NEPHELINE SYENITE FROM CANADA

Determination of the Commission in Investigation No. 731–TA–525 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation

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UNITED STATES 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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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-525 (Preliminary)

NEPHELINE SYENITE FROM CANADA

Determination

On the basis of the record[1] developed in the subject investigation, the Commission unanimously determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Canada of nepheline syenite,[2] provided for in subheading 2529.30.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On July 12, 1991, a petition was filed with the Commission and the Department of Commerce by The Feldspar Corporation, Asheville, NC, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of nepheline syenite from Canada. Accordingly, effective July 12, 1991, the Commission instituted antidumping investigation No. 731-TA-525 (Preliminary).

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

[2] The product covered by this investigation is nepheline syenite, which is a coarse crystalline rock consisting principally of feldspathic minerals (i.e., sodium-potassium feldspars and nepheline), with little or no free quartz, and ground no finer than 140 mesh.

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of July 19, 1991 (56 F.R. 33305). The conference was held in Washington, DC, on August 2, 1991, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

Based on the record obtained in this preliminary investigation, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of nepheline syenite from Canada that allegedly are sold at less than fair value (LTFV).

The legal standard in preliminary antidumping investigations requires the Commission to determine whether, based upon the best information available at the time of the preliminary determination, there is a reasonable indication of material injury or threat thereof to a domestic industry or material retardation of the establishment of such an industry by reason of the subject imports.[1] The definition of "material injury" is the same in both preliminary and final investigations, but in preliminary investigations an affirmative determination is based on a "reasonable indication" of material injury, as opposed to an actual finding of material injury or threat required in a final determination.[2]

In American Lamb Co. v. United States,[3] the Federal Circuit addressed the Commission's standard for preliminary investigations. The Court stated that the purpose of preliminary investigations is to avoid the cost and disruption to trade caused by unnecessary investigations.[4] Accordingly, the Court held that the reasonable indication standard requires more than a finding that there is a "possibility" of material injury. Finally, the Court

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[1] See 19 U.S.C. § 1673b(a). See also Maverick Tube Corp. v. United States, 687 F. Supp. 1569, 1573 (CIT 1988). Material retardation is not at issue in this investigation.

[2] Compare 19 U.S.C. §§ 1671b(a) and 1673b(a) with 19 U.S.C. §§ 1671d(b)(1) and 1673d(b)(1).

[3] 785 F.2d 994 (Fed. Cir. 1986).

[4] Id. at 1004.

held that the Commission is to weigh the evidence it has obtained to determine whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[5]

I. Like Product/Domestic Industry

To determine whether a "reasonable indication of material injury" exists, we first must determine the "like product" and the "domestic industry." Section 771(4)(A) of the Tariff Act of 1930 defines the domestic industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the whole domestic production of that product . . . ."[6] The term "like product" is defined 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 . . . ."[7]

The Commerce Department has defined the product subject to investigation as glass-grade nepheline syenite (i.e., ground no finer than 140 mesh).[8] [9]

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[5] Id. at 1001-1004.

[6] 19 U.S.C. § 1677(4)(A).

[7] 19 U.S.C. § 1677(10).

[8] The Department of Commerce ("Commerce") has defined the products covered in this investigation as:

> [N]epheline syenite which is a coarse crystalline rock consisting principally of feldspathic minerals (i.e., sodium-potassium feldspars and nepheline), with little or no free quartz, and ground no finer than 140 mesh.

56 Fed. Reg. 37526 (August 7, 1991).

[9] Glass-grade constitutes material ground no finer than 140 mesh, but typically sized between 30 to 140 mesh (i.e., material should be ground fine enough to pass through a 30-mesh screen, but not so fine as to pass through a 140-mesh screen). Report at A-8. In addition to glass-grade, nepheline syenite and feldspar are produced in two other finer grades -- ceramic-grade defined as between 200 to 325 mesh; and filler-grade defined as 325 mesh and finer. Tr. at 71 and 72.

Glass-grade nepheline syenite is used as an alumina source in the production of glass. There is no production in the United States of nepheline syenite, and all of the product consumed in the United States is imported from Ontario, Canada.[10]

The Commission's decision regarding the appropriate like product or products in an investigation is a factual determination, and it has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[11] In analyzing like product issues, the Commission generally considers a number of factors including: (1) physical characteristics and uses, (2) interchangeability of the products, (3) channels of distribution, (4) customer and producer perceptions of the products, (5) the use of common manufacturing facilities and production employees, and (6), where appropriate, price.[12] No single factor is dispositive, and the Commission may consider other factors relevant to a particular investigation. The Commission looks for clear dividing lines among possible like products, and disregards minor variations.[13]

A. Domestic Products "like" or "most similar" to imported product Nepheline Syenite

There is no domestic production of nepheline syenite. There are, however, several products that have some of the attributes of nepheline

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[10] U.S. Department of the Interior, Bureau of Mines, Feldspar, Nepheline Syenite, and Aplite Minerals Yearbook -- 1989, (September 1990) at 2 ("Bureau of Mines Report").

[11] Asociacion Colombiana de Exportadores de Flores v. United States, 12 CIT ___, 693 F. Supp. 1165, 1168, n.4 (1988) ("Asocoflores").

[12] E.g., Asocoflores, 693 F. Supp. at 1170, n. 8; Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Final), USITC Pub. 2163 (March 1989).

[13] E.g., Antifriction Bearings (Other than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom, Inv. Nos. 303-TA-19 and 20, 731-TA-391-399 (Final), USITC Pub. 2185 (May 1989).

syenite. The focus of our inquiry in this preliminary investigation is on which of these products are "most similar" to the subject imports. In this preliminary investigation, as the result of information developed in the record, we considered three related questions: 1) whether aplite and glass-grade feldspar were "most similar" products; 2) whether feldspathic sand should be included in the definition of "most similar" product; and 3) whether it is appropriate to distinguish between glass-grade and ceramic-grade feldspar for the purposes of defining the like product.

Petitioner suggested that there are three products produced in the United States which are alternatives to glass-grade nepheline syenite as sources of alumina, a key ingredient in glass-making -- aplite, glass-grade feldspar, and glass-grade feldspathic sand.[14] Petitioner contended that these products should be defined as the like product. Respondent's position on the like product question appeared to be somewhat inconsistent. While arguing that glass-grade nepheline syenite has unique physical and chemical characteristics that are not reflected in any U.S. product, respondent also presented a comparison of the advantages for using glass-grade nepheline syenite over feldspar, aplite, and feldspathic sand in glass-making, thus implying that all of those materials were in some manner similar, at least in their principal use, to nepheline syenite.[15] In its postconference brief, respondent also proposed that ceramic-grade feldspar be included with glass-grade feldspar as a like product to glass-grade nepheline syenite.[16]

Nepheline syenite, feldspar, aplite, and feldspathic sand are all different kinds of domestically-produced feldspathic materials that have

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[14] Petitioner's Postconference Brief at 10.
[15] Respondent's Postconference Brief at Appendix 8.
[16] Respondent's Postconference Brief at 19.

certain chemical elements in common -- aluminum, potassium, sodium, calcium and silica.[17] The glass-grades of these four products are added to glass-making formulas principally for their alumina content.[18] Glass-makers value alumina for the beneficial qualities it contributes to glass composition such as: increased resistance to scratching and breakage, improved thermal endurance, and increased chemical durability.[19] All four products also contain varying amounts of other chemicals necessary for the making of glass. Both parties submitted almost identical aluminum oxide content figures for these four products which indicated a slight variance between nepheline syenite and aplite, and a slightly larger, but still small, difference between nepheline syenite and feldspar.[20] [21] Feldspathic sand has a significantly lower alumina content.

1. **Aplite and Feldspar**

There are a number of similarities in physical characteristics and uses of feldspar, aplite, and glass-grade nepheline syenite. As discussed above, these products are sources of alumina for glass-making with only slight variations in aluminum oxide content. However, there are variations in the relative amount each product contains of the other chemical elements that are used in glass-making.[22] For all feldspathic material, the finished glass-

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[17] Bureau of Mines Report at 3 and 4.
[18] Bureau of Mines Report, p. 1.
[19] Report at A-7.
[20] "Nepheline syenite [h]as an average of 23.5 percent of aluminum oxide content, aplite has 22 percent, feldspar has 18.5 percent roughly and feldspathic sand can vary in alumina content from three to eight percent." Tr. at 94.
[21] Petitioner's Exhibit 1 at the Conference listed aluminum oxide contents as follows: feldspar, 19 percent; aplite, 22 percent; and nepheline syenite, 23.4 percent.
[22] In any final investigation, we will consider further the effects these variations in chemical composition have on use, interchangeability, and price for these products.

grade product has a granular texture, and has a low value-to-weight ratio.

Notwithstanding certain differences in chemical composition, there is also a significant overlap in customers' use of these three products.[23] While customers might develop a preference for one product,[24] both parties indicated that for the most part customers can, and will, substitute these products for one another due to price considerations, strikes, and availability and price of other glass-making components.[25]

Because these products are processed near to the mines and then generally sold by the producer directly to end-user customers,[26] they are distributed in similar ways. However, generally they are not produced in common production facilities.[27] All of these products typically are mined from open pits and then ground and processed.[28] Due to variations in the chemical composition of these products, and the consequent need to adjust the amount of other ingredients in a glass batch to suit the particular chemical composition of the product being used, the prices for these products are not

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[23] Petitioner's Conference Exhibit 3 provided 13 examples where purchasers had shifted from use of one of these products to use of one of the others, such as a transfer from nepheline syenite to aplite.

[24] Report at A-12.

[25] Due to the impact on other components in the glass batch these transfers usually occur when contracts are renegotiated. Report at A-48.

[26] Report at A-13.

[27] The petitioner has contended that "[t]here are no common manufacturing facilities for the three products." Petitioner's Postconference Brief at 14.

[28] As discussed in the Report, a dry process is used for nepheline syenite, and a wet process is used for aplite, feldspar, and feldspathic sand deposits, but with some variations to the process due to differences in their chemical composition. Report at A-9.

directly equivalent.[29] [30]

In summary, we find that the similarities in physical characteristics, uses, and actual interchangeability among nepheline syenite, feldspar, and aplite outweigh their differences in chemical composition and some consumer preferences.[31] For the purposes of this preliminary determination, glass-grade feldspar and aplite, in characteristics and use, are most similar to glass-grade nepheline syenite; and we define both of them as "like" the product subject to investigation.

2. **Feldspathic Sand**

Although feldspathic sand is also used as a source of alumina in glass-making, its physical composition makes it significantly dissimilar to the product subject to investigation.[32] Feldspathic sand is heavier and costlier to transport than the other products because it includes not only alumina but also a larger amount of the silica (sand) and certain other lower value

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[29] The difference in the chemical composition of the feldspathic materials affects the amount of the other ingredients in a glass batch. For example, the alumina and alkali levels in Canadian nepheline syenite are higher than in domestic aplite or feldspar, providing greater concentrations of these products per ton, thus lessening the required amount of soda ash (an alkali), the most costly of the batch ingredients. Report, Table 1 at A-8, and A-48.

[30] Due to the low-value to weight ratio, transportation costs account for about 50 percent of final delivered costs. Report at A-49. According to petitioner, nepheline syenite can command a delivered price per ton that is $6 to $8 higher than aplite or feldspar because of its chemical composition. Tr. at 67.

[31] As noted in the legislative history to the Trade Agreements Act of 1979, "[t]he requirement that a product be 'like' the imported article should not be interpreted in such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under investigations." S. Rep. No. 249, 96th Cong., 1st Sess. at 90-91 (1979).

[32] Note -- the relevant comparison is to the import (see similar discussion in section on Ceramic-grade Feldspar at 8).

chemicals used in glass production.[33] Secondly, its alumina content is far lower than the other three products and varies widely, depending on its source.[34]

This makes feldspathic sand interchangeable for nepheline syenite to a more limited degree than aplite or glass-grade feldspar because of its low alumina content. Moreover, like glass-grade feldspar and aplite, feldspathic sand does not share channels of distribution or common production facilities with other products.[35] Unlike the other products, it is often produced as a by product of silica production. Its price is difficult to compare with the other products due to its wider variance in chemical composition. Accordingly, we do not include feldspathic sand in the definition of the like product.

3. Ceramic-grade Feldspar[36]

We next consider whether it is proper to distinguish between glass-grade feldspar and ceramic-grade feldspar for purposes of defining the like product. Respondent argued that "[c]eramic-grade feldspar is much more similar to glass-grade feldspar than is aplite or feldspathic sand."[37] This

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[33] Table 1, Report at A-8, provides chemical composition for various alumina sources. But as the Commission staff report states, "the 'typical' feldspathic sand of table 1 may not, in fact, be representative of most of the feldspathic sands; most U.S. producers indicated that the alumina content was less than 12 percent." Report at A-18.

[34] Petitioner's Conference Exhibit 1 indicates that for a glass batch composition the pounds of alumina material required varies depending on the source from 459 for feldspathic sand (with alumina content of 11.2 percent), 247 for feldspar, 210 for aplite, to 196 for nepheline syenite. While these products are not one-to-one equivalents due to their different chemical compositions, the wide disparity between feldspathic sand and the other products is significant.

[35] See footnote 29.

[36] Aplite is not produced in a ceramic-grade; therefore, this discussion pertains only to feldspar.

[37] Respondent's Postconference Brief at 23.

is beside the point: the issue before us is whether ceramic-grade feldspar is more similar to glass-grade nepheline syenite not glass-grade feldspar.

We find there is a clear dividing line in physical characteristics, interchangeability, use, customer perceptions and price between ceramic-grade and glass-grade feldspar. Therefore, we exclude ceramic-grade feldspar from the definition of like product in this investigation.[38]

In terms of physical characteristics and interchangeability, ceramic-grade feldspar undergoes a costly additional grinding process[39] to achieve a significantly finer mesh (between 200 to 325-mesh) than glass-grade nepheline syenite (ground no finer than 140-mesh).[40] Once the feldspar is ground further to ceramic-grade, it is too fine for glass-grade use.[41] Moreover, the Bureau of Mines has reported that the feldspar preferred for ceramic-grade contains a different chemical composition than that used in glass-grade in

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[38] In her recent opinion on Polyethylene Terephthalate Film etc. from Japan and Korea, Inv. Nos. 731-TA-458 and 459 (Final) USITC Pub. 2383 (May 1991), Acting Chairman Brunsdale refined the usual multipart test used by the majority to focus on whether dumping would induce significant substitution between the potential like products by either producers or consumers. In defining the like product in this way, she seeks to identify the products that will be significantly and directly affected by any dumping of the articles subject to investigation. She agrees that the best available evidence in the record in this investigation indicates that those who buy glass-grade nepheline syenite do not view ceramic- and filler-grade feldspar as a substitute. There is evidence, however, that the producers of ceramic-grade feldspar at least could easily switch production to make glass-grade feldspar. (They would seem to have to only forego a costly grinding operation.) At this point, she would exclude the ceramic-grade from the like product because the best, albeit thin, evidence on the record, is that there are differences in the chemical makeup of the raw feldspar that ceramic-grade producers use. See n.42. It is an issue on which any final investigation should shed more light.

[39] Ceramic-grade feldspar undergoes a fine grinding process with flint pebbles in an air-swept, ceramic-lined mill. Bureau of Mines Report, "Feldspar Resources and Marketing in Eastern United States," at 16 (1967).

[40] According to the Staff report, "the fine particle limitations [specified by the glassmaking industry] also help to reduce health risks and equipment damage that might otherwise be caused by the excess dust" of finer mesh. Report at A-8.

[41] Tr. at 71 and 72.

addition to being ground to a finer mesh size.[42] In addition to the chemical composition, the particle size of the product is important for its end use. These products are produced in the coarser glass-grade, finer ceramic-grade, and extremely fine filler grade. As the Commission report notes, "[t]he grain size and distribution is very critical to efficient melting and blending of the raw minerals that comprise a glass batch, while minimizing possible chemical segregation."[43]

In those past cases in which the Commission has found all grades to be one like product, the grading has not been standard industry-wide, or the grades have been at least somewhat interchangeable, or both. For example, in Dry Aluminum Sulfate from Sweden, the Commission found all grades to be one like product because "there was no industry-wide definition for each grade. Individual producers set their own standards...It appears that most end-users do not prefer one grade over another and will take delivery of the available grade, so long as it is at least standard grade."[44] In contrast in this

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[42] According to the Bureau of Mines, "Feldspar with a high potash-to-soda ratio is often preferred for pottery making, and spar for this purpose is usually ground to minus 200 mesh....Both potash and soda feldspars, ground to minus 200 mesh, are used in glazing." "Pottery-grade feldspar for whiteware and similar ceramic products may range from 5% to 14% in K2O [potassium] content," reports the Bureau of Mines, whereas "[f]eldspar for glass manufacturing...usually contains 4% to 6% K2O [potassium]." Bureau of Mines Report at 4 and 5.

[43] Staff report at A-8.

[44] Dry Aluminum Sulfate from Sweden, Inv. No. 731-TA-430 (Preliminary) USITC Pub. 2174 (March 1989) at 8 and 9 ("despite varying physical properties...generally may be used to perform same functions...[customer perception that] liquid and dry aluminum sulfate are considered nearly perfect substitutes for each other"); See, e.g., Industrial Nitrocellulose from Brazil, Japan, People's Republic of China, Republic of Korea, United Kingdom, West Germany, and Yugoslavia, Inv. Nos. 731-TA-439 - 445 (Final) USITC Pub. 2295 (June 1990) at 5 and 6 ("slight differences in the characteristics and uses in each grade mean that the grades are not perfectly substitutable. Nonetheless...they generally share the same categories of end uses"); Electrolytic Manganese Dioxide from Greece, Ireland and Japan, Inv. Nos. 406 -

(continued...)

investigation, it is agreed that glass-, ceramic-, and filler-grades are uniformly recognized throughout the industry. Further, as discussed below, the end-uses are different, and the product is purchased by grade for specific uses.

In terms of use, the glass-making and ceramic industries have different reasons for adding feldspathic materials in their production process. Feldspar is added to glass-making formulas for its alumina[45] whereas it is used in ceramic mixtures as a flux.[46] Glass-grade feldspar is sold for use in the production of glass containers, flat glass (i.e., windows) and fiberglass. In contrast, ceramic-grade is sold to customers for ceramic/pottery and enamels. While respondent raised the issue that ceramic-grade feldspar was similar to glass-grade feldspar, it provided no examples of a customer purchasing ceramic-grade feldspar in place of glass-grade feldspar.

In the past the Commission has given more weight to actual, rather than merely potential interchangeability in considering whether to expand the like product beyond those articles described by Commerce as subject to

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[44](...continued)
408 (Preliminary) USITC Pub. 2097 (July 1988) (interchangeable uses and similar pricing); Potassium Permanganate from the People's Republic of China, Inv. No. 731-TA-125 (Final, USITC Pub. 1480 (January 1984).

[45] The Bureau of Mines reports, "[p]rocessed feldspar is added to glass-making formulas for its alumina...[which] enhances the workability of molten glass and improves the finished product by giving it better chemical stability." Bureau of Mines Report at 1. See also, Office of Industrial Resources, International Cooperation Administration, A Complete Directory of Ceramic Materials, 15 and 16 (January 1960) ("[t]he effect of feldspar on the workability of glass is very similar to that of lime").

[46] The Bureau of Mines states that "[f]eldspar is used in ceramic mixtures, such as those for the making of vitreous china and porcelain enamels, principally as a flux." It also performs as a vitreous binder to cement particles of various crystalline substances present in ceramic mixtures. Bureau of Mines Report at 1 and 2.

investigation.[47] While some customers may contract for both grades, the customers purchase each grade based on the intended use. The additional processing required for ceramic-grade significantly increases its price. In this investigation, the price of ceramic-grade feldspar is almost 50 percent higher than glass-grade feldspar.[48]

In sum, after considering the different uses, different physical characteristics, the inability to use ceramic-grade for glass-grade due to the finer grade achieved from additional processing, the distinct perception of customers of a difference between the grades, and the significantly higher price for the ceramic-grade, the Commission does not include ceramic-grade in the like product.

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[47] Aspherical Ophthalmoscopy Lenses from Japan, Inv. No. 731-TA-518 (Preliminary), USITC Pub. 2396 (June 1991) at 11 and 12 ("That the lenses could be used interchangeably is of at least some relevance....we nonetheless find that the lack of actual substitutability supports excluding contact lenses from the like product."); See, e.g., Coated Groundwood Paper from Austria, Belgium, Finland, France, Germany, Italy, the Netherlands, Sweden, and the United Kingdom, Inv. Nos. 731-TA-486 through 494 (Preliminary), USITC Pub. 2359 (February 1991) at 8 ("Coated groundwood paper is not generally interchangeable...Thus, purchasers reported that they did not substitute either supercalendared paper or coated free sheet for coated groundwood paper.") (emphasis added); Certain Personal Word Processors from Japan and Singapore, Inv. Nos. 731-TA-483 and 484 (Preliminary), USITC Pub. 2344 (December 1990) at 11 (personal computers were not included in like product despite some degree of interchangeability, differences in some characteristics and different perceptions of the products by consumers warranted not including them in the like product); Sweaters Wholly or in Chief Weight of Manmade Fibers from Hong Kong, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-448 through 450 (Final), USITC Pub. 2312 (September 1990) at 12 through 16 (considered interchangeability in the broad sense of encompassing both customer preferences as well as end use, ultimately found that natural fiber sweaters should not be included in the like product).

[48] According to Industrial Minerals (March 1991), the prices for glass-grade feldspar are: $45.50 (FOB Middleton, CT), and $33.50 (FOB Spruce Pine, NC); whereas the prices for ceramic-grade feldspar are: $67.50 (FOB Middleton, CT), and $50.00 (FOB Spruce Pine, NC). Therefore, ceramic-grade prices are 48 percent and 49 percent higher, respectively. See Tungsten Ore Concentrate from the People's Republic of China, Inv. No. 731-TA-497 (Preliminary), USITC Pub. 2367 (March 1991) at 7.

II. Regional Industry[49]

A. Appropriateness of Regional Industry Analysis

Petitioner has requested use of a regional industry analysis[50] in these investigations pursuant to Section 771(4)(C) of the Tariff Act of 1930. This statute provides that:

> In appropriate circumstances, the United States, for a particular product market, may be divided into 2 or more markets and the producers within each market may be treated as if they were a separate industry if--
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> (i) the producers within such market sell all or almost all of their production of the like product in question in that market, and
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> (ii) the demand in that market is not supplied, to any substantial degree, by producers of the product in question located elsewhere in the United States.
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> In such appropriate circumstances, material injury, the threat of material injury, or material retardation of the establishment of an industry may be found to exist with respect to an industry even if the domestic industry as a whole, or those producers whose collective output of a like product constitutes a major proportion of the total domestic production of that product, is not injured, if there is a concentration of subsidized or dumped imports into such an isolated market and if the producers of all, or almost all, of the production within that market are being materially injured or threatened by material injury, or if the establishment of an industry is being materially retarded, by reason of the subsidized or dumped imports.[51]

The Commission has considered regional industry analysis as discretionary, based on the language "appropriate circumstances" and "may be

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[49] Commissioner Rohr concurs in the conclusions and factual analysis contained in this section of the Commission's views, but considers other factors in deciding the appropriateness of regional analysis as set forth in his additional views below.

[50] The petitioner has proposed a regional industry which consists of the producers and customers of aplite and glass-grade feldspar located in the following states and territories -- Connecticut, Illinois, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, West Virginia, Wisconsin, and the Commonwealth of Puerto Rico. Petition at 6 and 10. For purposes of this preliminary investigation, we define this region as the "northeast/northcentral region and Puerto Rico."

[51] 19 U.S.C. § 1677(4)(C).

treated" found in the statute.[52] The Court of International Trade, however, has cautioned against "[a]rbitrary or free handed sculpting of regional markets."[53]

The Commission is concerned that the regional analysis be applied only in appropriate circumstances so as to preclude imposing duties on imports sold in the national market in cases in which the detrimental impact of the imports is limited to a segment of that market. The Commission has defined "appropriate circumstances" on several occasions, focusing on whether a separate geographic market exists and whether the market is isolated and insular.[54] [55]

In two recent investigations, the Commission used a "two-step" approach

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[52] 19 U.S.C. § 1677(4)(C). See, e.g., Gray Portland Cement and Cement Clinker from Mexico, Inv. No. 731-TA-451 (Final), USITC Pub. 2305 at 15 (August 1990) ("Mexico Cement"); Frozen French Fried Potatoes from Canada, Inv. No. 731-TA-93 (Preliminary), USITC Pub. 1259 at 6 (June 1982) ("Frozen French Fried Potatoes"); Fall-Harvested Round White Potatoes from Canada, Inv. No. 731-TA-124 (Final), USITC Pub. 1463 at 7 (December 1983) ("Round White Potatoes"); Rock Salt from Canada, Inv. No. 731-TA-239 (Final), USITC Pub. 1798 at 5 (January 1986) ("Rock Salt").

[53] See, e.g., Atlantic Sugar, Ltd. v. United States, 2 CIT ___, 519 F. Supp. 916, 920 (1981); Portland Hydraulic Cement from Australia and Japan, Inv. Nos. 731-TA-108 and 109 (Preliminary), USITC Pub. 1310 at 11 n. 30 (November 1982) ("Australia and Japan Cement").

[54] See, e.g., Rock Salt, USITC Pub. 1798 at 5; Cut-to-Length Carbon Steel Plate from the Federal Republic of Germany, Inv. No. 731-TA-147 (Preliminary Remand), USITC Pub. 1550 at 8 (July 1984).

[55] The additional requirement suggested by earlier Commission determinations, such as Certain Steel Wire Nails from the Republic of Korea, Inv. No. 731-TA-26 (Final), USITC Pub. 1994 at 9 (August 1980), that the proposed region account for a significant share of total U.S. consumption or production is now largely not considered as an independent requirement. See Gray Portland Cement and Cement Clinker from Japan, Inv. 731-TA-461 (Final), USITC Pub. 2376 (April 1991) at 21, n. 47 ("would not consider it of much weight if Southern California represented but a very small share of overall U.S. consumption") ("Japan Cement"); See also, Aluminum Sulfate from Venezuela, (Final) at 8, n. 21 (also finding Puerto Rico to be a region); Privileged Memorandum GC-M-188 (Final) (November 21, 1989) at 24 and 25.

to regional analysis.[56] Under this approach, the Commission first determined whether a regional market exists based on the two "market isolation" factors identified in subsections (i) and (ii) of the statute. As a second step, the Commission then considered whether imports are concentrated in any regional market so defined. Effectively, import concentration is a condition precedent to analysis of material injury (or threat thereof) to a regional industry.

The Commission has found, in the past, that appropriate circumstances exist for the Commission to engage in a regional industry analysis for products with low value-to-weight ratios and where high transportation costs make the areas in which the product is produced necessarily isolated and insular.[57] While these prior decisions are not binding on this investigation, we note that the product under investigation has similar low value-to-weight ratios and high transportation costs as the Cement cases.

1. Market Isolation Criteria

The Commission finds that during the period of investigation shipments within the region by the regional producers of their glass-grade feldspar and aplite are in the range that we have considered in the past to satisfy the statutory isolation criterion for "shipments out."[58] Moreover, the trend is

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[56] See e.g., Gray Portland Cement and Cement Clinker from Venezuela, Inv. No. 731-TA-519 (Preliminary), USITC Pub. 2400 (July 1991) ("Venezuela Cement"). Previously, the Commission has interpreted section 771(4)(C) as establishing three criteria for determining whether a regional industry exists: (1) producers within a geographic region must sell "all or almost all" of their production of the like product to customers within that region; (2) demand within the region must not be supplied, to any substantial degree, by U.S. producers of the like product located elsewhere; (3) there must be a concentration of the unfairly traded imports within the region. Gray Portland Cement and Cement Clinker from Mexico, Inv. No. 731-TA-451 (Preliminary), USITC Pub. 2235 at 5 and 6 (November 1989) ("Mexico Cement").

[57] See, e.g., Venezuela Cement, USITC Pub. 2400 at 6 and 7.

[58] See, e.g., Venezuela Cement, USITC Pub. 2400 at 7 and 27; (over 95 percent found to be sufficient); Japan Cement, USITC Pub. 2376 at 18, 44 (82.6 percent

(continued...)

increasingly for shipments originating in the region to remain within the region.[59]

For purposes of this preliminary investigation, we also conclude that the "shipments in" figures for glass-grade feldspar and aplite are within an acceptable range and support treating this northeast/northcentral region including Puerto Rico as an isolated market.[60] The Commission has stated that no precise numerical cutoff exists for the percentage of consumption in the region which is supplied by U.S. producers outside the region above which an area is disqualified from regional industry status.[61] In Atlantic Sugar, Ltd. v. United States,[62] the Court of International Trade suggested that 12 percent outside supply may be too high to be considered insubstantial "in the abstract," but nonetheless affirmed a Commission determination holding that market isolation criteria were satisfied when 12 percent of regional consumption was supplied by producers outside the region. The Commission has found that an average of 10.5 percent was acceptable[63] and on several

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[58](...continued)
found to be sufficient); Operators for Jalousie and Awning Windows from El Salvador, Inv. Nos. 701-TA-272 and 731-TA-319 (Final), USITC Pub. 1934 at 9 (January 1987) (over 80 percent found to be sufficient); Round White Potatoes, USITC Pub. 1463 at 7 (84 percent found to be sufficient); Australia and Japan Cement, USITC Pub. 1310 at 5 (92 percent found to be sufficient); Frozen French Fried Potatoes, USITC Pub. 1259 at 7 (66 percent found not to be sufficient).

[59] Report, Table 5 and Table 7, at A-15 and A-21.

[60] Report, Table 5 and Table 7 at A-15 and A-21. In any final investigation, we will reexamine the appropriateness of conducting a regional industry rather than a national industry analysis in light of the like product defined in this preliminary investigation. A review of the information compiled in this investigation indicates that production within the region of glass-grade feldspar and aplite might be significant enough to constitute consideration as a national industry. Appropriate information will be gathered for any final investigation to enable the Commission to consider this approach.

[61] See, e.g., Cut-to-Length Carbon Steel Plate from Germany, Inv. No. 731-TA-147 (Preliminary-Remand), USITC Pub. 1550 at 9, n. 11 (July 1984).

[62] 2 CIT 295, 298 (1981).

[63] Venezuela Cement, USITC Pub. 2400 at 8-10.

occasions that percentages of outside supply of less than 10 percent were acceptable.[64] It determined in one case that 30 percent was too large,[65] and in a second that percentages that ranged between 25 and 50 percent were too large.[66]

2. Concentration of Imports

In the final step of the regional industry analysis, we determine whether there is the requisite concentration of imports within the pertinent region. Again, there is no precise numerical limit for determining when import concentration is sufficient, but we have generally found percentages higher than 80 percent of total imports by volume subject to investigation to be sufficient.[67] However, we have also found the requisite concentration at levels as low as 68 percent[68] and 43 percent.[69] For example, in Japan Cement, a majority of the Commissioners found an import concentration level between 61.2 percent and 73.7 percent to be sufficient.[70] Still other Commission determinations have questioned whether the concentration was sufficient when

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[64] See, e.g., Mexico Cement, USITC Pub. 2305 at 15 (between 8 and 8.5 percent acceptable); Sugars and Sirups from Canada, Inv. No. 731-TA-3 (Final), USITC Pub. 1047 at 4, 14 (March 1980) (5.5 percent acceptable) ("Sugar and Sirups"); Australia and Japan Cement, USITC Pub. 1310 at 9 (less than 10 percent acceptable).

[65] See Frozen French Fried Potatoes, USITC Pub. 1259 at 7.

[66] See 12-Volt Lead-Acid Type Automotive Storage Batteries from the Republic of Korea, Inv. No. 731-TA-261 (Preliminary), USITC Pub. 1710 at 8 (June 1985).

[67] See, e.g., Australia and Japan Cement, USITC Pub. 1310 at 10 (99 percent); Offshore Platform Jackets and Piles from the Republic of Korea and Japan, Inv. Nos. 731-TA-259 and 260 (Final), USITC Pub. 1848 (May 1986) at 10 (100 percent) ("Offshore Platform Jackets"); Sugars and Sirups, USITC Pub. 1047 (March 1980) (96 percent).

[68] See Round White Potatoes, USITC Pub. 1463 at 7.

[69] See Certain Steel Wire Nails from the Republic of Korea, Inv. No. 731-TA-26 (Final), USITC Pub. 1088 at 11 and 12 (August 1980).

[70] Japan Cement, USITC Pub. 2376 at 20 and 21, 48-50. See also Venezuela Cement, USITC Pub. 2400 at 10 and 11 (63.5 percent to 100 percent found to be sufficient).

the percentages of imports ranged from 66.3 percent to 79.2 percent[71] and found insufficient concentration when the imports into the region ranged from 69.2 percent to 80.1 percent.[72]

Determining whether imports are sufficiently concentrated in the region is obviously an area in which the Commission exercises considerable discretion. Based on the information in the record, we conclude for purposes of this preliminary investigation that imports from Canada are sufficiently concentrated to warrant consideration of material injury or threat thereof to a regional industry composed of the domestic producers of glass-grade feldspar and aplite in the northeastern/northcentral region.

3. Proposed Alternative Regions

We considered a number of variations of the northeast/northcentral region that were proposed by respondent and are discussed below such as (1) excluding states from the region in which the petitioner does not ship, (2) adding the states of North Carolina, South Carolina, Georgia, and Florida to make the region contiguous with Puerto Rico, (3) in the alternative, excluding Puerto Rico, and (4) adding the state of Kentucky.[73]

First, we considered the exclusion of states from the region in which the petitioner does not ship.[74] In the subject investigation, there are no

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[71] See, e.g., Certain Welded Carbon Steel Pipes and Tubes from Taiwan, Inv. No. 731-TA-349 (Final), USITC Pub. 1994 (July 1987).

[72] See, e.g., Certain Welded Carbon Steel Pipes and Tubes from the Philippines and Singapore, Inv. Nos. 731-TA-293, 294, 296 (Final), USITC Pub. 1907 at 6 and 7, n. 19 (November 1986).

[73] Respondent's Postconference Brief at 4-19.

[74] Respondent had cited the Commission decision in Offshore Platform Jackets to support its claim that the Commission has "limited a region to areas where there is import or domestic competition." Respondent's Postconference Brief at 6. Respondent stated: "In Offshore Platform Jackets and Piles from the Republic of Korea and Japan...the Commission rejected a Gulf Coast region for offshore platform jackets because there were no sales of Korean or Japanese imports into the Gulf Coast." Id. at 6.

current or future limitations on sales by the petitioner in these states.[75] Further, there was actual marketing in these states.[76] Thus, we conclude that all states within the region proposed by the petitioner should be included in the region.

Secondly, we considered the exclusion of Puerto Rico from the region since it is a non-contiguous territory, and, in the alternative, adding the states of North Carolina, South Carolina, Georgia and Florida to the region to make Puerto Rico "contiguous" to the region.[77] Indeed, in the past, the Commission has added states to make a region contiguous when there have been non-region states between the states proposed as a non-contiguous region.[78]

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[75] Offshore Platform Jackets, USITC 1848 at 8-10 (The Commission found that the Gulf Coast region should be included in a national assessment for piles because actual competition was not required, only that "[t]here were no geographical features preventing such shipments in the future;" but that geographical limitations on shipment from the Gulf Coast of offshore platform jackets intended for the West Coast required a West Coast production facility and, therefore, should be assessed as a separate regional industry).

[76] Evidence provided to the Commission during the preliminary investigation indicated that marketing efforts had been undertaken in the states in question. See, e.g., Fall-Harvested Round White Potatoes from Canada, Inv. No. 731-TA-124 (Preliminary), USITC Pub. 1364 (1983) (marketing of round white potatoes in the states of New Jersey, Delaware, and Maryland, even though there were no producers of the like product in those states, was enough to include those states in the region) ("Round White Potatoes").

[77] Respondent's Postconference Brief at 12. Respondent had contended that "[I]t is necessary to include those states to make Puerto Rico contiguous to the Region and to include states to which both the imported and domestic product are shipped." Respondent cited the Commission's request for data collection by geographic region in Certain Steel Pails from Mexico, Inv. No. 731-TA-435 (Final), USITC Pub. 2277 at A-10 (May 1990), to contend that: "[t]he Commission logically included Puerto Rico in the Southeast region because it was closest to states in that region. In contrast, TFC [petitioner] has requested that the Commission include Puerto Rico in a Northeast/Northcentral Region." Respondent's Postconference Brief at 12 and 17.

[78] See, e.g., Mexico Cement, USITC Pub. 2235 at 12-14 (Commission included the Gulf states to make proposed separate Southwest and Florida regions contiguous); Round White Potatoes, USITC Pub. 1364 (Commission included the states of New Jersey, Delaware and Maryland to make the proposed Northeast region contiguous with the proposed inclusion of the cities of Baltimore, Maryland and Washington, D.C.).

But, despite the respondent's interpretation, we have not found nor considered adding to a region the closest geographically located states for the sole reason of making an island territory (included in the region) "contiguous" to the region to be assessed.

Finally, we have considered including Kentucky in the region and find no statutory basis for such an inclusion. The record suggests that Kentucky does not meet the statutory criteria for inclusion, that there is production within the state or that producers within the region provide all or almost all of the like product in the Kentucky market.[79] In any final investigation, we will revisit this issue when we consider if a national industry analysis is appropriate.

Based on the information in the record, we conclude for purposes of the preliminary determination that a regional analysis is appropriate using the northeast/northcentral region and Puerto Rico. However, due to the factors discussed above, we will examine more closely in any final investigation whether a national industry analysis for the domestic producers of the like product as defined in this preliminary determination is more appropriate.

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[79] See 19 U.S.C. § 1677(4)(C)(i).

III. Condition of the Regional Industry[80] [81]

In determining whether the regional industry is experiencing material injury, we consider, among other factors, domestic consumption, domestic production, shipments, capacity utilization, employment, wages, financial performance, capital investment, and market share.[82] No single factor is dispositive, and in each investigation we consider the particular nature of the industry involved and the relevant economic factors which have a bearing on the state of the industry.[83] Moreover, a regional industry analysis is different from that of a national industry analysis because we must determine whether producers of "all or almost all" of the production in the region are materially injured.[84]

We also note that much of the information on which we base our decision is business proprietary, as there is only one domestic producer in the region.[85] Therefore, our discussion of the condition of the industry must necessarily be in general terms. Furthermore, because the product subject to

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[80] Commissioner Rohr concurs in this section but also adds additional considerations in his additional views.

[81] Acting Chairman Brunsdale joins in this discussion of the condition of the domestic industry. However, she does not reach a separate legal conclusion regarding the presence or absence of material injury based on this information, and does not believe an independent determination is either required by statute or useful to the determination of whether a domestic industry is materially injured by reason of dumped imports. She does, however, find the discussion of the condition of the industry helpful in determining whether any injury resulting from the dumped imports is material. See, e.g., Certain Light-Walled Rectangular Pipes and Tubes from Taiwan, Inv. No. 731-TA-410 (Final), USITC Pub. 2169 (March 1989) at 10-15 (Views of Chairman Brunsdale and Vice Chairman Cass).

[82] See 19 U.S.C. § 1677(7)(C)(iii).

[83] See 19 U.S.C. § 1677(7)(C)(iii), which requires us to consider the condition of the industry in the context of the business cycle and conditions of competition that are distinctive to the domestic industry.

[84] 19 U.S.C. § 1677(4)(C).

[85] The petitioner provided the Commission with a limited waiver to discuss only certain trends regarding the condition of the domestic industry.

investigation and the products defined as most similar to the imported product are not identical, we viewed all statistical data with some caution. In any final investigation, we will attempt to resolve this issue by compiling more comprehensive information on the products.

Apparent consumption of the like product in the region remained relatively even overall, fluctuating somewhat from year to year.[86] There was a slight decline in apparent consumption from the interim period of 1990 (January-June) to the same period in 1991.[87]

Overall the data for regional production of glass-grade feldspar and aplite between 1988 and 1990 generally support an affirmative determination of injury.[88] Data for the interim period of 1990 to the interim period of 1991 provide even stronger support for that conclusion.[89] Overall, capacity utilization for glass-grade feldspar and aplite production followed a similar pattern. The data for the period 1988 to 1990 provide some support for an affirmative determination while the interim data provide stronger support for that conclusion.[90]

Domestic shipments of the regional producer decreased between 1988 and 1990, with a slightly greater decline from the interim period of 1990 to the interim period of 1991.[91] The data for the number of workers, the hours worked, and the wages paid for the period 1988 to 1990, and for the interim periods, provide some support for an affirmative determination.

The data for the cost of goods sold over the period of investigation,

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[86] Report, Table 5 at A-15.
[87] Report, Table 5 at A-15.
[88] Report, Table 6 at A-19.
[89] Report, Table 6 at A-19.
[90] Report, Table 6 at A-19.
[91] Report, Table 7 at A-21.

including the interim period, provide strong support for an affirmative determination.[92] Operating income and profits both followed the same pattern and support the same conclusions.[93] The data for overall net sales for the period 1988 to 1990 support our determination, while the data for the interim period provides stronger support for an affirmative determination.[94] Finally, overall net return on fixed assets over the period of investigation strongly support our conclusion.[95]

On the basis of the information compiled for this preliminary investigation, we find that there is a reasonable indication of material injury to the industry producing the like product in the region.

IV. Reasonable Indication of Material Injury "by Reason of" Allegedly LTFV Imports

In making a preliminary determination in an antidumping investigation, we determine whether there is a reasonable indication that an industry in the United States is materially injured "by reason of" the imports under investigation.[96] In each case, we consider the volume of imports, their effect on prices for the like product, and their impact on domestic producers.[97] In doing so, we consider whether import volumes or increases in volume are significant, whether there has been significant underselling by imports, whether imports significantly depress or suppress prices for the like product, and such factors as domestic production, sales, capacity utilization,

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[92] Report, Tables 11 and 12 at A-34 and A-35.
[93] Report, Table 11 and 12 at A-34 and A-35.
[94] Report, Tables 11 and 12 at A-34 and A-35.
[95] Report, Table 14 at A-39.
[96] 19 U.S.C. § 1673b(a).
[97] 19 U.S.C. § 1677(7)(B)(i).

inventories, employment, and profits.[98]

Although the Commission may consider information that indicates that injury to the industry is caused by factors other than the allegedly LTFV imports, it is not to weigh causes.[99] Subject imports need only be a cause of material injury.[100] [101]

Similar to our analysis of the condition of the domestic industry, we note that much of the information on which we base our decision is business proprietary, as there is only one Canadian producer (and exporter to the United States) of the product subject to investigation.[102] Therefore, our discussion of the effects of the subject imports must necessarily be in very general terms. Furthermore, since the product subject to investigation and the products defined as most similar to the import are not one-to-one

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[98] 19 U.S.C. § 1677(7)(C).

[99] E.g., Citrosuco Paulista S.A. v. United States, 704 F. Supp. 1075, 1101 (CIT 1988). "Current law does not . . . contemplate that the effects from the subsidized (or LTFV) imports be weighted against the effects associated with other factors (e.g. the volume and prices of imports sold at fair value, contraction in demand or changes in patterns of consumption, trade, restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry) which may be contributing to overall injury to an industry." S. Rep. No. 249, 96th Cong., 1st Sess. 57 (1979). See also H.R. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979).

[100] See Iwatsu Electric Co. Ltd. v. United States, 758 F. Supp. 1506, 1512 (CIT 1991) ("the woes of the domestic industry were exacerbated by LTFV imports"). See also Citrosuco Paulista, S.A. v. United States, 704 F. Supp. 1075, 1101 (CIT 1988); Hercules, Inc. v. United States, 673 F. Supp. 454, 481-82 (CIT 1987).

[101] Acting Chairman Brunsdale agrees that the Commission is not to weigh causes. It must nonetheless determine that the injury "by reason of" the subject imports is material to reach an affirmative determination. While the a-cause-of-material-injury formulation used in the text has received some favorable commentary in judicial dicta, it finds no support in the language of the statute or in the legislative history. For a full treatment of this issue, see Certain Telephone Systems and Subassemblies Thereof from Japna and Taiwan, Inv. Nos. 731-TA-426 and 428 (Final, USITC Pub. 2237 (November 1989) at 228-248 (Dissenting Views of Vice-Chairman Cass).

[102] Respondent provided the Commission with a limited waiver to discuss only certain trends regarding the imports.

equivalents, we view, again, all statistical data with caution. In any final investigation, we will attempt to further refine our data and our analysis.[103]

Imports of glass-grade nepheline syenite into the region were present in large volume during the period of investigation. However, the volume of imports slightly declined from 1989 to 1990.[104] Despite any fluctuations in volume, a significant portion of the region's market share by volume continues to be held by these imports. While the subject imports lost market share by volume between 1988 to 1990, they gained market share from the interim period of 1990 to the same period of 1991.[105] We find the volume of the subject imports is significant.

The Commission received only limited pricing data in this preliminary investigation. In those few instances where price comparisons were available, the data provided support for an affirmative determination.[106] However, price trends are difficult to compare from the record compiled for the preliminary investigation since sales for both the imported and the domestic products are generally made through annual or multi-year contracts.[107] With respect to price depression and suppression, the record indicates that domestic prices followed the same pattern during the period of investigation.[108]

The Commission received a number of lost sales and lost revenue

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[103] Acting Chairman Brunsdale finds an absence of clear and convincing evidence that there is no material injury in the significant regional market share that Canadian nepheline syenite has. The 9.01 percent dumping margin alleged by the petitioner (which is the best evidence available now) is relatively small, and the substitutability of the like product and the subject import is somewhat limited. But the import's market share and the limited information on the elasticity of demand prevent her from concluding that there is no material injury.

[104] Report, Table 17 at A-45.

[105] Report, Table 5 and Table 7 at A-15 and A-21.

[106] Report, Table 19 at A-52.

[107] In any final investigation, we will attempt to further refine our data.

[108] Report, Table 19 at A-52.

allegations from the regional industry that the Commission staff attempted to confirm. When contacted by the staff, a number of major purchasers of the domestic product confirmed that the petitioner lost revenue because it was forced to lower its price by Canadian competition. Respondents argue that the domestic industry lost sales only due to factors other than price, such as transportation costs and superior product qualities. However, the record suggests that at least one major purchaser shifted from glass-grade feldspar (higher-priced product) to aplite (lower-priced product) principally because of financial considerations after evaluating competitive prices of Canadian imports. The evidence provides a reasonable indication that the imports are adversely affecting the domestic price of the like product.

The record shows that several firms left the domestic industry during the period of investigation. One of those companies stated that its departure was due in significant part to its loss of sales to the Canadian imports of nepheline syenite.[109]

In this preliminary investigation, we find that (1) the record as a whole does not contain clear and convincing evidence that there is no material injury or threat of material injury; and (2) additional and possibly contrary evidence is likely to arise in a final investigation.[110] For all the reasons set forth above, we determine that there is a reasonable indication that the regional glass-grade feldspar and aplite industry is experiencing material injury by reason of the subject imports.

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[109] Report at A-17.
[110] American Lamb at 1001.

ADDITIONAL VIEWS OF COMMISSIONER DAVID B. ROHR CONCERNING REGIONAL INDUSTRY AND CONDITION OF THE INDUSTRY

I concur with my colleagues' conclusion to analyze the domestic industry in this preliminary investigation on a regional basis. I also concur with their conclusion that the regional industry is experiencing material injury. I add these additional views because this investigation presents certain issues with respect to the appropriateness of regional analysis and the condition of the regional industry that are particularly important to the methodologies that I employ to analyze these questions.

Definition of the Region

The petitioner in this investigation has alleged injury to a region which, at first glance, is highly unusual. It incorporates the northeastern and northcentral states, but excludes Maine, New Hampshire and Vermont. It extends down the East Coast to include Virginia, but excludes Delaware. The southern boundary extends from the southern border of Virginia across the Mississippi to include Missouri, but excludes Kentucky. The western border of the region extends northward from Missouri to the Canadian border, but excludes Iowa. In addition, the region is suggested to include Puerto Rico.

The odd borders and discontinuous nature of the proposed region calls to mind the warning of the Court of International Trade that while the Commission has considerable discretion in undertaking a regional analysis, it must avoid the "freehand sculpting" of regions. Keeping in mind that warning, obvious questions could be raised about the proposed region. If Missouri is a natural market for producers in Virginia, why isn't Kentucky which geographically falls between them? The Mississippi is a natural geographic boundary of most eastern regions. Why is it not relevant for this particular industry? How can it be economical, given the transportation intensive nature of the product, to ship from Connecticut to Puerto Rico and not Connecticut to

Florida or Georgia, or Vermont or Maine?

There are answers to at least some questions. Some of the border exclusions, i.e. Iowa, Delaware, Maine, New Hampshire and Vermont, are not really exclusions. There appear to be no purchasers, producers, or importers of the relevant products in those area. Therefore, rather than exclusions from the region, they are simply irrelevant to our inquiries. As far as the western area of the proposed region is concerned, there have apparently been at least some offers for sale of the like product by domestic producers into the region. These areas could therefore be included in the region in accordance with past Commission practice.

The more important question, I think, is whether, in terms of the market realities of this product, it is necessary or appropriate to think in terms of a regional industry at all. To be sure, this product has a low value to weight ratio. Such products are much more likely to be sold in a limited marketing area. It is therefore more likely that such products are appropriately analyzed on a regional basis. Other factors must also be considered in deciding whether a regional analysis is appropriate.

For example, there are a limited number of purchasers of either nepheline syenite or the like product. This fact might distinguish this investigation from those, such as cement, in which a commodity is used nationwide, while particular producers serve a limited region. The fact that this product is even more transportation intensive than cement, and yet even the suggested marketing area is much wider than that of the typical cement producer (close to 1000 miles rather than no more than 300 miles) suggests important differences. Further, even if purchasers tend to be geographically concentrated, the Commission does not, on that account, turn to a regional analysis.

In this case, I begin by looking at the universe of producers of the like product, defined as aplite and glass grade feldspar. There is one producer of glass grade feldspar in Connecticut, one producer of aplite in South central Virginia, 3 producers, all of whom are located in close proximity to one another, in Northwestern North Carolina, one in Georgia (owned by petitioner), and one further producer, the status

of whose operations is confidential, in South Dakota. Of the North Carolina operations, one is owned by petitioner, one by respondent, and the other by an independent company.

The reality of these products and this market appears to be that both petitioner and respondent organize their sales is such a way as not to interfere with their own related operations. In other words, there are few sales from within the region to, for example, Kentucky, because Kentucky appears to be within the marketing region of the operations outside the region, including perhaps petitioner's and respondent's own operations. The same is true of respondent. Sales of the imports are apparently predominantly confined to the Northeast and Northcentral at least in part because respondent has decided, as a matter of its corporate policy, to service these areas from Canada rather than from its North Carolina operation.

It is not clear to me that this seemingly arbitrary division of the country is what Congress intended in adopting the regional industry provisions of Title VII. On the other hand, there may be other factors of which the Commission has not yet been made aware which might show that the divisions are not merely arbitrary. It could also be that the particular needs of individual purchasers may play a role in a geographic division of the market.

I do agree with my colleagues that the proposed region does meet the statutory numbers test for definition of a region. I will adopt it for purposes of this preliminary investigation. I will examine more closely in a final whether the region meets the test of market reality.

Condition of the Domestic Industry

In regional industry cases, I have adopted a percentage of production analysis for determining whether all or almost all of the production of regional producers is being materially injured. To perform this analysis, I calculate the percentage of production represented by each producer in a region. I then rank the performance of the

producers within each of the traditional indicators of industry performance examined by the Commission. If a sufficiently large percentage of production to be characterized as "all or almost all" of that production is operating at levels reflective of material injury, I conclude that the regional industry is materially injured. If a sufficiently large percentage of the regional production is operating at levels which are not indicative of material injury, I would conclude that the regional industry is not materially injured.

In this particular instance, however, there are only two regional producers. In fact, both the regional producers are related. Although they are of unequal size, both account for significant proportions of regional production. Neither one of these two producers could be said to account, on its own, for all or almost all of regional production. In other words, either both are injured or the regional industry is not injured.

I conclude, based on the data available in this preliminary investigation, that there is a reasonable indication that the regional industry, i.e. both of the two regional producers, is currently experiencing material injury. Virtually all the data in this analysis is confidential. I am therefore limited in my description.

To begin with, I note that the trend or pattern in the operations of the two producers is not identical. In general, the pattern of performance for one operation has been steadily downward throughout the period of investigation, including the interim period. For the other operation, performance was relatively stable throughout the three year period, but the 6-month interim data show a substantial downturn in most performance indicators. For this second operation, certain key indicators, including those of financial performance, in 1990 also provide support for the conclusion that there is a reasonable indication of material injury.

I further note that I have also examined the condition of the industry on a national basis. I note that one of the national operations is a related party and, had I chosen to analyze this industry as a national one, there is a reasonable basis for excluding this

operation from the domestic industry. I note that the performance of the national industry appears to be as materially injured as the regional industry.

This conclusion adds to the question of the appropriateness of a regional analysis. It also raises a question that will have to be examined in any final investigation. If, as petitioner claims, imports are impacting only the regional industry, and the performance of producers outside the region is as bad or worse than those within the region, imports may not really be having any effect. I note, however, that two producers outside the region also claim that imports were adversely affecting their operations.

In conclusion, I concur with my colleagues that there is a reasonable indication that the domestic industry in this investigation is currently experiencing material injury.

INFORMATION OBTAINED IN THE INVESTIGATION

INTRODUCTION

On July 12, 1991, counsel for The Feldspar Corporation (TFC), Asheville, NC, filed petitions with the U.S. International Trade Commission (the Commission) and the U.S. Department of Commerce (Commerce) alleging that an industry in the United States is materially injured and is threatened with material injury by reason of imports from Canada of nepheline syenite[1] that are alleged to be sold in the United States at less than fair value (LTFV). Imports of nepheline syenite are provided for in subheading 2529.30.00 of the Harmonized Tariff Schedule of the United States (HTS) (previously in items 522.33 and 522.43 of the former Tariff Schedules of the United States (TSUS)).

Accordingly, effective July 12, 1991, the Commission instituted investigation No. 731-TA-525 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of the allegedly LTFV imports of nepheline syenite into the United States.

The statute directs the Commission to make preliminary determinations within 45 days of receipt of the petition, or in this case by August 26, 1991. Notice of the institution of this investigation and of a conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of July 19, 1991 (56 F.R. 33305). Commerce published its notice of initiation in the Federal Register of August 7, 1991 (56 F.R. 37526).[2] The conference was held on August 2, 1991.[3] The Commission's briefing and vote in this investigation was held on August 21, 1991.

PREVIOUS COMMISSION INVESTIGATIONS CONCERNING NEPHELINE SYENITE

There have been two previous Commission investigations (AD-13 and AD-15) concerning nepheline syenite, both of which were antidumping investigations.

On May 27, 1960, the Commission was advised by Treasury that nepheline syenite from Canada was being, or was likely to be, sold in the United States at LTFV. Consequently, the Commission instituted investigation No. AD-13 (25 F.R. 4967, June 4, 1960). On August 26, 1960, the Commission unanimously determined that "an industry in the United States was not being, and was not likely to be, injured, or prevented from being established, by reason of the importation of nepheline syenite from Canada at LTFV" (25 F.R. 8394, September 1, 1960). Under its "statement of reasons," the Commission found

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[1] The product covered by this investigation is nepheline syenite, which is a coarse crystalline rock consisting principally of feldspathic minerals (i.e., sodium-potassium feldspars and nepheline), with little or no free quartz, and ground no finer than 140 mesh.

[2] Copies of the Commission's and Commerce's notices are shown in app. A.

[3] A list of witnesses appearing at the conference is presented in app. B.

that the pertinent Treasury file disclosed that Treasury's LTFV determination was based solely on pricing policies of the two Canadian exporters in which they quoted their nepheline syenite in dollars and accepted in payment Canadian dollars from the Canadian purchasers and United States dollars from the United States purchasers without regard to the prevailing exchange rates of the two currencies. As soon as the two Canadian companies were apprised of a possible charge of dumping based on their pricing policy, they immediately proceeded to change that policy and to revise their prices to take cognizance of the exchange rates. Therefore, the Commission found that if the domestic feldspar industry suffered any injury by virtue of sales of nepheline syenite at LTFV because of the exchange rate that existed at any time between the Canadian and the United States dollar, any such injury was inconsequential and no injury was likely to occur under the new pricing policies adopted by the two Canadian exporters.

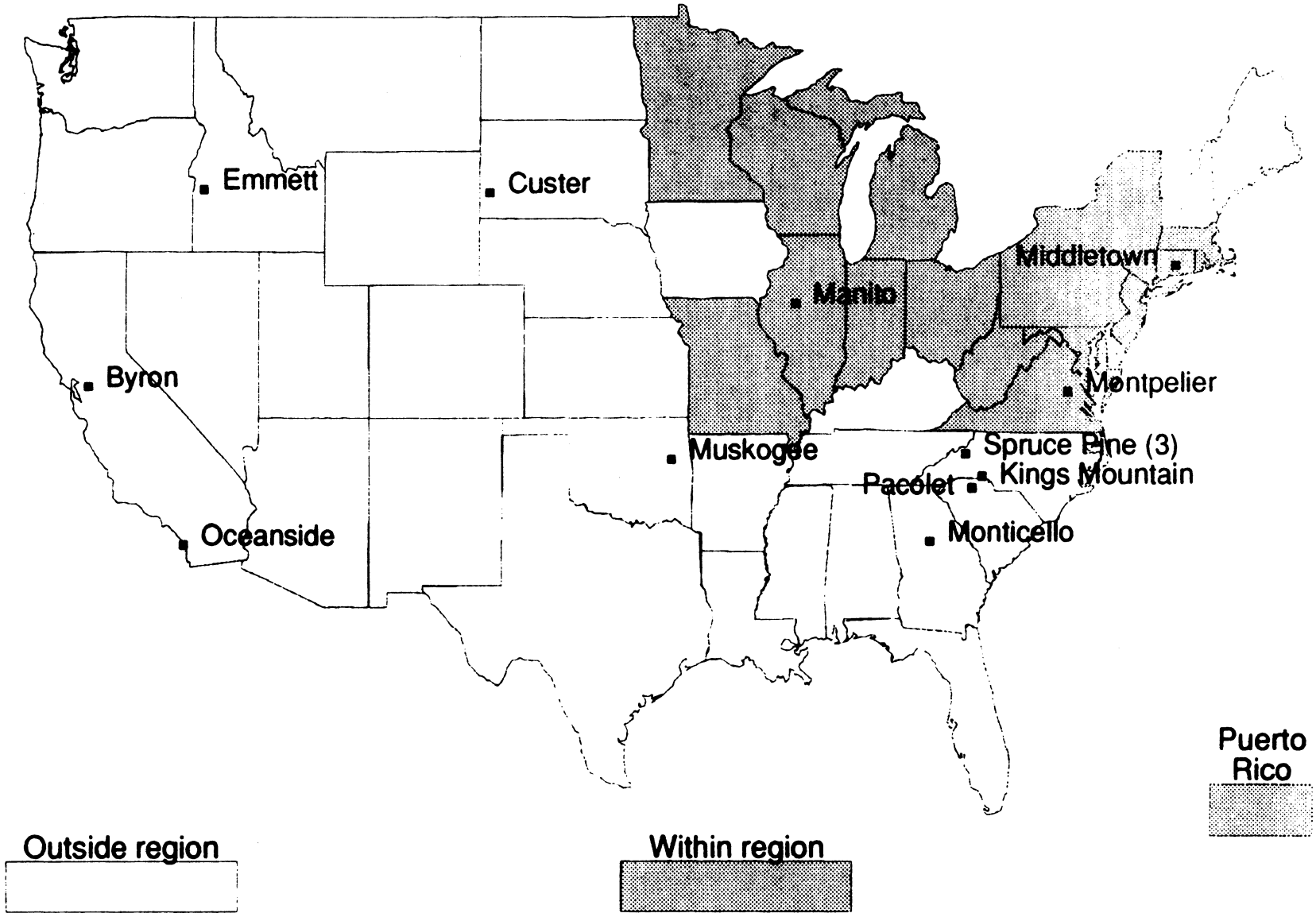
During the course of investigation No. AD-13, counsel for three domestic feldspar producers (the petitioners) argued that Treasury's LTFV determination did not take into account freight allowances by the Canadian exporters and that petitioners had requested Treasury to recall the investigation from the Commission pending investigation by Treasury of the freight matter. However, Treasury did not recall the case.

On October 26, 1960, the Commission was advised by Treasury of a new determination that nepheline syenite from Canada was being, or was likely to be, sold in the United States at LTFV. The new Treasury determination resulted from consideration by Treasury of two aspects of the pricing policies of the Canadian exporters, namely, a policy to disregard the rate of exchange between the United States and Canadian dollar, and a policy to absorb part of the freight charges. Consequently, the Commission instituted another investigation, No. AD-15 (25 F.R. 10584, November 4, 1960). No request for a hearing was made by any interested party, but written statements were received from the attorneys for the Canadian exporters and three domestic feldspar producers. On January 26, 1961, the Commission unanimously determined (Commissioners Schreiber and Sutton not participating because of absence) that an industry in the United States was not being, and was not likely to be, injured, or prevented from being established, by reason of the importation of nepheline syenite from Canada sold at LTFV (26 F.R. 956, January 31, 1961).

THE PRESENT INVESTIGATION

In this investigation, the petitioner has filed on the basis of a regional industry consisting of the producers and customers of aplite and glass-grade feldspar located in the following States and territory--Connecticut, Illinois, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, West Virginia, Wisconsin, and the Commonwealth of Puerto Rico. The region is described in the petition as including the northeastern/northcentral States and Puerto Rico (hereinafter referred to as the "NEC region" (figure 1)). Petitioner contends (1) that the producers in the NEC region sell almost all of their production in that area, (2) that the demand in the NEC region is not supplied, to any substantial degree, by producers of the product in question located elsewhere in the United States, (3) the LTFV imports are concentrated

Figure 1
Petitioner's proposed region and locations of U.S. producers' plants



Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

primarily within the NEC region, (4) the NEC region accounts for a significant share of domestic consumption and production of the like products, and (5) the economic condition of producers of the like products in the NEC region is worse than that of the domestic industry at large. Petitioner argues that these criteria are sufficient for the NEC region to satisfy the statutory criteria for regional industry analysis.[4] Further, petitioner maintains that it is the only producer of the like products which operates in the NEC region.[5]

Counsel for respondent testified at the conference that there is no regional industry and, alternatively, if there is one, it should not include States in which TFC does not ship.[6] Further, counsel for respondent submits that petitioner's alleged NEC region was simply drawn to meet certain import concentrations and avoids nearby plants in states such as North Carolina, while including distant States in which TFC has no sales.[7]

For this investigation, information was collected from producers and importers located within the NEC region and from those located outside the region.[8]

With respect to the issue of "like product," according to the petition, nepheline syenite is not produced in the United States, but U.S. companies do produce three products that are like, or most similar in characteristics and uses to, glass-grade nepheline syenite--aplite, glass-grade feldspar, and glass-grade feldspathic sand.[9] Also, nepheline syenite, aplite, feldspar, and feldspathic sand have in common certain chemical constituents--aluminum, sodium, potassium, calcium, and silica,[10] although the relative amounts of these components vary among the products.[11]

Insofar as the "domestic industry" is concerned, petitioner stated in the petition that it is the sole producer, within the NEC region, of products like nepheline syenite and is, therefore, the domestic industry. However, at Commerce and at the Commission's conference, counsel for the respondent asserted that there is a producer of feldspathic sand,[12] other than the petitioner, in the NEC region. The existence of this producer was confirmed by the Commission.[13]

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[4] 19 U.S.C. § 1677(4)(C).

[5] At the Commission's conference, petitioner disclosed that there is a producer of feldspathic sand, other than the petitioner, in the region (transcript of conference, p. 73).

[6] Transcript of conference, p. 84.

[7] Ibid., pp. 85-89.

[8] The Commission mailed producers' questionnaires to collect information on trade, financial, employment, and pricing data from all known producers of possible "like products" in the United States or Puerto Rico. Importers' questionnaires were sent to companies believed to be importing nepheline syenite from Canada.

[9] Petition, p. 8.

[10] Petition, p. 9.

[11] Petition, p. 10 at footnote 2.

[12] Manito Sand, Manito, IL.

[13] Telephone calls of Aug. 2, 1991, to ***.

THE PRODUCT

Description and Uses

Nepheline syenite (which is not produced in the United States), aplite, glass-grade feldspar, and feldspathic sand are all different kinds of feldspathic materials. These materials have different chemical compositions, but are all (including nepheline syenite from Canada) sources of alumina, alkali, and silica for the glassmaking industry. Alumina is valued for certain beneficial qualities contributed to glass composition: increased resistance to scratching and breakage, improved thermal endurance, and increased chemical durability.[14] After the feldspathic materials have been extracted from the earth's crust, they are ground to a sand-like consistency and beneficiated (purified by removing unwanted chemical elements) to specifications established by the end user (in this case, the glassmaking industry) to control uniformity by limiting variations in particle size and chemical composition.

Feldspathic materials provide the most economical way to introduce alumina in the production of glass; these materials melt at temperatures compatible with those customarily used to melt glass, and some of the other essential elements in feldspathic materials are creditable chemical ingredients for glass. Other essential elements include alkalis (potassium and sodium) which replace some of the soda ash (one of the more expensive input materials in glassmaking), and silica, which replaces some of the silica sand that would otherwise be required to make up the glass batch (a mixture of various raw materials in proper proportions, depending on the kind of glass being made).

Of the elements found in ground feldspathic materials, iron is the most common undesirable element for glassmaking. The presence of only a small percentage of iron colors glass green and must be neutralized by the addition of other elements in the manufacturing of all except green and amber glass. The usual maximum acceptable iron content of feldspathic material is 0.1 percent for flint glass (clear glass) and as much as 0.5 percent for green or amber glass and glass fiber.

To calculate the batch mixture for a specific glass product, glass technologists factor in the oxide composition of the necessary materials, including the feldspathic materials.[15] A switch from one feldspathic material to another may be made by adjusting the required formula configuration of the input material comprising a glass batch, and can be done with little or no additional cost or downtime to the glass manufacturer.[16] However, a glass producer would be reluctant to change raw materials unless there were a significant savings in cost.[17] A typical chemical analysis of nepheline syenite, aplite, glass-grade feldspar, and feldspathic sand used for making glass is provided in table 1.

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[14] Ceramic Industry, January 1991, p. 51.

[15] H.N. Mills, "Glass Raw Materials," 4th ed., Industrial Minerals and Rocks, (American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., 1975), p. 328.

[16] Transcript of conference, pp. 64-65.

[17] Transcript of conference, pp. 66 and 98.

Table 1
Feldspathic materials: A typical chemical analysis for use in glassmaking

Chemical oxide	Nepheline syenite	Aplite	Glass-grade feldspar	Feldspathic sand
	Oxide composition in percent			
Silica.....	60.000	62.200	68.000	79.200
Alumina.....	23.400	22.000	19.000	12.100
Iron.....	0.070	0.090	0.060	0.060
Titanium.....	-	0.260	0.002	-
Calcium.....	0.300	5.300	1.300	0.520
Magnesium.....	-	0.030	0.010	trace
Sodium.....	10.500	6.000	6.800	4.800
Potassium.....	5.000	2.800	4.600	2.620
Lithium.....	-	-	-	0.350
Glass made[1]....	99.270	98.680	99.772	99.650
Fusion loss[2]...	0.730	1.320	0.228	0.350

[1] Represents the sum of the oxide composition for each feldspathic material and the amount of glass produced by that material in percent terms.

[2] Represents the difference between 100 percent and percent glass made, and is the portion of each feldspathic material lost in the melting process.

Sources: Compiled from exhibit 1 of public conference, August 2, 1991; and from Carroll P. Rogers, Jr. and J. Philip Neal, "Feldspar and Aplite," p. 649, and H.N. Mills, "Glass Raw Materials," p. 329, 4th ed., Industrial Minerals and Rocks, (American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., 1975).

In addition to the chemical composition, consumers of ground feldspathic material are also concerned about particle size and distribution, setting specifications relative to end-use requirements. For the materials subject to this investigation, the glassmaking industry specifies that particles be ground no finer than 140 mesh, typically sized between 30 to 140 mesh (i.e., material should be ground fine enough to pass through a 30-mesh screen, but not so fine as to pass through a 140-mesh screen). The grain size and distribution is very critical to efficient melting and blending of the raw minerals that comprise a glass batch, while minimizing possible chemical segregation. The fine particle limitations also help to reduce health risks and equipment damage that might otherwise be caused by excess dust.

Nepheline syenite and feldspar, when ground to 200 mesh or finer, can also be used as a flux in the ceramic industry and as paint fillers. Feldspathic materials produced for these products are more expensive to make and result in a higher market price. Unless otherwise specified, "feldspathic materials" as used in this report refers to glass-grade feldspathic materials. In 1988, the Bureau of Mines estimated that 54 percent of the feldspar used in the United States went into glassmaking, including container glass and glass fiber, and 44 percent was used in pottery or ceramics. Aplite has no other market but glassmaking.

Production Process

Nepheline syenite, aplite, glass-grade feldspar, and feldspathic sand are typically mined from open pits, which is less expensive than underground mining. The recovered material is then ground and beneficiated by one of two basic processes: a dry process or a wet process. The differences between dry and wet processing are procedural; there are no differences in the chemical or physical characteristics of the end products. The process used depends on the chemical composition of the mined material compared with the chemical specifications established for the end-use product.

In the dry process, mined material passes through a series of grinding and screening operations to reach a particle size of between 30 and 140 mesh, followed by removal of excess iron oxide with magnetic-type separators, and preparation for either bag or bulk shipment. This process is the least expensive and is used by the producer of nepheline syenite in Canada.

The wet process is used for aplite, feldspar, and feldspathic sand deposits, but with some variations to the process due to differences in the chemical composition of each of the three materials. The simplest wet process is used for aplite. Mined material moves through a series of wet grinding and screening procedures to achieve particle sizes between 30 and 100 mesh. The material is then conveyed through a wet magnetic separator to remove any metallic minerals, washed, and passed through a spiral concentrator in which centrifugal force separates mica and hornblend from the feldspar. The resulting feldspar concentrate then passes through a thermal dryer, which is a dry magnetic separator designed to remove any remaining metallic minerals, and is conveyed to silo storage bins in preparation for bulk shipping in closed containers. The wet process is more expensive because of the additional energy costs required to dry the final product.

Because of the chemical composition of some feldspar and feldspathic sand deposits, the grinding and screening steps are followed by a flotation procedure. For feldspar, two stages of acid circuit flotation are typically used, with each stage preceded by desliming and conditioning. The first stage uses an amine (an ammonia-based chemical compound) collector to remove mica, and the second stage uses sulfonated oils to remove iron-bearing minerals, such as garnet, which leaves a feldspar silica mixture.[18] However, feldspathic sand (e.g., beach sand) is usually beneficiated by froth flotation during which finely crushed minerals are separated by causing lighter ones to float in a froth and the heavier ones to sink. Oils and various chemicals are used to effect this process. The remaining mixture from the flotation process is dewatered in filters or drain bins and dried in rotary driers for use as glass-grade feldspar.[19]

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[18] U.S. Department of the Interior, Bureau of Mines, "Feldspar," by Michael J. Potter, Minerals Facts and Problems (1985 Edition), Preprint from Bulletin 675, p. 3.

[19] Ibid.

U.S. Tariff Treatment

U.S. imports of nepheline syenite from countries entitled to the column 1-general (most-favored-nation) duty rate, including Canada, enter free of duty under subheading 2529.30.00 of the HTS. U.S. imports of aplite and glass-grade feldspar from countries entitled to the column 1-general duty rate enter free of duty under HTS subheading 2529.10.00. U.S. imports of feldspathic sand from countries entitled to the column 1-general duty rate enter free of duty under subheading 2505.90.00. The column 2 rate of duty, applicable to imports from those Communist countries and areas specified in general note 3(b) of the HTS, is free for nepheline syenite and feldspathic sand, and 49 cents per metric ton for feldspar.

NATURE AND EXTENT OF THE ALLEGED SALES AT LTFV

In its petition, TFC identified Unimin Corporation (Unimin) as the only exporter of glass-grade nepheline syenite from Canada. Based upon a comparison of the home-market price for Unimin's two types of glass-grade nepheline syenite and a calculation of the prices charged by Unimin to unrelated U.S. customers, the petitioner alleged LTFV margins as high as 18.0 percent, with a weighted-average LTFV margin of 5.0 percent, for container-grade nepheline syenite; and alleged LTFV margins as high as 16.3 percent for fiberglass-grade nepheline syenite, with a weighted-average LTFV margin of 12.5 percent.[20] The petition alleges a weighted-average LTFV margin of 9.01 percent for all glass-grade nepheline syenite.

THE DOMESTIC MARKET

The Regional Character

According to the petition, the cost of transportation can have a considerable effect on the feasibility of a sale of feldspathic products, because it may comprise 50 percent or more of the total delivered cost. Because of this, most domestic feldspathic products are shipped less than 1,000 miles from the place of production.[21] The following tabulation presents the distribution of U.S. producers' shipments of feldspathic materials, by distances, in 1990 (in percent, compiled from questionnaire data):

Aplite:

Miles shipped	Share of domestic shipments
0-200.....	***
201-500.....	***
501-1,000.....	***
1,000 or more..	***

[20] Petition, p. 20.
[21] Petition, p. 12.

Glass-grade feldspar:

Miles shipped	Share of domestic shipments
0-200.....	***
201-500.....	***
501-1,000.....	***
1,000 or more..	***

Feldspathic sand:

Miles shipped	Share of domestic shipments
0-200.....	***
201-500.....	***
501-1,000.....	***
1,000 or more..	***

All feldspathic materials:

Miles shipped	Share of domestic shipments
0-200.....	***
201-500.....	***
501-1,000.....	***
1,000 or more..	***

The following tabulation presents the distribution of U.S. shipments of nepheline syenite from Canada by Unimin, by distance shipped, in 1990 (in percent, compiled from questionnaire data):

Miles shipped	Share of import shipments
0-200.....	***
201-500.....	***
501-1,000.....	***
1,000 or more..	***

Information on the statutory criteria set forth for regional analysis is presented in table 2. In addition, appendix C presents selected trade and financial data by plants.

Marketing Considerations and Channels of Distribution

As mentioned, glass-grade nepheline syenite produced in Canada is marketed in the United States (primarily) as a source of alumina and (secondarily) as a source of alkalis and silica for glass production. Successful marketing requires the consideration of four important factors: availability of substitutes, delivered price, strength of the glass industry, and reliability of supply.

Table 2
Feldspathic materials: Selected data pertaining to the NEC region, 1988-90, January-June 1990, and January-June 1991

(In percent, based on quantity)

Item	1988	1989	1990	January-June-- 1990	1991
Share of NEC region producers' shipments made to destinations within NEC region.....	***	***	***	***	***
Share of NEC region consumption supplied by U.S. plants outside NEC region.....	***	***	***	***	***
Region's share of total imports from Canada.....	***	***	***	***	***
Ratio of imports from Canada to consumption--					
Within NEC region.....	***	***	***	***	***
Outside NEC region.....	***	***	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

In addition to nepheline syenite, the glass industry has several alternative sources of alumina from which to choose. Feldspar, feldspathic sand, and aplite all compete with nepheline syenite. However, each mineral has a distinct chemical composition and requires a slightly different batch configuration.[22] Although the configuration can be altered relatively quickly, to do so would require a recalculation of the total batch cost, based on the cost of all the constituent components, and could require "downtime" for the end user.[23]

Nepheline syenite, aplite, feldspar, and feldspathic sand all have a relatively low value-to-volume ratio. A significant component of the delivered price of these feldspathic materials, typically sold in bulk and shipped by truck or by rail in 100-ton hoppers, is the cost of transportation. In order to reduce freight rates, which are frequently equal to or greater than the f.o.b. price of the feldspathic material, producers will often take an active role in negotiation. According to the respondent, "Unimin is often involved in three way negotiations with Unimin, the customers and the railroads trying to obtain the lowest delivered cost."[24]

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[22] For this reason, a vast majority of end users who currently purchase nepheline syenite (16 of 18) responded negatively to the question "Are the U.S.-produced and Canadian products used interchangeably?"

[23] Downtime would be minimal. ***. However, according to Harry Mills, a consultant on glass technology testifying on behalf of the petitioner, "...there need be no downtime if it's done properly." Transcript of conference, p. 65.

[24] Mr. Dick Nichols, Vice President of Sales, Unimin. Transcript of conference, p. 112.

Aplite is marketed exclusively to the glass industry. Nepheline syenite, feldspar, and feldspathic sand have other applications, mostly in ceramics, but they too are marketed in large part to the glass industry.[25] Therefore, producers of all four feldspathic products have to be keenly aware of the glass industry's health, particularly in the subsectors of containers and fiberglass, the major consumers of feldspathic materials (see tables 3 and 4). Furthermore, their marketing strategies must respond to industry trends, such as the increasing use of recycled glass (cullet) and the practice of "lightweighting," or altering the geometric shape of a container to reduce the amount of glass required to hold a given volume.

Reliability of supply is a crucial concern to the highly competitive glass industry, since most glass manufacturers maintain only marginal raw material inventories. The producers of the feldspathic materials accommodate this need by negotiating long-term contracts. TFC typically negotiates one-year contracts; prices remain firm for the duration of the contracts, but TFC is obligated to match lower bids or allow purchasers to accept those bids.[26] ***.[27] ***. ***.[28] ***. This channel structure is typical of the distribution arrangements of all the producers of feldspathic materials.

Apparent U.S. Consumption

Table 5 shows apparent consumption of feldspathic materials in the NEC region, outside the NEC region, and for the total United States. Additionally, table 5 presents the quantity and value of consumption in these areas provided by plants located within the NEC region and outside the NEC region, as well as consumption supplied by imports of nepheline syenite from Canada.

Imports of nepheline syenite into the NEC region *** during 1988-90, while imports outside the NEC region ***. Nevertheless, most of the imports were concentrated in the NEC region.

Shipments from U.S. producers' plants located within the NEC region primarily go to destinations within the NEC region, and shipments from U.S. producers' plants located outside the NEC region primarily go to destinations outside the NEC region. Most of the U.S. production of feldspathic sand is located outside the NEC region. Feldspathic sand, because of its low feldspar content, tends to move shorter distances than the other feldspathic materials.

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[25] Preliminary data indicate that 56 percent of all feldspar sold by U.S. producers in 1990 and the first quarter of 1991 was shipped to the glass industry, according to the Bureau of Mines.

[26] Transcript of conference, pp. 47-49.

[27] ***.

[28] Ibid.

Table 3
Glass containers: U.S. production, 1969-90

Year	Production	Growth	Year	Production	Growth
	Millions of gross	Percent		Millions of gross	Percent
1969...	260.3	-	1980...	328.0	0.6
1970...	269.2	3.4	1981...	325.5	-.7
1971...	264.8	-1.6	1982...	311.1	-4.4
1972...	268.5	1.4	1983...	294.1	-5.5
1973...	279.0	3.9	1984...	291.7	-.8
1974...	280.4	0.5	1985...	273.7	-6.2
1975...	283.1	.9	1986...	289.3	5.7
1976...	302.5	6.9	1987...	285.0	-1.5
1977...	303.2	.2	1988...	284.7	-.2
1978...	327.6	8.1	1989...	287.5	1.1
1979...	326.0	-.5	1990...	289.7	.8

Source: Bureau of the Census.

Table 4
Fiberglass: U.S. production, by types, 1973-89

Year	Total production	Growth	Textile fibers	Growth	Insulation fibers	Growth
	Millions of pounds	Percent	Millions of pounds	Percent	Millions of pounds	Percent
1973..	2,683	-	708	-	1,975	-
1974..	2,721	1.4	707	-0.1	2,015	2.0
1975..	2,259	-17.0	569	-19.5	1,690	-16.1
1976..	2,833	25.4	735	29.2	2,097	24.1
1977..	3,383	19.4	819	11.4	2,564	22.3
1978..	3,735	10.4	996	21.6	2,739	6.8
1979..	3,943	5.6	1,076	8.0	2,867	4.7
1980..	3,640	-7.7	930	-13.6	2,716	-5.3
1981..	3,648	.2	1,112	19.6	2,536	-6.6
1982..	3,180	-12.8	918	-17.5	2,263	-10.8
1983..	3,874	21.8	1,298	41.4	2,576	13.8
1984..	4,780	23.4	1,703	31.2	3,077	19.5
1985..	4,852	1.5	1,735	1.9	3,118	1.3
1986..	5,109	5.3	1,735	0.0	3,373	8.2
1987..	5,003	-2.1	1,897	9.3	3,107	-7.9
1988..	5,148	2.9	1,961	3.4	3,188	2.6
1989..	5,174	.5	1,961	.0	3,214	.8

Source: Bureau of the Census.

Table 5
Feldspathic materials: U.S. shipments of domestic product, U.S. imports,[1] and apparent U.S. consumption, by regions, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Quantity (1,000 tons)				
NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
Apparent consumption	***	***	***	***	***
Outside NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
Apparent consumption	***	***	***	***	***
United States:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
Apparent consumption	***	***	***	***	***
	Value (1,000 dollars)				
NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
Apparent consumption	***	***	***	***	***
Outside NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
Apparent consumption	***	***	***	***	***

See footnotes at end of table.

Table 5--Continued
Feldspathic materials: U.S. shipments of domestic product, U.S. imports,[1] and apparent U.S. consumption, by regions, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Value (1,000 dollars)				
United States:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
Apparent consumption	***	***	***	***	***

[1] U.S. imports are composed exclusively of nepheline syenite from Canada. Imports into the region and outside the region were provided by Unimin.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. Producers

According to the U.S. Bureau of Mines, there were 12 active producers of feldspar or other feldspathic materials operating 16 plants in the United States in 1989. The producers and plants are presented in the following tabulation:

Company	Plant location	Product
APAC Arkansas, Inc.	Muskogee, OK	Feldspar-silica mixture
Calspar Div. of Steelhead Resources, Inc	Santa Fe Springs, CA	Soda feldspar
CISCO	Corona, CA	Feldspar-silica mixture
Cyprus Foote Mineral Co	Kings Mountain, NC	Feldspar-silica mixture
The Feldspar Corp	Middletown, CT	Soda feldspar
	Monticello, GA	Potash feldspar
	Spruce Pine, NC	Soda feldspar
	Montpelier, VA	Aplite
Indusmin, Inc	Spruce Pine, NC	Soda feldspar
KMG Minerals, Inc	Kings Mountain, NC	Potash feldspar
Lithium Crop. of America	Bessemer City, NC	Feldspar-silica mixture
Pacer Corp	Custer, SD	Potash feldspar
Spartan Minerals Corp.	Pacolet, SC	Feldspar-silica mixture
Unimin Corp	Emmett, ID	Feldspar-silica mixture
	Spruce Pine, NC	Soda feldspar
U.S. Silica Co	Oceanside, CA	Feldspar-silica mixture

Questionnaires were sent to all of the firms listed above, and each firm was requested to file a separate questionnaire response for each of its plants.

A number of significant changes took place in the domestic feldspathic materials industry during 1990 that are not reflected in the Bureau of Mines information. For example, Unimin purchased the Canadian operations of Indusmin, Inc. (Indusmin), ***. Unimin is the respondent in the instant proceedings before the Commission. ***. ***[29] in addition to the plants tabulated above. ***. A questionnaire response was received from ***. ***. *** did not respond to the Commission's questionnaires.

TFC alleged in its petition that it is the sole producer in its proposed NEC region and that only aplite and feldspar are produced in the NEC region; however, there is at least one producer, Manito Sand, Manito, IL, of feldspathic sand in the NEC region. ***. The names, plant locations, and shares of reported 1990 regional production of feldspathic materials are presented in the following tabulation:

Firm	Location	Share of reported 1990 regional production (percent)[1]
Petitioner:		
The Feldspar Corporation.....	Middletown, CT..	***
	Montpelier, VA..	***
Other producer:		
Manito Investment Co.[2]....	Manito, IL.....	***

[1] Shares are calculated on the basis of quantity, which because of the differences in chemical composition of the feldspathic materials, tends to overstate the importance of feldspathic sand.

[2] ***.

U.S. Importers

The petition alleges that there is only one importer of glass-grade nepheline syenite from Canada, Unimin.[30] However, the petition lists a number of "customers" that are potentially importers. Therefore, importers' questionnaires were sent to a number of glass producers in addition to Unimin. This creates a potential for double counting because some of the glass firms were unsure of their status as importers.

The situation was further complicated by the change in ownership of the Canadian producer from Indusmin to Unimin. This was discussed with counsel for Unimin, and the following statement was attached to Unimin's importers' questionnaire response: ***.

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[29] ***.

[30] Petition, p. 15.

CONSIDERATION OF MATERIAL INJURY TO AN INDUSTRY IN THE UNITED STATES

The information presented in this section of the report is based on the questionnaire responses of TFC and limited information obtained from Manito Sand which, combined, operate three plants that are believed to account for all the production of feldspathic materials in the NEC region. Questionnaire responses were received from *** firms operating *** plants outside the NEC region which, in the aggregate, are believed to account for over *** percent of U.S. production of feldspathic materials outside the NEC region.

The feldspathic materials aplite, feldspar, feldspathic sand, and nepheline syenite are not chemically identical but, in general, the same chemicals are present in each product in varying proportions. This presents a number of problems in the evaluation of statistical data because more than one of the chemicals in these feldspathic minerals are important in making glass; therefore, the data cannot be adjusted to a common component.

The most serious problem in the evaluation of gross weights of the different feldspathic materials occurs with feldspathic sand. Producers of feldspathic sand generally know the alumina (Al_2O_3) content of the sand; a telephone survey of the producers of this product indicated that the alumina content of feldspathic sand varies widely from location to location, ranging from less than 5 percent to over 13 percent. However, as noted in table 1, feldspathic sand contains several chemicals useful in making glass, and the ratios of these chemicals are unlikely to be constant at different locations. Therefore, in the absence of complete chemical analyses for the product from each plant, feldspathic sand data cannot be adjusted to a common component. Further, the "typical" feldspathic sand of table 1 may not, in fact, be representative of most of the feldspathic sands because most U.S. producers indicated that the alumina content was less than 12 percent.

The questionnaires in these investigations collected gross-weight data and values; however, industry experts testified at the Commission's conference that glass firms evaluate the total chemical composition of the feldspathic materials, not just one component.[31] Therefore, some caution should be exercised when viewing the statistical data because the different feldspathic materials are not "one for one" substitutes, nor does there appear to be a simple relationship to put them on an equivalent basis.

U.S. Production, Capacity, and Capacity Utilization

Table 6 details production of feldspathic materials in the NEC region and outside the NEC region as well as total U.S. production. In addition, table 6 presents corresponding data for capacity[32] and capacity utilization. ***. Aplite is only produced in the NEC region. TFC's aplite plant ***.

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[31] Conference exhibit 1, transcript of conference, pp. 19-24 and 95-98.

[32] Production capacity is defined as "full production capacity"--the maximum level of production that a plant could reasonably be expected to attain under normal operating conditions.

Table 6
Feldspathic materials: U.S. capacity, production, and capacity utilization, by regions and by products, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Average-of-period capacity (1,000 tons)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Production (1,000 tons)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Capacity utilization (percent)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***

Note.--Capacity utilization is calculated using data of firms providing both capacity and production information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The capacity to produce feldspathic sand outside the NEC region increased during 1988-90; and the capacity utilization rate also increased. However, the capacity utilization rate dropped during January-June 1991 when compared with the utilization rate during January-June 1990.

U.S. Shipments by U.S. Producers

Table 7 presents data on U.S. shipments by U.S. producers from plants located within the NEC region, from plants located outside the NEC region, and for the United States as a whole. The shipment data associated with this investigation, as presented in table 7, are extensive; therefore, recitations of period-to-period changes for all these data would also be extensive and are not included here. In general, shipments of feldspathic materials both in the NEC region and in the country as a whole rose during 1988-90 and fell from January-June 1990 to January-June 1991.

Export Shipments by U.S. Producers

Table 8 presents data on export shipments by U.S. producers from plants located within the NEC region, from plants located outside the NEC region, and for the United States as a whole. As can be seen from table 8, exports of feldspathic materials by U.S. producers are quite small.

End-of-Period Inventories of U.S. Producers

Producers' end-of-period inventories of feldspathic materials, by regions, are presented in table 9. Inventories of feldspathic materials are expensive to store; therefore, producers' inventories were small and varied little from period to period. Further, inventories were a small fraction of production during any given period.

Employment, Wages, and Productivity

The majority of workers producing feldspathic materials are not unionized. The *** percent that are unionized are employed at four facilities, ***. ***. ***.[33]

Employment and wage data are reported in table 10. The number of aplite PRWs ***. Within the NEC region, the number of glass-grade feldspar PRWs *** percent in 1990, from *** in 1988 and 1989 to *** in 1990; *** was reported for the period January-June 1991. Outside the NEC region, the number of glass-grade feldspar PRWs *** between 1988 and 1989, reflecting the ***. The number of PRWs *** between January-June 1990 and January-June 1991. The number of feldspathic sand PRWs has *** within the NEC region since ***. Outside the NEC region, the number of PRWs increased between 1988 and 1989 and decreased between 1989 and 1990. This number also decreased between January-June 1990 and January-June 1991.

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[33] ***.

Table 7
Feldspathic materials: U.S. shipments by producers, by regions, by products, and by types, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Quantity (1,000 tons)				
NEC region:					
Aplite:					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Glass-grade feldspar:					
Within NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic sand:					
Within NEC region	***	***	***	***	***
Feldspathic materials:					
Within NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
Outside NEC region	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar:					
Into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic sand:					
Into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic materials:					
Into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***

Continued.

Table 7--Continued
Feldspathic materials: U.S. shipments by producers, by regions, by products, and by types, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Quantity (1,000 tons)				
United States:					
Aplite:					
Within/into NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Glass-grade feldspar:					
Within/into NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic sand:					
Within/into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic materials:					
Within/into NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
	Value (1,000 dollars)				
NEC region:					
Aplite:					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total U.S. shipments	***	***	***	***	***

Continued.

Table 7--Continued
Feldspathic materials: U.S. shipments by producers, by regions, by products, and by types, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Value (1,000 dollars)				
NEC region--Continued.					
Glass-grade feldspar:					
Within NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic sand:					
Within NEC region	***	***	***	***	***
Feldspathic materials:					
Within NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
Outside NEC region:	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar:					
Into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic sand:					
Into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic materials:					
Into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
United States:					
Aplite:					
Within/into NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
U.S. shipments	***	***	***	***	***

Continued.

Table 7--Continued
Feldspathic materials: U.S. shipments by producers, by regions, by products, and by types, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Value (1,000 dollars)				
United States--Continued.:					
Glass-grade feldspar:					
Within/into NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic sand:					
Within/into NEC region	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Feldspathic materials:					
Within/into NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
Outside NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Subtotal	***	***	***	***	***
U.S. shipments	***	***	***	***	***
	Unit value (per ton)				
NEC region:					
Aplite:					
Within NEC region	$***	$***	$***	$***	$***
Outside NEC region	***	***	***	***	***
Average, U.S. shipments	***	***	***	***	***
Glass-grade feldspar:					
Within NEC region:					
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
Average, U.S. shipments	***	***	***	***	***

Continued.

Table 7--Continued
Feldspathic materials: U.S. shipments by producers, by regions, by products, and by types, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Unit value (per ton)				
NEC region--Continued.:					
Feldspathic sand:					
Within NEC region.....	$***	$***	$***	$***	$***
Feldspathic materials:					
Within NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Outside NEC region.....	***	***	***	***	***
Average, U.S. shipments.....	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar:					
Into NEC region.....	***	***	***	***	***
Outside NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Average, U.S. shipments..	***	***	***	***	***
Feldspathic sand:					
Into NEC region.....	***	***	***	***	***
Outside NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Average, U.S. shipments..	***	***	***	***	***
Feldspathic materials:					
Into NEC region.....	***	***	***	***	***
Outside NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Average, U.S. shipments..	***	***	***	***	***
United States:					
Aplite:					
Within/into NEC region.....	***	***	***	***	***
Outside NEC region.....	***	***	***	***	***
Average, U.S. shipments.....	***	***	***	***	***

Continued.

Table 7--Continued
Feldspathic materials: U.S. shipments by producers, by regions, by products, and by types, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Unit value (per ton)				
United States--Continued.:					
Glass-grade feldspar:					
Within/into NEC region:					
Company transfers.....	$***	$***	$***	$***	$***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Outside NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Average, U.S. shipments..	***	***	***	***	***
Feldspathic sand:					
Within/into NEC region.....	***	***	***	***	***
Outside NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Average, U.S. shipments..	***	***	***	***	***
Feldspathic materials:					
Within/into NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Outside NEC region:					
Company transfers.....	***	***	***	***	***
Domestic shipments.....	***	***	***	***	***
Average.....	***	***	***	***	***
Average, U.S. shipments..	***	***	***	***	***

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 8
Feldspathic materials: Export shipments by U.S. producers, by products, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Quantity (1,000 tons)				
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Value (1,000 dollars)				
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Unit value (per ton)				
Aplite	$***	$***	$***	$***	$***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 9
Feldspathic materials: End-of-period inventories of U.S. producers, by regions and by products, 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Quantity (1,000 tons)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Ratio to production (percent)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***

Note.--Ratios are calculated using data of firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 10
Average number of production and related workers producing feldspathic materials, hours worked,[1] wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs,[2] by regions and by products, 1988-90, January-June 1990, and January-June 1991[3]

Item	1988	1989	1990	January-June-- 1990	1991
	Number of production and related workers (PRWs)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Hours worked by PRWs (1,000 hours)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Wages paid to PRWs (1,000 dollars)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***

See footnotes at end of table.

Table 10--Continued
Average number of production and related workers producing feldspathic materials, hours worked,[1] wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs,[2] by regions and by products, 1988-90, January-June 1990, and January-June 1991[3]

Item	1988	1989	1990	January-June-- 1990	1991
	Total compensation paid to PRWs (1,000 dollars)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Total	***	***	***	***	***
	Hourly wages paid to PRWs				
NEC region:					
Aplite	$***	$***	$***	$***	$***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
	Hourly total compensation paid to PRWs				
NEC region:					
Aplite	$***	$***	$***	$***	$***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***

See footnotes at end of table.

Table 10--Continued
Average number of production and related workers producing feldspathic materials, hours worked,[1] wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs,[2] by regions and by products, 1988-90, January-June 1990, and January-June 1991[3]

Item	1988	1989	1990	January-June-- 1990	1991
	Productivity (tons per hour)				
NEC region:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
	Unit labor costs (per ton)				
NEC region:					
Aplite	$***	$***	$***	$***	$***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
Outside NEC region:					
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***
United States:					
Aplite	***	***	***	***	***
Glass-grade feldspar	***	***	***	***	***
Feldspathic sand	***	***	***	***	***
Average	***	***	***	***	***

[1] Includes hours worked plus hours of paid leave time.
[2] On the basis of total compensation paid.
[3] Firms providing employment data accounted for over *** percent of reported total U.S. shipments (based on quantity) in 1990.

Note.--Ratios are calculated using data of firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The number of hours worked by aplite PRWs *** between 1988 and 1989, *** between 1989 and 1990, and *** between January-June 1990 and January-June 1991. The number of hours worked by glass-grade feldspar PRWs *** throughout the entire period in question, both within the NEC region (*** percent between 1988 and 1990) and outside of it (*** percent between 1988 and 1990). The number of hours worked by feldspathic sand PRWs *** within the NEC region. Outside the NEC region, it rose from *** in 1988 to *** in 1989 to *** in 1990. However, between January-June 1990 and January-June 1991 the number of hours worked declined from ***.

The amount of wages paid to aplite PRWs *** between 1988 and 1990 and between January-June 1990 and January-June 1991. Within the NEC region, wages for glass-grade feldspar PRWs *** between 1988 and 1989, *** between 1989 and 1990, and *** by *** percent between January-June 1990 and January-June 1991. Outside the NEC region, wages rose between 1988 and 1990, but declined by *** percent between January-June 1990 and January-June 1991. Wages for feldspathic sand PRWs *** within the NEC region. Outside the NEC region, wages increased between 1988 and 1990 but declined by *** percent between January-June 1990 and January-June 1991.

Hourly wages and hourly compensation *** throughout the period in question for aplite and for feldspar, both inside and outside the NEC region. During this period, aplite and feldspar PRWs within the NEC region received, on average, *** hourly wages and compensation than feldspar PRWs outside the NEC region. ***. Outside the NEC region, both hourly wages and hourly compensation rose steadily between January 1988 and June 1991. During this period, feldspathic sand PRWs outside the NEC region received, on average, *** hourly wages than those within the NEC region.

Productivity, as measured by tons of mineral produced per hour, *** within the NEC region between 1988 and 1990 for aplite (***) and feldspar (***) and *** for feldspathic sand (***). Productivity within the NEC region *** between January-June 1990 and January-June 1991 for all three products. Outside the NEC region, productivity for feldspar declined from *** tons per hour in 1988 to *** in 1989 and 1990. Productivity recovered to *** tons per hour in the period January-June 1991. Productivity for feldspathic sand rose from *** tons per hour in 1988 and 1989 to *** in 1990; productivity increased from *** to *** tons per hour between January-June 1990 and January-June 1991.

The unit labor cost (per ton) of aplite *** throughout the period in question. Between 1988 and 1990, the unit labor cost of glass-grade feldspar ***, both inside and outside the NEC region. In 1988 and 1989, unit labor costs were *** inside the NEC region. This situation was reversed in 1990, although for the first half of 1991 unit labor costs were again *** within the NEC region. Between January-June 1990 and January-June 1991, feldspar unit labor costs *** inside the NEC region and *** outside the NEC region. Unit labor costs for feldspathic sand produced outside the NEC region rose steadily between 1988 and 1990 and between January-June 1990 and January-June 1991.

Financial Experience of U.S. Producers

The petitioner (TFC), accounting for all U.S. production of aplite, and all glass-grade feldspar production within the NEC region, furnished financial data for each of its two plants within the region.[34] [35]

TFC is a wholly owned subsidiary of Zemex Corporation, a diversified minerals and materials company. Excerpts from Zemex's 1990 Form 10-K report and 1990 annual report, pertaining to feldspathic minerals, are presented in appendix D.

TFC's glass-grade feldspar from its Middletown, CT, plant accounted for approximately *** percent of total plant establishment sales during the period of investigation. Other products include ceramic-grade feldspar, silica sand, and mica. Aplite sales from its Montpelier, VA, plant constitute *** percent of that plant's establishment sales. Establishment data are not presented in this section.

The income-and-loss experience of TFC's Middletown, CT, plant is presented in table 11.[36] Net sales *** percent from *** in 1988 to *** in 1989. Sales in 1990 were *** percent from 1989 sales. ***. Operating *** ratios, as a share of net sales, were *** percent in 1988, *** percent in 1989, and *** percent in 1990.

Interim 1991 sales were *** percent from interim 1990 sales of ***. Operating *** were *** in interim 1990 and *** in interim 1991. Operating *** ratios were *** percent in interim 1990 and *** percent in interim 1991.

The income-and-loss experience of TFC's Montpelier, VA, aplite plant is presented in table 12. There were no reported *** of aplite. Net sales *** percent from *** in 1988 to *** in 1989. Sales in 1990 were *** percent from 1989 sales. Operating *** was *** in 1988, *** in 1989, and *** in 1990. Operating *** ratios, as a share of net sales, were *** percent in 1988, *** percent in 1989, and *** percent in 1990.

Interim 1991 sales were *** percent from interim 1990 sales of ***. Operating *** was *** in interim 1990, *** in interim 1991. Operating *** ratios were *** percent in interim 1990 and *** percent in interim 1991.

Selected income-and-loss data, on a dollars-per-ton basis, are presented in table 13. At the Connecticut plant, the average *** values were *** than the average ***, except during January-March 1991, when average *** values were *** per ton and *** per ton. A variance analysis for this plant indicates that average per-unit sales values *** throughout the period of investigation, but were ***. In addition, per-unit costs *** in each period. ***.

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[34] Financial data in this section include detailed data for the two plants in the NEC region and some additional financial data for other plants. Separate financial data for all plants are shown in app. C.

[35] ***.

[36] ***. Refer to table 13 for a summary of the per-unit sales and cost values.

Table 11
Income-and-loss experience of TFC on its Middletown, CT, plant producing glass-grade feldspar, fiscal years 1988-90,[1] January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March-- 1990	1991
	Value (1,000 dollars)				
Net sales	***	***	***	***	***
Cost of goods sold	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
Selling, general, and administrative expenses	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Other income or (loss), net	***	***	***	***	***
Net income or (loss) before income taxes	***	***	***	***	***
Depreciation and amortzation included above	***	***	***	***	***
Cash flow (deficit)[2]	***	***	***	***	***
	Share of net sales (percent)				
Cost of goods sold	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
Selling, general, and administrative expenses	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss) before income taxes	***	***	***	***	***

[1] Fiscal year ends Dec. 31.
[2] Cash flow is defined as net income or loss plus depreciation and amortization.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 12
Income-and-loss experience of TFC on its Montpelier, VA, plant producing aplite, fiscal years 1988-90,[1] January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March-- 1990	1991
	Value (1,000 dollars)				
Net sales[2]	***	***	***	***	***
Cost of goods sold[2]	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
Selling, general, and administrative expenses	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Other income or (loss), net	***	***	***	***	***
Net income or (loss) before income taxes	***	***	***	***	***
Depreciation and amortzation included above	***	***	***	***	***
Cash flow (deficit)[3]	***	***	***	***	***
	Share of net sales (percent)				
Cost of goods sold	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***
Selling, general, and administrative expenses	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss) before income taxes	***	***	***	***	***

[1] Fiscal year ends Dec. 31.
[2] ***.
[3] Cash flow is defined as net income or loss plus depreciation and amortization.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 13
Selected income-and-loss data of TFC on its operations producing aplite and glass-grade feldspar, on a dollars-per-ton basis, by plants, fiscal years 1988-90,[1] January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March-- 1990	1991
			(In thousands of tons)		
Quantity:					
Aplite/VA	***	***	***	***	***
Glass-grade feldspar/CT:					
***	***	***	***	***	***
***	***	***	***	***	***
Total	***	***	***	***	***
			Value (per ton)		
Net sales:					
Aplite/VA[2]	$***	$***	$***	$***	$***
Glass-grade feldspar/CT:					
***	***	***	***	***	***
***	***	***	***	***	***
Average	***	***	***	***	***
Cost of goods sold:					
Aplite/VA[2]	***	***	***	***	***
Glass-grade feldspar/CT	***	***	***	***	***
Gross profit (loss):					
Aplite/VA	***	***	***	***	***
Glass-grade feldspar/CT	***	***	***	***	***
SG&A:					
Aplite/VA	***	***	***	***	***
Glass-grade feldspar/CT	***	***	***	***	***
Operating income (loss):					
Aplite/VA	***	***	***	***	***
Glass-grade feldspar/CT	***	***	***	***	***

[1] Fiscal year ends Dec. 31.
[2] ***.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

On a cost-per-ton basis, the cost of goods sold for aplite (Virginia plant) is *** than the cost of goods sold for glass-grade feldspar (Connecticut plant). Labor costs constitute *** percent of total costs at each plant. TFC attributed no cost to ***. At the conference, Mr. Wood stated "The production processes are different, but it is also true to say that both plants employ very typical mineral processing techniques. The plant at Connecticut uses crushing, grinding, flotation, multi-step flotation, and then drying of the products. We also have a dry grinding section where we produce finer products; taking as the raw material feed for that final step the typical glass-grade material as a feedstock. The aplite plant is quite different from that in that there is no flotation in that plant. It uses crushing, grinding, classification, scrubbing, and spirals to remove heavy metals."[37]

There were also sharp cost differences among petitioner's plants producing glass-grade feldspar. The product produced at the Georgia plant is a potash type of feldspar. A comparison of the glass-grade feldspar costs of goods sold, by plants, is shown in the tabulation below (on a per-ton basis):

				January-March--	
Plant	1988	1989	1990	1990	1991
Connecticut	$***	$***	$***	$***	$***
Georgia	***	***	***	***	***
North Carolina	***	***	***	***	***

TFC's operating income (loss) ratios for its two plants within the NEC region and its two plants outside of the region are summarized in the tabulation below (in percent):[38]

				January-March--	
Plant/product	1988	1989	1990	1990	1991
VA/aplite[1]	***	***	***	***	***
CT/glass-grade feldspar[1]	***	***	***	***	***
GA/glass-grade feldspar[2]	***	***	***	***	***
NC/glass-grade feldspar[2]	***	***	***	***	***
NC/feldspathic sand[2] [3]	***	***	***	***	***

[1] Plant in NEC region.
[2] Plant outside of region.
[3] ***.

[37] Statement of Mr. Gerard Wood, CEO of TFC. Transcript of conference, p. 59.

[38] The petitioner stated that its Georgia and North Carolina facilities are profitable, and it believes that all other producers outside of the region are profitable (Petition, pp. 14-15). ***.

There was also a disparity in profitability among the three domestic products (aplite, glass-grade feldspar, and feldspathic sand). TFC's aplite plant was ***. ***. ***.[39] A summary of the aggregate operating income (loss) ratios, as a share of net sales, for each product, is shown in the tabulation below (in percent):

Product	1988	1989	1990	January-March-- 1990	1991
Feldspathic sand.....	***	***	***	***	***
Aplite.....	***	***	***	***	***
Glass-grade feldspar....	***	***	***	***	***

Transportation costs were not included (except the *** in the income-and-loss data supplied by the producers. Most sales are on an f.o.b. plant and/or rail siding basis. The proportion of a plant's shipments utilizing a particular means of transportation varies from plant to plant. Transportation methods include various combinations of truck and/or rail. ***. In 1990, the Connecticut plant's glass-grade feldspar shipments were ***. In 1990, the Virginia plant's aplite shipments consisted of ***. The remaining *** percent of shipment quantities were shipped by ***. Of this amount, *** percent of total shipments went directly from *** and *** percent went from ***. A summary of all of the producers' transportation methods for 1990 is shown in the following tabulation (in percent):

Company/plant	TRE[1]	TRTE[2]	RE[3]	RTE[4]	TE[5]
Region					
* *	*	*	*	*	*
Outside region					
* *	*	*	*	*	*

[1] Truck to rail to end user.
[2] Truck to rail to truck to end user.
[3] Rail to end user.
[4] Rail to truck to end user.
[5] Truck to end user.

[39] Analysis excludes ***. Refer to app. C (tables C-7 and C-8) for income-and-loss data by plants and products.

Investment in Productive Facilities

TFC's investment in property, plants, and equipment and returns on investment, by plants, are shown in table 14.[40]

Table 14
Aplite and glass-grade feldspar: Value of assets and return on assets of TFC, fiscal years 1988-90, January-March 1990, and January-March 1991

Item	As of the end of fiscal year--			As of Mar. 31--	
	1988	1989	1990	1990	1991
	Value (1,000 dollars)				
Aplite/VA:					
Fixed assets:					
Original cost	***	***	***	***	***
Book value	***	***	***	***	***
Total assets	***	***	***	***	***
Glass-grade feldspar/CT:					
Fixed assets:					
Original cost	***	***	***	***	***
Book value	***	***	***	***	***
Total assets	***	***	***	***	***
	Return on book value of fixed assets (percent)				
Aplite/VA:					
Operating return	***	***	***	***	***
Net return	***	***	***	***	***
Glass-grade feldspar/CT:					
Operating return	***	***	***	***	***
Net return	***	***	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

[40] Rates of return on the book value of fixed assets for all producers are presented in app. C (table C-9). Due to a low response rate or unreliable data, rates of return on total establishment assets for all producers are not available.

Capital Expenditures

Capital expenditures for TFC, by plants, are shown in table 15.[41]

Table 15
Aplite and glass-grade feldspar: Capital expenditures[1] by TFC, fiscal years 1988-90, January-March 1990, and January-March 1991

(In thousands of dollars)

Item	1988	1989	1990	Jan.-Mar.-- 1990	1991
Aplite/VA	***	***	***	***	***
Glass-grade feldspar/CT	***	***	***	***	***

[1] ***.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Research and Development Expenses

* * * * * * *

Impact of Imports on Capital and Investment

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of nepheline syenite on their existing development and production efforts, growth, investment, and ability to raise capital. Their responses are shown in appendix E.

[41] Capital expenditures for all producers are presented in app. C (table C-10).

CONSIDERATION OF THE QUESTION OF THREAT OF MATERIAL INJURY

Section 771(7)(F)(i) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(F)(i)) provides that--

> In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of any merchandise, the Commission shall consider, among other relevant factors[42]--
>
> (I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),
>
> (II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,
>
> (III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,
>
> (IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,
>
> (V) any substantial increase in inventories of the merchandise in the United States,
>
> (VI) the presence of underutilized capacity for producing the merchandise in the exporting country,
>
> (VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

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[42] Section 771(7)(F)(ii) of the act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

> (VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 736, are also used to produce the merchandise under investigation,
>
> (IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and
>
> (X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.[43]

Subsidies (item (I)) and agricultural products (item (IX)) are not issues in this investigation. Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the causal relationship between imports of the subject merchandise and the alleged material injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of material injury to an industry in the United States." Available information on U.S. inventories of the subject products (item (V)); foreign producer's operations, including the potential for "product-shifting" (items (II), (VI), and (VIII) above); any other threat indicators, if applicable (item (VII) above); and any dumping in third-country markets, follows.

---

[43] Section 771(7)(F)(iii) of the act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

U.S. Importers' Inventories

***. Because the cost of storage is high relative to the mineral's value, it is expensive to keep large inventories on hand. The same reasoning holds true for end users. Of the 21 U.S. importers/end users of nepheline syenite that responded to questionnaires, only 3 kept inventories of 1,000 tons or more.[44]

Ability of the Canadian Producer to Generate Exports and the Availability of Export Markets Other Than the United States

In response to a Commission request, Unimin supplied information regarding its glass-grade nepheline syenite operations in Canada (table 16).

* * * * * * *

The home market for nepheline syenite has traditionally represented only a small portion of the overall market.

* * * * * * *

Unimin is not currently under investigation for dumping nepheline syenite in any country other than the United States, nor are any antidumping remedies in place against nepheline syenite in any foreign countries.[45] Unimin's shipments to export markets other than the United States are increasing. It has stated that it sees Europe as a region of growth in the coming years.[46]

Unimin has some potential for shifting production of nepheline syenite away from glass applications.[47] Specifically, it has stated that one of its "areas of concentration" in strategic planning will be the paint industry, which uses a much finer grind of nepheline syenite than does the glass industry.[48]

---

[44] ***.
[45] Transcript of conference, p. 152.
[46] Transcript of conference, pp. 121 and 135.
[47] ***.
[48] Transcript of conference, pp. 118, 121, and 135.

Table 16
Nepheline syenite: Canadian capacity, production, inventories, and shipments, 1988-90, January-June 1990, January-June 1991, and projected 1991-92

Item	Actual experience			January-June		Projected	
	1988	1989	1990	1990	1991	1991	1992
	Quantity (1,000 short tons)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market	***	***	***	***	***	***	***
Exports to--							
Within NEC region	***	***	***	***	***	***	***
Outside NEC region	***	***	***	***	***	***	***
U.S. total	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories to production	***	***	***	***	***	***	***
Share of total quantity of shipments:							
Home market	***	***	***	***	***	***	***
Exports to--							
Within NEC region	***	***	***	***	***	***	***
Outside NEC region	***	***	***	***	***	***	***
U.S. total	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***

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

Source: Compiled from data submitted in response to a Commission request.

CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE SUBJECT MERCHANDISE AND THE ALLEGED MATERIAL INJURY

U.S. Imports

Canada was the sole source of imports of glass-grade nepheline syenite during January 1988-June 1991 (table 17). Official Commerce trade statistics could not be used because Commerce data include all imports of nepheline syenite, whereas the alleged injury is attributed to LTFV imports of nepheline syenite ground no finer than 140 mesh (glass-grade). ***.

Table 17
Nepheline syenite: U.S. imports from Canada, by regions, 1988-90, January-June 1990, and January-June 1991

Region	1988	1989	1990	January-June-- 1990	1991
	Quantity (1,000 short tons)				
United States:					
Within NEC region.....	***	***	***	***	***
Outside NEC region.....	***	***	***	***	***
Total.....	***	***	***	***	***
	Value (1,000 dollars)				
United States:					
Within NEC region.....	***	***	***	***	***
Outside NEC region.....	***	***	***	***	***
Total.....	***	***	***	***	***
	Percent of total quantity				
United States:					
Within NEC region.....	***	***	***	***	***
Outside NEC region.....	***	***	***	***	***
Total.....	***	***	***	***	***

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

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Market Penetration by the Allegedly LTFV Imports

Market penetration, based on quantity, by imports of glass-grade nepheline syenite from Canada *** during 1988-90 within the NEC region (table 18), whereas market penetration during January-June 1991 was *** in the NEC region than during January-June 1990. Market penetration by imports of glass-grade nepheline syenite from Canada outside the NEC region *** during 1988-90 but was ***. Market penetration outside the NEC region *** during January-June 1991 when compared with market penetration during January-June 1990.

It should be noted that table 18 is for all glass-grade feldspathic materials, and market penetration based on quantity is affected by domestic consumption of feldspathic sand within the NEC region compared with consumption of feldspathic sand outside the NEC region because of the relatively low (and variable) feldspar content of feldspathic sand. For this reason, market penetration based on value shows somewhat different trends than market penetration based on quantity.

Table 18
Feldspathic materials: Apparent consumption, by regions, and shares of apparent consumption accounted for by producers' shipments and imports,[1] 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
	Apparent consumption quantity (1,000 tons)				
NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
	Apparent consumption value (1,000 dollars)				
NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
	Share of the quantity of U.S. consumption (percent)				
NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
Outside NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***

See footnote at end of table.

Table 18--Continued
Feldspathic materials: Apparent consumption, by regions, and shares of apparent consumption accounted for by producers' shipments and imports,[1] 1988-90, January-June 1990, and January-June 1991

Item	1988	1989	1990	January-June-- 1990	1991
United States:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
	Share of the value of U.S. consumption (percent)				
NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
	Share of the value of U.S. consumption (percent)				
Outside NEC region:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***
United States:					
Producers' U.S. shipments supplied by plants--					
Within NEC region	***	***	***	***	***
Outside NEC region	***	***	***	***	***
Total	***	***	***	***	***
U.S. imports	***	***	***	***	***

[1] All imports are from Canada.

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

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Prices

Feldspathic materials act principally as a source of alumina and are a primary ingredient in the production of glass. Each glass manufacturer determines the feldspathic material to use based on its particular, and often proprietary, batch formula used in its glass production. The difference in the chemical composition of the feldspathic materials affects the amount of the other ingredients in a glass batch. For example, the alumina and alkali levels in Canadian nepheline syenite are higher than in domestic aplite or feldspar, providing greater concentrations of these products per ton, thus lessening the required amount of soda ash (an alkali), the most costly of the batch ingredients. According to the petitioner, nepheline syenite can command a delivered price per ton that is $6 to $8 higher than aplite or feldspar because of its chemical composition.[49]

While end users agree that any of the feldspathic materials can serve as a source of alumina in glass production, nepheline syenite, aplite, glass-grade feldspar, and feldspathic sand are not interchangeable on a ton-for-ton basis, and glass manufacturers do not use these products simultaneously. In order to shift among these materials, a reformulation of the entire glass batch formula is necessary. End users value consistency and generally consider any modification to glass formulas to be a major undertaking.[50] While shifting from one raw material to another can be carried out with little downtime, shifting a plant that has historically used the same feldspathic material to a new one could cause the manufacturer to incur additional initial costs, such as in shifting the composition of the other raw materials, re-education of the work force, and potential quality and consistency problems. Thus, most end users require a considerable economic incentive to shift.[51] A former employee of Manville Sales Corporation, a manufacturer of fiberglass, estimated that his company would require a $50,000 savings per plant to shift its alumina source, which translates into a $10 to $20 per ton differential between feldspar and nepheline syenite.[52] If the feldspathic material is changed, it usually occurs at the time a new contract is being negotiated.

A representative of Anchor Glass, Meredith Keller, reported that when deciding which alumina agent to use, they review several different factors. First, the agent with the greatest alumina content is preferred. Second, they consider the agent with the greatest amount of alkali earth elements, which contributes soda ash to the batch. Third, glass makers prefer the feldspathic material with the least amount of trace elements, such as iron oxide. And finally, they consider the alumina agent with the least amount of small or large particles (mesh size distribution). In each of these factors, Anchor Glass believes that nepheline syenite is superior to both aplite and glass-grade feldspar.[53]

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[49] Transcript of conference, p. 67.

[50] Conversation with ***. Also, transcript of conference, p. 53.

[51] One end user reported that soda ash accounts for only *** percent of a glass batch by weight, but *** percent by value. Thus, any shift that might increase the needed amounts of soda ash would have to provide considerable economic incentives in other areas. ***.

[52] Transcript of conference, pp. 100-101.

[53] Transcript of conference, pp. 97-98.

The demand for feldspathic materials is driven by demand for the end products in which the materials are used. Factors affecting demand include competition from non-glass containers, such as aluminum, paper, and plastic containers, and the effects of bottle bills and curbside recycling programs introduced in several States in the NEC region. These laws and programs increase the amount of cullet available as an alternate source of alumina. Also, a practice known as lightweighting, in which glass manufacturers attempt to achieve more uniform wall dimensions, reduces the amount of raw material needed to produce a glass container. The petitioner asserts that although container glass production and shipments in the United States increased during the investigation period, demand for feldspathic products is down 7.5 to 10 percent in the NEC region during the same period, due primarily to glass plant closures caused by these competitive influences.[54] This decrease in demand affects sales of nepheline syenite as well.[55] Unimin stated that the competitive factors listed above have depressed overall demand for glass containers, and that sales of fiberglass insulation have been negatively affected by a decline in housing starts and automotive sales during the investigation period.[56]

Because feldspathic materials have a low value-to-weight ratio, transportation costs are an important part of the final delivered price to customers. Producers and importers reported that transportation costs are a primary factor in determining their market areas. U.S. manufacturers indicated that transportation costs tend to limit their geographic market areas to end-user facilities within 500 miles of production facilities. Unimin reported a market area for nepheline syenite that includes ***, and tends to ship a greater percentage of its product longer distances than the petitioner.

Several end users have indicated that the most meaningful price from their perspective is the delivered price. For most end users, transportation costs accounted for more than 50 percent of the final delivered price, thus the ability of the producer or end user to negotiate attractive freight rates may have an impact on which feldspathic material is purchased.[57] Other end users reported that under certain circumstances, transporting feldspathic materials by truck may be more economical than transporting by rail. For example, several end users reported that the location of production facilities may make it feasible to arrange backhaul rates.

End users also need to consider the transportation costs for all raw materials needed for producing glass. *** reported that it uses nepheline syenite because it is located nearer to that source than to the domestic materials. Using the Canadian product also decreases the amount of soda required in a batch and thereby lessens the transportation costs associated with having soda shipped from Wyoming.

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[54] Conversation with ***.

[55] Post-conference brief of TFC, pp. 37-38, and ***.

[56] Transcript of conference, p. 104. Post-conference brief of Unimin, p. 39.

[57] ***. This was demonstrated in the price history *** submitted to the Commission. ***.

Prices are generally, although not exclusively, quoted on an f.o.b. plant basis by both U.S. producers and Unimin.[58] Because of the high transportation costs associated with shipping feldspathic materials, producers tend to concentrate sales in areas in which they have a transportation advantage. *** commented that it is more competitive south and west of its plant since transportation costs tend to limit competition in this region. *** reported that it looks at the customer's location in relation to rail lines, other sources of alumina, and additional ingredients in the glass batch.

Larger end users of feldspathic materials, such as ***, have numerous plants producing glass containers throughout the United States. These customers tend to use different feldspathic materials in individual plants, with the choice of material dependent on the specific characteristics of the material, what the plant has used historically, the type of furnace in the plant, the location of the plant in relation to the batch ingredients, and the end products.

Although end users generally agreed that any of the feldspathic materials can be used to make glass containers, *** reported that *** aplite is preferred, since nepheline syenite's use may cause imperfections in the glass, known as syenite stones, that could weaken the glass. This has not been raised as a concern by any other container glass manufacturer.

Unimin also raised as a concern the Occupational Safety and Health Administration (OSHA) requirement that aplite, feldspar, and feldspathic sand be labeled as health hazards because they contain crystalline quartz. Under OSHA standards, these materials must carry a warning label on all rail cars and packages in which they are shipped, describing the dangers of working with the materials. Nepheline syenite does not face these requirements. Because of this, Unimin believes some glass manufacturers prefer nepheline syenite so as not to assume the liability that would be associated with employees handling aplite, feldspar, or feldspathic sand. No end users contacted by staff reported selecting nepheline syenite over the domestic materials because of the OSHA ruling.

Materials named as substitutes for aplite, feldspar, feldspathic sand, and nepheline syenite include cullet, blast furnace slag, kaolin clay, and lithospar. Several end users said that they continue to test different alumina sources as alternatives to aplite, feldspar, feldspathic sand, and nepheline syenite, but generally, the use of these potential substitutes does not occur on a commercial basis.[59]

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[58] Unimin quotes prices f.o.b. Ontario. There is no U.S. shipping point for nepheline syenite.

[59] *** reported that its use of cullet has increased in recent years, and has reduced its demand for all raw materials in the glass production process, not just the feldspathic material.

Sales of feldspathic materials are made principally through contracts of one year or more. Contracts generally lock in an annual price and estimate the customer's annual volume requirements. In several instances, both the petitioner and the Canadian producer have signed *** contracts with large customers. ***. ***.[60]

Most contracts signed with both TFC and Unimin contain a "meet-or-release" provision, under which the customer could be released from the contract if it receives a better price that cannot be met by its current supplier. According to TFC, it has never lost a contract in midyear because of not being able to meet a competitor's price.[61] Shifting between different types of feldspathic materials usually occurs when negotiating a new annual contract.

Prices for domestic aplite, glass-grade feldspar, and feldspathic sand, and nepheline syenite imported from Canada, were requested on an f.o.b. and delivered basis for the largest quarterly sale, based on quantity, to an unrelated end user located in the NEC region. The total quantity and value shipped to all unrelated customers in the NEC region in each quarter, and shipping costs, were also requested.

Only TFC reported prices for shipments from plants in the NEC region.[62] Its prices were reported f.o.b. point of shipment. Several producers outside the NEC region reported f.o.b. prices for sales of feldspar and feldspathic sand into the region. Two companies reported f.o.b. prices for shipments from plants outside the region to end users outside of the region. Unimin reported prices f.o.b. Ontario for imported nepheline syenite. There is no U.S. shipping point for nepheline syenite. All shipments originate at Unimin's production facilities in Ontario.

Prices in the NEC region for the domestic products produced inside the region and Canadian nepheline syenite are shown in table 19. Prices for feldspathic materials produced outside the region and shipped to end users in the region are shown in table 20.

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[60] Conversation with ***.
[61] Transcript of the conference, p. 77.
[62] ***.

Table 19
Aplite, feldspar, and nepheline syenite: U.S. producer's f.o.b. prices for materials produced inside the NEC region and shipped to end users within the region, and f.o.b. prices for imports from Canada, by quarters, January 1988-June 1991

Period	The Feldspar Corporation		Unimin
	Aplite Montpelier, VA	Feldspar Middletown, CT	Nepheline syenite Canada
1988:			
Jan.-Mar....	$***	$***	$***
Apr.-June...	***	***	***
July-Sept...	***	***	***
Oct.-Dec....	***	***	***
1989:			
Jan.-Mar....	***	***	***
Apr.-June...	***	***	***
July-Sept...	***	***	***
Oct.-Dec....	***	***	***
1990:			
Jan.-Mar....	***	***	***
Apr.-June...	***	***	***
July-Sept...	***	***	***
Oct.-Dec....	***	***	***
1991:			
Jan.-Mar....	***	***	***
Apr.-June...	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Price Trends

Price trends are difficult to analyze since sales for both the domestic and imported products are generally made through annual or multi-year contracts under which prices to larger customers tend to be fixed. For this reason, little movement in prices is observed in any producer's prices throughout the investigation period.

Table 20
Feldspar and feldspathic sand: U.S. producers' f.o.b. prices for materials produced outside the NEC region and shipped to end users within the NEC region, by quarters, January 1988-June 1991

Period	The Feldspar Corporation		Unimin		***
	Feldspar Spruce Pine, NC	Feldspar[1] Monticello, GA	Feld. sand Emmett, ID	Feldspar Spruce Pine, NC	Feldspar ***
1988:					
Jan.-Mar....	$***	$***	$***	$***	$***
Apr.-June...	***	***	***	***	***
July-Sept...	***	***	***	***	***
Oct.-Dec....	***	***	***	***	***
1989:					
Jan.-Mar....	***	***	***	***	***
Apr.-June...	***	***	***	***	***
July-Sept...	***	***	***	***	***
Oct.-Dec....	***	***	***	***	***
1990:					
Jan.-Mar....	***	***	***	***	***
Apr.-June...	***	***	***	***	***
July-Sept...	***	***	***	***	***
Oct.-Dec....	***	***	***	***	***
1991:					
Jan.-Mar....	***	***	***	***	***
Apr.-June...	***	***	***	***	***

[1] Potash feldspar is produced in Monticello, GA. This product contains a high percentage of potassium oxide and sodium oxide, and is not considered to be an alternative to aplite, glass-grade feldspar, feldspathic sand, or nepheline syenite. It is used primarily in the production of electrical porcelain and ceramics. (Transcript of conference, p. 74).

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Aplite from Virginia

TFC reported that its price to its largest customer for aplite in 1989 and through September 1990 was $*** per ton, compared to $*** per ton in 1988. In October 1990, the price ***, *** percent *** the previous period. ***.

Glass-grade feldspar from Connecticut

TFC sold glass-grade feldspar *** to its largest customer for $*** per ton *** during the ***. In April-June 1991, TFC's largest shipment was to *** at an *** price of $*** per ton. ***.

Nepheline syenite imported from Canada

Unimin reported prices for the ***. During this time, its largest customer was ***, which purchased nepheline syenite for *** production. Unimin sold to *** at an *** price of $*** for ***. ***. Unimin reported selling *** different grades of nepheline syenite - *** intended for the production of container glass and *** for fiberglass.

, Unimin's largest shipment was to *** at an *** price of $ per ton and ***. Unimin reported that this price, while it was for the ***, is an exception to the prices paid by most end users for nepheline syenite. ***.

Feldspathic materials produced outside the NEC region

Prices for glass-grade feldspar produced outside the NEC region and shipped to end users within the region *** to prices for products from within the NEC region. Prices reported by *** in the 1989-90 contract period from 1988, but *** for the 1991 contract year. *** prices *** in each calendar year, while *** prices *** in July-September 1989 and then ***.

TFC's feldspar produced in Georgia is potash feldspar and is not considered a substitute for the other feldspathic materials under investigation. This particular feldspar contains high levels of potassium oxide and sodium oxide, and is used principally in the manufacture of electrical porcelain and ceramics. ***.

*** producers reported prices for feldspathic materials produced outside the region and shipped to end users outside the region. *** reported selling *** to an end user in ***. The f.o.b. price *** from $*** per ton in 1989 to $*** in 1991. *** shipped *** from its *** plant to an end user in ***. Prices *** during the year from $*** to $***.

Price Comparisons

It is not possible to compare directly per-ton prices of the domestic and imported feldspathic materials. Although prices reported reflect actual contract prices for sales to unrelated end users, the price for the alumina agent should not be considered separately from the associated transportation costs and costs of other materials in a glass batch. As noted earlier, end users of feldspathic materials consider the optimal chemical composition of all ingredients in a glass batch when deciding which feldspathic material to choose, as well as the source of the material.

Data show that per-ton f.o.b. prices for each type of feldspathic material vary greatly, ranging from $*** for nepheline syenite to more than $*** for potash feldspar. The f.o.b. price of glass-grade feldspar produced in *** was *** that of glass-grade feldspar produced in North Carolina and aplite from Virginia, and *** the price of nepheline syenite imported from Canada. However, comparisons cannot be made at the f.o.b. price level without considering transportation and other costs involved in producing a glass batch. For example, even though *** has a *** higher f.o.b. price, it may be competitive in specific areas at a delivered price.

Lost Sales and Lost Revenues

*** submitted 2 lost sales and 11 lost revenue allegations involving end users within the NEC region. Allegations of lost sales and lost revenues to end users outside the NEC region were also received from ***. Staff contacted those end users located inside the NEC region. ***.

* * * * * * *

*** alleged lost revenues in a *** sale of *** tons of *** to ***. *** reported having to lower its f.o.b. quote from $*** per ton to $*** because of competition from Canadian nepheline syenite. *** reported that *** has been used historically, and he did not recall that nepheline syenite caused ***.

*** alleged lowering its f.o.b. price per ton of *** from $*** to $*** in a *** sale to ***. *** stated that a shift was made from nepheline syenite to *** during ***. *** pays a higher delivered price per ton for *** than it would for nepheline syenite.

*** alleged having to lower its price on *** tons of *** from $*** per ton f.o.b. to $*** due to competition from nepheline syenite in a *** sale to ***. *** stated that there was *** between *** and nepheline syenite. *** did lower its price for ***, and ***. ***.

*** alleged having to lower its per ton f.o.b price from $*** to $*** on a *** sale of *** tons of *** to *** because of competition from nepheline syenite imported from Canada. *** reported that *** has always used ***, and that nepheline syenite has not been considered ***.

* * * * * * *

*** alleged losing a sale of *** tons of *** to *** in ***. The allegation stated that *** shifted to nepheline syenite quoted at $*** per ton delivered and rejected ***'s quote for *** at $*** per ton delivered. *** told staff that ***'s quote was for ***. ***. *** said that the correct quote for the nepheline syenite was $*** per ton delivered and was for ***. *** considers nepheline syenite to be a superior product since its alumina and soda ash levels offer more usable product per ton that does ***.

*** alleged *** due to price competition from Canadian nepheline syenite. In ***, *** quoted *** an f.o.b. price of $*** per ton for *** tons. ***. *** reported that after quoting $*** per ton for ***, *** announced a $*** per ton increase, which prompted *** to evaluate other products, including nepheline syenite from Canada. However, after considering ***, *** selected *** at $*** per ton delivered.

*** alleged lowering its price for *** from $*** to $*** per ton for a sale of *** tons to *** in ***. *** said that *** has been preferred and used historically. According to ***, *** uses *** but at an annual cost of $*** over what it would cost them to use nepheline syenite; he referred to this as a "penalty" for using ***. ***. *** did negotiate the reduction in the per-ton price of ***, thus reducing its "penalty" to $***. *** added that while using nepheline syenite could reduce costs, if they are not making a product at the quality level needed by the customer, the cost savings are lost.

For sales to ***, *** allegedly had to reduce its price per ton for *** from $*** to $*** in *** for a sale of *** tons. ***. In order to reduce the added cost of using ***, *** did negotiate the reduced price per ton.

At ***, *** allegedly had to reduce its quote for *** in *** from $*** f.o.b. *** to $*** for *** tons. *** stated that the initial quote was $*** per ton delivered, which was reduced to $*** per ton delivered. ***.

*** alleged lost revenues involving a sale of *** to ***. *** reported having to lower its price from $*** per ton delivered due to a competing price of $*** delivered for Canadian nepheline syenite. *** reported that *** has always used *** from ***, but that ***. ***.

* * * * * * *

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that during January 1988-March 1991 the nominal value of the Canadian dollar fluctuated, appreciating 9.7 percent overall relative to the U.S. dollar (table 21).[63] Adjusted for movements in producer price indexes in the United States and Canada, the real value of the Canadian currency showed an overall appreciation of 3.5 percent relative to the dollar for the period January 1988 through March 1991.

[63] International Financial Statistics, July 1991.

Table 21
Exchange rates:[1] Indexes of nominal and real exchange rates of the Canadian dollar and indexes of producer prices in the United States and Canada,[2] by quarters, January 1988-March 1991

Period	U.S. producer price index	Canadian producer price index	Nominal exchange rate index	Real exchange rate index[3]
1988:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	101.6	101.2	103.1	102.7
July-September.....	103.1	102.3	103.9	103.1
October-December....	103.5	103.1	105.1	104.6
1989:				
January-March.....	105.8	104.6	106.3	105.2
April-June.....	107.7	104.8	106.2	103.4
July-September.....	107.3	104.4	107.2	104.4
October-December....	107.7	103.8	108.5	104.5
1990:				
January-March.....	109.3	104.2	107.2	102.2
April-June.....	109.1	104.4	108.3	103.6
July-September.....	111.0	104.4	109.9	103.4
October-December....	114.4	105.7	109.2	100.9
1991:				
January-March.....	112.0	105.7	109.7	103.5

[1] Exchange rates expressed in U.S. dollars per Canadian dollar.

[2] Producer price indexes--intended to measure final product prices--are based on period-average quarterly indexes presented in line 63 of the International Financial Statistics.

[3] The real exchange rate is derived from the nominal rate adjusted for relative movements in producer prices in the United States and Canada.

Note.--January-March 1988 = 100.

Source: International Monetary Fund, International Financial Statistics, July 1991.

APPENDIX A

FEDERAL REGISTER NOTICES OF THE U.S. INTERNATIONAL TRADE COMMISSION AND THE U.S. DEPARTMENT OF COMMERCE

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-525 (Preliminary)]

Nepheline Syenite From Canada

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of a preliminary antidumping investigation.

SUMMARY: The Commission hereby gives notice of the institution of preliminary antidumping investigation No. 731-TA-525 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Canada of nepheline syenite,[1] provided for in subheading 2529.30.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value. The Commission must complete preliminary antidumping investigations in 45 days, or in this case by August 26, 1991.

For further information concerning the conduct of this investigation and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201, as amended by 56 FR 11918, Mar. 21, 1991) and part 207,

[1] The nepheline syenite subject to this investigation is defined as "glass-grade" and is ground no finer than −140 mesh.

subparts A and B (19 CFR part 207, as amended by 56 FR 1918, Mar. 21, 1991).

EFFECTIVE DATE: July 12, 1991.

FOR FURTHER INFORMATION CONTACT: Tedford Briggs (202-205-3181), 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.

SUPPLEMENTARY INFORMATION:

Background

This investigation is being instituted in response to a petition filed on July 12, 1991, by The Feldspar Corporation, Asheville, NC.

Participation in the Investigation and Public Service List

Persons (other than petitioners) wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in §§ 201.11 and 207.10 of the Commission's rules, not later than seven (7) days after publication of this notice in the **Federal Register**. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

Pursuant to § 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this preliminary investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than seven (7) days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference

The Commission's Director of Operations has scheduled a conference in connection with this investigation for 9:30 a.m. on August 2, 1991, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Tedford Briggs (202-205-3181) not later than July 30, 1991, to arrange for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions

As provided in §§ 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before August 7, 1991, a written brief containing information and arguments pertinent to the subject matter of the investigation. Parties may file written testimony in connection with their presentation at the conference no later than three (3) days before the conference. If briefs of written testimony contain BPI, they must conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of serviced must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.12 of the Commission's rules.

Issued: July 16, 1991.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 91-17323 Filed 7-18-91; 8:45 am]

BILLING CODE 7020-02-M

[A-122-813]

Initiation of Antidumping Duty Investigation: Nepheline Syenite From Canada

AGENCY: Import Administration, International Trade Administration, Commerce

EFFECTIVE DATE: August 7, 1991.

FOR FURTHER INFORMATION CONTACT: John Gloninger, Office of Antidumping Investigations, Import Administration, U.S. Department of Commerce, room B099, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 377-2778.

Initiation

The Petition

On July 12, 1991, The Feldspar Corporation (TFC) filed with the Department of Commerce (the Department) an antidumping duty petition on behalf of a regional United States industry producing feldspar and aplite, alleged to be like products to nepheline syenite. In accordance with 19 CFR 353.12, the petitioner alleges that imports of nepheline syenite from Canada are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports are materially injuring, or threaten material injury to, domestic producers of the like products, feldspar and aplite, located within the region.

The petitioner has stated that it has standing to file the petition because it is an interested party, as defined in 19 CFR 353.2(k), and because it has filed the petition on behalf of the regional U.S. industry producing like products.

On July 25, 1991, the Department received a letter from Unimin Corporation (Unimin), a domestic feldspar producer located near to, but outside, the region identified in the petition. Unimin is also the parent of the sole Canadian exporter of nepheline syenite. The Department agreed to receive Unimin's submission because it was uncertain whether Unimin was a target and/or a member of the domestic industry, and because Unimin was raising the issue of the petitioner's standing. In its submission, Unimin argued that TFC lacks standing to file this petition because: (1) TFC's products are not like products, and (2) if TFC's products are determined to be like products, then the Department's analysis of whether TFC represents the industry should include producers of other like products. Unimin requested that the Department immediately make a like product determination regarding TFC's feldspar and aplite products.

The Department has determined that since Unimin is sole owner of the Canadian nepheline syenite exporter, the Department is precluded under *Roses Inc.* v. *United States*, 706 F.2d 1563 (Fed. Cir. 1983) and 19 CFR 353.12(i) from considering Unimin's arguments. Further, since Unimin is also located outside the region as alleged by the petitioner, the Department is precluded from considering Unimin a part of the regional domestic industry under *Gilmore* v. *United States*, 7 CIT 219, 585 F.Supp. 670 (1984). However, the Department will reexamine the standing issue should the International Trade Commission (ITC) determine that the boundaries of the region are such that Unimin would fall within them. If any interested party, as described in 19 CFR 353.2(k)(3), (4), (5), or (6), wishes to register support for, or opposition to, this investigation, please file written notification with the Assistant Secretary for Import Administration.

United States Price and Foreign Market Value

The petitioner bases United States Price for glass-grade and fiberglass-grade nepheline syenite on information from U.S. parties and its own experience. The information consists of sales reports or other similar documentation identifying a price which the petitioner would need to meet to receive an order, or the margin by which a quotation was not competitive. The petitioner adjusted the FOB Canada prices by deducting freight charges.

The petitioner bases foreign market value for glass-grade (grade 340) nepheline syenite on information from a source in Canada. The petitioner calculated foreign market value for fiberglass-grade (grade 333) nepheline syenite by first calculating the difference between Unimin's price on grade 340 and grade 333 as published in Industrial Minerals and then subtracting this difference from the grade 340 price. Petitioner made no adjustments to foreign market value.

Based on a comparison of U.S. price and foreign market value, petitioner alleges dumping margins of 1.13 percent to 18 percent, depending on grade and quantity.

Initiation of Investigation

Under 19 CFR 353.13(a), the Department must determine, within 20 days after a petition is filed, whether the petition properly alleges the basis on which an antidumping duty may be imposed under section 731 of the Act, and whether the petition contains information reasonably available to the petitioner supporting the allegations. We have examined the petition on nepheline syenite from Canada and find that it meets the requirements of 19 CFR 353.13(a). Therefore, we are initiating an antidumping duty investigation to determine whether imports of nepheline syenite from Canada are being, or are likely to be, sold in the United States at less than fair value.

In accordance with 19 CFR 353.13(b) we are notifying the ITC of this action.

Any producer or reseller seeking exclusion from a potential antidumping duty order must submit its request for exclusion within 30 days of the date of the publication of this notice. The procedures and requirements regarding the filing of such requests are contained in 19 CFR 353.14.

Scope of Investigation

The product covered by this investigation is nepheline syenite which is a coarse crystalline rock consisting principally of feldspathic minerals (*i.e.*,

sodium-potassium feldspars and nepheline), with little or no free quartz, and ground no finer than 140 mesh. Nepheline syenite is currently classifiable under item 2529.30.0010 of the Harmonized Tariff Schedule (HTS). Although the HTS subheading is provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

Preliminary Determination by ITC

The ITC will determine by August 26, 1991, whether there is a reasonable indication that imports of nepheline syenite from Canada are materially injuring, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will be terminated. If affirmative, the Department will make its preliminary determination on or before December 19, 1991, unless the investigation is terminated pursuant to 19 CFR 353.17 or the preliminary determination is extended pursuant to 19 CFR 353.15.

This notice is published pursuant to section 732(c)(2) of the Act and 19 CFR 353.13(b).

Dated: August 1, 1991.

Eric I. Garfinkel,

Assistant Secretary for Import Administration.

[FR Doc. 91-18751 Filed 8-6-91; 8:45 am]

BILLING CODE 3510-DS-M

APPENDIX B

CALENDAR OF PUBLIC CONFERENCE

CALENDAR OF THE PUBLIC CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's conference:

Subject: NEPHELINE SYENITE FROM CANADA

Investigation No: 731-TA-525 (Preliminary)

Date and Time: August 2, 1991 - 9:30 a.m.

Sessions were held in connection with the investigation in the Main Hearing Room (Room 101), United States International Trade Commission, 500 E Street, SW., Washington, DC.

In Support of the Imposition of Antidumping Duties:

Davis, Graham & Stubbs--Counsel
Washington, DC
On behalf of

The Feldspar Corporation
Asheville, NC

Gerard E. Wood, Chief Operating Officer,
The Feldspar Corporation

Robert Morris, Secretary - Treasurer,
Zemex Corporation

Michael G. Holloway, Vice President, Marketing,
The Feldspar Corporation

David Maek, Geologist,
The Feldspar Corporation

Harry Mills, Consultant on glass technology

Barry E. Cohen)
)--OF COUNSEL
M. Roy Goldberg)

In Opposition to the Imposition of Antidumping Duties:

O'Melveny & Myers--Counsel
Washington, DC
On behalf of

Unimin Corporation
New Canaan, CT

Andrew J. Regis, Vice President, Geology and Environmental Affairs, Unimin Corporation

Richard Nickel, Vice President for Sales for National Accounts, Unimin Corporation

Joseph Shapiro, Vice President for Legal and Regulatory Affairs, Unimin Corporation

W.J. Glascock, Purchasing Manager (Retired), Manville Corporation

Meredith Keller, Technical Director of Engineering, Anchor Glass Container Corp.

William F. Finan, Law and Economics Consulting Group, Inc.

Gary N. Horlick)
)--OF COUNSEL
F. Amanda DeBusk)

APPENDIX C

SELECTED TRADE AND FINANCIAL DATA, BY REGIONS, BY PRODUCTS, AND BY PLANTS

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APPENDIX D

EXCERPTS FROM ZEMEX CORPORATION'S 1990 10-K REPORT AND 1990 ANNUAL REPORT

Excerpts from Zemex Corporation's 1990 10-K Report and 1990 Annual Report

"Sales of feldspar to both the ceramic and glass industry in 1990 were slightly below 1989 levels due to plant closures in the glass industry and the general slowdown in the economy. Because of low demand and excess capacity for feldspathic minerals, product prices did not increase appreciably in 1990."[1]

"Industrial mineral prices generally are not subject to the price fluctuations typical of commodity metals. Demand for industrial minerals is primarily related to general economic conditions, particularly in the housing and construction and glass container industries. In the United States there are four major feldspathic mineral producers. Markets for industrial mineral products are sensitive not only to service, product performance and price, but to competitive price pressures caused by transportation costs."[2]

"The recession first became evident during September and increased in severity during the fourth quarter. The construction industry, end user of many of The Feldspar Corporation's products, suffered its lowest level of activity in December for any year since the recession of 1982."[3]

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[1] Zemex Corporation's 1990 10-K Report, p. 8, description of business.

[2] Ibid, p. 10.

[3] Zemex Corporation's 1990 Annual Report, p. 2, letter to shareholders from the President (CEO) and Chairman.

APPENDIX E

COMMENTS RECEIVED FROM U.S. PRODUCERS ON THE IMPACT OF IMPORTS OF NEPHELINE SYENITE FROM CANADA ON THEIR GROWTH, INVESTMENT, ABILITY TO RAISE CAPITAL, AND EXISTING DEVELOPMENT EFFORTS

Comments Received from U.S. Producers on the Impact of Imports of Nepheline Syenite from Canada on Their Growth, Investment, Ability to Raise Capital, and Existing Development Efforts

The Commission requested U.S. producers to describe and explain the actual and anticipated negative effects, if any, of imports of nepheline syenite from Canada on their investment, ability to raise capital, and/or existing development and production efforts (including efforts to develop a derivative or improved version of their products). Producers were also asked whether the scale of capital investments undertaken has been influenced by the presence of imports of this product from Canada. The responses are shown below.

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