN market has been the decrease in the U.S. production and consumption of HDAN during 2001-06, and the degree to which other nitrogenous fertilizers have substituted for HDAN. U.S. producers, importers, and purchasers have identified several nitrogen

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[15] *** reported that it had substituted urea for this volume of HDAN, because its price was much lower than HDAN (U.S. purchaser questionnaire response, section II-2).

[16] E-mail from ***, March 19, 2007.

[17] E-mail from ***, March 19, 2007. HDAN in 50-pound bags marked as fertilizer reportedly was an ingredient in the explosives used in the April 19, 1995, Oklahoma City, OK, bombing of the Alfred P. Murrah Federal Building (E-mail from ***, March 7, 2006; and *http://en.wikipedia.org/wiki/Oklahoma_City_bombing*, retrieved February 19, 2007).

[18] Such security measures have also affected distributors, dealers, and the transport companies, including operators of barges, railroads, and trucks.

[19] *** U.S. producer questionnaire response, sections IV-B-15a and IV-B-28. Annual U.S. production of HDAN decreased by *** percent during 2001-06, while U.S. apparent consumption of HDAN decreased by *** percent.

[20] U.S. producer and importer questionnaire responses, sections IV-B-25 and III-B-25, respectively. Three U.S. producers and three importers responded. One of the responding U.S. producers, ***, reported that it did not know of any security measures, such that only comments of the remaining two responding U.S. producers will be discussed.

[21] U.S. purchaser questionnaire responses, section III-15. Four responding purchasers indicated that no such security measures have been put in place, while six purchasers reported at least some measures and/or impacts; all ten responding purchasers were distributors and/or dealers of fertilizer, including HDAN. In addition, two U.S. purchaser-producers (***) responded; their comments were the same as in their producer questionnaire responses and are not repeated here. *** indicated that the security measures have not affected their HDAN purchases, which have been very limited.

fertilizer substitutes and commented on the limits of such substitution and the likelihood of future substitution; such substitution appears based on a number of factors, including weather, types of crops, relative prices, and the availability of HDAN and its alternatives. Due to climate, soil conditions, and types of plants, farmers/growers in the Southeastern and South-Central United States may be the most resistant to switching from HDAN to alternatives, while users in other areas of the United States may switch more readily. A detailed discussion of fertilizer substitutes for HDAN is provided later in Part II in the U.S. Demand section.

Because HDAN and LDAN have the same chemical structure (NH_4NO_3), U.S. producers, importers, and purchasers were requested to discuss to what extent HDAN can be used in explosives and to what extent LDAN can be used as a fertilizer. In addition, U.S. producers were also requested to discuss how easily HDAN could be converted to LDAN and how easily LDAN could be converted to HDAN. Three U.S. producers,[22] two U.S. importers,[23] and four U.S. purchasers [24] provided useable responses regarding the uses of HDAN and LDAN. The responses discussing HDAN use in explosives and LDAN use as fertilizer are shown in the tabulations on pages II-6 and II-7.

The two responding U.S. producers, ***, asserted that it was not economically feasible to convert HDAN to LDAN or LDAN to HDAN. *** provided a detailed response for converting HDAN to LDAN, but indicated that the process and cost would be the same for converting LDAN to HDAN.[25] According to ***, HDAN can be converted into LDAN by re-melting and solidifying into a lower density particle. *** asserted that the process would be energy intensive, crushing the HDAN, dissolving into solution, concentrating the solution, and repeating the prilling or granulation process. *** indicated that it would require $***-$*** in new capital and an added process cost of $***/ton to convert 200,000 tons per year. Additionally, according to ***, HDAN could be sized into greater surface areas but the resulting poor flow ability would limit its use to packaged explosives only.[26]

[22] U.S. producer questionnaire response, section IV-B-18a and b.

[23] U.S. importer questionnaire response, section III-B-19.

[24] U.S. purchaser questionnaire response, section III-12.

[25] U.S. producer questionnaire response, section IV-B-18c.

[26] ***.

Comments regarding U.S. security measures placed on HDAN	
Firm	**Comments**
U.S. producers:	
***	Since 2001 the following states have put some regulations in place controlling the handling and sale of HDAN: New York, New Jersey, California, Oklahoma, Michigan, South Carolina, Maryland, and Nevada. In August 2004, the ATF and the Fertilizer Institute co-sponsored the "America's Security Begins With You" campaign. While this is voluntary, it encourages dealers handling HDAN to "protect, plan, identify, and alert" law enforcement officials of suspicious activity. In the summer of 2004, new Coast Guard regulations controlling the transportation and handling of HDAN on the water went into effect. Since the first half of 2005, both the U.S. House and Senate have introduced bills concerning the handling of HDAN, but nothing has been passed yet. At this time, nothing has been put in place that has had a material effect on the production, importation, transportation, or storage of HDAN.
***	In 2004, the U.S. Coast Guard implemented legislation that imposed requirements on barge traffic and shore facilities that handle HDAN. In *** case, the cost of implementing the measures at *** was in the order of $***. This has inevitably led to some companies who had dock facilities handling HDAN to decide not to implement the measures and thus cease to handle the product. This, however, has not caused a significant bottleneck in the trade of HDAN.
U.S. importers:	
***	Barge security changed the cost by more than *** after 2001. Warehouse security costs increased by more then *** after 2001 as well.
***	Security regulations have increased the cost of handling HDAN. ***.
***	Coast Guard implemented HDAN security act in 2004. Warehousing: certifications and enhancements at river and inland warehouses were implemented requiring fencing, cameras, guards and extra fire abatements. Cost per terminals approximately $***. Barging: operators needed to be certified, however many barge lines elected not to take on the insurance premiums, special fleeting and security measures mandated by the coast guard, thereby limiting the number of carriers able to transport HDAN, which increased barge costs by *** percent. Trucking: government regulations also reduced the number of trucking companies willing to handle HDAN, due to HAZMAT certifications and higher insurance premiums. This has reduced the capability to transport HDAN. All of the issues have increased HDAN prices.
U.S. purchasers:	
***	Coast guard and facility security.
***	Barge freight costs have increased *** percent. Cost of storage due to regulations increased.
***	Transportation costs are double that of other forms of nitrogen.
***	Site security plans on all locations. We now only sell product to farmers we know. No cash sales. Tighter security measures in place, such as the following: (1) chain link fence around warehouse facilities, and (2) barricades to secure fertilizer bins.
***	Kansas City, MO, does not allow HDAN storage in city limits. St. Joseph, MO, has expensive requirements for storage in city limits. Several storage locations on the river system quit storing HDAN rather than spend the money to meet Army Corp of Engineers' requirements for unloading barges of HDAN. Railroads charge more to haul HDAN than urea. All these changes make it harder and more expensive to get HDAN and has resulted in our switching *** percent of our HDAN purchases to urea. I expect to switch *** percent to urea from HDAN in the future, with the way it looks like the price is going in the future.
***	Higher transportation costs due to heightened security measures for HDAN.
Source: Compiled from data submitted in response to Commission questionnaires.	

Comments regarding HDAN used in explosives	
Firm	**Comments**
U.S. producers:	
***	***.
***	By itself, HDAN is unsuitable as a commercial explosive in the U.S. mining and construction industries. HDAN, properly sized through crushing, screening, or other means continues to be used as an ingredient in high explosives and blasting agents. HDAN used in explosives represents a tiny share of the total HDAN sold. Other than for this limited legal use of HDAN in explosives, we are aware of no other instances since 2001 where HDAN has been used as an explosive in the United States.
***	HDAN can theoretically be used as an explosive, but it is not practical to do so. The higher density of HDAN makes it less suitable for explosives purposes than LDAN, because the HDAN cannot efficiently absorb fuel oil. Also, HDAN made in the United States for agricultural purposes is coated with an organic anti-caking agent, eliminating its potential use as an emulsion to be used in explosives. To our knowledge, HDAN has not been used as an explosive, either intentionally or accidentally, during 2001-06.
U.S. importers:	
***	HDAN crushed and combined with fuel oil would be a blasting agent when used with some type of initiator (blasting cap).
***	HDAN is an oxidizer and can be used as an explosive.
U.S. purchasers:	
***	Very feasible to use HDAN in explosives.
***	Our firm uses a small quantity of high-density industrial grade ammonium nitrate in the manufacture of industrial grade commercial explosives. This is an HDAN grade comprised of small prills with a tackifier to allow diesel oil to stick to the surface of the prills (does not penetrate molecules as with LDAN). This process using HDAN has been around since the 1980's. This type of explosive is used in large bore holes (6-8" in diameter) and HDAN is used because it has more bulk than LDAN.
***	Feasible, if allowed into hands of wrong people; example includes Oklahoma City Federal Building. Urea can and has been used; example includes first attack on world trade building.
***	Not personally aware of any instances other than newspaper accounts of Oklahoma City, OK and Texas City, TX.
Source: Compiled from data submitted in response to Commission questionnaires.	

Comments regarding LDAN used as fertilizer	
Firm	**Comments**
U.S. producers:	
***	It is technically possible to use LDAN as a fertilizer, as it has the same nitrogen content as HDAN. However, it is not preferred due to its lower density and comparative particle instability that creates a tendency for LDAN to segregate when mixed and spread with other fertilizer materials. It does not store or transport well due to its low density. Prior to the Oklahoma City bombing (in which, according to ***, the ammonium nitrate used was LDAN intentionally sold as fertilizer), LDAN was used as a fertilizer in some limited instances. We are unaware of any sales of LDAN into the fertilizer market since that time. Compared to HDAN prills, LDAN prills are smaller and more porous. The higher porosity aids in the retention of fuel oil, but makes LDAN more fragile. As a result, LDAN transported over long distances becomes compressed under its own weight and suffers structural damage, making it even more prone to segregation when blended with other fertilizer materials. Because it is relatively fragile, there is limited trade of LDAN over long distances and limited use as a fertilizer, even before the Oklahoma City bombing. LDAN does not have a long shelf life and mines, for example, generally do not have facilities for long-term storage. In most cases, LDAN is shipped to mine sites when needed and used promptly. HDAN's structure, on the other hand, enables it to be traded over long distances and to withstand the rigors of the fertilizer distribution chain, where the product is stored and then shipped from producer to dealer and to retailer prior to being purchased by end users.
***	Ammonium nitrate emerged as a major nitrogen fertilizer in the United States in the late 1940's and in the 1950's by TVA technology developments that provided for the production of quality solid ammonium nitrate from wartime nitrogen capacity. Ammonium nitrate was not available in the United States in significant quantity for use as a fertilizer until near the end of WWII, when the supply of ammonium nitrate produced for explosives use exceeded wartime demand. Initially, therefore, ammonium nitrate used as fertilizer was LDAN, made suitable for agricultural use by the addition of different coating agents that prevented caking, moisture absorption, etc. Supported by regional and national market or "introduction" programs and with intensification of U.S. agriculture, ammonium nitrate use grew rapidly and became the solid nitrogen fertilizer material of choice by the mid-1950's. ***. LDAN could theoretically be used as a fertilizer because it has the same chemical composition as HDAN. However, while LDAN occasionally would show up in the agricultural market, subsequent to the Oklahoma City bomb incident, this practice has ceased to our knowledge. LDAN would not be suitable as a fertilizer, in any event, because it lacks a coating or incorporated dessicant agent, and will more easily break down or cake during handling, as compared to HDAN.
U.S. importers:	
***	LDAN could be used as a fertilizer but its density is not favored. Chemically HDAN and LDAN are the same.
***	LDAN can be used as a fertilizer. No knowledge of LDAN used as a fertilizer.
U.S. purchasers:	
***	Very feasible.
***	Not aware of any use in our area.
***	LDAN was used extensively as fertilizer for 10 or 20 years. In our use it was just as good as HDAN except it did not spread as evenly because it was too light and it took more bin space and more trips with tender trucks because it was so light weight.
Source: Compiled from data submitted in response to Commission questionnaires.	

SUPPLY AND DEMAND CONSIDERATIONS[27]

U.S. Production[28]

Based on available information, U.S. HDAN producers have the ability to respond to changes in demand with moderate changes in the quantity of domestic shipments of their U.S.-produced HDAN. The main factors contributing to this degree of responsiveness are available unused capacity and the availability of production alternatives. However, other factors, such as insufficient export markets and the low level of inventories, tend to moderate this degree of responsiveness. In addition, a high ratio of variable costs to total costs in the domestic HDAN industry requires product prices to be sufficiently high to trigger additional production from excess capacity.[29]

Two responding U.S. producers, ***, reported the combination of selling prices for HDAN and purchase costs for natural gas and/or ammonia that would enable them to increase production in a 12-month period.[30] *** reported that, if its ammonia costs in 2006 remained unchanged, it would increase HDAN production by 10 percent and by 20 percent, if the price of HDAN were to increase by *** percent and *** percent, respectively. Alternatively, the firm reported that, if its price of HDAN in 2006 remained unchanged, it would increase HDAN production by 10 percent and by 20 percent, if its costs of ammonia were to decrease by *** percent and *** percent, respectively. *** reported that its HDAN production has increased since 2003 as prices have increased and, according to the firm, the market has become more balanced. According to ***, however, its decisions to increase or decrease production are affected by many other factors, including customer demand, which changes from year-to-year; *** cited as an example that droughts can result in smaller purchases by its customers, and hence production declines. *** reported that its production levels of HDAN over the next 12 months ***. However, the firm indicated that ***.

U.S. purchasers were requested in their purchaser questionnaire responses to report if they were ever unable to obtain HDAN from a domestic producer since January 1, 2001.[31] Nine of 13 responding purchasers, including two purchaser-producers ***, reported that they were able to obtain U.S.-produced HDAN, whereas the 4 remaining purchasers reported that they were unable at times to obtain U.S.-produced HDAN. These latter four purchasers provided the following explanations. *** asserted that its supplying U.S. producer sold out and shut down. *** asserted that natural gas was at $10 plus so the Terra plant in Yazoo City, MS, cut production and purchased imported barges for inventory. *** asserted that since the closing of Nitram and Air Products in Florida, there have been no domestic suppliers who distribute to Florida. *** asserted that Terra has been unable to supply HDAN from time to time.

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

[28] Data on U.S. HDAN production, production capacity, capacity utilization, inventories, and exports are shown in detail in Part III.

[29] High variable costs in the U.S. HDAN industry can make it difficult to expand production even in the short run if the level of product prices does not allow the producers to at least cover their variable costs. The two U.S. producers of HDAN during 2006 responded in their questionnaires to a request for information on their variable and fixed costs to produce HDAN during 2006. These responses indicated that U.S. HDAN producers' variable costs, which were dominated by natural gas and/or ammonia costs, averaged *** percent and their fixed costs averaged *** percent of their total costs to produce HDAN during this period (U.S. producer questionnaire responses, section IV-B-22a). Natural gas/ammonia costs alone reportedly accounted for almost *** percent of their total HDAN production costs.

[30] U.S. producer questionnaire responses, section IV-B-34c.

[31] U.S. purchaser questionnaire response, section III-31.

Industry Capacity

The average of all U.S. HDAN producers' reported annual capacity utilization rates fluctuated during 2001-06, and ranged between a low of *** percent during *** to a high of 77.5 percent during 2002. The total annual level of reported HDAN production capacity decreased from 2,047,578 short tons in 2001 to *** short tons in 2006, or by *** percent. While low output levels may lead to increased unit costs, the substantial share of variable costs to total costs may limit the impact of a downturn in output on unit costs. *** reported a required minimum capacity utilization rate of *** percent to achieve acceptable economies of scale for its HDAN production, while *** reported a required minimum capacity utilization rate of *** percent.[32] *** asserted that calculating a capacity utilization rate for 2006 by dividing production by capacity provides a misleading result for several reasons.[33] First, due to extremely high natural gas costs in early 2006, *** reported that it ***, which curtailed HDAN production. In addition, ***. *** reported that economies of scale were still achieved in those months where HDAN production was not reduced. *** also stated that a combination of favorable raw material costs and favorable product prices resulted in HDAN operations ***. The reported information suggests that some unused capacity could be used to increase HDAN production, but how much unused capacity could be used appears to depend on a number of factors, including alternative production opportunities and the condition that selling prices of HDAN would have to be sufficient to at least cover variable costs.

*** provided data on the cost and time to add extra U.S. production capacity by constructing a new U.S. production facility and by increasing HDAN production capacity at current U.S. facilities.[34] *** estimated that a new HDAN plant at a greenfield site that produces *** short tons of HDAN annually would cost at least $*** million and require *** to construct, whereas *** estimated costs of a Greenfield plant *** at about $*** million, which also included equipment to produce ***. *** also reported that it ***. *** reported that, given the current declining market, ***. *** reported that to add capacity of any significance to an existing plant would vary considerably on whether or not it was possible to de-bottleneck existing equipment, possibly adding up to a *** percent increase in capacity, which would probably cost *** dollars. The reported information suggests that ***.

Inventory Levels

Available data show that U.S. producers' annual end-of-period inventories of HDAN relative to their annual U.S. shipments averaged *** percent during 2001-06, and were *** percent in 2005 and *** percent in 2006. ***.[35] These data indicate that U.S. producers had a limited ability to use inventories to increase shipments of HDAN to the U.S. market in the short run and it appears that this will continue in the future.

Export Markets

Exports were not substantial for U.S. HDAN producers during January 2001-December 2006. U.S. exports of HDAN accounted for *** of all U.S. producers' total shipments during this period. ***

[32] U.S. producer questionnaire responses, section IV-B-34a. ***. (U.S. producer questionnaire response, section IV-B-34a.)

[33] U.S. producer questionnaire response, section IV-B-34a.

[34] U.S. producer questionnaire responses, sections IV-B-35 and IV-B-36.

[35] *** U.S. producer questionnaire response, section IV-B-33a.

accounted for *** percent of the reported exports during 2001-06[36] and ***.[37] The U.S. export figures suggest that there was virtually no ability for U.S. producers to divert shipments of HDAN to or from alternate markets in response to changes in the price of HDAN during January 2001-December 2006, and prospects appear equally restricted for any such future diversion of shipments in the short run.

Production Alternatives

*** reported producing other products on at least some of the equipment and with at least some of the employees that they use to produce HDAN.[38] *** . ***. The reported information suggests that U.S. producers could alter their shipments of HDAN to the U.S. market in the short run in response to changes in relative prices of alternative production products.

Subject Import Supply From Ukraine[39]

Because there were no U.S. imports of HDAN from Ukraine during 2001-06, the following discussion of Ukrainian HDAN producers to supply the U.S. market during this period and in the future is implicitly based on the absence of the U.S. antidumping duty order. In addition, because the four Ukrainian producers have not exported their HDAN to the United States in the last several years,[40] they were unable to answer several questions in the foreign producer questionnaire asking the foreign producers to discuss their ability to supply HDAN to the U.S. market.

Based on available information, the four HDAN producers in Ukraine have the ability to respond to changes in the price of HDAN with large changes in the quantity of shipments of Ukrainian HDAN to the U.S. market. The main factor contributing to this degree of responsiveness is the existence of substantial alternate markets for HDAN but also due to excess capacity; inventory levels have generally been low.

The Ukrainian HDAN producers reported any changes they expected in the availability of their HDAN to the U.S. market in the future if the antidumping order was revoked.[41] Two Ukrainian HDAN producers, ***, reported increased availability, and *** reported that their firms did not anticipate selling to the United States. *** provided some additional useable responses. *** stated that no recurrence of dumping would occur if the antidumping order were revoked, due to increases in raw material costs in Ukraine to produce HDAN and increases in transportation costs. *** also reported that the firm has successfully oriented its HDAN exports to non-U.S. markets and HDAN demand in Ukraine has grown substantially. *** reported that its HDAN would be available to the U.S. market if prices were favorable and the U.S. antidumping duty order were revoked; it commented that it may be possible to switch HDAN shipments from other export markets to the U.S. market.

Two Ukrainian HDAN producers, ***, reported that their HDAN sold in their home market was fully interchangeable with their HDAN exported to third-country markets; and *** reported that there was partial interchangeability between its home-market shipments and third-country market exports,

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[36] *** accounted for the remaining *** of total U.S. producers' HDAN exports during 2001-06.

[37] *** U.S. producer questionnaire response, section IV-B-32.

[38] U.S. producer questionnaire response, section II-5.

[39] The data on the subject foreign producers' HDAN production, capacity, capacity utilization, and shipments are shown in detail in Part IV.

[40] Four Ukrainian producers (Cherkassy, Rivneazot, Severodonetsk, and Stirol) are believed to account for all the HDAN produced in Ukraine.

[41] Foreign producer questionnaire response, sections II-15 and III-11.

because HDAN produced for export contained ***.[42] The two Ukrainian producers, ***, that responded reported that they were unaware of requirements in the U.S. market because they have not exported HDAN to the United States.

All four Ukrainian HDAN producers reported increases in their natural gas costs during 2001-06 ***;[43] their reported purchase prices of natural gas in Ukraine are discussed in detail in Part V. One of the Ukrainian producers, ***, reported that natural gas costs have increased its price of HDAN and, according to ***, if the existing antidumping duty order is revoked, no dumping of HDAN from Ukraine would occur because of the substantial growth in production costs of HDAN in Ukraine.[44] On the other hand, ***, reported that demand dictates the price of HDAN, not natural gas prices. In addition, *** asserted that HDAN sales in Ukraine depended on seasonal demand and,[45] during those periods when there is no domestic demand, HDAN was produced mainly for export. According to ***, export selling prices of HDAN are determined by taking into account the recommended price level by the Ukraine Ministry of Economy; this recommended price is based on analysis of current conditions in the world market for HDAN.[46]

Industry Capacity

The average of the four Ukrainian HDAN producers' reported annual capacity utilization rates fluctuated during 2001-06, ranging between a low of 58.0 percent during 2001 to a high of 82.9 percent during 2002, with a rate of *** percent in 2006. Projected figures were reported showing expected capacity utilization rates of *** percent in 2007 and *** percent in 2008. The total annual level of reported HDAN production capacity increased from 2,191,343 short tons in 2001 to *** short tons in 2006, or by *** percent. These data indicate that there was unused HDAN capacity in Ukraine to increase shipments to the U.S. market during 2001-06, and that this excess capacity is projected to continue during 2007 and 2008.

Inventory Levels

Available data show that Ukrainian producers' annual average beginning-period inventories of HDAN, of *** short tons, averaged *** percent of their average annual total HDAN shipments during 2001-06; these inventories were forecast to average only *** short tons during 2007-08. These data indicate that Ukrainian producers had some ability to use inventories to export HDAN to the U.S. market during 2001-06, but the estimated inventories during 2007-08, which are *** than historical levels, may indicate a very limited ability to use inventories to export HDAN to the United States in the future.

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[42] Foreign producer questionnaire response, section III-3.

[43] Foreign producer questionnaire response, section III-9.

[44] Ibid.

[45] *** reported that peak seasonal demand for HDAN in Ukraine was December-April, in preparation for spring seed time, and the rest of the year was off-peak season, when the supply of Ukrainian-produced HDAN exceeds domestic demand (foreign producer questionnaire response, section III-21).

[46] *** Ukrainian producers reported that their export prices of HDAN are determined by negotiations between buyers and sellers; the producers monitor prices obtained from several sources, including specialized marketing firms such as FERTECON (responses to supplemental foreign producer questionnaire question IV received on April 26, 2007 from *** and on April 30, 2007 from ***).

Alternate Markets

The four HDAN producers in Ukraine shipped a majority of their HDAN to customers in their home market, exported most of the rest to third-country markets,[47] and internally consumed/transferred the remaining amount during 2001-06. During this period, the quantity of HDAN shipped to customers in the home market accounted for *** percent of the producers' total HDAN shipments, exports to third-country markets accounted for *** percent, and internal consumption/transfers accounted for the *** percent. This shipment pattern was projected to continue in 2007 and 2008. These data indicate that the Ukrainian HDAN producers have flexibility to use alternate markets to increase or decrease HDAN shipments to the U.S. market in the short run in response to price changes in the U.S. market.

Three of the four Ukrainian HDAN producers, ***, reported that Ukrainian HDAN has been subject to antidumping duties ranging from 29.26-33.25 percent since 2001 in the European Union (EU);[48] on April 19, 2007, the EU announced its decision to continue the antidumping duty order on imports of ammonium nitrate from Ukraine.[49] Ukrainian producers exported *** short tons of HDAN to the EU, or *** percent of their total HDAN shipments. In addition, *** reported that Ukrainian HDAN is subject to antidumping duties ranging from 19.0-30.0 percent in Brazil. *** reported that its exports of HDAN are not subject to tariff or non-tariff barriers to trade.

Production Alternatives

Two of the four Ukrainian producers, ***, reported that they can switch production between HDAN and other products using the same equipment and labor to produce HDAN, whereas the remaining two Ukrainian producers, ***, reported that they were unable to switch production between HDAN and other products.[50] *** reported that it could switch production to ***. *** reported that it could switch production ***.

Nonsubject Imports

Based on U.S. producer and importer questionnaire responses, all U.S. imports of HDAN were from nonsubject countries, although those from Russia are subject to quotas and reference/floor prices under a suspension agreement. Based on official U.S. import statistics for ammonium nitrate and questionnaire responses of U.S. producers and importers, the major sources of U.S. imported HDAN during 2001-06 were, in descending order, Romania, the Netherlands, Bulgaria, Russia, Spain, and in 2006, Georgia and Lebanon. Nine of ten responding U.S. purchasers reported that they did not know of any new HDAN suppliers in the U.S. market since 2001 and they did not expect any new suppliers in the future.[51] One other purchaser-producer, ***, reported that *** have begun importing HDAN into the United States, but their sources of HDAN are not necessarily new sources.[52] In another part of its purchaser questionnaire response, *** asserted that some foreign urea producers have such a low cost of natural gas compared to U.S. producers that they will drive out any HDAN or urea producers in the

[47] Ukrainian HDAN producers reported exporting HDAN to the following specific countries since 2001: *** (foreign producer questionnaire response, section II-13).

[48] Foreign producer questionnaire responses, II-12a.

[49] Domestic interested parties' posthearing brief, p. 3.

[50] Foreign producer questionnaire responses, section II-10.

[51] U.S. purchaser questionnaire responses, section III-25.

[52] Ibid.

United States, and, according to ***, they have built and continue to build huge urea production plants with low-cost natural gas supplies.[53]

The top 10 countries exporting HDAN during 2005 (the most recent year historical data are available) accounted for *** percent of total world exports of HDAN, or *** million short tons out of a world total of *** million short tons.[54] The top 10 countries in descending order of quantity exported and their shares of world exports during 2005 are shown in the following tabulation; these countries are expected to remain the top exporting countries for HDAN through 2015.[55]

* * * * * * *

U.S. Demand

Demand for HDAN, as measured by U.S. apparent consumption figures calculated from U.S. shipment data reported in U.S. producer and importer questionnaire responses, generally decreased during 2001-06. U.S. apparent consumption of HDAN (used in single- and multi-nutrient fertilizers and other uses) decreased irregularly from 1,888,260 short tons of HDAN in 2001 to *** short tons of HDAN in 2006, or by *** percent.[56] Based on U.S. consumption of single-nutrient nitrogen fertilizers at the farm level, HDAN usage generally decreased from 1,552,941 short tons of HDAN (528,000 short tons of contained nitrogen) in crop year 2001 to 961,764 short tons of HDAN (327,000 short tons of contained nitrogen) in crop year 2006 (the most recent period for which such data were available), or by 38.1 percent.[57] El Dorado and Terra asserted that U.S. demand for HDAN will decline and level off in the range of *** short tons annually, with the majority of consumption remaining concentrated in the southeastern United States.[58] In addition, FERTECON forecasts that U.S. annual HDAN consumption is expected to *** during calendar years 2006-10, to *** short tons by 2010.[59]

Based on available information, U.S. aggregate demand for HDAN is likely to respond moderately to changes in HDAN prices. Several factors contribute to this degree of price sensitivity, including the degree to which the other principal single-nutrient nitrogen fertilizers are substitutable with HDAN and the cost share of HDAN in the care of pastures and the growing of crops using this fertilizer. The demand response to changes in HDAN prices may also be affected by the availability of supply of HDAN in the U.S. market, perhaps leading some end users to consider alternatives where, before the supply availability became a concern, they would not have considered alternatives.

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[53] U.S. purchaser questionnaire response, section III-14b.

[54] FERTECON, *Nitrogen Fertilizer Data File*, January 2007, submitted by domestic interested parties on April 10, 2007, in their prehearing brief, exh. 6.

[55] Ibid.

[56] Total U.S. annual commercial nitrogen fertilizer consumption fluctuated but increased by approximately 4.4 percent between crop year 2001 and crop year 2006 (a crop year, sometimes referred to as a fertilizer year, runs from July 1 in one year to June 30 of the following year); crop year 2006 represents the most recent data available for such figures. These figures are based on data published jointly by the Association of American Plant Food Control Officials and The Fertilizer Institute in various issues of *Commercial Fertilizers*.

[57] Various issues of *Commercial Fertilizer*, the Association of American Plant Food Control Officials and The Fertilizer Institute.

[58] Domestic interested parties' posthearing brief, pp. 5-6, and exhs. 7 and 9.

[59] Based on forecasted figures in FERTECON, *Nitrogen Fertilizer Data File*, January 2007, submitted by domestic interested parties on April 10, 2007, in their prehearing brief, exh. 6. On the other hand, North American (United States and Canada) annual total commercial nitrogen fertilizer demand is expected to *** during this period (*Global Fertilizers and Raw Materials Supply and Supply/Demand Balances 2006-2010*, International Fertilizer Industry Association, Michel Prud'homme, June 2006, p. 14).

Demand Characteristics

HDAN is a dry nitrogen fertilizer and its major advantage is that 50 percent of its nitrogen is in a readily available form for use by plants. The principal uses for HDAN fertilizer are, in reported descending order of U.S. HDAN use, forages (pasture and hay), cotton, corn, wheat, citrus/vegetables, and tobacco.[60] It should be noted that other single-nutrient nitrogen fertilizers are also used on these crops, including importantly urea for forages; anhydrous ammonia, UAN, and urea for corn; and UAN and urea for cotton, wheat, and citrus/vegetables. U.S. HDAN consumption reportedly peaks during the spring planting season, which generally occurs between February-June, while July-January is considered the off-season.[61] U.S. HDAN producers continue to operate during the off-season to build inventories, which supply the lower levels of off-season demand and are used to fill the distribution system in time for the peak season.[62]

The overall U.S. demand for HDAN depends on various factors, but is primarily affected by the following: planted acreage and application rates, agronomic factors, weather conditions, relative prices and substitutability of other single-nutrient nitrogen fertilizers, availability of HDAN, and the cost share of HDAN in the pasture and crops using this fertilizer. These demand factors are discussed below.

Planted acreage and application rates

Total U.S. acres planted for crops that are the principal users of HDAN fertilizer are shown by crop years 2001-06 in the following tabulation.

Crop year	Hay[1]	Cotton	Corn	Wheat	Tobacco[1]	Total
	(Thousands of acres)					
2001	63,516	15,769	75,702	59,432	433	214,852
2002	63,942	13,958	78,894	60,318	427	217,539
2003	63,383	13,480	78,603	62,141	411	218,018
2004	61,966	13,659	80,929	59,674	408	216,636
2005	61,729	14,245	81,779	57,229	297	215,279
2006	60,807	15,274	78,327	57,334	339	212,081
TOTAL	375,343	86,385	474,234	356,128	2,315	1,294,405

[1] Acres harvested.

Source: National Agricultural Statistics Service, USDA, *http://www.nass.usda.gov/QuickStats,* retrieved March 23-24, 2007.

[60] Two U.S. producer questionnaire responses, section IV-B-14, of ***; three U.S. importer questionnaire responses, section III-B-15, of ***; and seven U.S. purchaser questionnaire responses, section III-8, of ***.

[61] *** U.S. producer questionnaire response, section IV-B-4. In addition, a purchaser, *** reported that in Georgia the peak demand for HDAN occurs during February-July, with HDAN applied to wheat during February and April, to pasture during May, and as a top-dress for cotton during June and July (staff telephone interview with ***).

[62] *** U.S. producer questionnaire response, section IV-B-4.

As seen in the tabulation, acres harvested for hay,[63] which was the HDAN use closest to forage for which such data were available (forage was reportedly the largest use of HDAN), generally decreased from 63.5 million acres in 2001 to 60.8 million acres in crop year 2006, or by 4.3 percent. Acres planted for cotton generally fluctuated but decreased from 15.8 million acres in crop year 2001 to 15.3 million acres in crop year 2006, or by 3.2 percent. Acres planted for corn fluctuated but increased from 75.7 million acres in crop year 2001 to 78.3 million acres in crop year 2006, or by 3.4 percent. Acres planted for wheat fluctuated but decreased from 59.4 million acres in crop year 2001 to 57.3 million acres in crop year 2006, or by 3.5 percent. Acres harvested for tobacco[64] generally decreased from 433,000 acres in crop year 2001 to 339,000 acres in crop year 2006, or by 21.7 percent. Recently, ethanol use reportedly has become the driving force in acres planted for corn; U.S. corn acreage planted is projected to be over 90 million acres for 2007.[65] Reportedly, U.S. farmers have not planted 85 million acres of corn since 1949. Wheat planted reportedly increased to 60.1 million acres in crop year 2007, but is expected to drop in following years to 57 million acres by 2016.[66]

Application rates of total nitrogen from all nitrogen fertilizers for corn, cotton, and wheat were available for crop year 2004 (the most recent period for which such data were available). Corn showed the highest application rate of total nitrogen fertilizer (including HDAN as well as other nitrogen fertilizers), at 137 pounds of nitrogen per acre; this was followed by wheat at 90 pounds per acre and cotton at 84 pounds per acre.[67] In addition, a common application rate of total nitrogen from all nitrogen fertilizers for tall fescue used as forage reportedly is about 75 pounds of nitrogen per acre.[68]

The 20 largest HDAN consuming states in crop year 2006 (the most recent period such data were available) accounted for 92.9 percent of total U.S. agricultural HDAN consumed during this period and approximately 50 percent of total U.S. nitrogen fertilizer consumed (in short tons of contained nitrogen) during this period.[69] The 20 largest HDAN fertilizer consuming states, their percentage share of total U.S. agricultural HDAN consumed in crop year 2006, and the principal agricultural uses for HDAN in each state are shown in table II-1. The principal agricultural uses of HDAN, by state, were reported in

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[63] Acres-planted data for hay were not available; harvested acreage tends to understate the actual number of acres fertilized.

[64] Acres-planted data for tobacco were not available; harvested acreage tends to understate the actual number of acres fertilized.

[65] Food and Agricultural Policy Research Institute, *http://www.agweb.com/get_article,* retrieved, March 7, 2007; and NASS, Agricultural Statistics Board, USDA, *Prospective Plantings*, March 30, 2007.

[66] Ibid.

[67] E-mail from ***. It should be noted that during crop year 2004 the application rates for total nitrogen fertilizer were based on the following shares of total acres for each crop that were fertilized with nitrogen fertilizers: 96.0 percent of the corn acres were fertilized, while 85.0 percent of the cotton acres and 88.0 percent of the wheat acres were fertilized during this crop year (Ibid.).

[68] *Finding Alternatives to HDAN as a Nitrogen Source for Tall Fescue Pastures*, Robert Kallenbach, Division of Plant Sciences, and Matt Massie, Southwest Center, University of Missouri-Columbia, 2005, *http://aes.missouri,edu/swcenter/fieldday/2005/*, retrieved March 8, 2007.

[69] These figures are reported in *Commercial Fertilizers 2006*, the Association of American Plant Food Control Officials and The Fertilizer Institute, April 2007, p. 20. Please note that the 92.9-percent share of total U.S. HDAN agricultural consumption of these top 20 HDAN consuming states likely understates the actual figure, because consumption figures of specific nitrogen fertilizers, including HDAN, by state do not include specific nitrogen fertilizers in the various fertilizer blends such as NPK and NP/NK.

Table II-1
HDAN: U.S. agricultural consumption of HDAN by states, crop year 2006, and principal HDAN agricultural uses

State	HDAN consumption		Principal agricultural uses of HDAN
	Quantity *(short tons of product)*	Share of total HDAN *(percent)*	
Missouri	172,662	17.9	Forages (cool season grasses), corn, wheat
Tennessee	142,052	14.7	Forages (warm season grasses), cotton, corn, wheat, tobacco
Alabama	111,671	11.6	Forages (warm season grasses), cotton, corn, wheat
Texas	82,987	8.6	Forages (warm season grasses), cotton, corn, wheat
Kentucky	54,864	5.7	Forages (fescue and orchard grass), corn, wheat, tobacco
Mississippi	41,800	4.3	Forages (warm season grasses), cotton, wheat
Kansas	36,643	3.8	Forages (cool season grasses), corn, wheat
North Carolina	35,485	3.7	Forages, cotton, tobacco
Georgia	34,250	3.6	Forages (warm season grasses), cotton, wheat, corn
Arkansas	29,482	3.1	Forages (warm season grasses), wheat
Louisiana	28,682	3.0	Forages (warm season grasses), cotton, wheat
Wyoming	23,497	2.4	Forages (cool season grasses)
Florida	22,799	2.4	Forages (warm season grasses), citrus and vegetables, cotton, sugar cane
Oklahoma	19,089	2.0	Forages (warm season grasses), wheat
Iowa	12,985	1.3	Pasture, hay, wheat, small amount of corn
Nebraska	10,129	1.1	Forages (cool season grasses)
Colorado	9,548	1.0	Pasture, hay, wheat, vegetables
Montana	8,954	0.9	Forages (cool season grasses)
Maine	8,793	0.9	Potatoes, pasture
South Carolina	8,522	0.9	Forages (warm season grasses), tobacco, cotton, sod, vegetables
Subtotal	894,894	92.9	
All other	68,816	7.1	
TOTAL	963,710	100.0	

Note: Cool season grasses include brome, fescue, and ryegrass for grazing, whereas warm season grasses include bermuda grass.

Source: Compiled from data submitted in response to Commission questionnaires, and *Commercial Fertilizers 2006*, the Association of American Plant Food Control Officials and The Fertilizer Institute, April 2007.

questionnaire responses of one U.S. producer (***),[70] two U.S. importers (***),[71] and five U.S. purchasers (***).[72] It should be noted that the three West Coast states--California, Oregon, and Washington–and Idaho, which were all included in the top 20 HDAN users in crop year 2005, dropped out of the top 20 in crop year 2006, because their combined HDAN usage fell substantially, by 171, 733 short tons of material during this period, or by 90.1 percent.[73] During this period the only remaining Western producer, Agrium, stopped producing HDAN and total U.S. HDAN production fell to two U.S. producers, El Dorado in Arkansas and Terra in Mississippi.

Agronomic and weather conditions

Agronomically, the choice of the most appropriate nitrogenous fertilizer is based principally on soil and weather conditions and on application techniques in order to provide nitrogen to the crop with minimum loss of nitrogen in the soil[74] and to avoid harm to the plant.[75] HDAN and UAN have less tendency to lose nitrogen to the atmosphere than urea; HDAN, urea, and UAN are applied to the surface of the soil, although urea is also frequently plowed into the soil, and anhydrous ammonia, because it is applied as a gas, is knifed into the soil. Moist soil and mild weather are the best conditions for applying nitrogen fertilizers and minimizing loss of nitrogen to the atmosphere; rainfall within 2-3 days of applying nitrogenous fertilizer is considered to be ideal to move the surface-applied nitrogenous fertilizers, such as HDAN, urea, and UAN into the soil. If the soil is too wet, however, the nitrogen can be lost by leaching out of the soil. If the soil is too dry, in clumps, and/or sandy, nitrogen, including that from anhydrous ammonia, can be quickly lost by volatilization. Because HDAN, UAN, and urea (the latter is also plowed

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[70] U.S. producer questionnaire response, section IV-B-14. In addition, *** reported additional crop information by state (***).

[71] U.S. importer questionnaire response, section III-B-15.

[72] U.S. purchaser questionnaire response, section III-8.

[73] *Commercial Fertilizers 2005 and 2006*, the Association of American Plant Food Control Officials and The Fertilizer Institute, April 2006 and 2007. Although each of these four states also consumed other nitrogenous fertilizers, the percentage decline in HDAN consumption in these states was larger than that of all the other nitrogenous fertilizers used in these states. California was the only one of the four states that saw an increase in total nitrogen fertilizer consumption in crop year 2006, as it substantially increased consumption of anhydrous ammonia and nitrogen from multinutrient fertilizers. The other three states–Idaho, Oregon, and Washington–each consumed less total nitrogen fertilizer in crop year 2006 compared with crop year 2005, despite increasing their use of UAN and urea. Of these three latter states, Oregon saw the biggest decline in total nitrogen fertilizer consumption during crop year 2006, because it also consumed substantially less anhydrous ammonia and multinutrient fertilizers containing nitrogen.

[74] On average, only 40 percent of the nitrogen applied as fertilizer is used by the crop, with the rest largely lost through volatilization/denitrification (lost to the atmosphere) or leached from the soil (*Modern Organics*, "Low Fertilizer Efficiency Reduces Yield Potential and Increases Production Costs," *http://www.modernorganics.com*). Other studies show that, although ammonia loss from urea-containing fertilizers can cause crop-yield reductions due to nitrogen deficiencies, the frequency and extent of nitrogen losses from urea fertilizers are less than commonly believed. Even when conditions are considered ideal for ammonia loss (lots of residue and urease, warm temperatures, and moist soil), losses are unlikely to exceed 20 percent of the surface-applied urea. Higher losses are possible from surface applications on sandy soils (*Managing Urea-Containing Fertilizers*, Larry G. Bundy, Professor and Extension Soil Scientist, Department of Soil Science, University of Wisconsin-Madison, Prepared for the 2001 Area Fertilizer Dealer Meetings, November 27-December 6, 2001; and *Management practices affecting nitrogen loss from urea*, D.E. Kissel, D.A. Whitney, and R.E. Lamond, Kansas State University Ext. Publ. MF-894, Kansas State University, Manhattan, KS, 1988).

[75] All nitrogen fertilizers attract water (salt effect) and, therefore, can cause damage to the seed or seedling if applied too closely to the young crop, particularly in coarse dry soil.

into the soil for some applications) are applied to the surface of the ground, the amount of surface moisture and foliage (especially stubble/residue from the previous crop) is important. Excessive foliage, which can occur with no-till or minimal-till practices, will keep the ground surface moist and prevent the fertilizer from reaching the soil. Enzymes in the foliage combined with warm, moist conditions promote fast production of nitrogen into ammonium, which, in turn, raises the surrounding pH above 7.0. High pH levels lead to the reformation of nitrogen into ammonia, which is easily lost to the atmosphere if at the surface of the ground or, if in the soil, when the soil is dry, in clumps, and/or sandy. Excessive foliage may also lead to nitrogen loss to the atmosphere through denitrification by converting nitrates into nitrogen gas, which is rapidly lost to the atmosphere. Cold weather greatly reduces both volatilization and denitrification.

Excessively wet or hard ground (the latter very dry or frozen) can make it difficult or impossible to operate the equipment used to knife anhydrous ammonia into the soil. If such conditions occur in the fall planting season, farmers may wait until spring to apply nitrogen fertilizer and then will likely use additional HDAN or urea, substituting, at least partly, for anhydrous ammonia.[76] HDAN, urea, and UAN are used principally in the spring in pre-emergence, side-dress, and top-dress applications, while anhydrous ammonia is commonly applied in the late fall in the Corn Belt, where frozen ground, thereafter, prevents appreciable nitrogen loss.

Substitute products

Demand for HDAN is also affected by the substitutability of HDAN with other fertilizers. Principal substitutes for HDAN include anhydrous ammonia, UAN, and urea--all single-nutrient nitrogenous fertilizers.[77] Total annual U.S. commercial nitrogen fertilizer consumption increased during the 2001-04 crop years, but then decreased in crop years 2005 and 2006. This trend was accompanied by varying annual shares of the four major single-nutrient nitrogenous fertilizers (based on short tons of contained nitrogen). Total U.S. nitrogen fertilizer consumption and the various forms and types of nitrogen fertilizer during crop years 2001-06 are shown in table II-2.

As seen in table II-2, total U.S. nitrogen fertilizer consumption increased from 11.5 million short tons of contained nitrogen in crop year 2001 (also known as a fertilizer year) to 12.0 million short tons in crop year 2006, or by approximately 4.4 percent. HDAN averaged 5.4 percent of consumption of the four major single-nitrogenous fertilizers during crop years 2001-06, whereas anhydrous ammonia averaged 35.4 percent, UAN 31.6 percent, and urea 27.5 percent. HDAN was the only one of the four major single-nutrient nitrogenous fertilizers that decreased in consumption during this period, by 38.1 percent. HDAN consumption also decreased continuously as a share of total nitrogenous fertilizer consumption during crop years 2001-06, from 4.6 percent in crop year 2001 to 2.7 percent in crop year

[76] Anhydrous ammonia is used principally in pre-plant and pre-emergence applications. If the spring planting season is delayed because of weather, or is excessively wet, farmers may use HDAN and/or urea instead of anhydrous ammonia which takes much longer to apply than the other nitrogenous fertilizers.

[77] Based on short tons of contained nitrogen, these four single-nutrient nitrogenous fertilizers together averaged 73.3 percent of total U.S. commercial nitrogen fertilizer consumption (based on short tons of contained nitrogen) during the 2001-06 crop years. (Various issues of *Commercial Fertilizers*, the Association of American Plant Food Control Officials and The Fertilizer Institute.)

Table II-2
U.S. nitrogen fertilizer consumption, by product form, 2001-06[1]

Fertilizer form	2001	2002	2003	2004	2005	2006	2001	2002	2003	2004	2005	2006
	(Thousands of short tons of contained nitrogen)						*(Share of total annual nitrogen consumption (percent))*					
Single-nutrient:												
AA	3,015	3,177	3,148	3,336	3,164	3,134	26.1	26.5	26.0	25.6	25.6	26.0
UAN	2,634	2,610	2,798	3,138	2,918	2,828	22.8	21.7	23.1	24.1	23.7	23.5
Urea	2,311	2,438	2,517	2,592	2,393	2,466	20.0	20.3	20.8	19.9	19.4	20.5
HDAN	528	533	522	519	482	327	4.6	4.4	4.3	4.0	3.9	2.7
Other N solns.[2]	115	109	105	140	138	119	1.0	0.9	0.9	1.1	1.1	1.0
Aqua ammonia	69	55	79	106	86	82	0.6	0.5	0.7	0.8	0.7	0.7
Subtotal	8,672	8,922	9,169	9,831	9,181	8,956	75.2	74.3	75.8	75.5	74.4	74.4
Multinutrients[3]	2,304	2,500	2,315	2,600	2,574	2,467	20.0	20.8	19.1	20.0	20.9	20.5
Other[4]	559	587	608	597	581	621	4.8	4.9	5.0	4.6	4.7	5.1
Total nitrogen	11,535	12,009	12,092	13,028	12,336	12,044	100.0	100.0	100.0	100.0	100.0	100.0

[1] Fertilizer years (also known as crop years), ending on June 30 of the indicated year; 2006 data are preliminary and subject to revision.
[2] Solutions with lower nitrogen concentrations than UAN.
[3] Includes NPK blends, and NP/NK compounds and blends.
[4] Includes ammonium sulfate, ammonium thiosulfate, calcium nitrate, sodium nitrate, and natural organic materials.

Source: Commercial Fertilizers 2006; a cooperative project of the Association of American Plant Food Control Officials, Inc., and the Fertilizer Institute, Washington, DC, April 2007.

2006. Of the four major single-nutrient nitrogenous fertilizers, UAN and urea increased in both absolute amounts and in their relative shares of total nitrogen fertilizer consumption during crop years 2001-06; UAN increased in absolute amount by 7.4 percent during this period and its relative share increased from 22.8 percent during crop year 2001 to 23.5 percent during crop year 2006,[78] while urea increased in absolute amount by 6.7 percent and its relative share increased from 20.0 percent during crop year 2001 to 20.5 percent during crop year 2006. Nitrogen in multinutrient fertilizers, another important source of nitrogen fertilizer, also increased absolutely and in its relative share of total nitrogen fertilizer consumption during crop years 2001-06.[79]

Each of the major single-nutrient nitrogen fertilizers has its own advantages and disadvantages, and substitution among these fertilizers depends on the intended crop, soil assay, the method of tilling, weather conditions, agronomic factors, and relative fertilizer prices and availability. Prices of the four major single-nutrient nitrogenous fertilizers are discussed in detail in Part V. The price data show that on a per-nitrogen-unit basis (20 pounds of nitrogen), anhydrous ammonia is generally the least expensive of the four major single-nutrient nitrogenous fertilizers, followed in increasing order of expense by urea, UAN, and HDAN (the most expensive of the four).

[78] UAN, which incorporates in liquid form both ammonium nitrate and urea, can be easily mixed with other nutrients and with herbicides and insecticides so that a single pass will apply all the required materials; use of UAN in existing irrigation facilities/equipment further reduces application costs.

[79] It is not known, however, to what extent HDAN was used as the source of nitrogen in the multinutrient fertilizers versus other forms, such as urea.

Anhydrous ammonia is a toxic gas at room temperature and pressure, so it is often stored and shipped more safely as a liquid by cooling and pressurizing this form of nitrogen in pressure containers; its 82.2-percent nitrogen content is the highest of all nitrogen fertilizers and offsets high storage and shipping costs, making it the lowest-cost fertilizer in terms of contained nitrogen. The dangerous nature of anhydrous ammonia, the expensive equipment required to inject the gas into the soil, and the slow process of applying the gas may limit the use of this form of nitrogen fertilizer.[80]

Urea has the highest nitrogen content of the surface-applied nitrogen fertilizers (46 percent), is safe to store, and is easy to handle. It is a dry fertilizer that can be blended with other fertilizers (except HDAN in the dry form) and is applied with similar broadcasting methods as HDAN. Urea has a slower rate of conversion of available nitrogen to the soil than HDAN. Urea can volatilize, that is, lose a portion of its nitrogen to the atmosphere, especially with dry soil and/or hot temperatures, but this loss is from a high level of nitrogen. Urea is generally less expensive to purchase on a per-unit nitrogen basis than HDAN.

UAN is an aqueous mixture produced from the hot liquid of both urea and ammonium nitrate; the nitrogen content in UAN typically ranges from 28 to 32 percent and its liquid form helps retard nitrogen volatility. This solution is easy to handle, can be more uniformly applied to the soil than its principal alternatives, and is easily stored.[81] Another advantage of UAN is that it can be mixed with other nutrients such as potassium and phosphate and with herbicides and pesticides which can all be applied at the same time, requiring only one pass across the field.[82] UAN can also be metered into irrigation water, thereby foregoing the need for special application equipment, or, if applying from a tank, a boom-and- pressure sprayer can be obtained at a modest cost.[83] The lower nitrogen content of UAN makes its shipping costs more expensive on a per-unit nitrogen basis than anhydrous ammonia, urea, and HDAN; in cold conditions (below 32 degrees Fahrenheit), only 28 percent and 30 percent UAN can be used, further increasing its shipping costs per unit of nitrogen.

HDAN contains 34 percent nitrogen by weight, has a relatively high assay of nitrogen in nitrate form (50 percent of total),[84] and may be blended with other solid fertilizers, except urea, for broadcast onto fields. HDAN is less subject to volatilization than other products in hotter weather because the nitrate portion will not evaporate or dissipate as a result of the heat, which would reduce the amount of nitrogen in the soil. However, HDAN (and UAN) are susceptible to nitrogen-leaching loss as soon as they are applied.[85] Prescribed application of HDAN does not burn plants, which could cause a setback in

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[80] Proper soil conditions, such as a damp soil, are necessary to retain the ammonia gas long enough to allow soil microorganisms to nitrify the ammonia gas to allow plants to absorb the nitrogen. Excessively wet soil or frozen/hard ground will prevent proper use of the application equipment, and dry, sandy, or lumpy soil will facilitate volatilization (escape of nitrogen into the atmosphere) with anhydrous ammonia.

[81] An additional advantage of UAN is that, like HDAN, a portion of its nitrogen is in the form of nitrates, which can be readily used by plants. Twenty-five percent of the contained nitrogen in UAN is in this readily available form.

[82] Potassium and phosphate are two other major soil nutrients also important for the growth of plants and pasture, but these nutrients tend to remain in the soil when not absorbed by the plants and, therefore, are not applied as frequently as nitrogen. The majority of the nitrogen applied in commercial fertilizers is gone in 60 days (*McDowell County Center Forage News*, "Fertilizer Prices and Usage," North Carolina State University A&T State University Cooperative Extension, *http://mcdowell.ces.state.nc.us/newsletters/forage/01-03/*, March 2001).

[83] *Certain Ammonium Nitrate from Ukraine*, USITC Pub. 3448, August 2001, pp. II-8-9.

[84] Nitrogen in nitrate form can be used readily by plants, making HDAN fast-acting.

[85] Although all applied nitrogenous fertilizers eventually convert completely to the nitrate form of nitrogen (NO_3) that can then be used by plants, 50 percent of the nitrogen in HDAN and 25 percent of the nitrogen in UAN are already in the nitrate form of nitrogen (NO_3). Urea and anhydrous ammonia take up to two weeks or more to

(continued...)

their growth; therefore, it is a popular source of nitrogen for no-till crops and for top/side dressing. A major disadvantage is that HDAN draws moisture from the air and, under extreme conditions, may become combustible and explosive. As discussed earlier in Part II, the security measures implemented on HDAN production and handling since January 2001 have led to increased costs and reduced availability of this fertilizer. Another disadvantage is that HDAN is generally more costly on a per-unit-of-nitrogen basis than any of the other major nitrogenous fertilizers and, therefore, its use reportedly is restricted mostly to specialty crops.[86]

U.S. producers,[87] importers,[88] and purchasers[89] were requested in their questionnaire responses to report in descending order of importance up to three top substitutes for HDAN. The responding firms included four U.S. producers,[90] three U.S. importers,[91] and five U.S. purchasers;[92] U.S. producers and importers that also reported as U.S. purchasers were not counted more than once, as long as their responses remained the same from one type of questionnaire to another. The tabulation on the following page shows the number of responses, by type of firm, for each of the reported fertilizers, by first, second, and third most likely substitutes for HDAN.

As shown in the tabulation, a total of six fertilizers were reported as possible substitutes for HDAN. Urea (including ESN, the polymer coated urea)[93] was identified most frequently as the most likely substitute for HDAN, possibly owing to its dry form, its similarity to HDAN, its higher nitrogen content (46 percent) than HDAN (34 percent), and generally its lower price than HDAN (on a nitrogen unit basis). UAN was identified most frequently as the second most likely substitute for HDAN, and both UAN and nitrogen solutions were cited with the same frequency as the third most likely substitutes for HDAN. The three responding U.S. producers,[94] three responding importers,[95] and two of the three responding purchasers[96] asserted that changes in the prices of substitutes have not affected the price or quantity of HDAN in the U.S. market since January 1, 2001. The remaining responding purchaser, ***,

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[85] (...continued)
convert their nitrogen to the nitrate form. This form of nitrogen is not held tightly by soil particles and can be leached from the soil with excessive rains, especially on lighter-textured soils, making HDAN and UAN particularly susceptible to nitrogen loss through leaching.

[86] *Ibid*, p. II-8.

[87] U.S. producer questionnaire response, section IV-B-16.

[88] U.S. importer questionnaire response, section III-B-17.

[89] U.S. purchaser questionnaire response, section III-10.

[90] ***.

[91] ***.

[92] ***.

[93] The polymer coating reportedly reduces nitrogen loss through volatilization and allows the plant to more efficiently obtain the nitrogen.

[94] U.S. producer questionnaire response, section IV-B-16c. One of the responding U.S. producers, ***, also asserted that HDAN is not directly affected by changes in the price of urea since HDAN has more specialized uses. According to ***, anhydrous ammonia and HDAN are not easily substituted so there is less of a price impact, and HDAN is applied on pastures and specialty crops in regions of the country where, according to ***, UAN is less likely to be effective.

[95] U.S. importer questionnaire response, section III-B-17c.

[96] U.S. purchaser questionnaire response, III-10c.

Alternatives to HDAN	Number of U.S. firms reporting			
	Producers	Importers	Purchasers	Total
Substitute #1:				
Anhydrous ammonia	-	-	1	1
Ammonium sulfate	-	-	1	1
Calcium ammonium nitrate	-	-	1	1
ESN (polymer-coated urea)	1	-	-	1
Urea	3	3	2	8
Substitute #2:				
Anhydrous ammonia	1	-	-	1
Calcium ammonium nitrate	-	1	-	1
UAN	2	1	1	4
Urea	-	-	1	1
Substitute #3:				
Anhydrous ammonia	-	1	-	1
Ammonium sulfate	1	-	-	1
Nitrogen solutions	1	-	1	2
UAN	-	1	1	2

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

asserted that price changes in substitutes affect the demand for HDAN.[97] According to ***, (1) when urea is priced more than 8 cents per nitrogen unit (NU) lower than HDAN, farmers switch to it for wheat and pasture--presently urea is priced 8 cents per NU lower; (2) when UAN is priced more than 8 cents per NU less than HDAN, farmers switch to it for wheat, pasture, and hay--presently UAN is priced 8 cents per NU lower; (3) when anhydrous ammonia is priced more than 8 cents per NU lower than HDAN, farmers switch to it for corn–presently, anhydrous ammonia is priced 15-20 cents per NU lower.

U.S. producers,[98] importers,[99] and purchasers[100] were also requested to discuss in their questionnaire responses any factors that would affect the substitution of each reported alternative product for HDAN. Although not commenting on any specific possible substitute for HDAN, one U.S. producer, ***, asserted that prior to its exit from the HDAN industry in ***, product substitution was limited in the Southeast due to many crop and geography-specific factors, including soil conditions, planting methods,

[97] Ibid.

[98] U.S. producer questionnaire response, sections IV-B-15 and IV-B-16b.

[99] U.S. importer questionnaire response, sections III-B-16 and III-B-17b.

[100] U.S. purchaser questionnaire response, sections III-9 and III-10b.

weather, and design of application equipment.[101] The firm reported that it saw little substitution of other products for HDAN in the markets that it served.[102] On the other hand, a responding U.S. importer, ***, asserted that dealer regulatory issues, such as security, reporting, and insurance for warehouse and transportation will result in replacement of HDAN mainly by urea and UAN and to a much smaller extent by polymer coated urea.[103]

Several other comments of responding U.S. producers, importers, and purchasers reported the advantages of HDAN over substitutes, such as low nitrogen volatility, especially in the warmer parts of the United States, specialized equipment that is required for anhydrous ammonia and UAN, and farmer long-standing preference. In addition, a purchaser, *** asserted that HDAN was the fertilizer of choice for pastures and that urea and UAN could not be used on pastures.[104] On the other hand, the University of Missouri reported that HDAN and urea have been the most popular sources of nitrogen for spring and late-summer fertilization of tall fescue grass for forage,[105] and because of the higher price of HDAN and increasing security concerns of HDAN, urea is quickly becoming the most widely used nitrogen source for forage production.[106] This is reportedly due to urea's wider availability and lower cost per NU compared to HDAN. However, up to 40 percent of the nitrogen applied to pastures as urea can be lost due to volatilization if rainfall does not occur within 48 hours of application, such that farmers are looking for a reliable and inexpensive source of nitrogen for pastures.[107] Some promising non-volatilizing fertilizers are ammonium sulfate and specially coated or treated urea that inhibits volatilization.[108]

The reporting firms also cited disadvantages of HDAN vis-a-vis substitutes, such as higher cost per NU compared with other single-nutrient nitrogenous fertilizers,[109] lower nitrogen content than anhydrous ammonia or urea, and availability concerns for HDAN as some dealers and transporters have elected not to handle this fertilizer due to increased security measures and risk. Three U.S. producers also provided some additional comments regarding substitution, which are shown in the tabulation on the following page.

[101] U.S. producer questionnaire response, section IV-B-15a.

[102] Ibid.

[103] U.S. importer questionnaire response, section III-B-16.

[104] U.S. purchaser questionnaire response, section III-B-10b.

[105] In Missouri, tall fescue grass grows on more than 12 million acres and provides forage for more than four million beef cattle in this state. About one-half of this acreage reportedly receives nitrogen fertilizer in the spring (March or early April) and in late summer.

[106] *Finding Alternatives to HDAN as a Nitrogen Source for Tall Fescue Pastures*, Robert Kallenbach, Division of Plant Sciences, and Matt Massie, Southwest Center, University of Missouri-Columbia, 2005, *http://aes.missouri,edu/swcenter/fieldday/2005/*, retrieved March 8, 2007.

[107] Ibid.

[108] Ibid.

[109] On the other hand, a purchaser, ***, reported that calcium ammonium nitrate, a compound fertilizer, was priced higher on a nitrogen unit basis than HDAN (U.S. purchaser questionnaire responses, section III-10b).

U.S. producers' questionnaire comments discussing substitutes for HDAN	
***	***.
***	Urea is strictly ammoniacal and more volatile than HDAN, whereas half of the nitrogen in HDAN is in ammoniacal form and half is in nitrate form. The nitrate form of nitrogen in HDAN is immediately available to the plant, and has the advantage of being fast-acting, which has advantages for crops where farmers reap multiple harvests, such as forages. HDAN is much less volatile than other forms of nitrogen fertilizer, and less of the nitrogen content is lost into the atmosphere. This characteristic is important when a nitrogen product is applied to the soil surface and not incorporated into the soil (e.g., no-till and top-dressing), particularly in hotter-climate regions where the potential for volatilization is greater. This is one reason that HDAN's consumption is relatively greater in the southeast quadrant states, because HDAN is immune to the conditions that can severely affect the performance of UAN and urea, such as soil pH, temperature, amount of time sitting on the soil before being incorporated by rain, wind speed, and soil moisture. If conditions were ideal when using urea and/or UAN, results could be expected to closely resemble HDAN, but conditions are rarely ideal and that can be costly to the grower.
***	Urea and HDAN can be interchanged to a limited extent; retailer storage space, retailer sales programs, and the security issues can influence which product is used. Recently, distributors and dealers outside of key HDAN markets have moved away from handling it due to added safety requirements imposed by the U.S. Coast Guard and state governments. In these areas, customers have been forced to use other forms of nitrogen. However, a key advantage that HDAN has over other nitrogen fertilizers is low volatility. In hot, humid climates, more nitrogen will reach the plant with HDAN than from any other nitrogen fertilizer. As a result, HDAN consumption for direct application is concentrated in the Southeastern quadrant of United States. This same concept applies to pasture applications as well, where HDAN is the primary source of nitrogen for pastures in the southern states. In the key HDAN consuming areas, farmers demand HDAN and distributors and dealers continue to supply it. In addition, for applications or regions where the unique characteristics of HDAN are most important to farmers (e.g., less volatilization) farmers are much less likely to switch.
Source: Compiled from data submitted in response to Commission questionnaires.	

U.S. producers,[110] importers,[111] and purchasers[112] were also requested in their questionnaire responses to discuss any changes in the number or types of products that can be substituted for HDAN since January 1, 2001. Two of four responding U.S. producers, all three responding importers, and four of the eight responding U.S. purchasers reported that there were no new substitutes for HDAN. Responses of the two U.S. producers and four purchasers discussing new substitutes for HDAN are shown in the tabulation on the following page.

[110] U.S. producer questionnaire response, section IV-B-17.

[111] U.S. importer questionnaire response, section III-B-18.

[112] U.S. purchaser questionnaire response, section III-11.

Questionnaire comments regarding presence of new substitutes for HDAN	
U.S. producers:	
***	Agrotain was introduced to try to limit the nitrogen losses of urea when applied to the soil surface. However, the added cost of this additive usually negates the cost advantages of urea on a NU basis.
***	Although there have been attempts to produce and market coated urea products, which are supposed to reduce volatilization (such as Agrotain), these products have met with very little success and have not made any significant inroads in the market.
U.S. purchasers:	
***	Slow release urea.
***	NP 33-3-0 (nitric phosphate), which was imported from Russia was used in place of HDAN, but this product has not been available in the last two years.
***	ESN is a polycoated form of urea that stops the volatilization/denitrification. The ESN form of urea contains 44% nitrogen and is produced by Agrium. *** ESN releases nitrogen too slowly to be used effectively on wheat. ESN, which is priced *** HDAN, is a good substitute for HDAN. The polycoating of ESN adds about *** to the price of the urea.
***	Introduction of NK 21-0-21 from Russia was priced *** the blend produced by *** when it uses HDAN.
Source: Compiled from data submitted in response to Commission questionnaires.	

HDAN cost share

Although U.S. producers,[113] importers,[114] and end-user purchasers [115] were requested to provide the cost of the farmer/growers' end product accounted for by HDAN, only two U.S. producers (***) and one U.S. importer (***) provided useable responses.[116] Two of the three responding firms (***) reported, as requested, specific crops/plants and the estimated cost share of HDAN to the total production costs of each reported crop/plant.[117] These responses are shown in the tabulation on the following page. Based on the reported information for specific crops/plants, HDAN cost shares ranged from 11 percent to 37 percent.

[113] U.S. producer questionnaire response, section IV-B-11.

[114] U.S. importer questionnaire response, section III-B-12.

[115] U.S. purchaser questionnaire response, section III-4.

[116] Another importer, ***, reported that HDAN costs accounted for 100 percent of the total cost of the pasture (U.S. importer questionnaire response, section III-B-12). This response, however, does not appear to take into account other costs, such as the cost of machinery and labor required to apply the HDAN.

[117] *** reported that a recent USDA report showed that in 2005 all fertilizers accounted for between 3.8 percent and 13.9 percent of total production costs (including overhead) and from 11.2 percent to 28.9 percent of total operating costs (U.S. producer questionnaire response, section IV-B-11).

Firm	End use	HDAN cost share *(percent)*
***	Cool season grasses	27
	Warm season grasses	30
	Cotton (two bales per acre)	17
	Corn	37
	Milo/grain sorghum	29
	Wheat	23
	Certain vegetables	30
	Tobacco	30
***	Pasture	11
	Corn	11
	Wheat	16

Note: Cool season grasses include brome, fescue, and ryegrass for grazing, whereas warm season grasses include Bermuda grass.

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

Foreign Demand

Estimated HDAN demand in the top 14 consuming countries, excluding the United States, during 2006 is estimated to account for almost *** percent of world HDAN consumption during this period.[118] These 14 countries and their estimated shares of world consumption are shown in the following tabulation.

* * * * * * *

World consumption of HDAN is forecast to *** during 2006-08.[119] Consumption of HDAN is forecast to *** during this period in the following top consuming foreign countries: Egypt, Russia, Turkey, Ukraine, and the United Kingdom; whereas HDAN consumption is forecast to *** in the following top foreign countries: Brazil, Bulgaria, China, France, Lithuania, and Poland.[120] Consumption of HDAN is *** in the following top foreign countries: Hungary, Romania, and Uzbekistan.[121] Two Ukrainian HDAN producers, ***, reported that they expected demand for HDAN in Ukraine to increase in the future due to the health of the Ukrainian economy.[122]

[118] FERTECON, *Nitrogen Fertilizer Data File*, January 2007, submitted by domestic interested parties on April 10, 2007, in their prehearing brief, exh. 6.

[119] Ibid.

[120] Ibid.

[121] Ibid.

[122] U.S. foreign producer questionnaire response, section III-2c.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported HDAN depends upon such factors as relative prices, quality (e.g., prill size, density, coating, etc.), availability/reliability of supply, U.S. transportation costs, and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available information, staff believes there is at least a moderate degree of substitution between domestic HDAN and HDAN imported from Ukraine and other import sources.

U.S. purchasers were requested to report in their purchaser questionnaire response whether purchasing HDAN produced in the United States was an important factor in the firms' purchases.[123] Seven of the 12 responding U.S. purchasers reported that it was not a factor,[124] whereas the remaining 5 purchasers reported that it was a factor. Three of these five latter purchasers reported buying 100 percent of their HDAN from U.S. producers; another purchaser, ***, reported buying 60 percent of its HDAN from U.S. producers; and the remaining purchaser, ***, reported buying 50 percent of its HDAN from U.S. producers. These last two purchasers, which are dealers, also provided additional discussion. *** reported that domestic HDAN provided a dependable supply. The firm also asserted that it is important to have domestic suppliers who are allowed to make a fair profit and, according to ***, it would be a mistake to allow foreign producers with less expensive natural gas cost to dump nitrogen products at lower prices in the United States putting domestic suppliers out of business. *** asserted that, with present costs of transportation and transportation regulations, it would be difficult to stock imported HDAN, because most of these regulations apply to barge companies and their storage facilities, which handle mostly imported HDAN; U.S.-produced HDAN is shipped mainly by rail and does not encounter as many such costs.

Factors Affecting Purchasing Decisions

Purchasers were requested in their questionnaires to list the top three purchase factors that they consider when deciding from whom to purchase HDAN.[125] Responses of the 12 reporting purchasers, which did not necessarily respond for each level of importance, are shown in the following tabulation.

Factors	Number of purchasers responding		
	First important factor	Second important factor	Third important factor
Price	6	1	2
Quality	3	6	1
Availability	3	2	4
Transport costs	-	1	1
Traditional supplier	-	-	2
Source: Compiled from data submitted in response to Commission questionnaires.			

[123] U.S. purchaser questionnaire response, section III-16.

[124] One of these seven purchasers, ***, asserted that no U.S.-produced HDAN was available for distribution in Florida.

[125] U.S. purchaser questionnaire response, section III-32b.

As shown in the tabulation, the responding purchasers identified five purchase factors as important; price was reported most frequently as the most important factor, quality was reported most frequently as the second important factor, and availability was reported most frequently as the third important factor. Purchasers reported that quality considerations included guaranteed certificates of analysis, prill size and hardness, free flowing product, bulk density, coating, and low dust.[126] Twelve U.S. purchasers responded to a request in the purchaser questionnaire to indicate how frequently they purchase HDAN at the lowest price.[127] Two purchasers reported always, four reported usually, three reported sometimes, and the remaining three reported never.[128] The reporting firms that did not always purchase HDAN at the lowest price reported that quality and availability were also important in their purchase decisions.

Twelve U.S. purchasers also responded to a request in the purchaser questionnaire to rank 15 specified purchase factors as very important, somewhat important, or not important;[129] not all responding purchasers necessarily ranked every specified factor. The total number of responses is shown in table II-3 for each purchase factor. Five purchase factors--availability, discounts offered, price, product quality meets standards, and reliable supply--were considered most frequently to be very important purchase factors for HDAN.[130] Minimum quantity requirements followed by product consistency were reported most frequently as the top two somewhat important purchase factors; packaging, followed by technical support and product range, were the three most frequently cited purchase factors considered not important.

Comparison of the U.S.-Produced and Imported HDAN

Twelve responding U.S. purchasers did not report any purchases of HDAN imported from Ukraine, but did report purchasing HDAN from U.S. producers and other U.S. suppliers.[131] These purchasers frequently were not able to identify the country of origin of HDAN that they purchased from their U.S. suppliers, and assumed that the HDAN purchased from U.S. producers was produced domestically. Nine of 11 responding U.S. purchasers reported that they sometimes or never purchase HDAN based on the country of origin, whereas one of the remaining two purchasers, ***, always did so and the other purchaser, *** usually did so.[132] All nine responding purchasers reported that their customers sometimes or never purchase HDAN based on the country of origin.[133] U.S. HDAN producers and importers sell their HDAN almost exclusively to fertilizer distributors and dealers.

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[126] Ibid.

[127] U.S. purchaser questionnaire response, section III-34.

[128] One of the three purchasers that never purchased HDAN at the lowest price, ***, purchases its HDAN from *** and ***.

[129] U.S. purchaser questionnaire response, section III-32a.

[130] Price, product quality, and availability, in descending order, were reported as the top three purchase factors in another part of the purchaser questionnaire and were discussed earlier.

[131] U.S. purchaser questionnaire response, section II-1.

[132] U.S. purchaser questionnaire response, section II-22. *** reported purchasing only U.S.-produced HDAN and *** reported purchasing mostly U.S.-produced HDAN, because some imported material does not store well and breaks down in storage (U.S. purchaser questionnaire response, sections II-1 and III-22).

[133] U.S. purchaser questionnaire response, section III-22.

Table II-3
Ranking of purchase factors, as reported by U.S. HDAN purchasers

Purchase factors	Very important	Somewhat important	Not important
Availability *	10	1	1
Delivery terms	6	3	3
Delivery time	7	3	2
Discounts offered	11	0	1
Extension of credit	5	2	5
Price *	10	1	1
Minimum quantity requirements	1	6	5
Packaging	1	0	11
Product consistency	8	4	0
Product quality meets standards *	10	1	1
Product quality exceeds standards	4	3	4
Product range	2	3	6
Reliable supply	10	2	0
Technical support	1	3	8
U.S. transportation costs	7	3	2

Note.–The overall top three purchase factors as discussed earlier are identified with asterisks.

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

The U.S. producers,[134] importers,[135] and purchasers[136] of HDAN 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 HDAN produced domestically, imported from Ukraine, and imported from third countries. The U.S. producers[137] and importers[138] were also asked to report the extent of any differences other than price that would affect sales in the U.S. market among the various country sources of HDAN.[139] Responses of the two reporting U.S. producers, three U.S. importers, and eight U.S. purchasers regarding the degree of interchangeability between domestic and imported HDAN are summarized in table II-4 for comparisons involving the U.S.-produced and imported HDAN.

[134] U.S. producer questionnaire response, section IV-B-37.

[135] U.S. importer questionnaire response, section III-B-34.

[136] U.S. purchaser questionnaire response, section IV-2.

[137] U.S. producer questionnaire response, section IV-B-38.

[138] U.S. importer questionnaire response, section III-B-35.

[139] Nonprice factors referred to in the questionnaire request included quality, availability, transportation network, product range, and technical support, but nonprice factors were not necessarily restricted to only these factors.

Responses of the two reporting U.S. producers and three U.S. importers regarding differences other than price affecting competition are summarized in table II-5 for comparisons involving the U.S.-produced and imported HDAN. Although responses of all the reporting firms suggest that U.S.-produced and imported HDAN are generally always interchangeable, some importers and purchasers also reported these products were sometimes interchangeable. Responses of the U.S. producers and importers suggest that non-price factors generally never affect competition between U.S.-produced and imported HDAN, although two responses of U.S. importers indicated that such factors sometimes affect such competition.[140]

Table II-4
HDAN: Perceived degree of interchangeability of product produced in the United States and in other countries, and sold in the U.S. market

	Number of U.S. producers' responses[1]				Number of U.S. importers' responses[2]				Number of U.S. purchasers' responses[3]			
Country pair	A	F	S	N	A	F	S	N	A	F	S	N
United States vs.--												
Ukraine	2	-	-	-	1	-	-	-	4	-	1	-
Other countries	2	-	-	-	1	-	1	-	4	-	1	-
Ukraine vs.--												
Other countries	2	-	-	-	1	-	1	-	4	-	1	-

[1] Based on responses of two U.S. producers.
[2] Based on responses of three U.S. importers.
[3] Based on responses of eight U.S. purchasers.

Note: A = Always, F = Frequently, S = Sometimes, N = Never.

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

[140] Other countries for which interchangeability and non-price factors were reported included Bulgaria, Georgia, Netherlands, Romania, and Russia.

Table II-5
HDAN: Perceived importance of differences in factors other than price between product produced in the United States and in other countries, and sold in the U.S. market

Country pair	Number of U.S. producers' responses[1]				Number of U.S. importers' responses[2]			
	A	F	S	N	A	F	S	N
United States vs.--								
Ukraine	-	-	-	2	-	-	1	1
Other countries	-	-	-	2	-	-	-	2
Ukraine vs.--								
Other countries	-	-	-	2	-	-	1	1

[1] Based on responses of two U.S. producers.
[2] Based on responses of three U.S. importers.

Note: A = Always, F = Frequently, S = Sometimes, N = Never.

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

Purchaser Sourcing Patterns

Purchasers were also requested in their questionnaire to make country-of-origin comparisons among the U.S.-produced and imported HDAN 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.[141] The purchaser responses are summarized in table II-6 for the reported comparisons between the U.S.-produced HDAN and that imported from nonsubject countries; no comparisons were reported between U.S.-produced and imported Ukrainian HDAN. A total of four U.S. HDAN purchasers reported the requested information but not necessarily for all country and purchase factors involving the United States and the reported six nonsubject countries (Bulgaria, Georgia, Netherlands, Romania, Russia, and Spain); these six countries accounted for the bulk of total U.S. imports of HDAN during 2001-06. It may be difficult to make generalizations of these comparisons because of the small number of responses, likely because purchasers either purchased only the domestic HDAN or did not know the country of origin of the HDAN that they purchased. Based on the responses of the four reporting U.S. purchasers, U.S.-produced HDAN was generally superior or comparable to the HDAN imported from the reported six nonsubject countries for most of the purchase factors. The principal exception was for the purchase factor, price, where the U.S.-produced HDAN was almost always reported as inferior, i.e., the U.S.-produced HDAN was higher-priced than the imported HDAN.

[141] U.S. purchaser questionnaire response, section IV-6.

Table II-6
HDAN: Comparisons of U.S.-produced HDAN with HDAN imported from nonsubject countries, as reported by U.S. purchasers[1]

Purchase factors	U.S.-produced HDAN compared to HDAN imported from–											
	Bulgaria			Georgia			Netherlands			Romania		
	S	C	I	S	C	I	S	C	I	S	C	I
Availability *	2	1	0	1	1	0	1	1	0	2	0	0
Delivery terms	1	1	1	0	1	1	0	1	1	1	0	1
Delivery time	1	2	0	0	2	0	0	2	0	1	1	0
Discounts offered	0	0	1	0	0	0	0	0	0	1	0	0
Extension of credit	0	2	0	0	1	0	0	1	0	1	1	0
Price[2] *	0	0	3	0	0	2	0	0	2	1	0	1
Minimum quantity requirements	0	3	0	0	2	0	0	2	0	1	1	0
Packaging	0	3	0	0	2	0	0	2	0	1	1	0
Product consistency	2	1	0	1	1	0	1	1	0	2	0	0
Product quality meets standards *	1	2	0	0	2	0	0	2	0	1	1	0
Product quality exceeds standards	0	2	0	0	2	0	0	2	0	1	1	0
Product range	0	2	0	0	1	0	0	1	0	1	1	0
Reliable supply	1	2	0	0	2	0	0	2	0	1	1	0
Technical support	1	1	0	1	1	0	1	1	0	2	0	0
U.S. transportation costs[2]	0	3	0	0	2	0	0	2	0	1	1	0

Continued on the next page.

Table II-6--*Continued*
HDAN: Comparisons of U.S.-produced HDAN with HDAN imported from nonsubject countries, as reported by U.S. purchasers[1]

Purchase factors	U.S.-produced HDAN compared to HDAN imported from–					
	Russia			Spain		
	S	C	I	S	C	I
Availability *	2	0	0	1	0	0
Delivery terms	1	0	1	1	0	0
Delivery time	1	1	0	1	0	0
Discounts offered	0	0	1	0	0	1
Extension of credit	0	2	0	0	1	0
Price[2] *	0	0	2	0	0	1
Minimum quantity requirements	0	2	0	1	0	0
Packaging	0	2	0	0	1	0
Product consistency	2	0	0	0	1	0
Product quality meets standards *	1	1	0	1	0	0
Product quality exceeds standards	0	1	0	0	0	0
Product range	0	2	0	0	1	0
Reliable supply	1	1	0	1	0	0
Technical support	1	0	0	0	0	0
U.S. transportation costs[2]	0	2	0	0	1	0

[1] A total of four U.S. purchasers reported the requested information, but not necessarily for every country and purchase factor.

[2] A rating of "S" on price and/or transportation costs indicates that the U.S. product has lower prices or transportation costs than the product from the country with which it is being compared.

Note.–S=superior, C=comparable, and I=inferior. The overall top three purchase factors as discussed earlier are identified with asterisks.

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

ELASTICITY ESTIMATES[142]

U.S. Supply Elasticity

The domestic supply elasticity for HDAN measures the sensitivity of quantity supplied by U.S. producers to a change in the U.S. market price of HDAN. The elasticity of domestic supply depends on several factors including U.S. producers' level of excess capacity, the ease with which U.S. producers can alter productive capacity, the existence of inventories, and the availability of alternate markets for U.S.-produced HDAN.[143] Analysis of these factors indicates that, overall, U.S. producers have a moderate flexibility in the short run to alter their supply of HDAN in response to relative changes in the demand for their product; thus, the domestic elasticity of supply is estimated to be in the range of 2 to 4.

U.S. Demand Elasticity

The U.S. price elasticity of demand for HDAN measures the sensitivity of the overall quantity demanded for this product to changes in the U.S. market price of HDAN. The price elasticity of demand depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, the component cost share of HDAN in the production of downstream products, and the price elasticity of demand for down-stream products. Based on available information, the demand elasticity for HDAN is estimated to be in the range of -0.8 to -1.6.

Substitution Elasticity[144]

The elasticity of substitution largely depends upon the degree to which there is an overlap of competition between U.S.-produced and imported HDAN, and product differentiation. Product differentiation, in turn, depends on such factors as physical characteristics (e.g., chemistry, surface coatings, etc.) and conditions of sale (e.g., delivery lead times, reliability of supply, product service, etc.). Based on this and other available information discussed earlier, the elasticity of substitution between domestic HDAN and imported HDAN from Ukraine is estimated to be in the range of 3 to 5.[145]

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[142] The ranges for the various elasticities were presented below in the prehearing report for purposes of discussion in the prehearing briefs, hearing testimony, and/or posthearing briefs; the domestic interested parties reported that they agreed with the three elasticity ranges reported by staff in the prehearing report (staff telephone interview with ***, May 1, 2007). The elasticity responses in this section refer to changes that could occur within 12 months, unless otherwise indicated.

[143] Domestic supply response is assumed to be symmetrical for both an increase and a decrease in demand for the domestic product. Therefore, factors opposite to those resulting in increased quantity supplied to the U.S. market result in decreased quantity supplied to the same extent. Exceptions to this assumption are a limited supply increase when demand increases because either the domestic firm(s) already operate near or at full capacity and any likely expansion in capacity would take more than 12 months to complete, or selling prices do not cover variable costs in a high variable cost industry. Another exception is a limited supply reduction when demand decreases because the domestic firm(s) must operate at or near full capacity due to very high fixed costs.

[144] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject 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 subject imported product (or vice versa) when prices change.

[145] The elasticities of substitution between U.S.-produced HDAN and nonsubject imports and between subject imports and nonsubject imports are likely to be in the same range.

PART III: CONDITION OF THE U.S. INDUSTRY

Information on the U.S. industry is based on the questionnaire responses of eight firms. Questionnaires were sent to 15 possible producers of ammonium nitrate; eight provided information. Of these eight firms, five firms[1] produced the subject HDAN and three firms produced LDAN during the period for which data were gathered.[2] Industry data obtained accounted for virtually all known U.S. production of HDAN during 2001-06.

U.S. PRODUCERS' CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

During the original investigations, there were 10 major U.S. producers of HDAN; eight firms that accounted for approximately *** percent of U.S. production in 2000 responded to the Commission questionnaires. Since the original investigation, two firms have gone out of business (Wil-Gro in 2000 and Nitram in 2003) and their production capacity disappeared. Additional capacity closures include the facilities of Coastal Chem, which after being acquired by Dyno Nobel in 2003, switched to LDAN production; the closure of the Crystal City, MO facility formerly owned by LaRoche, then acquired by El Dorado in 2000; the cessation of HDAN production by Potash Corp. in 2004 ***;[3] ***;[4] and Agrium acquiring the fertilizer production assets of Prodica LLC in 2000 and discontinuing HDAN production and sales in 2005. *** during the original investigation, MCC, was acquired in 2004 by a new entrant to the HDAN market, Terra. El Dorado ceased production of HDAN at its Cherokee, AL plant *** in 2004 in order to ***.[5]

During the original investigation and in this review, *** reported a tolling arrangement with *** whereby *** supplied *** with ammonia which *** converted to HDAN. *** charged *** a fee for this service. In this review, *** reported the tolling arrangement ***.[6]

HDAN capacity decreased during 2001-06, primarily due to the cessation of operations of Potash Corp., El Dorado's Cherokee plant in 2004, and Agrium and Air Products in 2005 (table III-1). Despite the plant closures, U.S. producers' capacity ***. HDAN production and capacity utilization declined irregularly during 2001-06, with a 2002 upturn primarily attributed to ***.

In their questionnaire responses, three producers reported production of other products on the same machinery and equipment or using the same workers as for the production of HDAN. *** reported common production equipment upstream in the production of HDAN that is also used to produce other products; *** reported the ability to switch from HDAN prills to LDAN prills and the ability to use the AN liquor for downstream products (UAN); and *** indicated that some capital equipment prior to HDAN prilling is used to produce ammonia, nitric acid, and ammonium nitrate solution, but not all of this production is dedicated to solid ammonium nitrate production. ***

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[1] ***.

[2] *** responded in the negative to the Commission's questionnaire; however, each provided a letter of explanation citing that the company produced ammonium nitrate liquor solely for purposes of manufacturing urea ammonium nitrate ("UAN") liquid fertilizer.

[3] Potash Corp.'s U.S. producer questionnaire response (section II-2) and *Green Markets*, "El Dorado, Terra to remain in agricultural AN business," August 15, 2005.

[4] ***'s U.S. producer questionnaire response (section II-2).

[5] El Dorado's U.S. producer questionnaire response (section II-2).

[6] ***'s U.S. producer questionnaire response (section II-11).

Table III-1
HDAN: U.S. producers' capacity, production, and capacity utilization, by producer, 1998-2000 and 2001-06

Producer	1998	1999	2000	2001	2002	2003	2004	2005	2006
Capacity *(short tons)*									
Agrium[1]	***	***	***	***	***	***	***	***	***
Air Products	***	***	***	***	***	***	***	***	***
El Dorado[2]	***	***	***	***	***	***	***	***	***
Nitram	***	***	***	***	***	***	***	***	***
Potash Corp.[3]	***	***	***	***	***	***	***	***	***
Terra	***	***	***	***	***	***	***	***	***
Total	2,585,210	2,673,064	2,666,251	2,047,578	2,039,125	2,074,340	2,050,042	1,747,368	***
Production *(short tons)*									
Agrium[1]	***	***	***	***	***	***	***	***	***
Air Products	***	***	***	***	***	***	***	***	***
El Dorado	***	***	***	***	***	***	***	***	***
Nitram	***	***	***	***	***	***	***	***	***
Potash Corp.[3]	***	***	***	***	***	***	***	***	***
Terra	***	***	***	***	***	***	***	***	***
Total	2,126,197	1,970,942	1,679,379	1,432,727	1,581,114	1,368,676	1,282,263	1,066,799	***
Capacity utilization *(percent)*									
Agrium	***	***	***	***	***	***	***	***	***
Air Products	***	***	***	***	***	***	***	***	***
El Dorado	***	***	***	***	***	***	***	***	***
Nitram	***	***	***	***	***	***	***	***	***
Potash Corp.[3]	***	***	***	***	***	***	***	***	***
Terra	***	***	***	***	***	***	***	***	***
Average	82.2	73.7	63.0	70.0	77.5	66.0	62.5	61.1	***

[1] Agrium data include Prodica LLC's data.
[2] El Dorado's Arkansas production was limited to approximately *** short tons for any rolling 12-month period by the State of Arkansas for environmental reasons since 2001. In March 2005 El Dorado completed environmental equipment improvements that increased production capacity to *** short tons per year from *** short tons per year; however, ***. El Dorado's U.S. producer questionnaire response (section II-3a).
[3] Potash Corp. produced HDAN and LDAN ***. Its reported AN capacity fluctuated with the fluctuation in product mix between HDAN and LDAN.

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

***.[7]

[7] ***'s U.S. producer questionnaire response (section II-5); ***'s U.S. producer questionnaire response (section II-7); and ***'s U.S. producer questionnaire response (sections II-3a, II-3b, and II-5).

Restraints on production capacity were described as ***.[8]

U.S. production of LDAN was reported by six firms: Apache Nitrogen Products, Inc. ("Apache Nitrogen"); Dyno Nobel Inc. ("Dyno Nobel"); El Dorado; Geneva Nitrogen, LLC ("Geneva"); Potash Corp; and Terra. *** and ***, with *** percent and *** percent of U.S. production of LDAN, respectively, together accounted for approximately *** percent of U.S. production of LDAN during the period for which data were gathered (table III-2).

Table III-2
LDAN: U.S. producers' capacity, production, and capacity utilization, 2001-06

Item	2001	2002	2003	2004	2005	2006
Capacity[1] (*short tons*)	1,506,727	1,519,680	1,486,465	1,935,763	2,241,000	2,312,000
Production (*short tons*)	1,270,500	1,280,385	1,283,437	1,603,759	1,660,050	1,794,979
Capacity utilization (*percent*)	84.3	84.3	86.3	82.8	74.1	77.6

[1] ***.

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

Changes in Character of Operations and Capacity Projections

El Dorado *** .[9] In July 2005, Terra announced that it entered into a 10-year, renewable agreement to supply LDAN and ammonium nitrate solution (ANS) to Orica USA Inc. (Orica). As part of the agreement, Terra modified one of its HDAN AN prill towers to enable the production of either HDAN or LDAN.[10] ***.[11] Table III-3 presents information on the status of existing HDAN production facilities.

U.S. PRODUCERS' DOMESTIC SHIPMENTS, COMPANY TRANSFERS, AND EXPORT SHIPMENTS

U.S. producers' U.S. shipments declined irregularly during 2001-06 (table III-4). Three firms, ***, reported transfers of HDAN to related companies and internal consumption during the period for which data were gathered. ***. Exports accounted for *** of production, with only two firms, ***, reporting exports *** during 2001-06.

[8] U.S. producers' questionnaire responses (section II-6).

[9] El Dorado's U.S. producer questionnaire response (section II-3a).

[10] Terra News Release, "Terra announces ammonium nitrate supply agreement with Orica," July 22, 2005, found at http://www.terraindustries.com/latest/corp_activities/05-07/orica.pdf.com, retrieved February 7, 2006.

[11] Terra's U.S. producers' questionnaire response (section II-3a).

Table III-3
Status of existing HDAN production facilities, 2006

Current owner	Production facility location	Capacity *(short tons)*	Production capability	Status
Agrium	Homestead, NE	***	***	Discontinued HDAN production and sales mid-year 2005. Operating as distribution terminal for ammonia and other nitrogen products.
	Kennewick, WA	***	***	Acquired by Agrium in October 2000. Discontinued HDAN production and sales mid-year 2005. ***.
Air Products	Pace, FL	***	***	Permanently shut down its HDAN production facility at the end of December 2005. ***.
Dyno Nobel	Cheyenne, WY	***	***	The former Coastal Chem, Inc.'s facility was acquired by El Paso Energy Corp. in January 2001 and then acquired by Dyno Nobel ASA in 2003. This facility now produces LDAN.
El Dorado	Cherokee, AL	***	***	LaRoche (the former facility owner) filed for Chapter 11 bankruptcy protection in May 2000 and sold production facilities in Cherokee, AL and Crystal City, MO to Orica LLC in August 2000. Subsequently, Orica sold the facilities to LSB Industries (parent of El Dorado) in November 2000. Production suspended in March 2004; ***.
	El Dorado, AR	***	Yes	***. **Currently producing.**
	Pryor, OK	***	***	The former Wil-Gro facility closed in February 2000 after being idle since December 1999. LSB Industries (parent of El Dorado) acquired facility in 2001 but did not restart production. ***.
Potash Corp.	Augusta, GA	***[1]	***	Ceased AN production in favor of LDAN *** in December 2004.
Terra	Yazoo City, MS	***[1]	Yes	MCC filed for Chapter 11 bankruptcy protection in May 2003. Acquired by Terra Industries, Inc. in December 2004. **Currently producing.**

[1] Includes capacity to produce LDAN ***.

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

Table III-4
HDAN: U.S. producers' shipments, by type, 1998-2000, and 2001-06

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
					Quantity *(short tons)*				
Commercial shipments	***	***	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	1,959,789	2,014,854	1,807,145	1,393,412	1,550,097	1,401,992	1,294,570	1,070,037	***
Export shipments	***	***	***	***	***	***	***	***	***
All shipments	***	***	***	***	***	***	***	***	***
					Value *($1,000)*				
Commercial shipments	***	***	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	238,321	207,508	218,878	193,227	176,109	214,711	224,514	219,981	***
Export shipments	***	***	***	***	***	***	***	***	***
All shipments	***	***	***	***	***	***	***	***	***
					Unit value *(per short ton)*				
Commercial shipments	$***	$***	$***	$***	$***	$***	$***	$***	$***
Internal consumption	***	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	121.61	102.99	121.12	138.67	113.61	153.15	173.43	205.58	***
Export shipments	***	***	***	***	***	***	***	***	***
Average	***	***	***	***	***	***	***	***	***
					Share of shipment quantity (*percent*)				
Commercial shipments	***	***	***	***	***	***	***	***	***
Internal consumption	***	***	***	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***	***	***	***
Subtotal, U.S. shipments	***	***	***	***	***	***	***	***	***
Export shipments	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***

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

U.S. PRODUCERS' INVENTORIES

Inventories declined steadily during the period examined in this review (table III-5). Only two producers, ***, had inventories at the end of 2006. Agrium discontinued AN production and sales in mid-year 2005. Air Products permanently shut down its AN production facility at the end of December 2005. ***.

Table III-5
HDAN: U.S. producers' end-of-period inventories, 1998-2000, and 2001-06

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
Inventories *(short tons)*	352,614	247,435	97,376	105,499	104,719	65,491	42,963	***	***
Ratio to production *(percent)*	16.6	12.6	5.8	7.4	6.6	4.8	3.4	***	***
Ratio to U.S. shipments *(percent)*	18.0	12.3	5.4	7.6	6.8	4.7	3.3	***	***
Ratio to total shipments *(percent)*	***	***	***	***	***	***	***	***	***

Note.–***.

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

U.S. PRODUCERS' PURCHASES

*** purchased *** of HDAN from *** (table III-6). The reason for *** purchases of HDAN from *** was that it ***.[12] In 2005, *** purchased *** short tons of HDAN from ***.[13]

*** reported that its purchases of HDAN in 2005 and 2006 were ***.[14]

Table III-6
HDAN: U.S. producers' purchases of U.S.-produced and imported product, 2001-06

* * * * * * *

U.S. PRODUCERS' EMPLOYMENT, WAGES, AND PRODUCTIVITY

Employment declined steadily during 2001-06 (table III-7). ***.

[12] ***'s U.S. producers' questionnaire response (section II-10).

[13] ***'s U.S. producers' questionnaire response (section II-10).

[14] ***'s U.S. producers' questionnaire response (section II-10).

Table III-7
HDAN: Average number of production and related workers, hours worked, wages paid to such workers, hourly wages, productivity, and unit labor costs, 1998-2000 and 2001-06

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
Production and related workers *(number)*[1]	426	422	389	293	290	287	277	179	***
Hours worked *(1,000)*	942	927	852	658	664	636	604	378	***
Hours worked per worker	2,211	2,197	2,190	2,246	2,290	2,216	2,181	2,112	***
Wages paid *($1,000)*	18,833	18,841	17,442	13,898	14,505	13,914	13,870	8,707	***
Hourly wages	$19.99	$20.33	$20.48	$21.12	$21.84	$21.88	$22.96	$23.03	$***
Productivity *(tons per 1,000 hours)*	***	***	***	***	***	***	***	***	***
Unit labor costs *(per short ton)*	$***	$***	$***	$***	$***	$***	$***	$***	$***

[1] Agrium did not provide employment data on a calendar-year basis; therefore, employment is understated during 2001-05.

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

EFFECTS OF HURRICANES

Two major hurricanes, Katrina and Rita, hit the United States in 2005. Katrina made landfall in the United States on August 25, 2005, and Rita hit the United States about one month later, on September 24, 2005. U.S. producers' responses to a query concerning current and future effects, if any, of Hurricanes Katrina and /or Rita on their firm's production and shipments are presented in appendix D.

FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

Five firms[15] provided usable financial data on their operations on HDAN, which accounted for the vast majority of known U.S. production of HDAN in 2006. A number of changes occurred in the structure of the U.S. HDAN industry since 2000.[16] El Dorado entered the market in 2000 through the purchase of two existing plants, located at Cherokee, AL, and El Dorado, AR.[17] However, El Dorado suspended HDAN production at its plant in Cherokee, AL *** in order to ***.[18] Nitram closed its facility

[15] These firms are: Agrium; Air Products; El Dorado (which reported for itself and separately for Cherokee, the plant it acquired from LaRoche on November 1, 2000); Potash Corp.; and Terra, which reported for Mississippi Chemical Co. ("MCC") during 2001-04 and for the combined firm during 2005-06. ***. Differences between the financial data and the trade data in this report are primarily accounted for by timing differences; wide price fluctuations over the periods reviewed accounted for differences in value.

[16] See *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), pp. III-1 to III-4, III-6, and III-7.

[17] El Dorado purchased nitrogen plants at Crystal City, MO, and Cherokee, AL, from LaRoche in 2000. *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), p. III-6. Reportedly, El Dorado decided not ***.

[18] ***.

in 2003 after filing for bankruptcy protection; its capacity was permanently lost.[19] Air Products and Potash Corp. both exited the market in 2005: Air Products closed its HDAN production unit at Pace, FL, exiting the fertilizer business after June 2005,[20] while Potash Corp. ceased making HDAN as of December 2004, but continues to produce other nitrogen-based fertilizers, like low-density ammonium nitrate.[21] MCC, which filed for bankruptcy protection in May 2003, was purchased by Terra (which produced nitrogen fertilizers other than ammonium nitrate) in December 2004.[22] As a result of these changes, El Dorado (at El Dorado, AR) and Terra (at Yazoo City, MS) became the only U.S. firms producing HDAN in 2006 and 2007.

Factors that affect the supply of and demand for ammonium nitrate include the availability, cost, and price volatility of feedstock natural gas,[23] and competition with other forms of nitrogen for industrial and agricultural use. For example, ***.[24] Security and liability concerns also affect the market for HDAN because of its classification as a hazardous material (it is an oxidizing agent and has the potential to be used as an explosive). These include increased U.S. Coast Guard and State safety requirements, rising insurance costs, and the associated liability related to security concerns on transportation, storage, and sale, and were cited by certain producers like Agrium,[25] Air Products,[26] and ***[27] as reasons why they discontinued producing and marketing HDAN.[28]

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[19] ***.

[20] Air Products announced its intention to exit the fertilizer business "at the end of its contractual commitments." In its press release of December 22, 2005, the firm stated "that it will permanently close its converted products fertilizer operations at Pace, FL by the end of December 2005. Air Products has been unsuccessful in finding a buyer to purchase the operation." *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), p. III-6-7. ***.

[21] ***.

[22] MCC filed for bankruptcy in May 2003 and disposed of its non-nitrogen assets at the same time that Terra's purchase of the remaining MCC assets was completed in December 2004. *See* MCC's 2004 Form 10-K, p. 4, and Terra's 2004 Form 10-K, p. 3. Terra started producing industrial grade ammonium nitrate in 2005 after installing a production line for that product at its plant in Yazoo City, MS. *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), p. III-7.

[23] According to Agrium, "from 2002 to 2004, there were relatively few new nitrogen facilities brought into production following the cyclical downturn in nitrogen prices that began in 1997. In addition, there was a shift to sustained higher North American natural gas prices during this period, accompanied by substantially higher gas price volatility. This forced the permanent closure of a number of U.S. nitrogen {production} facilities." Also, a spokesman for Terra estimated that approximately 30 percent of North American ammonia production capacity was shut down during 2000-05 because of volatile and rising natural gas costs. *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), p. III-7.

[24] ***.

[25] Reportedly, Agrium's decision was made as an ongoing process to optimize returns on its business and to reduce potential exposure related to security concerns. *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), p. III-7.

[26] Air Products stated in its questionnaire response that ***. In a December 22, 2005 press release, Air Products stated that a changing regulatory environment was a factor that made it difficult for the firm to sustain a profitable business.

[27] ***.

[28] These concerns are sometimes cited as "logistical constraints" or "security controls." See *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), p. III-8.

Operations on HDAN

Results of U.S. firms' operations on HDAN are briefly summarized here. Total net sales quantities decreased irregularly between 2001 and 2005 and fell *** between 2005 and 2006. Total net sales values increased irregularly between 2001 and 2005, attributable primarily to increased average unit sales values; total net sales value fell between 2005 and 2006 on lower sales volume although the average unit value of sales increased. Increases in the cost of raw materials during 2001-05 led to an overall increase in the industry's cost of goods sold ("COGS"). The industry recorded operating losses during 2001-05 (the operating loss was greatest in 2001), *** in 2006. Part of *** is attributable to the number of firms reporting (five during 2001-05 with three leaving the industry, but only two, (El Dorado and Terra) reporting data for their operations on HDAN in 2006. Hence the data in 2006 are more sensitive to changes in the operating conditions of a smaller industry.[29] Net income before taxes followed changes in operating income, as did cash flow. These data for the industry are shown in table III-8, while table III-9 provides operating data on a firm-by-firm basis.

Table III-8
HDAN: Results of operations of U.S. firms, fiscal years 2001-06

* * * * * * *

Table III-9
HDAN: Results of operations of U.S. firms, by firm, fiscal years 2001-06

* * * * * * *

Raw material costs are a significant factor in industry profitability. Natural gas is the principal raw material used to produce HDAN. Nitrogen is taken from the air and reacted with natural gas reformed with steam, to produce ammonia, and ammonia is processed with nitric acid to produce HDAN. Several of the firms have produced HDAN based on ammonia that they produced or purchased.[30] Natural gas prices (and costs) have been volatile since 2001, and generally increased from 2003 through 2005. Although natural gas costs moderated in the latter part of 2006, they remained at relatively high levels. While there is no mechanism to hedge price risk on ammonia, these firms have used several pricing mechanisms to smooth or mitigate the price volatility of natural gas including swaps, options, "forward

[29] Staff asked ***. E-mail to staff from ***. On the other hand, ***. ***.

[30] When Terra acquired MCC, it acquired a 50-percent ownership interest in an ammonia plant, Point Lisas Nitrogen Limited, located in The Republic of Trinidad and Tobago. Point Lisas Nitrogen purchases its natural gas under contract with Natural Gas Co. of Trinidad and Tobago, which is considered to be a low-cost producer. See *Ammonium Nitrate from Russia*, Investigation No. 731-TA-856 (Review), USITC Publication 3844 (March 2006), p. III-8. Terra can produce HDAN based on ammonia that it produces either at its plant in Yazoo City, MS, or that it can bring in from Point Lisas through the firm's terminal at Donaldsonville, LA; Terra can purchase ammonia from other suppliers as well to run its HDAN facility at Yazoo City, MS. ***. El Dorado produces HDAN from ***. Air Products stated that ***.

pricing contracts," and hedging using futures contracts.[31] Terra's gains and losses from these cost-management activities are estimated to be about 5 percent of its costs of natural gas in 2006.[32]

U.S. producers commented on the effects of changes in raw material costs on pricing of HDAN. One firm, ***, stated that there was "minimal impact;" another, ***, stated that prices for HDAN changed to some extent depending on supply availability or the season, and that higher ammonia prices forced it to pass through higher costs to customers, if possible, to preserve {profit} margins. *** stated that ***. *** comments on the relationship of HDAN prices to natural gas were similar to those of ***.

*** provided data on the cost of natural gas used in its production of ammonia; this cost ranged from *** percent of total ammonia cost in 2001 to *** percent in 2004, and from *** percent to *** percent in 2005 and 2006, respectively. In turn, *** ratio of ammonia cost to its total raw materials cost ranged from *** percent to *** percent. (*** identified *** as cost categories within its direct raw materials, which reduced the cost ratio of ammonia to total raw materials.) Two firms, ***, classified natural gas as their direct raw material, and natural gas accounted for *** percent to *** percent of their total raw material costs during the periods reviewed. For ***, which provided ammonia costs, the ratio of costs of ammonia to the total costs of raw materials ranged from *** percent to *** percent. Other items within the category of raw materials are additives, coating products, and bags. Energy costs are chiefly composed of electricity, steam, and natural gas used as a process gas. These costs are usually classified as part of other factory costs, and as a share of the category, they generally rose during the periods reviewed. ***.[33]

Variance Analysis

The variance analysis showing the effects of prices and volume on U.S. producers' net sales of HDAN, and of costs and volume on their total expenses, is presented in table III-10. The information for this variance analysis is derived from table III-8, but differs in that only total net sales are shown. The variance analysis provides an assessment of changes in profitability as related to changes in pricing, cost, and volume. Any differences in terms of sales or product mix (certain producers stated they had sold HDAN in bags while others sold on both a retail and wholesale basis, for example) are not material to the results as a whole. A summary variance analysis is presented for *** at the end of table III-10.

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[31] Natural gas purchases accounted for 53 percent and 46 percent of Terra's world-wide total operating costs and expenses in 2005 and 2006, respectively, with natural gas unit costs net of forward pricing gains and losses equivalent to $7.50 per MMBtu and $7.14 per MMBtu in 2005 and 2006, respectively (up from $5.37 per MMBtu in 2004). Terra uses futures contracts, swaps and options, that reference physical natural gas prices or appropriate NYMEX futures contract prices to hedge approximately 22 percent of its North American natural gas requirements, which were estimated at 100 million MMBtu in 2007. Terra benefits from an increase in forward prices but does not if forward prices decline (2006 natural gas costs for the nitrogen segment were $50.3 million higher than spot prices compared with 2005 natural gas costs that were $0.7 million lower than spot prices). Contract physical prices are frequently based on prices at the Henry Hub in Louisiana. The contracts are traded in months forward and settlement dates are scheduled to coincide with gas purchases during that future period but are not perfect hedges because of location differences. Terra's 2006 Form 10-K, pp. 26, 30, 32, and 39. Also, *see* ***. Potash Corp. reported ***. El Dorado reported ***.

[32] Estimated by staff based on Terra's 2006 form 10-K, pp. 26, 30, and 39. MCC also hedged its purchase requirements of natural gas, resulting in cost decreases and cost increases in different years that represented a small portion of its total costs of natural gas. See *Ammonium Nitrate from Russia, Investigation No. 731-TA-856 (Review)*, USITC Publication 3844 (March 2006), p. III-9.

[33] ***.

Table III-10
HDAN: Variance analysis on U.S. firms' operations, fiscal years 2001-06

* * * * * * *

The variance analysis is summarized at the bottom of the table and shows generally that the increase in the operating income from 2001 to 2006 is attributable to the favorable price variance (higher unit prices) that was greater than the unfavorable net cost/expense variance (higher unit costs). This appears to be the case whether the industry is examined as a whole or *** are examined separately.

Assets and Return on Investment

The Commission's questionnaire requested data on assets used in the production, warehousing, and sale of HDAN to compute return on investment ("ROI") for 2001 to 2006 (table III-11). The data for total net sales and operating losses are from table III-8, ***. Total net sales was divided by total assets,

Table III-11
HDAN: Value of assets used in production, warehousing, and sales, and return on investment, fiscal years 2001-06

Item	Fiscal year					
	2001	2002	2003	2004	2005	2006
	Value (*$1,000*)					
Current assets:						
Cash and equivalent	172	75	27	1,706	3	***
Accounts receivable, net	21,443	17,374	18,828	14,790	14,138	***
Inventories	20,055	16,330	18,615	14,637	16,909	***
All other current assets	2,003	2,568	1,708	3,050	2,009	***
Subtotal current assets	43,673	36,347	39,178	34,183	33,059	***
Noncurrent assets:						
Original cost of property, plant, and equipment	75,025	80,295	94,241	95,188	82,285	***
Accumulated depreciation	58,951	64,059	74,978	74,002	52,610	***
Book value of property, plant, and equipment	16,074	16,236	19,263	21,186	29,675	***
Other noncurrent assets	33,874	29,952	8,881	36,262	207	***
Subtotal noncurrent assets	49,948	46,188	28,144	57,448	29,882	***
Total assets	93,621	82,535	67,322	91,631	62,941	***
Total net sales	***	***	***	***	***	***
Operating income or (loss)[1]	***	***	***	***	***	***
	Return on investment ratio (*percent*)					
Return on investment [1]	***	***	***	***	***	***

[1] See note 5 in table III-8 and note 1 in table III-9. If ***.

Note.–***. The data for total net sales and operating income or (loss) shown here differs from table III-8 because they do not include ***.

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

resulting in the asset turnover ratio. The operating income ratio was then multiplied by the asset turnover ratio, resulting in ROI; the expanded form of this equation shows how the profit margin and total asset turnover ratio interact to determine the return on investment.

ROI generally followed changes in operating income (discussed earlier in connection with table III-8), i.e., was ***. Generally, U.S. firms allocated costs, expenses, and assets to HDAN, which represents one product out of several types of nitrogen fertilizers produced in their multiproduct plants. As firms produced less HDAN they allocated less of their assets to the production, warehousing, and sale of HDAN. Hence, ROI was influenced by changes in the industry's total value of assets as well as by changes in operating income or loss.

Capital Expenditures and Research and Development Expenses

U.S. producers' data on their capital expenditures and research and development ("R&D") expenses for their operations on HDAN are shown in table III-12.

Table III-12
HDAN: U.S. firms' capital expenditures and research and development expenses, fiscal years 2001-06

Item	Fiscal years					
	2001	2002	2003	2004	2005	2006
	Value (*$1,000*)					
Capital expenditures:						
Air Products	***	***	***	***	***	***
El Dorado	***	***	***	***	***	***
Cherokee	***	***	***	***	***	***
Potash Corp.	***	***	***	***	***	***
Terra	***	***	***	***	***	***
Total	3,001	4,253	2,875	8,729	***	***
R&D expenses[1]	***	***	***	***	***	***

[1] Accounted for by ***.

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

*** stated that it ***.[34] *** stated that its recent capital expenditures have been ***.[35] Likewise, other firms reportedly continued efforts to improve throughput (efficiency in production operations), conversion ratios of natural gas to ammonia and of ammonia to HDAN, and/or to reduce environmental discharges and the related potential liability.[36] However, with the exception of 2004, capital expenditures were ***.

[34] ***.

[35] ***.

[36] See, for example Potash Corp.'s 2002 Form 10-K, p. I-18 and Terra's 2003 Form 10-K, p. 33. Terra stated that its capital expenditures were for air and water quality control equipment to ensure compliance with environmental, health, and safety regulations under the Clean Air Act.

PART IV: U.S. IMPORTS, THE WORLD MARKET, AND THE INDUSTRY IN UKRAINE

U.S. IMPORTS

Proprietary Customs data identified 26 firms as importers of ammonium nitrate during the period for which data were gathered. Questionnaires were sent to these firms and all firms identified in the domestic interested parties' response to the notice of institution. In addition, importers' questionnaires were sent to all domestic producers.

Data on U.S. imports of ammonium nitrate presented in this section of the report are from responses to Commission questionnaires. Although ammonium nitrate is provided for separately in official U.S. import statistics, these statistics encompass all forms of ammonium nitrate (e.g., HDAN, LDAN, and aqueous solutions), not just the subject HDAN, and therefore may not be representative of imports of HDAN.[1] Because of this possibility, coupled with the fact that questionnaire data (1) enable imports of HDAN and LDAN to be presented separately (which is not possible using official statistics) and (2) enable the use of importers' U.S. shipment data to calculate apparent U.S. consumption, questionnaire data are preferable to the official Commerce statistics. Responding firms' imports of HDAN and LDAN together account for an average of approximately *** percent of the value of official ammonium nitrate import statistics from "all other" (non-Ukrainian) sources for the period for which data were gathered. Data contained in this section are derived from questionnaire responses from 16 importers of all forms of ammonium nitrate. Official Commerce statistics are presented in appendix E for comparison. There were no imports of ammonium nitrate from Ukraine during the period for which data were collected in this review (2001-06).[2]

During the period for which data were gathered in the original investigation (1998-March 2001), reported imports of the subject HDAN from Ukraine were accounted for by two firms, ConAgra International Fertilizer Co., Savannah, GA, and Transammonia, Inc., Tampa, FL. During 2000, Ukraine, Canada, and the Netherlands were the largest exporters of HDAN to the United States.

Of the importers' responses received by the Commission in this five-year review, *** firms, (***), reported imports of HDAN from sources other than Ukraine. ***, with imports of HDAN from ***, were the largest importers of HDAN over the period of review, together accounting for *** percent of imports of HDAN from all other sources over the period for which data were gathered. These data are presented in table IV-1.

In the original investigation, *** firms, ***, reported imports of LDAN, all from Canada. *** accounted for *** percent of imports of LDAN over the period of the original investigation. In this five-year review, six firms, ***, reported imports of ammonium nitrate other than HDAN, i.e., LDAN, all from Canada. *** accounted for *** percent of reported imports of ammonium nitrate other than HDAN over the period for which data were collected. These data are presented in table IV-2.

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[1] Many items other than HDAN enter the United States under HTS subheading 3102.30, such as LDAN, molten ANS solution (nominally 83 percent AN) used for emulsion explosives, liquid ammonium nitrate in less than 50 percent solution for use in the manufacture of photographic products, and mixtures of ammonium nitrate in water used in hot and cold therapy products.

[2] ***.

Table IV-1
HDAN: U.S. imports, by sources, 1998-2006

Item	1998	1999	2000	2001	2002	2003	2004	2005	2006
Quantity (*short tons*)									
Ukraine	***	***	***	0	0	0	0	0	0
Nonsubject sources	***	***	***	521,552	536,819	912,358	558,150	423,924	557,674
Total	437,102	564,775	495,950	521,552	536,819	912,358	558,150	423,924	557,674
Landed, duty-paid value (*1,000 dollars*)									
Ukraine	***	***	***	0	0	0	0	0	0
Nonsubject sources	***	***	***	63,627	49,405	112,231	92,151	83,634	116,118
Total	39,271	43,863	39,355	63,627	49,405	112,231	92,151	83,634	116,118
Unit value (*per short ton*)									
Ukraine	$***	$***	$***	([1])	([1])	([1])	([1])	([1])	([1])
Nonsubject sources	***	***	***	$122.00	$92.03	$123.01	$165.10	$197.29	$208.22
Average	89.84	77.66	79.35	122.00	92.03	123.01	165.10	197.29	208.22
Share of quantity (*percent*)									
Ukraine	***	***	***	0.0	0.0	0.0	0.0	0.0	0.0
Nonsubject sources	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of value (*percent*)									
Ukraine	***	***	***	0.0	0.0	0.0	0.0	0.0	0.0
Nonsubject sources	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ratio of import quantity to U.S. production (*percent*)									
Ukraine	***	***	***	0.0	0.0	0.0	0.0	0.0	0.0
Nonsubject sources	***	***	***	36.4	34.0	66.7	43.5	39.7	***
Total	20.6	28.7	29.5	36.4	34.0	66.7	43.5	39.7	***

[1] Not applicable.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission (2001-06) and from data submitted in response to questionnaires of the U.S. International Trade Commission and official Commerce statistics (1998-2000).

Table IV-2
LDAN: U.S. imports, by sources, 1998-2006

* * * * * * *

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO DECEMBER 31, 2006

The Commission requested importers to indicate whether they imported or arranged for the importation of HDAN from Ukraine after December 31, 2006. Of the *** responding importers, none reported imports or arrangements for importation of HDAN from Ukraine for that period.

U.S. IMPORTERS' INVENTORIES

U.S. importers' inventories of HDAN are presented in table IV-3.

Table IV-3
HDAN: U.S. importers' end-of-period inventories from Ukraine and other countries, 2001-06

* * * * * * *

THE WORLD MARKET

Based on data compiled by ***, Russia and the Ukraine are the world's largest producers of HDAN and together accounted for *** of global HDAN production in 2006 (table IV-4). Other countries producing significant amounts of HDAN are Uzbekistan, Egypt, the United Kingdom, the United States, France, Poland, Romania, China, Lithuania, and Bulgaria, which together accounted for another *** percent of world HDAN production in 2006.

Table IV-4
HDAN: World production, imports, exports, apparent consumption, and import penetration, 2001-06 and projected 2007-08

* * * * * * *

The United Kingdom, the United States, Egypt, and France are the largest importing countries and together accounted for approximately *** percent of world HDAN imports in 2006. Russia and Ukraine together accounted for about *** percent of world HDAN exports. Other significant HDAN exporting countries are Romania, Lithuania, Bulgaria, and Uzbekistan which together accounted for another *** percent of world HDAN exports in 2006.

Russia is the world's largest consumer of HDAN and accounted for approximately *** percent of world HDAN consumption in 2006. The United States, Egypt, the United Kingdom, Uzbekistan, and France are also large HDAN consumers and together accounted for about *** percent of global HDAN consumption in 2006.

THE INDUSTRY IN UKRAINE

Industry sources indicate four producers of ammonium nitrate ("AN") in Ukraine, which is the same number of producers as during the original investigation. Three producers responded to the Commission questionnaires in the original investigation: J.S. Co. "Azot" Cherkassy, J.S. Co. "Concern Stirol," and Severodonetsk State Manufacturing Enterprise "Azot Association." All four producers, accounting for 100 percent of total ammonium nitrate capacity in Ukraine, responded to the Commission's questionnaire in this review: Open Joint Stock Co. Azot ("Cherkassy"), OJSC "Rivneazot" ("Rivneazot"), Close Joint Stock Company "Severodonetsk Azot Association"

("Severodonetsk"), and SC "Concern Stirol" ("Stirol"). The reporting firms have not indicated any major capacity changes since 2001.[3]

Ukraine's Capacity, Production, Capacity Utilization, Home Market Shipments, Export Shipments, and Inventories

Data gathered by the International Fertilizer Development Center ("IFDC") indicate that the capacity to produce all types of ammonium nitrate in Ukraine was 2.8 million short tons during 2003/04 to 2006/07, an increase from 2.6 million short tons in 2002/03 (table IV-5). Cherkassy and Stirol together accounted for approximately 75 percent of the reported Ukrainian ammonium nitrate capacity, as shown in the tabulation following table IV-5.

Table IV-5
AN: Ukranian capacity, by company, fertilizer years (July-June) 2001/02-2006/07

Item	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
	Quantity (*1,000 short tons*)					
Cherkassy	1,190	1,190	1,323	1,323	1,323	1,323
Stirol	794	794	794	794	794	794
Severodonetsk	496	496	496	496	496	496
Rivneazot	146	146	220	220	220	220
Total	2,626	2,626	2,833	2,833	2,833	2,833

Source: International Fertilizer Development Center, *Worldwide AN/CAN (Ammonium Nitrate/Calcium Ammonium Nitrate) Capacity Listing by Plant*, January 2001 and June 2006.

Name of enterprise	Percent of 2006/07 Ukranian AN capacity
Cherkassy	46.7
Stirol	28.0
Severodonetsk	17.5
Rivneazot	7.8
Total	100.0

Proprietary data gathered by the International Fertilizer Industry Association ("IFA") indicate *** in all types of Ukrainian ammonium nitrate production, home market deliveries, and exports during 2001-05 (table IV-6).

[3] ***.

Table IV-6
AN: Ukranian capacity, production, home market deliveries, and exports, 2001-05

* * * * * * *

Global Trade Information Service ("GTIS") export data for Ukraine indicate that the largest export market for Ukrainian HDAN is Turkey, located directly across the Black Sea, which accounted for 48 percent of Ukrainian HDAN exports in 2006 (table IV-7).[4] Ukraine is a net exporter of HDAN (table IV-8).

Table IV-7
HDAN: Ukrainian exports and unit values, 2002-06

Destination[1]	2002	2003	2004	2005	2006
	Quantity (*short tons*)				
Turkey	248,192	520,792	332,589	328,193	508,137
Hungary	87,728	69,931	30,481	6,127	112,883
Morocco	133,179	94,750	104,055	70,690	96,215
Argentina	2,918	33,897	32,497	32,295	69,305
Syria	7,472	23,931	56,881	46,020	53,668
India	23,753	84,460	47,568	53,977	52,719
Albania	6,791	15,141	21,809	0	28,208
Mexico	5,976	6,134	5,590	0	16,860
Yugoslavia	2,254	9,892	5,648	22,166	15,422
Australia	1,947	10,056	9,088	11,026	13,761
Moldova	28,675	12,637	10,308	7,391	13,049
Ecuador	6,075	8,892	27,551	0	12,304
Brazil	63,842	330,586	8,948	43,617	5,593
All other	823,621	510,149	275,542	460,706	60,478
Total exports	1,442,423	1,731,248	968,555	1,082,208	1,058,602

Table continued on next page.

[4] GTIS export data for Ukraine for 2001 are not available. ***.

Table IV-7--*Continued*
HDAN: Ukrainian exports and unit values, 2002-06

Destination	2002	2003	2004	2005	2006
	Unit value (*dollars per short ton*)				
Turkey	$61.11	$77.38	$108.44	$108.92	$122.03
Hungary	64.11	73.00	126.28	132.75	117.05
Morocco	61.56	65.09	106.21	103.75	115.42
Argentina	54.69	78.70	109.25	108.01	119.55
Syria	64.17	76.12	111.37	121.85	118.48
India	78.80	75.36	85.15	117.42	116.06
Albania	65.17	89.98	103.93	([2])	129.57
Mexico	56.48	62.76	114.40	([2])	117.90
Yugoslavia	70.87	91.59	112.84	117.02	133.56
Australia	77.90	89.18	119.36	124.63	134.61
Moldova	67.63	70.38	117.05	114.69	134.17
Ecuador	78.80	65.51	87.09	([2])	142.46
Brazil	57.70	78.47	82.25	100.98	111.75
All other	([3])	([3])	([3])	([3])	([3])
Average	62.92	72.46	105.14	111.24	120.96

[1] Ranked by the quantity of exports from Ukraine in 2006.
[2] Not applicable.
[3] Not meaningful. Ukraine did not export to all countries each year; data for individual countries are sporadic beyond the top export destinations.

Note.– Export figures are quantities reported at the 6-digit level for HTS subheading 3102.30.

Source: Official Ukraine trade statistics, Global Trade Information Services (GTIS), and COFANT's prehearing brief, exhs. 10 and 15.

Table IV-8
HDAN: Ukraine's exports and imports, 2002-06

Item	2002	2003	2004	2005	2006
	Quantity (*short tons*)				
Exports	1,442,423	1,731,248	968,555	1,082,208	1,058,602
Imports	364,385	110,947	48,727	113,090	423,687
Net exports	1,078,038	1,620,301	919,828	969,118	634,915

Source: Official Ukraine trade statistics, Global Trade Information Services (GTIS), and COFANT's prehearing brief, exhs. 10 and 15.

Data for Ukrainian production capacity, production, shipments, and inventories for the original investigation are presented in table IV-9. During the period of review, no producers reported exporting the nonsubject ammonium nitrate product NP 33-3-0 to the United States; however, ***.[5] HDAN production increased irregularly during 2001-06 and the allocation between home market and export shipments was roughly equal in most of the years 2002-06 (table IV-10). *** no plans to produce HDAN in the United States or other countries, nor to export HDAN to the United States. *** further reported that the antidumping duty order has had no effect on their production capacity, production, home market shipments, or exports.[6] *** reported no changes in their operations or organization since 2001 nor anticipated any changes in operations or organization or changes to production capacity in the future.[7]

*** reported that it does not have a business plan and provided several items from its common strategy as an alternative. These items indicate that ***.[8] *** provided business plans or alternative materials.

Table IV-9
HDAN: Ukrainian producers' capacity, production, inventories, and shipments, 1998-2000

* * * * * * *

[5] ***'s foreign producers' questionnaire response (section II-6).

[6] ***.

[7] ***'s foreign producers' questionnaire response (sections II-1 and II-2). ***'s foreign producer questionnaire response (section II-4).

[8] ***'s foreign producers' questionnaire response (section I-4).

Table IV-10
HDAN: Ukrainian producers' capacity, production, inventories, and shipments, 2001-06 and projected 2007-08

Item	Actual experience						Projections[1]	
	2001	2002	2003	2004	2005	2006	2007	2008
Quantity (*short tons*)								
Capacity	2,191,343	2,191,343	2,191,343	2,191,343	***	***	***	***
Cherkassy	***	***	***	***	***	***	***	***
Rivneazot	***	***	***	***	***	***	***	***
Severodonetsk	***	***	***	***	***	***	***	***
Stirol	***	***	***	***	***	***	***	***
Production	1,271,508	1,817,281	1,686,797	1,336,326	2,180,387	2,102,581	***	***
Cherkassy	***	***	***	***	***	***	***	***
Rivneazot	***	***	***	***	***	***	***	***
Severodonetsk	***	***	***	***	***	***	***	***
Stirol	***	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***	***
Shipments: Internal consumption/transfers	***	***	***	***	***	***	***	***
Commercial home market								
Exports to: United States	0	0	0	0	0	0	0	0
All other export markets European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
Other markets	177,351	500,076	717,013	313,879	482,226	370,766	***	***
Total exports	302,803	868,632	844,361	599,296	975,292	987,270	***	***
Total shipments	1,211,569	1,827,941	1,921,326	1,281,809	2,200,455	2,061,888	***	***
Ratios and shares *(percent)*								
Capacity utilization	58.0	82.9	77.0	61.0	***	***	***	***
Inventories/production	***	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***	***
Share of total shipments: Internal consumption/transfers	***	***	***	***	***	***	***	***
Home market commercial	***	***	***	***	***	***	***	***
Exports to: United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
Other markets	14.6	27.4	37.3	24.5	21.9	18.0	***	***
Total exports	25.0	47.5	43.9	46.8	44.3	47.9	***	***

Table continued on next page.

Table IV-10--*Continued*
HDAN: Ukrainian producers' capacity, production, inventories, and shipments, 2001-06 and projected 2007-08

Item	Actual experience						Projections[1]	
	2001	2002	2003	2004	2005	2006	2007	2008
					Value (*$1,000*)			
Home market: Commercial shipments	***	***	***	***	***	***	***	***
Exports to: United States	0	0	0	0	0	0	0	0
All other export markets: European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
Other markets	6,917	28,655	48,333	34,783	54,045	46,889	***	***
Total exports	10,128	39,600	56,760	66,753	106,852	120,594	***	***
Total commercial shipments	55,876	89,236	94,623	125,742	240,730	256,949	***	***
					Unit value (*dollars per short ton*)			
Home market: Commercial shipments	***	***	***	***	***	***	***	***
Exports to: United States	([2])	([2])	([2])	([2])	([2])	([2])	([2])	([2])
All other export markets: European Union	***	***	***	***	***	***	***	***
Asia	***	***	***	***	***	***	***	***
Other markets	39.00	57.30	67.41	110.82	112.07	126.47	***	***
Total exports	33.45	45.59	67.22	111.38	109.56	122.15	***	***
Total commercial shipments	48.90	49.22	57.40	99.97	114.30	127.97	***	***

[1] Data presented for 2007 and 2008 shipment projections are ***.
[2] Not applicable.

Note.--Unit values are calculated based on firms that reported both quantity and value data. *** did not report data for 2001-04, ***.

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

***.[9] Rivneazot, Severodonetsk, and Stirol reported ***.[10] Cherkassy, Severodonetsk, and Stirol each reported that ***; Rivneazot reported that ***.[11]

Constraints that set limits on production capacity were reported as: ***. Rivneazot reported ***.[12]

[9] ***'s foreign producers' questionnaire response (section II-6).

[10] ***'s foreign producers' questionnaire response (section II-6).

[11] Foreign producers' questionnaire responses (section II-9).

[12] Foreign producers' questionnaire responses (section II-8).

Cherkassy reported that it *** in response to a relative price change in the price of HDAN vis-a-vis the price of other products using the same equipment and labor. Rivneazot reported that it *** in response to such price changes, and that the ***.[13]

Export markets (other than the United States) that were developed or where sales of HDAN were increased as a result of the antidumping duty order on HDAN from Ukraine were reported as: ***.[14]

*** indicated that projected figures, such as shipments to the United States, would be different if the orders were revoked. ***.[15]

The producers in Ukraine were asked to report the share of their total 2006 exports of HDAN sold through trading companies. *** reported that almost all producers of HDAN, ***, usually export their product through trading companies. *** reported *** percent, *** stated approximately *** percent, and *** provided no response.[16]

The Ukrainian producers were asked to discuss any possible or anticipated changes in their raw material costs or factors that may affect their raw material costs in the future, including any policies or programs of the Ukrainian Government that could affect the cost of natural gas to their firms. *** stated that ***. *** listed specific natural gas and HDAN prices for 2006 and *** for 2007, and mentioned that ***. *** stated that ***. *** mentioned ***. It also stated that at the present ***.[17]

The Ukrainian ammonium nitrate producers *** on the efficiency of conversion of natural gas to ammonium nitrate versus other nitrogenous fertilizers. *** reported that the manufacture of ammonium nitrate was a less efficient way to convert natural gas to nitrogen fertilizer than the production of other fertilizer products such as urea or anhydrous ammonia. *** reported that efficiency of converting natural gas to a given nitrogenous fertilizer was dependent upon the actual market price level during a certain period of time. However, *** reported that the production of ammonium nitrate requires less natural gas than the production of urea.[18]

Ukrainian respondents reported *** for natural gas purchases. *** reported purchases of natural gas from a company registered in Ukraine with supplier gas origin unspecified. *** reported that it purchased *** percent of the natural gas it consumed from Russia. *** reported that according to public sources, 26.4 percent of natural gas consumed in Ukraine is of Ukrainian origin and 73.6 percent is imported from Russia, Turkmenia, and Kazakhstan combined. *** reported that to the best of its knowledge, no gas is supplied by Russia as payment for transportation; rather, gas transportation expenses in the territory of Ukraine are paid for in currency.[19] The Ukrainian HDAN producers reported ***.[20] *** submitted information concerning tax and natural gas price incentives allegedly offered to Ukrainian HDAN producers by the Ukrainian government.[21]

*** reported that no Ukrainian government entity has input into ammonium nitrate export price levels; rather, the selling price for HDAN is determined and ruled by market forces. *** report that current export sales quotations are monitored from specialized marketing agents (FERTECON and FMB) and from the Ukrainian State Information and Analysis Center for Monitoring Export Commodities Markets. Export price levels for HDAN are then established independently by sellers and buyers through

[13] Foreign producers' questionnaire responses (section II-10).

[14] Foreign producers' questionnaire responses (section II-13).

[15] Foreign producers' questionnaire responses (section II-16c).

[16] Foreign producers' questionnaire responses (section III-2(b)).

[17] Foreign producers' questionnaire responses (section III-9(b)).

[18] Foreign producers' responses to supplemental foreign producers' questionnaire, received April 26-30, 2007, question I.

[19] Ibid., question II.

[20] Ibid., question III.

[21] ***.

contract negotiations. However, *** reported that the government news agency, DerzhZovnishInform, publishes a recommended price for HDAN.[22]

*** reported that during the period January-May 2006, there was a large increase in Russian ammonium nitrate tonnage imported into Ukraine at lower prices than the domestic Ukrainian product. ***.[23]

Trade Restrictions in Third-Country Markets

The European Commission ("EC") recently conducted a review of its antidumping duty order on ammonium nitrate from Ukraine. On April 19, 2007, the Council of the European Union announced its decision to continue the antidumping duty order on ammonium nitrate from Ukraine.[24] Trade restrictions in third-country markets are presented in table IV-11.

Table IV-11
HDAN: Trade restrictions on imports from Ukraine

Country imposing restriction	Year imposed	Restriction
Brazil	2002	Antidumping duty of 19 percent *ad valorem*;[1,2] antidumping duty of about 30 percent *ad valorem*[3]
China	2003	General ban on nitrogen imports[1]
European Union[4]	2001	Antidumping duty of 33.25 euros per metric ton;[1,5] antidumping duties of 29.26-33.25 percent *ad valorem*;[2] antidumping duty of 34.00 euros per metric ton plus 6.5 percent *ad valorem*[3]

[1] Domestic interested parties' Response to Notice of Institution, pp. 17-18, and Council Regulation (EC) No. 132/2001 of January 22, 2001.
[2] ***'s foreign producers' questionnaire response (section II-12).
[3] ***'s foreign producers' questionnaire response (section II-12).
[4] Ten new member states acceded to the European Union in May 2004. At the time of accession, the EU Commission suspended application of the EU's antidumping duties on imports of Ukrainian and Russian ammonium nitrate into the EU 10 under certain conditions, and allowed the acceptance of price undertakings. These special transition arrangements expired on May 20, 2005, and the EU orders became effective for imports into the EU 10 at that time. COFANT's response to the notice of institution, p. 17, fn. 43, and prehearing brief, p. 29, fn. 137.
[5] ***'s foreign producers' questionnaire response (section II-12).

Source: Compiled from data submitted in response to Commission questionnaires and the domestic interested parties' Response to the Notice of Institution.

[22] Foreign producers' responses to supplemental foreign producers' questionnaire, received April 26-30, 2007, question IV.
[23] Ibid., question V.
[24] Domestic interested parties' posthearing brief, p. 3 and exh. 1, p. 21, fn. 41.

PART V: PRICING AND RELATED DATA[1]

FACTORS AFFECTING PRICING

HDAN prices can fluctuate based on demand factors such as the business cycle, seasonal demand patterns, and weather and soil conditions in the agricultural sector. Supply factors such as the price of natural gas, uncommitted inventory levels in the distribution chain, the distance shipped, the size of an order, and the mode of transportation also affect HDAN prices. In addition, recent and pending security measures involving the production, storage, and transportation of HDAN reportedly have affected the price of HDAN.

HDAN is used mostly as a nitrogenous fertilizer in the agricultural sector, but also is used as an ingredient in explosives, some of which are designed to be packed into large bore-holes. Possible alternative single-nutrient nitrogenous fertilizers to HDAN are urea, which is also in a dry form, UAN (a liquid), and anhydrous ammonia (a gas). Nitric phosphate and calcium ammonium nitrate are multinutrient fertilizers in dry form that may also be substituted for HDAN. Although the same application equipment is used for HDAN and urea and the two multinutrient fertilizers, unique application equipment is required for UAN and for anhydrous ammonia. The nitrogen in HDAN exists in a different concentration and/or form than those of the alternative nitrogenous fertilizers. Despite all of these differences, changes in weather and soil conditions and to a certain extent changes in the relative prices of these nitrogenous fertilizers may induce changes in relative demand for these fertilizers. Part II discusses in detail substitution among the nitrogenous fertilizers.

Raw Material Costs

Natural gas and its derivative, ammonia, are the predominant material inputs used by U.S. firms to produce HDAN. Reported purchases of both of these inputs averaged 58.7 percent of the producers' cost of goods sold in producing HDAN in the United States during January 2001-December 2006.[2] Table V-1 and figure V-1 show U.S. producers' quarterly weighted-average net purchase prices of natural gas and ammonia that they used at least partially to produce HDAN during this period.[3]

Table V-1
Natural gas and ammonia: U.S. HDAN producers' weighted-average net purchase prices of natural gas and ammonia, by quarters, January 2001-December 2006

* * * * * * *

[1] Because there were no U.S. imports of HDAN from Ukraine during 2001-06, most of the questionnaire responses in this part of the report that were based on requests for information on U.S.-produced and imported Ukrainian HDAN involve only responses of U.S. producers.

[2] U.S. producer questionnaire responses, sections III-11 and III-13. This average cost share was based on questionnaire responses representing five U.S. producers of HDAN (Air Products, El Dorado, Mississippi Chemical, Potash Corporation, and Terra). *** reported for *** for the period ***.

[3] U.S. producer questionnaire responses, section IV-B-20c. These price data were based on data representing three U.S. producers (El Dorado, Mississippi Chemical, and Terra). *** reported for ***. ***. The reported total value of ammonia purchased for pricing purposes amounted to *** percent of the total value of the reported natural gas purchased during 2001-06.

Figure V-1
Natural gas and ammonia: U.S. HDAN producers' net purchase prices of natural gas and ammonia, by quarters, January 2001-December 2006

* * * * * * *

As seen in table V-1 and figure V-1, the U.S. producers' quarterly weighted-average purchase prices of natural gas and ammonia trended closely together during January 2001-December 2006.[4] U.S. producers' purchase prices of natural gas began the period at $*** per MMBtu during January-March 2001, generally decreased to a period low of $*** per MMBtu during July-September 2002, generally increased to a period high of $*** per MMBtu by October-December 2005, then decreased to $*** per MMBtu by July-September 2006, before increasing to end the period at $*** per MMBtu during October-December 2006. U.S. producers' purchase prices of ammonia began the period at $*** per short ton during January-March 2001, generally decreased to a period low of $*** per short ton by July-September 2002, then generally increased to a period high of $*** per short ton by January-March 2006. Ammonia prices then decreased to $*** per short ton by July-September 2006, before increasing to end the period at $*** per short ton during October-December 2006.

*** also discussed in their questionnaires their purchases of natural gas and/or ammonia on the spot market and/or through forward contracts/derivatives (the latter included swaps, calls, and put options) during 2001-06.[5] ***. ***. ***.[6]

It may be useful for additional comparisons of raw material prices to focus on natural gas prices, which directly affect the prices of ammonia. The Energy Information Agency ("EIA"), Department of Energy, reports prices of natural gas to U.S. industrial users and also forecasts these prices of natural gas. Figure V-2 shows the quarterly purchase prices of natural gas reported by U.S. producers and quarterly natural gas prices to industrial users reported by the EIA. As seen in figure V-2, the two quarterly price series tracked very closely to each other during January 2001-December 2006.[7] In addition, the EIA forecasts that quarterly prices of natural gas to industrial users will fluctuate but increase in 2007, from $7.77 per MMBtu during January-March 2007 to $8.68 per MMBtu during October-December 2007, and then will fluctuate but decrease in 2008, from $9.52 per MMBtu during January-March 2008 to $8.59 per MMBtu during October-December 2008. On an annual basis, the EIA forecasts that the natural gas

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[4] Natural gas is the major raw material input to produce ammonia; therefore, the price of natural gas has a strong influence on the price of ammonia. Statistical correlation can quantify the degree to which these two purchase prices move together as a result of factors affecting both variables in similar ways. 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. The correlation coefficient was 0.90 between the U.S. HDAN producers' reported quarterly purchase prices of natural gas and ammonia during January 2001-December 2006.

[5] U.S. producer questionnaire responses, section IV-B-20.

[6] Terra also discussed that ***. (U.S. producer questionnaire response, section IV-B-20.)
The Henry Hub, in Vermillion Parish, Louisiana, is the gas pipeline hub on the Louisiana Gulf Coast that serves as the delivery point for the New York Mercantile Exchange natural gas futures, and often serves as a benchmark for U.S. wholesale natural gas spot and futures prices; about 49 percent of all U.S. wellhead natural gas production occurs or passes close to the Henry Hub (*www.traderslog.com/Henry-Hub.htm*, retrieved March 13, 2007).

[7] The correlation coefficient was 0.96 between the U.S. HDAN producers' reported quarterly purchase prices of natural gas and the EIA's reported prices of natural gas to the U.S. industrial sector during January 2001-December 2006.

price to industrial users will average $8.43 per MMBtu during 2007 and $8.90 per BTU during 2008, both up from the actual level of $8.13 per MMBtu during 2006.[8]

Figure V-2
Natural gas: U.S. HDAN producers' net purchase prices of natural gas and EIA's reported natural gas prices to the U.S. industrial sector, by quarters, January 2001-December 2006, and EIA's forecast of natural gas prices to industrial users, by quarters, January 2007-December 2008

* * * * * * *

The four Ukrainian HDAN producers also reported their quarterly net purchase price data for natural gas and ammonia that they used, at least partially, to produce HDAN during January 2001-December 2006.[9] The weighted-average quarterly net purchase prices of natural gas reported by U.S. and Ukrainian producers are shown in figure V-3. As seen in figure V-3, the price of natural gas in Ukraine was less than the natural gas price in the United States throughout the period; reported natural gas purchase prices of the Ukrainian HDAN producers averaged $2.07 per MMBtu during January 2001-December 2006, or *** percent less than the reported average natural gas purchase price of U.S. HDAN producers of $*** per MMBtu during this period. In addition, the two price series did not track very closely to each other during January 2001-December 2006.[10] *** reported in their questionnaire responses that there were no Ukrainian Government programs that affect the price or availability of natural gas to the Ukrainian HDAN producers.[11]

Figure V-3
Natural gas: U.S. and Ukrainian HDAN producers' net purchase prices of natural gas, by quarters, January 2001-December 2006

* * * * * * *

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

Transportation costs for Russian HDAN shipped to the United States during January 2001-December 2006 are a good proxy for transportation costs that would apply to HDAN from Ukraine, because Russian HDAN was shipped from Black Sea ports from which HDAN from Ukraine would have been shipped. Transportation charges for imports of HDAN from Russia to the U.S. ports of entry averaged 18.1 percent as a ratio to official customs values and 15.3 percent as a share of U.S. landed duty-paid values during January 2001-December 2006. The U.S. normal trade relations *ad valorem*

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[8] EIA, DOE, *Short-Term Energy Outlook*, April 2007, p. 15.

[9] Foreign producer questionnaire responses, section III-9c. Ukrainian producers generally purchase only natural gas and produce ammonia; the value of their reported purchases of ammonia amounted to less than *** percent of the value of their reported purchases of natural gas during January 2001-December 2006. The Ukrainian producers purchase natural gas in units of 1,000 cubic meters, which were converted to MMBtu at the rate of 1,000 cubic meters = 36.409 MMBtu.

[10] The correlation coefficient was 0.55 between the U.S. HDAN producers' reported quarterly purchase prices of natural gas and the Ukrainian producers' reported quarterly purchase prices of natural gas during this period.

[11] Foreign producer questionnaire responses, section III-9e, and responses to supplemental foreign producer questionnaire question III received on April 26, 2007 from *** and on April 30, 2007 from ***.

import duty rate was zero percent for imports of ammonium nitrate, whether HDAN, LDAN, or aqueous solutions, under HTS subheading 3102.30.00 during January 2001-December 2006.

U.S. Inland Transportation Costs

Two responding U.S. producers, ***, reported selling their HDAN nationally, whereas the remaining responding U.S. producers, ***, reported selling their HDAN only in the Southeastern United States.[12] Based on responses of these four U.S. producers, 10.7 percent of the quantity of U.S.-produced HDAN sold in the U.S. market during 2001-06 was shipped within 100 miles of the producers' plant and/or warehouses, 85.9 percent was shipped between 101-1,000 miles, and the remaining 3.4 percent was shipped more than 1,000 miles.[13] U.S. freight costs averaged 14.6 percent as a share of the delivered price for all these distances shipped.[14] Three of the four responding U.S. producers reported arranging transportation to their customers' locations, while one producer reported that its customers arranged the transportation.[15] HDAN is typically delivered by truck in the United States in distances up to 100 miles from the supplier, and by some combination of truck, rail, and barge for distances beyond 100 miles.[16] U.S. freight costs appear to be substantial as *** reported that with the closure of Agrium's facility in the state of Washington, dealers in the Pacific Northwest have been forced to switch to other nitrogen sources simply because there is no economic way to buy HDAN, be it domestically produced or imported.[17]

Exchange Rates

Figure V-4 shows quarterly nominal and real exchange rate indices (the latter are nominal exchange rates adjusted for relative rates of inflation)[18] of the currency of Ukraine relative to the U.S. dollar during January 2001-December 2006. The nominal value of the Ukranian hryvnia appreciated by 7.5 percent on a quarterly basis against the U.S. dollar during January 2001-December 2006, but a higher rate of inflation in Ukraine compared to inflation in the United States during this period resulted in a more rapid appreciation in the real value of the hryvnia, by 62.0 percent, during January 2001-December 2006.

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[12] U.S. producer questionnaire responses, section IV-B-9.

[13] U.S. producer questionnaire responses, section IV-B-8.

[14] Ibid.

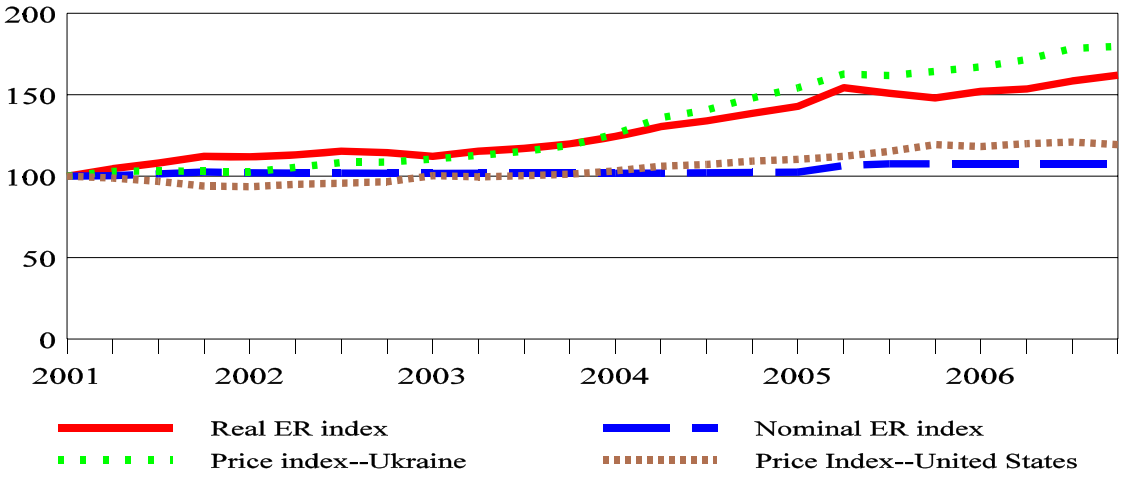
[15] Ibid.

[16] Barge is generally considered the least expensive U.S. transportation mode for HDAN, followed by rail, and then by truck, for comparable quantities and distances traveled. Depending on the size, barges can carry 1,200-3,400 short tons of material, but typically carry about 2,500 short tons; rail cars carry 100 short tons and trucks carry 25 short tons (staff telephone interview with ***). U.S. vessels and barges can be used to ship HDAN between U.S. ports; depending on the size, ocean vessels can carry from 20,000 to 30,000 short tons of material, but most commonly carry 22,000 to 27,500 short tons (staff telephone interview with ***). The Jones Act requires that U.S. vessels must be used, which, because of reportedly high costs, may limit the use of this mode of transport among U.S. ports.

[17] U.S. producer questionnaire responses, section IV-B-15a.

[18] The quarterly nominal and real exchange rate indices were calculated from quarterly-average nominal exchange rates and producer price indices reported by the IMF for each country. The exchange rate indices were based on exchange rates expressed in U.S. dollars per unit of the foreign currency, such that index numbers below 100 represent depreciation and numbers above 100 represent appreciation of the foreign currency vis-a-vis the U.S. dollar.

Figure V-4
Real and nominal exchange rate indices of the Ukrainian hryvnia relative to the U.S. dollar, and producer/wholesale price indices in Ukraine and the United States, by quarters, January 2001-December 2006



Note: Index (Jan.-Mar. 2001=100). Exchange rates are in U.S. dollars per Ukrainian hryvnia.

Source: International Monetary Fund, *International Financial Statistics*, December 2002, October and December 2003, December 2004, November 2006, and February 2007.

PRICING PRACTICES

Of four responding U.S. producers, two (***) reported quoting both delivered and f.o.b. selling prices for their domestically produced HDAN to their U.S. fertilizer distributor and dealer customers during 2001-06, whereas *** reported quoting delivered prices and *** reported quoting f.o.b. plant prices.[19] The three responding U.S. producers (***) reported selling their HDAN by using price lists,[20] but *** reported that they also negotiated prices in competitive sales situations.[21] ***. According to the firm, demand from end users peaks during the Spring planting season, which generally occurs between February-June, while the period of time covering July through January is considered the off season. *** also stated that U.S. producers continue to operate during the off season to build inventories, which supply the lower levels of off-season demand and are used to fill the distribution system in time for the peak season.[22] ***.[23]

The two responding U.S. producers (***) reported that *** percent of the quantity of their domestic HDAN sales during 2006 was on a short-term contract basis and the remaining *** percent was

[19] U.S. producer questionnaire responses, section IV-B-6.

[20] Price lists pertained to truck deliveries, which are used as a guide to establish prices for rail and barge shipments, which are individually negotiated (U.S. producers' questionnaire responses, section IV-B-4).

[21] U.S. producer questionnaire responses, section IV-B-4.

[22] Ibid.

[23] Ibid.

on a spot basis.[24] *** reported that *** and such sales likely dominated U.S. producers' HDAN sales in the past; the short-term sales volume was dominated by ***.[25] *** reported that short-term contracts ranged from 2 months to one year, that the short-term contracts for less than one year fix price and quantity, that prices in the one-year contracts are agreed to monthly and some of these contracts have meet-or-release provisions, but that the majority of short-term contracts do not have meet-or-release provisions.[26]

The three responding U.S. HDAN producers (***) reported offering discounts to ***.[27] ***. *** reported that it allowed a $*** per short ton discount on HDAN to its ***, and any other discounting would occur in competitive situations. *** reported allowing a $*** per short ton discount for HDAN on ***. In addition, *** reported that it has contracts with its ***. *** also reported that it has *** national account customers, which include ***.[28]

Both responding U.S. producers (***) reported that they typically shipped their HDAN from inventory to their customers ***.[29] *** reported shipping about *** percent of its HDAN from inventory and *** percent from production; its order lead times were *** days for shipments from inventory and *** days for shipments from production. *** reported shipping *** percent of its HDAN from inventory, but instead of reporting the requested order lead times provided the following response. ***[30] ***.

[24] U.S. producer questionnaire responses, section IV-B-1. Spot sales are usually one-time delivery, within 30 days of the purchase agreement; short-term contracts are for multiple deliveries for up to 12 months after the purchase agreement; and long-term contracts are for multiple deliveries for more than 12 months after the purchase agreement.

[25] U.S. producer questionnaire responses, section IV-B-1.

[26] U.S. producer questionnaire responses, section IV-B-3.

[27] U.S. producer questionnaire responses, section IV-B-5.

[28] *** reported that their national accounts are very large consumers of HDAN, have multiple retail or distribution locations, all of the purchases are conducted through the national accounts' corporate offices, and, for ***, provide their own truck transportation.

[29] U.S. producer questionnaire responses, section IV-B-7.

[30] *** reported that it has storage for about *** days of HDAN production at the plant plus some additional off-site storage, so it asserted that it is critical to move HDAN quickly into the distribution system (U.S. producer questionnaire responses, section IV-B-7). *** reported end-of-period inventories for its HDAN in 2006 that were *** percent of its 2006 HDAN production.

PRICE DATA

U.S. Producer Questionnaire Price Data[31]

The Commission requested U.S. producers of HDAN to provide in their questionnaire responses monthly sales data for the U.S.-produced HDAN that was shipped to U.S. customers (unrelated to the suppliers) during January 2001-December 2006. Monthly quantity and value of sales were requested for pricing based on:[32]

(1) a net U.S. f.o.b. plant basis (i.e., product that was picked up at the plant);

(2) a net U.S. f.o.b. other-than-plant shipping point basis (i.e., product that was picked up at a distribution point other than the production plant(s); and

(3) a net delivered basis.[33]

For sales that were priced on a U.S. f.o.b. other-than-plant shipping point basis, producers were requested also to report the freight and other handling costs necessary to transport the HDAN from the U.S. plant to the other-than-plant shipping point. For sales that were priced on a delivered basis, producers were requested to report the freight and other handling costs necessary to transport the HDAN from the U.S. plant to the customers' locations. The reported price data discussed here are for all reported pricing, on a comparable U.S. f.o.b. plant basis. The product for which pricing data were requested was as follows:

> ***Product*.--Solid, fertilizer-grade ammonium nitrate, sold in bulk, with a bulk density equal to or greater than 53 pounds per cubic foot.**

The requested price information for U.S.-produced HDAN involved five U.S. producers of HDAN, but not necessarily for all periods requested.[34] The reported sales data for pricing purposes totaled *** short tons of U.S.-produced HDAN during January 2001-December 2006 and accounted for *** percent of all commercial U.S. shipments of U.S.-produced HDAN during this period. Price trends of the U.S.-produced HDAN are quarterly net U.S. f.o.b. selling price data developed from the reported monthly price data and reflect all reported pricing adjusted to a U.S. f.o.b. plant basis.

The quarterly price and quantity data fluctuated due importantly to large changes in the U.S. price of natural gas, but also often due to other supply and demand factors, such as changes in weather, seasonal factors, the impact of security measures, shipping factors, and temporary or permanent production curtailments and shutdowns.

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[31] Comparable price data based on a U.S. f.o.b. port basis were also requested of U.S. importers for sales of any imported HDAN from Ukraine (U.S. importer questionnaire response, section III-A), but there were no responses because there have been no U.S. imports of HDAN from Ukraine during 2001-06.

[32] U.S. producer questionnaire responses, section IV-A.

[33] All values were requested to be net of returns, refunds, rebates, discounts, and credits.

[34] The five U.S. producers for which price data were reported were ***.

Price Trends

HDAN quarterly selling price trend data for domestic producers of the U.S.-produced HDAN during January 2001-December 2006 are shown in table V-2 and figure V-5; net quarterly prices for U.S. producers' purchases of natural gas during this period are also shown in figure V-5.

Table V-2
HDAN: U.S. weighted-average f.o.b. plant selling prices, net of U.S. freight and other handling costs, and quantities of U.S.-produced HDAN[1] sold to U.S. customers (unrelated to suppliers), by quarters, January 2001-December 2006

Period	Price (*per short ton*)	Quantity (*short tons*)	No. of firms reporting	Price (*per short ton)*	Quantity (*short tons*)	No. of firms reporting
2001:				**2004:**		
Jan.-Mar.	$151.19	206,908	4	$161.25	293,318	4
Apr.-June	145.97	294,173	4	157.54	250,110	4
July-Sept.	118.01	184,731	4	161.45	179,518	4
Oct.-Dec.	104.28	310,847	4	168.16	243,714	4
2002:				**2005:**		
Jan.-Mar.	105.51	275,328	4	177.04	265,053	4
Apr.-June	102.29	428,918	4	199.42	300,177	3
July-Sept.	104.80	208,906	4	208.65	163,715	3
Oct.-Dec.	99.91	294,912	4	***	***	***
2003:				**2006:**		
Jan.-Mar.	123.04	294,828	4	***	***	***
Apr.-June	152.71	283,407	4	***	***	***
July-Sept.	149.40	205,590	4	***	***	***
Oct.-Dec.	149.41	315,155	4	***	***	***

[1] Product is solid, fertilizer-grade ammonium nitrate, sold in bulk, with a bulk density equal to or greater than 53 pounds per cubic foot.

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

Figure V-5
HDAN: U.S. weighted-average f.o.b. plant selling prices and quantities, net of U.S. freight and other handling costs, of U.S.-produced HDAN sold to U.S. customers (unrelated to suppliers), and U.S. producers' net purchase prices of their natural gas requirements, by quarters, January 2001-December 2006

* * * * * * *

U.S. producers' net quarterly f.o.b. selling prices of their U.S.-produced HDAN and their net quarterly purchase prices for their natural gas requirements followed similar trends during January 2001-December 2006.[35] The HDAN quarterly selling price began at $151.19 per short ton during January-March 2001, then generally decreased to a period low of $99.91 per short ton by October-December 2002, while the decreasing purchase price of natural gas reached a period low of $*** per MMBtu by July-September 2002. The HDAN selling price then generally increased and *** $*** per short ton by January-March 2006, while the increasing purchase price of natural gas *** $*** per MMBtu by October-December 2005. The HDAN selling price then decreased to end the period at $*** per short ton during October-December 2006, while the purchase price of natural gas decreased to $*** per MMBtu by July-September 2006 before increasing to end the period at $*** per MMBtu during October-December 2006. Due to peak seasonal use of HDAN from February-June, total shipment quantities during the first two quarters of each year were higher than total shipment quantities during the last two quarters of the year. This may make it difficult to notice any trends in shipment quantities from quarter to quarter. U.S. producers' quarterly quantity shipments of HDAN fluctuated throughout January 2001-December 2006, reaching a period high of 428,918 short tons during April-June 2002 and then fluctuated with no apparent trend through April-June 2005 when shipments were 300,177 short tons. Quarterly shipments then generally followed a downward trend ending at *** short tons during October-December 2006.

Three of four responding U.S. producers reported that,[36] although changes in prices of natural gas affect HDAN prices because it is such a large component of HDAN production costs, prices for HDAN do not change in direct relationship to changes in natural gas prices because other factors in the market also affect price (e.g., U.S. and world nitrogen supply, demand considerations, and transportation costs).[37] According to these three producers, HDAN production is reduced when HDAN prices do not increase enough to cover increases in natural gas costs.[38]

.[39] *** reported that its highest selling price for HDAN was $ per short ton and its lowest selling price for HDAN was $*** per short ton during this period, and ***. *** reported that its highest selling price for HDAN was $*** per short ton and its lowest selling price for HDAN was $*** per short ton during this period, and ***.

Price Comparisons Within The U.S. Market

U.S. HDAN producers,[40] importers,[41] purchasers,[42] and Ukrainian HDAN producers [43] were requested in their questionnaire responses to compare prices of U.S.-produced and imported HDAN in the U.S. market during January 2001-December 2006. Useable responses were reported by two U.S.

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[35] The correlation coefficient was 0.87 between U.S. producers' reported quarterly selling prices of HDAN and their reported quarterly purchase prices of natural gas during January 2001-December 2006.

[36] These three responding U.S. producers were ***.

[37] U.S. producer questionnaire responses, section IV-B-20.

[38] Ibid. A fourth responding U.S. producer, ***, reported that raw materials' impact on pricing has been minimal.

[39] U.S. producer questionnaire responses, section IV-B-20b.

[40] U.S. producer questionnaire responses, section IV-B-30b.

[41] U.S. importers' questionnaire responses, section III-B-30b.

[42] U.S. purchasers' questionnaire responses, section III-42b.

[43] U.S. foreign producers' questionnaire responses, section III-20.

producers, ***; two U.S. importers, ***; and five U.S. purchasers, ***. The Ukrainian producers did not export HDAN to the United States during January 2001-December 2006, and reported that they were unaware of pricing in the United States.

Comments of ***[44]

*** indicated that it does not track the specific price and country-of-origin information requested and cannot provide it, but the firm asserted that when imports from Russia and then Ukraine flooded the market, the prices were so low and the volumes so great that it could sometimes identify particular sales of these products.[45]

According to ***, the trade press (such as *Green Markets* and *Fertilizer Week*) contains information about imported HDAN, while dealers also will tell the firm the price and whether their product is imported, but they often do not know the country of origin.

*** asserted that over the past several years, the price charged for U.S.-produced HDAN has been directly influenced by the price of imports entering the U.S. market. Until a few years ago, the firm indicated that a majority of imports went into New Orleans and then moved on barges to numerous river warehouses located on the Mississippi, Arkansas, and Ohio rivers. In addition, some of this product moved along the Gulf Coast to Victoria, TX. After Nitram ceased production in 2003, *** indicated that vessels of HDAN started unloading in Tampa, FL, with this product shipped by rail and truck out of the warehouse there. Also, within the past couple of months, the firm indicated that vessels have started unloading into a warehouse in Wilmington, NC, where this product has been sold via truck and rail.[46] According to ***, when the HDAN enters the market through the Wilmington and Tampa ports, it knows that it is competing with imported product. The firm also stated that, when product is filling the storage facilities on the river and not moving, it knows that imports have entered the country, are widely available, and are competing for business with its product.

According to ***, the lowest-priced HDAN imports in 2006, based on U.S. import statistics, were from the Netherlands, followed by Romania, Bulgaria, and Georgia.[47] *** indicated that, while there are some dealers that will give it a few dollars more for its product and service, most of the bigger buyers are

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[44] U.S. producers' and purchasers' questionnaire responses, sections IV-B-30b and III-42b, respectively. These comments were the same in *** producer and purchaser questionnaire responses.

[45] *** noted that the country of origin becomes difficult to ascertain once the imported product enters the distribution system because prills from different countries are very similar and can be easily blended while in the distribution chain. The trade press reports the prices for import tons that are available for purchase, but, according to ***, this does not tell the firm anything about the volumes or prices of imports that were under contract at the time of export. Due to these gaps in information, *** asserted that the systematic collection of import prices for HDAN from different countries is extremely difficult and of limited value. According to ***, in most cases importers want to have the majority of a vessel sold before they commit to bringing that product to the United States. Sometimes these deals are made a couple of months before the vessel arrives. Thus, the firm does not have any way of knowing the price or country of origin of these transactions.

[46] According to ***, the primary sources of HDAN into the United States in 2006 were Romania, the Netherlands, Georgia, and Bulgaria. ***, imports of ammonium nitrate from Canada were LDAN.

[47] *** stated that it references import average unit values ("AUVs") because it does not systematically track the prices of HDAN from specific countries. The firm indicated that, nevertheless, import unit values at least offer an apples-to-apples comparison of the relative prices that importers get from their various sources. *** indicated that import AUVs are not at a comparable level of the market where U.S. producers are selling their HDAN, but, according to the firm, the difference between the import AUV and the f.o.b. U.S. plant price provides some useful information regarding the ability of an importer to undercut the price of the domestic product.

more inclined to want the firm to match the import price because HDAN is a commodity. The firm noted that the bottom line is that its pricing is always under pressure directly from these imports.[48] *** asserted that it can survive the fairly traded HDAN, but it would likely be impossible for the firm to survive unfairly traded HDAN, given the asserted larger potential volume available from Ukraine and aggressive pricing that it would expect. *** asserted that HDAN is a commodity product, and competition inevitably occurs on the basis of price.

Comments of ***[49]

According to ***, once the antidumping agreement with Russia and the antidumping duty order on Ukraine were put in place, prices of imports generally returned to a market level of imports from all other sources. *** asserted that imports from *** are generally priced ***. According to ***, recently, in apparent reaction to a weak EU market, *** has been importing *** of HDAN and selling the imported product at ***. *** indicated that it recently lost a sale because *** offered product at about $***-$*** per short ton below the domestic producer's delivered price.

Comments of ***[50]

*** reported that U.S.-produced HDAN is priced higher than imports unless supply and demand balance is tight, then the difference disappears, whereas *** reported that selling prices between the U.S.-produced and imported HDAN seem in parity.

Comments of ***[51]

*** reported that imports of HDAN are priced slightly under the U.S.-produced HDAN, where supply and demand dynamics, as well as other nitrogen products, dictate the HDAN price. *** stated that import and domestic prices of HDAN have been equal in the last few years. *** asserted that U.S.-produced HDAN is not available to Florida users at a competitive price.

[48] The firm indicated that it competes against these imports in over 15 warehouse terminal locations.

[49] U.S. producer and purchaser questionnaire responses, sections IV-B-30b and III-42b, respectively. These comments were the same in *** producer and purchaser questionnaire responses.

[50] U.S. importer questionnaire responses, section III-B-30b.

[51] U.S. purchaser questionnaire responses, section III-42b. Comments by *** in their purchaser questionnaire responses were the same as in their producer questionnaire responses, and were shown earlier.

Price Comparisons Between U.S. and Non-U.S. Markets

U.S. HDAN producers,[52] importers,[53] purchasers,[54] and Ukrainian HDAN producers[55] were requested in their questionnaire responses to compare prices of HDAN in the U.S. market with prices of HDAN in non-U.S. markets during January 2001-December 2006. Useable responses were reported by two U.S. producers, ***; two U.S. purchasers, ***; and three Ukrainian producers, ***. The responding U.S. importers reported that they did not have price data available for non-U.S. markets.

Comments of ***[56]

*** asserted that the United States appears to be a very attractive market, such that, without the antidumping duty order in place, there is little doubt, according to the firm, that Ukrainian HDAN would quickly target the U.S. market. *** reported that ***. *** assumed ocean freight of around $*** per metric ton, such that, according to the firm, it would appear that the U.S. market carries a $***-$*** per metric ton premium for product sold out of the Baltic/Black Sea area.

Comments of ***[57]

*** stated that it does not have direct experience with HDAN prices in non-U.S. markets other than Canada. In Canada, according to the firm, *** handle HDAN from a variety of countries, but the firm typically does not know the countries of origin. *** indicated that it is attempting to obtain relevant information from *** on pricing in European markets during the relevant period.

Comments of ***[58]

*** stated that during 2006 the average price of HDAN in Ukraine and its export price, f.o.b., Port Jujniy (Yuzny) (Black Sea), according to *** was $***-$*** per short ton.

*** indicated that information for 2001-05 was not readily available, but it was able to provide HDAN price comparisons for 2006 as follows: (1) the average bulk Black Sea price was $*** per short ton for the year, but ranged from $*** per short ton in June to $*** in December; (2) the average bulk New Orleans, LA, price was $*** per short ton for the year, but ranged from $*** per short ton in August to $*** per short ton during January-March; and (3) the average local Ukrainian Market Severodonetsk price was $*** per short ton for the year, but ranged from $*** per short ton in June to $*** per short ton in December.

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[52] U.S. producer questionnaire responses, section IV-B-30a.

[53] U.S. importer questionnaire responses, section III-B-30a.

[54] U.S. purchaser questionnaire responses, section III-42a.

[55] U.S. foreign producer questionnaire responses, section III-20.

[56] U.S. producer and purchaser questionnaire responses, sections IV-B-30a and III-42a, respectively. These comments were the same in *** producer and purchaser questionnaire responses.

[57] U.S. producer and purchaser questionnaire responses, sections IV-B-30a and III-42a, respectively. These comments were the same in *** producer and purchaser questionnaire responses.

[58] Foreign producer questionnaire responses, section III-20.

*** reported annual average prices of its HDAN in U.S. dollars for the Ukrainian market and for export to non-U.S. export markets during 2001-06; *** did not specify whether the reported prices were per short ton, metric ton, or some other measurement. These data are shown in the following tabulation.

* * * * * * *

Public U.S. Price Data

U.S. price data for HDAN and the three other major single-nutrient nitrogenous fertilizers–anhydrous ammonia, urea, and UAN–are reported weekly in *Green Markets*.[59] Figure V-6 shows U.S. quarterly prices of anhydrous ammonia, urea, UAN, and HDAN during January 2001-March 2007 calculated from *Green Markets'* weekly price data. Prices of each type of nitrogenous fertilizer are shown in dollars per nitrogen unit ("NU"), which equals 20 pounds of contained nitrogen, and provides a common basis for directly comparing prices of the various single-nutrient nitrogenous fertilizers.[60] As seen in figure V-6, prices of these four nitrogenous fertilizers moved closely together,[61] which likely reflects the importance of natural gas as their common feedstock and similar demand characteristics; all of these fertilizers are purchased for their nitrogen content to provide this vital nutrient to pasture, hay, crops, etc.

Figure V-6 also shows that prices (in dollars per NU) of anhydrous ammonia are generally the lowest, followed by successively higher prices of urea, UAN, and finally HDAN as the highest-priced of the four nitrogenous fertilizers. During crop year 2006 (the most recent year data were available), anhydrous ammonia accounted for 26.0 percent of all nitrogen fertilizer used in the United States (based on contained nitrogen), UAN accounted for 23.5 percent, urea for 20.5 percent, and HDAN accounted for 2.7 percent; although not shown, nitrogen in multi-nutrient fertilizers accounted for 20.4 percent and nitrogen in other fertilizer forms accounted for the remaining 6.9 percent.[62]

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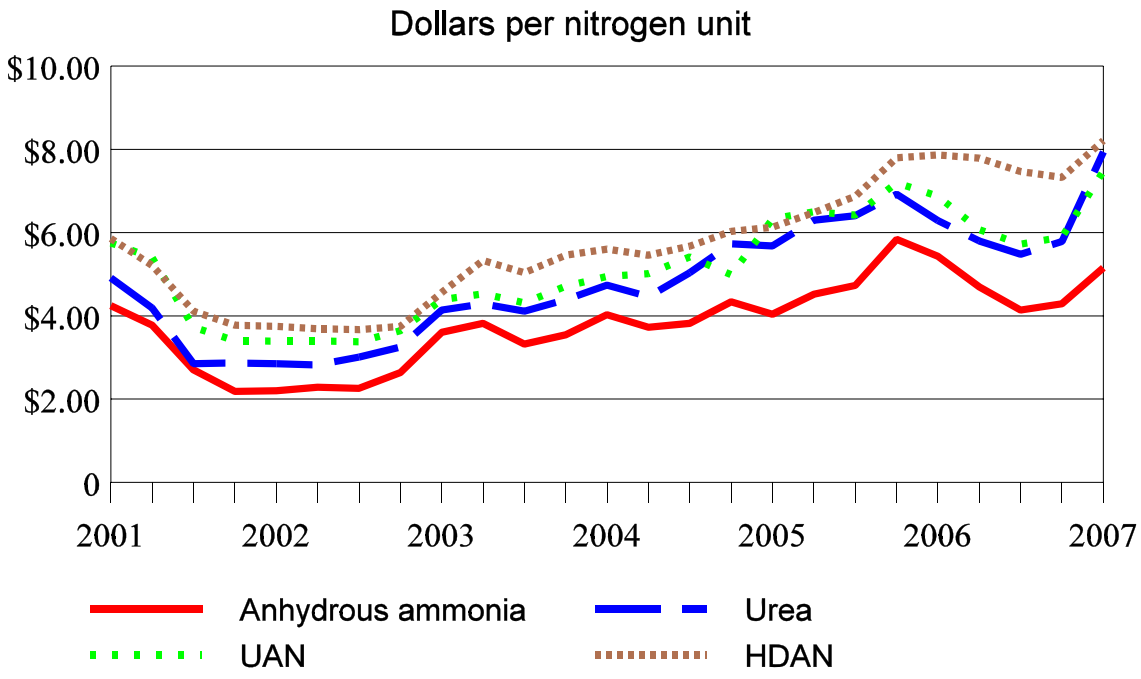
[59] *Green Markets* is published by Pike & Fischer, Inc., and is available by subscription. The fertilizer price data in *Green Markets* include both U.S.-produced and imported fertilizers without any distinction for country of origin. The Mid Cornbelt prices shown here represent fertilizer prices to distributors and dealers in Illinois, Indiana, Iowa, Missouri, Nebraska, and Ohio, where corn production is concentrated. The Mid Cornbelt states together accounted for 33.5 percent of total U.S. nitrogen fertilizer consumption during crop year 2006. Mid Cornbelt prices are commonly used to report nitrogen fertilizer prices, because corn requires the highest application rate for nitrogen fertilizers of all crops, averaging 136 pounds of nitrogen fertilizer per acre in crop year 2005 (the latest period for which data were available).

[60] Each type of nitrogenous fertilizer has a different nitrogen content as follows: anhydrous ammonia (82.2 percent), urea (46.0 percent), UAN (28-32 percent), and HDAN (34.0 percent). *Green Markets* reports prices for anhydrous ammonia, urea, and HDAN in dollars per short ton of material, while it reports prices of UAN in dollars per nitrogen unit. Pricing the various nitrogenous fertilizers per nitrogen unit is a common practice in the U.S. industry to evaluate relative prices of these principal single-nutrient nitrogen fertilizers.

[61] The correlation coefficients involving the quarterly prices between HDAN and the other nitrogenous fertilizers reported by *Green Markets* during January 2001-March 2007 were all above 0.93. The correlation coefficient between the quarterly prices of HDAN calculated from *Green Markets* and those reported by U.S. producers for their domestically produced HDAN during January 2001-December 2006 was 0.99.

[62] The Association of American Plant Food Control Officials and The Fertilizer Institute, *Commercial Fertilizers 2006*, April 2007.

Figure V-6
Single-nutrient nitrogenous fertilizers: U.S. prices of anhydrous ammonia, urea, UAN, and HDAN, by quarters, January 2001-March 2007



Note: A nitrogen unit equals 20 pounds of nitrogen; Mid Cornbelt prices were calculated as simple averages of reported high and low prices.

Source: *Green Markets*, Pike & Fischer, Inc., weekly issues, January 1, 2001-March 26, 2007.

As can be seen from figure V-6, U.S. average quarterly prices (in dollars per NU) of the four major single-nutrient nitrogenous fertilizers first generally decreased to period lows during October 2001-September 2002, ranging from $*** per NU during October-December 2001 for anhydrous ammonia to $*** per NU during July-September 2002 for HDAN. Prices then generally increased through October-December 2005 for anhydrous ammonia, UAN, and urea, and through January-March 2006 for HDAN. The prices during these latter periods ranged from $*** per NU during October-December 2005 for anhydrous ammonia (a period high) to $*** per NU during January-March 2006 for HDAN. Prices then generally decreased before turning up by October-December 2006 and/or January-March 2007 and ending in the first quarter of 2007 at period highs for urea, UAN, and HDAN. Ending period prices were $*** per NU for anhydrous ammonia, and period highs were $*** per NU for urea, $*** per NU for UAN, and $*** per NU for HDAN. Fertilizer prices in general are expected to rise appreciably this spring as U.S. corn acreage is expected to increase substantially to meet strong demand from the ethanol industry.[63] Green Markets' weekly Mid Cornbelt prices of nitrogen fertilizers for April 2007, averaged $*** per NU for anhydrous ammonia, $*** per NU for urea, $*** per NU for UAN, and $*** per NU for

[63] *Fertilizer prices seen rising with U.S. corn acres,* Reuters News Service, February 22, 2007, *http://today.reuters.com/news/articleinvesting.apsx? View=CN&storyID=2007*, retrieved March 2, 2007.

HDAN.[64] Green Markets also reported that the high costs of fertilizer has led to some growers to save by switching to manure and poultry litter, although these latter sources of nutrients typically do not meet the nitrogen target for many farmers.[65]

[64] *Green Markets*, Pike & Fischer, Inc., various issues, April 2-30, 2007, p. 4. The average prices in April 2007 for UAN and HDAN were the highest monthly prices for these nitrogen fertilizers during January 2001-April 2007.

[65] *Green Markets*, Pike & Fischer, Inc., April 16, 2007, pp. 13-14.

APPENDIX A

FEDERAL REGISTER NOTICES AND THE COMMISSION'S STATEMENT ON ADEQUACY

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–894 (Review)]

Ammonium Nitrate From Ukraine

AGENCY: United States International Trade Commission.

ACTION: Institution of a five-year review concerning the antidumping duty order on ammonium nitrate from Ukraine.

SUMMARY: The Commission hereby gives notice that it has instituted a review pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. 1675(c)) (the Act) to determine whether revocation of the antidumping duty order on ammonium nitrate from Ukraine would be likely to lead to continuation or recurrence of material injury. Pursuant to section 751(c)(2) of the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission; [1] to be assured of consideration, the deadline for responses is September 20, 2006. Comments on the adequacy of responses may be filed with the Commission by October 16, 2006. For further information concerning the conduct of this review 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, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* August 1, 2006.

FOR FURTHER INFORMATION CONTACT: Mary Messer (202–205–3193), 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 this review may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov.*

SUPPLEMENTARY INFORMATION:

Background. On September 12, 2001, the Department of Commerce issued an antidumping duty order on imports of ammonium nitrate from Ukraine (66 FR 47451). The Commission is conducting a review to determine whether revocation of the order would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. It will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct a full review or an expedited review. The Commission's determination in any expedited review will be based on the facts available,

[1] No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117–0016/USITC No. 06–5–155, expiration date June 30, 2008. Public reporting burden for the request is estimated to average 10 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436.

which may include information provided in response to this notice.

Definitions. The following definitions apply to this review:

(1) *Subject Merchandise* is the class or kind of merchandise that is within the scope of the five-year review, as defined by the Department of Commerce.

(2) The *Subject Country* in this review is Ukraine.

(3) The *Domestic Like Product* is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the *Subject Merchandise*. In its original determination, the Commission defined the *Domestic Like Product* coextensively with the scope of subject merchandise as fertilizer grade ammonium nitrate products with a bulk density equal to or greater than 53 pounds per cubic foot.

(4) The *Domestic Industry* is the U.S. producers as a whole of the *Domestic Like Product*, or those producers whose collective output of the *Domestic Like Product* constitutes a major proportion of the total domestic production of the product. In its original determination, the Commission defined the *Domestic Industry* as all domestic producers of the *Domestic Like Product*.

(5) The *Order Date* is the date that the antidumping duty order under review became effective. In this review, the *Order Date* is September 12, 2001.

(6) An *Importer* is any person or firm engaged, either directly or through a parent company or subsidiary, in importing the *Subject Merchandise* into the United States from a foreign manufacturer or through its selling agent.

Participation in the review 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 review as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission's rules, no later than 21 days after publication of this notice in the **Federal Register**. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the review.

Former Commission employees who are seeking to appear in Commission five-year reviews are reminded that they are required, pursuant to 19 CFR 201.15, to seek Commission approval if the matter in which they are seeking to appear was pending in any manner or form during their Commission employment. The Commission's designated agency ethics official has advised that a five-year review is the ''same particular matter'' as the underlying original investigation for purposes of 19 CFR 201.15 and 18 U.S.C. 207, the post employment statute for Federal employees. Former employees may seek informal advice from Commission ethics officials with respect to this and the related issue of whether the employee's participation was ''personal and substantial.'' However, any informal consultation will not relieve former employees of the obligation to seek approval to appear from the Commission under its rule 201.15. For ethics advice, contact Carol McCue Verratti, Deputy Agency Ethics Official, at 202–205–3088.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and APO service list. Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI submitted in this review available to authorized applicants under the APO issued in the review, provided that the application is made no later than 21 days after publication of this notice in the **Federal Register**. Authorized applicants must represent interested parties, as defined in 19 U.S.C. 1677(9), who are parties to the review. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Certification. Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with this review must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will be deemed to consent, unless otherwise specified, for the Commission, its employees, and contract personnel to use the information provided in any other reviews or investigations of the same or comparable products which the Commission conducts under Title VII of the Act, or in internal audits and investigations relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3.

Written submissions. Pursuant to section 207.61 of the Commission's rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is September 20, 2006. Pursuant to section 207.62(b) of the Commission's rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct an expedited or full review. The deadline for filing such comments is October 16, 2006. All written submissions must conform with the provisions of sections 201.8 and 207.3 of the Commission's rules and any submissions that contain BPI must also conform with the requirements of sections 201.6 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 FR 68036 (November 8, 2002). Also, in accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the review must be served on all other parties to the review (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the review you do not need to serve your response).

Inability to provide requested information. Pursuant to section 207.61(c) of the Commission's rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act in making its determination in the review.

Information to be Provided in Response to This Notice of Institution: As used below, the term ''firm'' includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address if available) and name, telephone number, fax number, and E-mail address of the certifying official.

(2) A statement indicating whether your firm/entity is a U.S. producer of the *Domestic Like Product*, a U.S. union or worker group, a U.S. importer of the *Subject Merchandise*, a foreign producer or exporter of the *Subject Merchandise*, a U.S. or foreign trade or business association, or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in this review by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the antidumping duty order on the *Domestic Industry* in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of *Subject Merchandise* on the *Domestic Industry*.

(5) A list of all known and currently operating U.S. producers of the Domestic Like Product. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the *Subject Merchandise* and producers of the *Subject Merchandise* in the *Subject Country* that currently export or have exported *Subject Merchandise* to the United States or other countries since the Order Date.

(7) If you are a U.S. producer of the *Domestic Like Product*, provide the following information on your firm's operations on that product during calendar year 2005 (report quantity data in short tons and value data in U.S. dollars, f.o.b. plant). If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed/which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total U.S. production of the *Domestic Like Product* accounted for by your firm's(s') production;

(b) The quantity and value of U.S. commercial shipments of the *Domestic Like Product* produced in your U.S. plant(s); and

(c) The quantity and value of U.S. internal consumption/company transfers of the *Domestic Like Product* produced in your U.S. plant(s).

(8) If you are a U.S. importer or a trade/business association of U.S. importers of the *Subject Merchandise* from the *Subject Country*, provide the following information on your firm's(s') operations on that product during calendar year 2005 (report quantity data in short tons and value data in U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of *Subject Merchandise* from the *Subject Country* accounted for by your firm's(s') imports;

(b) The quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. commercial shipments of *Subject Merchandise* imported from the *Subject Country*; and

(c) The quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. internal consumption/company transfers of *Subject Merchandise* imported from the *Subject Country*.

(9) If you are a producer, an exporter, or a trade/business association of producers or exporters of the *Subject Merchandise* in the *Subject Country*, provide the following information on your firm's(s') operations on that product during calendar year 2005 (report quantity data in short tons and value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping duties). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of *Subject Merchandise* in the *Subject Country* accounted for by your firm's(s') production; and

(b) The quantity and value of your firm's(s') exports to the United States of *Subject Merchandise* and, if known, an estimate of the percentage of total exports to the United States of *Subject Merchandise* from the *Subject Country* accounted for by your firm's(s') exports.

(10) Identify significant changes, if any, in the supply and demand conditions or business cycle for the *Domestic Like Product* that have occurred in the United States or in the market for the *Subject Merchandise* in the *Subject Country* since the *Order Date*, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the *Domestic Like Product* produced in the United States, *Subject Merchandise* produced in the *Subject Country*, and such merchandise from other countries.

(11) (*Optional*) A statement of whether you agree with the above definitions of the *Domestic Like Product* and *Domestic Industry*; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission's rules.

Issued: July 26, 2006.

By order of the Commission.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E6–12276 Filed 7–31–06; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–894 (Review)]

Ammonium Nitrate From Ukraine

AGENCY: United States International Trade Commission.

ACTION: Notice of Commission determination to conduct a full five-year review concerning the antidumping duty order on ammonium nitrate from Ukraine.

SUMMARY: The Commission hereby gives notice that it will proceed with a full review pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) to determine whether revocation of the antidumping duty order on ammonium nitrate from Ukraine would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. A schedule for the review will be established and announced at a later date. For further information concerning the conduct of this review 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, D, E, and F (19 CFR part 207).

EFFECTIVE DATE: November 6, 2006.

FOR FURTHER INFORMATION CONTACT: Mary Messer (202–205–3193), 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 this review may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov.*

SUPPLEMENTARY INFORMATION: On November 6, 2006, the Commission determined that it should proceed to a full review in the subject five-year review pursuant to section 751(c)(5) of the Act. The Commission found that both the domestic and respondent interested party group responses to its notice of institution (71 FR 43516, August 1, 2006) were adequate. A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements will be available from the Office of the Secretary and at the Commission's Web site.

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: November 15, 2006.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E6–19654 Filed 11–20–06; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF COMMERCE

International Trade Administration

A–823–810

Solid Agricultural Grade Ammonium Nitrate from Ukraine; Final Results of the Expedited Sunset Review of the Antidumping Duty Order

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

SUMMARY: On August 1, 2006, the Department of Commerce (''Department'') initiated a sunset review of the antidumping duty order on solid agricultural grade ammonium nitrate from Ukraine pursuant to section 751(c) of the Tariff Act of 1930, as amended (''the Act''). On the basis of a notice of intent to participate and a complete substantive response filed on behalf of the domestic interested parties and an inadequate response from respondent interested parties, the Department conducted an expedited sunset review of the antidumping duty order pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(B). As a result of this sunset review, the Department finds that revocation of the order would likely lead to continuation or recurrence of dumping at the levels indicated in the ''Final Results of Review'' section of this notice.

EFFECTIVE DATE: December 5, 2006.

FOR FURTHER INFORMATION CONTACT: Audrey Twyman, Damian Felton, or Brandon Farlander, AD/CVD Operations, Office 1, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street & Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482–3534, (202) 482–0133, and (202) 482–0182, respectively.

SUPPLEMENTARY INFORMATION:

Background

On August 1, 2006, the Department initiated a sunset review of the antidumping duty order on solid agricultural grade ammonium nitrate (''ammonium nitrate'') from Ukraine pursuant to section 751(c) of the Act. *See Initiation of Five-year (Sunset) Reviews*, 71 FR 43443 (August 1, 2006) (''*Notice of Initiation*''). The Department received a notice of intent to participate from the following domestic parties: the Committee for Fair Ammonium Nitrate Trade (''COFANT'') and its individual producer members, El Dorado Chemical Company and Terra Industries, Inc. (also known as ''domestic interested parties'') within the deadline specified in 19 CFR 351.218(d)(1)(I). COFANT claims interested party status under section 771(9)(C) of the Act as domestic manufacturers of ammonium nitrate for its members.

The Department received a complete substantive response collectively from the domestic interested parties within the 30-day deadline specified in 19 CFR 351.218(d)(3)(i). The Department also received a substantive response from respondent interested party, Open Joint Stock Company ''Azot,'' within the deadline specified in 19 CFR 351.218(d)(3)(i). On September 7, 2006, the domestic interested parties submitted a rebuttal to Azot's substantive response. On September 20, 2006, the Department determined that the respondent interested party did not account for more than 50 percent of exports by volume of the subject merchandise, because it reported that it had no exports during the 2001–2005 sunset review period. Therefore, the Department concluded that the respondent interested party did not submit an adequate response to the Department's *Notice of Initiation. See* Memorandum to Susan H. Kuhbach entitled, ''Adequacy Determination in

Antidumping Duty Sunset Review of Solid Agricultural Grade Ammonium Nitrate from Ukraine,'' (September 20, 2006). On October 10, 2006, the domestic interested parties submitted comments supporting the Department's adequacy determination.

Pursuant to 19 CFR 351.218(e)(1)(ii)(C)(2), the Department has conducted an expedited sunset review of this antidumping duty order.

Scope of the Order

The merchandise covered by this order are solid, fertilizer grade ammonium nitrate (''ammonium nitrate'' or ''subject merchandise'') products, whether prilled, granular or in other solid form, with or without additives or coating, and with a bulk density equal to or greater than 53 pounds per cubic foot. Specifically excluded from this scope is solid ammonium nitrate with a bulk density less than 53 pounds per cubic foot (commonly referred to as industrial or explosive grade ammonium nitrate). The merchandise subject to this investigation is classified in the Harmonized Tariff Schedule of the United States (''HTSUS'') at subheading 3102.30.00.00. HTSUS subheadings are provided for convenience and customs purposes. The written description of the scope of the order is dispositive.

Analysis of Comments Received

All issues raised in these reviews are addressed in the ''Issues and Decision Memorandum for the Expedited Sunset Review of the Antidumping Duty Order on Solid Agricultural Grade Ammonium Nitrate from Ukraine; Final Results'' (''Decision Memo'') from Stephen J. Claeys, Deputy Assistant Secretary for Import Administration, to David M. Spooner, Assistant Secretary for Import Administration (November 29, 2006), which is hereby adopted by this notice. The issues discussed in the Decision Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the margins likely to prevail if the order were to be revoked. Parties can find a complete discussion of all issues raised in these reviews and the corresponding recommendations in this public memorandum which is on file in room B–099 of the main Department building.

In addition, a complete version of the Decision Memo can be accessed directly on the Web at *http://ia.ita.doc.gov/frn.* The paper copy and electronic version of the Decision Memo are identical in content.

Final Results of Review

The Department determines that revocation of the antidumping duty order on ammonium nitrate from Ukraine would be likely to lead to continuation or recurrence of dumping at the rates listed below:

Producers/Exporters	Margin (percent)
J.S.C. ''Concern'' Stirol	156.29
All Others rate[1]	156.29

[1] As of February 1, 2006, Ukraine graduated to market economy status (*see Final Results of Inquiry Into Ukraine's Status as a Non-Market Economy Country*, February 24, 2006 (71 FR 9520)). As a result, the Ukraine-wide rate is now the All Others rate. *See Certain Cut-to-Length Carbon Steel Plate from Romania: Notice of Final Results and Final Partial Rescission of Antidumping Duty Administrative Review*, 71 FR 12651 (March 15, 2005) and accompanying Issues and Decision Memorandum at Comment 2.

Notification regarding Administrative Protective Order

This notice also serves as the only reminder to parties subject to administrative protective order (''APO'') of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

We are issuing and publishing the results and notice in accordance with sections 751(c), 752(c), and 777(i)(1) of the Act.

Dated: November 29, 2006.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. E6–20551 Filed 12–4–06; 8:45 am]

Billing Code: 3510–DS–S

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–894 (Review)]

Certain Ammonium Nitrate From Ukraine

AGENCY: United States International Trade Commission.

ACTION: Scheduling of a full five-year review concerning the antidumping duty order on certain ammonium nitrate from Ukraine.

SUMMARY: The Commission hereby gives notice of the scheduling of a full review pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) (the Act) to determine whether

revocation of the antidumping duty order on certain ammonium nitrate from Ukraine would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. For further information concerning the conduct of this review 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, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* December 8, 2006.

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 this review may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov*.

SUPPLEMENTARY INFORMATION:

Background.—On November 6, 2006, the Commission determined that responses to its notice of institution of the subject five-year review were such that a full review pursuant to section 751(c)(5) of the Act should proceed (71 FR 67366, November 21, 2006). A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements are available from the Office of the Secretary and at the Commission's Web site.

Participation in the review 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 this review 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, by 45 days after publication of this notice. A party that filed a notice of appearance following publication of the Commission's notice of institution of the review need not file an additional notice of appearance. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the review.

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 this review available to authorized applicants under the APO issued in the review, provided that the application is made by 45 days after publication of this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the review. A party granted access to BPI following publication of the Commission's notice of institution of the review 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 review will be placed in the nonpublic record on March 29, 2007, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission's rules.

Hearing.—The Commission will hold a hearing in connection with the review beginning at 9:30 a.m. on April 17, 2007, 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 April 10, 2007. 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 April 12, 2007, 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), 207.24, and 207.66 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 to the review may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission's rules; the deadline for filing is April 9, 2007. 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 207.67 of the Commission's rules. The deadline for filing posthearing briefs is April 27, 2007; 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 review may submit a written statement of information pertinent to the subject of the review on or before April 27, 2007. On May 23, 2007, 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 May 29, 2007, but such final comments must not contain new factual information and must otherwise comply with section 207.68 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 FR 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 review must be served on all other parties to the review (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: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: December 8, 2006.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E6–21420 Filed 12–14–06; 8:45 am]

BILLING CODE 7020–02–P

EXPLANATION OF COMMISSION DETERMINATION ON ADEQUACY
in
Ammonium Nitrate From Ukraine, Inv. No. 731-TA-894 (Review)

On November 6, 2006, the Commission determined that it should proceed to a full review in the subject five-year review pursuant to section 751(c)(3)(B) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(3)(B).

The Commission determined that the domestic producer responses, filed by the Committee for Fair Ammonium Nitrate Trade on behalf of two domestic producers of ammonium nitrate, El Dorado Chemical Co. (El Dorado) and Terra Industries, Inc. (Terra), were individually adequate. Because El Dorado and Terra account for all domestic production of ammonium nitrate, the Commission further determined that the domestic interested party group response was adequate.

The Commission also received responses to its notice of institution from Ukrainian producers/exporters CJSC Severodonetsk Azot Assoc. (Severodonetsk) and OJSC Azot (Azot), as well as from the Trade and Economic Mission of Ukraine, Embassy of Ukraine to the United States of America (Ukraine Embassy). The Commission determined that the responses were individually adequate and, further, that they constituted an adequate respondent interested party group response because Severodonetsk and Azot account for a significant share of the production of ammonium nitrate in Ukraine, and in light of the response of the Ukraine Embassy. Accordingly, the Commission determined to proceed to a full review in *Ammonium Nitrate From Ukraine*.

A record of the Commissioners' votes is available from the Office of the Secretary and the Commission's web site (http://www.usitc.gov).

APPENDIX B

CALENDAR OF THE PUBLIC HEARING

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Certain Ammonium Nitrate from Ukraine

Inv. No.: 731-TA-894 (Review)

Date and Time: April 17, 2007 - 9:30 a.m.

Sessions were held in connection with this investigation in the Main Hearing Room, 500 E Street (room 101), SW, Washington, DC.

OPENING REMARKS:

In Support of Continuation of the Antidumping Duty Order (**Valerie A. Slater**, Akin Gump Strauss Hauer & Feld, LLP)

In Support of Continuation of the Antidumping Duty Order:

Akin Gump Strauss Hauer & Feld, LLP
Washington, DC
on behalf of

The Committee for Fair Ammonium Nitrate Trade ("COFANT")

Matt Green, Director, Agricultural Sales, Terra Industries, Inc.

Gary Elliott, Market and Distribution Consultant to Terra Industries, Inc.

Phil Gough, Senior Vice President of Marketing, El Dorado Chemical Company

Paul Rydlund, Vice President, El Dorado Chemical Company

In Support of Continuation of the
Antidumping Duty Order (continued):

Daniel W. Klett, Principal, Capital Trade, Inc.

Valerie A. Slater)
Anne K. Cusick) – OF COUNSEL
Tatman Ryder Savio)

CLOSING REMARKS:

In Support of Continuation of the Antidumping Duty Order (**Valerie A. Slater**,
Akin Gump Strauss Hauer & Feld, LLP)

APPENDIX C

SUMMARY DATA

Table C-1
HDAN: Summary data concerning the U.S. market, 2001-06

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

	Reported data						Period changes					
Item	2001	2002	2003	2004	2005	2006	2001-06	2001-02	2002-03	2003-04	2004-05	2005-06
U.S. consumption quantity:												
Amount	1,888,260	2,034,755	2,162,963	1,890,360	1,504,608	***	***	7.8	6.3	-12.6	-20.4	***
Producers' share (1)	73.8	76.2	64.8	68.5	71.1	***	***	2.4	-11.4	3.7	2.6	***
Importers' share (1):												
Ukraine	0.0	0.0	0.0	0.0	0.0	***	***	0.0	0.0	0.0	0.0	***
All other sources	26.2	23.8	35.2	31.5	28.9	***	***	-2.4	11.4	-3.7	-2.6	***
Total imports	26.2	23.8	35.2	31.5	28.9	***	***	-2.4	11.4	-3.7	-2.6	***
U.S. consumption value:												
Amount	263,846	230,117	326,164	326,558	314,899	***	***	-12.8	41.7	0.1	-3.6	***
Producers' share (1)	73.2	76.5	65.8	68.8	69.9	***	***	3.3	-10.7	2.9	1.1	***
Importers' share (1):												
Ukraine	0.0	0.0	0.0	0.0	0.0	***	***	0.0	0.0	0.0	0.0	***
All other sources	26.8	23.5	34.2	31.2	30.1	***	***	-3.3	10.7	-2.9	-1.1	***
Total imports	26.8	23.5	34.2	31.2	30.1	***	***	-3.3	10.7	-2.9	-1.1	***
U.S. shipments of imports from:												
Ukraine:												
Quantity	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
Value	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
Unit value	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Ending inventory quantity	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
All other sources:												
Quantity	494,848	484,658	760,971	595,790	434,571	667,781	34.9	-2.1	57.0	-21.7	-27.1	53.7
Value	70,619	54,008	111,453	102,044	94,918	157,481	123.0	-23.5	106.4	-8.4	-7.0	65.9
Unit value	$142.71	$111.44	$146.46	$171.28	$218.42	$235.83	65.3	-21.9	31.4	16.9	27.5	8.0
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
All sources:												
Quantity	494,848	484,658	760,971	595,790	434,571	667,781	34.9	-2.1	57.0	-21.7	-27.1	53.7
Value	70,619	54,008	111,453	102,044	94,918	157,481	123.0	-23.5	106.4	-8.4	-7.0	65.9
Unit value	$142.71	$111.44	$146.46	$171.28	$218.42	$235.83	65.3	-21.9	31.4	16.9	27.5	8.0
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers':												
Average capacity quantity	2,047,578	2,039,125	2,074,340	2,050,042	1,747,368	***	***	-0.4	1.7	-1.2	-14.8	***
Production quantity	1,432,727	1,581,114	1,368,676	1,282,263	1,066,799	***	***	10.4	-13.4	-6.3	-16.8	***
Capacity utilization (1)	70.0	77.5	66.0	62.5	61.1	***	***	7.6	-11.6	-3.4	-1.5	***
U.S. shipments:												
Quantity	1,393,412	1,550,097	1,401,992	1,294,570	1,070,037	***	***	11.2	-9.6	-7.7	-17.3	***
Value	193,227	176,109	214,711	224,514	219,981	***	***	-8.9	21.9	4.6	-2.0	***
Unit value	$138.67	$113.61	$153.15	$173.43	$205.58	***	***	-18.1	34.8	13.2	18.5	***
Export shipments:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	105,499	104,719	65,491	42,963	***	***	***	-0.7	-37.5	-34.4	***	***
Inventories/total shipments (1)	***	***	***	***	***	***	***	***	***	***	***	***
Production workers	293	290	287	277	179	***	***	-1.0	-1.0	-3.5	-35.4	***
Hours worked (1,000s)	658	664	636	604	378	***	***	0.9	-4.2	-5.0	-37.4	***
Wages paid ($1,000s)	13,898	14,505	13,914	13,870	8,707	***	***	4.4	-4.1	-0.3	-37.2	***
Hourly wages	$21.12	$21.84	$21.88	$22.96	$23.03	***	***	3.4	0.1	5.0	0.3	***
Productivity (tons/1,000 hours)	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***
Net sales:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures	3,001	4,253	2,875	8,729	***	***	***	41.7	-32.4	203.6	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.

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.

APPENDIX D

COMMENTS ON THE SIGNIFICANCE OF THE EXISTING ANTIDUMPING DUTY ORDER AND THE LIKELY EFFECTS OF REVOCATION

U.S. PRODUCERS' COMMENTS

The Commission requested U.S. producers to describe any anticipated changes in their operations or organization relating to the production of HDAN in the future if the antidumping duty order were to be revoked. (Question II-4)

The following firms responded "No": *******.

****

"***."

****

"***."

****

"***."

****

"***."

The Commission requested U.S. producers to describe the significance of the antidumping duty order on their production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values. (Question II-14)

****

"***."

****

"***."

****

"***

***."

***

"***."

The Commission asked U.S. producers whether they anticipated changes in their production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, or asset values relating to the production of HDAN in the future if the antidumping duty order were to be revoked. (Question II-15)

The following firms responded "No": ***.

***

"***."

***

"***."

***

"***."

The Commission asked U.S. producers to indicate the effects (current and future), if any, of hurricanes Katrina and/or Rita on their firm's production and shipments of HDAN. (Question II-17)

***

"***."

***

"***."

***

"***."

***

"***."

U.S. IMPORTERS' COMMENTS

The Commission asked U.S. importers if they would anticipate any changes in their operations or organization relating to the importation of HDAN the future if the antidumping duty order were to be revoked. (Question II-4)

The following firms responded "No:" *******.

The Commission requested U.S. importers to describe the significance of the existing antidumping duty order covering imports of HDAN in terms of its effect on their firms' imports, U.S. shipments of imports, and inventories. (Question II-8)

****

"The current anti-dumping order has had no effect on ***'s imports of AN."

****

"No effect."

****

"N/A."

****

"We can import sufficient ammonium nitrate to meet the market demand without Ukraine ammonium nitrate."

The Commission requested U.S. importers if they would anticipate any changes in their imports, U.S. shipments of imports, or inventories of uranium in the future if the antidumping duty order were to be revoked. (Question II-9)

The following firms responded "No:" *******.

****

"***."

U.S. PURCHASERS' COMMENTS

The Commission's questionnaires in this review requested comments from U.S. purchasers (question III-40) regarding the likely effects of revocation of the antidumping duty order on imports of HDAN from Ukraine on (1) the future activities of their firms and (2) the U.S. market as a whole. The following comments were received:

***

(1) Activities of firm.--"If HDAN prices were competitive with urea the use of HDAN would increase back up to 20,000 TNs from present 10,000 TN. At present levels we will not use any HDAN in 2 years."

(2) Entire U.S. market –"If HDAN prices were competitive with urea the the HDAN volumes would go back up to previous levels."

***

(1) Activities of firm.--"No change."

(2) Entire U.S. market –"Greater supply implies more competitive price, benefit to grower, food costs."

***

(1) Activities of firm.--"None."

(2) Entire U.S. market –"None."

***

(1) Activities of firm.--"Currently 21-0-21 from Russia is being offered to only a few customers and is priced significantly below HDAN prices. If antidumping tariffs are eliminated HDAN would be more competitive."

(2) Entire U.S. market –"No answer."

***

(1) Activities of firm.--"Because of the regulations we are trying to go to other products than nitrate anyway. This continued duty will only make it easier for us."

(2) Entire U.S. market –"***."

***

(1) Activities of firm.--"Due to higher production cost, more closures of domestic producers are forcing us to buy imported product."

(2) Entire U.S. market –"Same as above."

***

(1) Activities of firm.--"No impact."

(2) Entire U.S. market –"N/A-unknown."

***

(1) Activities of firm.--"Ukrainian quality is poor-so there little effect for our firm as we will not import this product."

(2) Entire U.S. market –No answer.

***

(1) Activities of firm.--"See ***."

(2) Entire U.S. market –"Same as above."

***

(1) Activities of firm.--"See ***."

(2) Entire U.S. market –"Same as above."

***

(1) Activities of firm.--"This would give us additional supply but we have had adequate supply due to our ability to purchase vessels."

(2) Entire U.S. market –"There are limited storage locations for AN, less hazmat certified trucks, higher barge freight due to handling restrictions, and demand will be the limiting factors on how much imports will come into the U.S."

FOREIGN PRODUCERS'/EXPORTERS' COMMENTS

The Commission requested foreign producers to indicate whether they anticipated any changes in their operations or organization relating to the production of ammonium nitrate in the future if the antidumping duty order were to be revoked, and if yes, to describe those changes. (Question II-3)

The following firms responded "No": ***.

The Commission requested foreign producers to describe the significance of the existing antidumping duty order covering imports of HDAN in terms of its effect on their firms' production capacity, production, home market shipments, exports to the United States and other markets, and inventories. (Question II-14)

***

"***."

***

"***."

***

"***."

***

"***."

The Commission asked foreign producers if they would anticipate any changes in their production capacity, production, home market shipments, exports to the United States and other markets, or inventories in the future if the antidumping duty order were to be revoked. (Question II-15)

***

"***."

***

"***."

***

"***."

***

"***."

APPENDIX E

CENSUS DATA

Ammonium nitrate: U.S. imports, by leading sources, 2001-06

Country	2001	2002	2003	2004	2005	2006
Quantity (*short tons*)						
Canada	561,693	512,823	507,457	561,323	593,746	594,264
Netherlands	111,833	205,895	230,372	190,322	29,209	91,210
Romania	42,351	48,498	169,929	182,604	145,090	212,003
Russia	96,171	138,664	138,149	126,464	77,143	27,368
Bulgaria	19,854	0	133,019	66,535	71,188	73,333
Spain	105,691	99,218	65,166	244	0	18,038
Georgia	0	0	0	0	33,488	169,201
Lithuania	49,653	24,300	0	0	0	0
Norway	0	34,451	32,668	0	0	0
Ukraine	0	0	0	33,306	22,768	0
Subtotal	987,246	1,063,850	1,276,760	1,160,797	972,632	1,185,417
All other	62,697	26,895	50,406	3,187	3,759	38,439
Total	1,049,943	1,090,745	1,327,166	1,163,984	976,391	1,223,856
Landed duty-paid value (*$1,000*)						
Canada	66,465	62,341	70,326	94,415	113,541	125,514
Netherlands	14,537	18,221	25,736	29,563	5,118	18,065
Romania	4,983	4,224	20,704	29,040	27,518	44,360
Russia	11,859	12,969	15,687	21,039	15,502	6,933
Bulgaria	2,215	0	18,463	10,091	13,368	14,931
Spain	10,801	8,979	7,226	71	0	3,723
Georgia	0	0	0	0	8,355	40,460
Lithuania	6,542	2,249	0	0	0	0
Norway	0	3,350	2,767	0	0	0
Ukraine	0	0	0	6,057	5,035	0
Subtotal	117,403	112,331	160,909	190,277	188,437	253,986
All other	9,198	3,055	5,365	901	1,019	8,799
Total	126,601	115,386	166,273	191,178	189,456	262,785

Table continued on following page.

Ammonium nitrate: U.S. imports, by leading sources, 2001-06

Country	2001	2002	2003	2004	2005	2006
			Unit value (*dollars per short ton*)			
Canada	$118.33	$121.56	$138.58	$168.20	$191.23	$211.21
Netherlands	129.99	88.50	111.72	155.33	175.21	198.06
Romania	117.66	87.09	121.84	159.03	189.66	209.24
Russia	123.31	93.52	113.55	166.37	200.95	253.34
Bulgaria	111.58	(1.00)	138.80	151.67	187.79	203.61
Spain	102.19	90.50	110.89	292.08	([1])	206.39
Georgia	([1])	([1])	([1])	([1])	249.48	239.12
Lithuania	131.76	92.53	([1])	([1])	([1])	([1])
Norway	([1])	97.23	84.69	([1])	([1])	([1])
Ukraine	([1])	([1])	([1])	181.85	221.16	(1.00)
Average	118.92	105.59	126.03	163.92	193.74	214.26
All other	146.70	113.59	106.43	282.61	271.17	228.91
Average	120.58	105.79	125.28	164.24	194.04	214.72

[1] Not applicable.

Note.–Sources ranked according to total import quantity during 2001-06.

Source: Official statistics of the Department of Commerce (HTS subheading 3102.30.00).