# PERCHLOROETHYLENE FROM BELGIUM, FRANCE, AND ITALY

Determinations of Injury in Investigations Nos. AA1921-194, AA1921-195, and AA1921-196 Under the Antidumping Act, 1921, as Amended

# USITC PUBLICATION 969

APRIL 1979

United States International Trade Commission / Washington, D.C. 20436

# UNITED STATES INTERNATIONAL TRADE COMMISSION

# COMMISSIONERS

Joseph O. Parker, Chairman Bill Alberger, Vice Chairman George M. Moore Catherine Bedell Paula Stern

Kenneth R. Mason, Secretary to the Commission

This report was prepared by

Larry E. Reavis, Office of Operations

assisted by

Edward J. Taylor, Office of Industries

John M. MacHatton, Supervisory Investigator

Address all communications to Office of the Secretary United States International Trade Commission Washington, D.C. 20436

# CONTENTS

# Page

Determinations of injury	1
Statement of reasons of Chairman Joseph O. Parker and Commissioners	
George M. Moore and Catherine Bedell	3
Statement of reasons of Vice Chairman Bill Alberger	7
Statement of reasons of Commissioner Paula Stern	14
Information obtained in the investigation:	
Summary	А-1
Introduction	A-3
The product:	
Description and uses	A-4
U.S. tariff treatment	A-5
Nature and extent of sales at LTFV	A-5
The domestic industry	A-6
Foreign producers	A-9
The question of injury or likelihood thereof:	
Capacity utilization	A-14
U.S. producers' shipments and exports	A-14
U.S. employment	A-14
U.S. producers' inventories	
Financial performance of U.S. producers	A-17
The question of the causal relationship between LTFV imports and	
the alleged injury:	
U.S. consumption and market penetration of importsPrices	A-2.1
Lost sales	
	A-23
Appendix A. Treasury Department's letters of notification to the U.S. International Trade Commission	4-27
Appendix B. Notice of Commission's investigation and hearing	
Appendix C. Probable Economic Effects of Tariff changes under Title I	N-21
of the Trade Act of 1974 for Trade Agreement Digest No. 40224, July	
1975	4-35
Appendix D. Supplementary tables	
Appendix D. Duppiementary tables	

# Tables

1.	Perchloroethylene: U.S. producers' capacity, production, share of	
	total capacity, share of total production, and production as a	
	share of capacity, by firms, 1978	A-8
2.	Perchloroethylene: U.S. producers' shipments, imports, exports of	
	domestic merchandise, and apparent consumption, 1974-78	A-10
3.	Drycleaning grade Perchloroethylene: U.S. producers' shipments to northeast (NE) market, NE market's imports, and apparent NE market	,
	consumption, 1974-78	A-11
4.	Perchloroethylene: Imports, by sources, 1974-78	A-12

# CONTENTS

5.	Perchloroethylene: U.S. production, producers' capacity, and	
	capacity utilization, by firms, 1974-78	A-15
6.	Average number of employees in U.S. establishments producing	
	perchloroethylene, total, and all production and related workers	
	engaged in the manufacture of perchloroethylene, 1974-78	A-16
7.	Man-hours worked in U.S. establishments producing perchloro-	
	ethylene by production and related workers engaged in the	
	manufacture of all chlorinated solvents and of perchloro-	
	ethylene, 1974-78	<b>A-16</b>
8.	Perchloroethylene: U.S. producers' inventories of U.S. produced	
_	percholoroethylene, by firms, as of December 31 of 1974-78	A-17
9.	Selected financial data for U.S. producers of perchloroethylene on	
10	their U.S. chlorinated solvent operations, by firms, 1974-78	<b>A-18</b>
10.	Selected financial data for U.S. producers of perchloroethylene	
	on their U.S. perchloroethylene operations, by firms, 1974-78	A-19
11.	Drycleaning grade perchloroethylene: Average weighted prices of	
	U.S. producers and importers to respective principal customers	
	(distributors) in northeast market, bimonthly, January-February	
10	1976November-December 1978	A-22
12.	Perchloroethylene: U.S. producers' average unit production cost	
	and average unit selling prices for domestic sales of perchloro-	
	ethyene, by firms, 1974-78	A-24

# Figures

D-1.		U.S. producers' shipments, by types and by	-38
D-2.	Perchloroethylene:	Apparent U.S. consumption, by types and by	
D-3.	•	U.S. imports for consumption, by types and by	A-40
D-4.		Ratio of U.S. imports for consumption to sumption, by types and by markets, 1974-78	A-41

# UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

[AA1921-194, AA1921-195, and AA1921-196] PERCHLOROETHYLENE FROM BELGIUM, FRANCE, AND ITALY Determinations of Injury

On the basis of information obtained in investigations Nos. AA1921-194, AA1921-195, and AA1921-196, the Commission determines (Vice Chairman Alberger and Commissioner Stern dissenting) that an industry in the United States is being injured by reason of the importation of perchloroethylene from Belgium, France, and Italy that is being, or is likely to be, sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended.

On January 30, 1979, the United States International Trade Commission received advice from the Department of the Treasury that perchloroethylene from Belgium, France, and Italy is being, or is likely to be, sold in the United States at less than fair value (LTFV) within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)). Accordingly, on February 8, 1979, the Commission instituted investigations Nos. AA1921-194 (perchloroethylene from Belgium), AA1921-195 (perchloroethylene from France), and AA1921-196 (perchloroethylene from Italy) under section 201(a) of said act, to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States.

In connection with the investigations, a public hearing was held in Washington, D.C., on March 13, 1979. Notice of the institution of the investigations and the public hearing was given by posting copies of the notice at the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and at the Commission's office in New York City, and by publishing the notice in the Federal Register of February 20, 1979 (44 F.R. 10442). The Treasury Department instituted its investigations after receiving a complaint filed on June 16, 1978, from counsel acting on behalf of PPG Industries, Inc., Pittsburgh, Pa.; Stauffer Chemical Co., Westport, Conn.; Diamond Shamrock Corp., Cleveland, Ohio; Vulcan Materials Co., Birmingham, Ala.; and Dow Chemical U.S.A., Midland, Mich. Treasury's notices of withholding of appraisement and its determinations of sales at LTFV were published published in the Federal Register of February 2, 1979 (44 F.R. 6821-6824).

In arriving at its determinations, the Commission gave due consideration to all written submissions from interested parties and information adduced at the hearing as well as information obtained by the Commission's staff from questionnaires, personal interviews, and other sources. Statement of Reasons of Chairman Joseph O. Parker and Commissioners George M. Moore and Catherine Bedell

On January 30, 1979, the United States International Trade Commission received advice from the Treasury Department that it had determined, on the basis of investigations it had made, that perchloroethylene from Belgium, France, and Italy is being, or is likely to be, sold in the United States at less than fair value (LTFV) within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)). Accordingly, on February 8, 1979, the Commission instituted investigations Nos. AA1921-194 (perchloroethylene from Belgium), AA1921-195 (perchloroethylene from France), and AA1921-196 (perchloroethylene from Italy) under section 201(a) of said act to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, <u>1</u>/ by reason of the importation of such merchandise into the United States.

The Commission previously conducted inquiries into perchloroethylene imports from the countries in question under section 201(c) of the Antidumping Act (AA1921-Inq.-14, 15, and 16) after receiving advice from Treasury that there was substantial doubt that an industry was being or was likely to be injured by reason of the importation of this merchandise into the United States. As a result of those investigations, the Commission determined that the criteria for continuing the investigations had been met. Treasury's investigations were instituted on the basis of a petition filed with Treasury by five U.S. producers of perchloroethylene.

#### Determination

On the basis of the information obtained in this investigation, we determine that an industry in the United States is being injured by

<sup>1/</sup> Prevention of establishment of an industry is not an issue in these investigations and will not be discussed further in these views.

reason of the importation of perchloroethylene from Belgium, France, and Italy which the Treasury Department has determined is being, or is likely to be, sold at LTFV within the meaning of the Antidumping Act, 1921, as amended.

#### Injury by reason of LTFV sales

In order to make an affirmative determination in an antidumping investigation, it is necessary to determine that a U.S. industry is being or is likely to be injured by reason of the LTFV sales determined by the Secretary of the Treasury. The legislative history of the Antidumping Act and Commission decisions have both established that the injury criterion of this unfair trade practice statute is satisfied if there is injury which is "more than frivolous, inconsequential, insignificant, or immaterial."  $\underline{1}$ / It is also well established that the term "by reason of" expresses a causation linkage between the LTFV sales and injury to the U.S. industry but does not mean that the LTFV imports must be a principal, major, or a substantial cause of such injury.  $\underline{2}$ / In our judgment, the information obtained in these investigations shows these criteria to have been satisfied.

The Treasury Department investigated imports of perchloroethylene from Belgium and France during the 6-month period beginning February 1, 1978. It was determined that 100 percent of the perchloroethylene imported from Belgium during this period was at LTFV. Treasury made comparisons on 90 percent of perchloroethylene imported from France into the United States during this period and all of the sales compared were found to have been at LTFV. The weighted average LTFV margins for sales from Belgium were 60 percent and those for sales from France were 32 percent. The Treasury Department also determined that 100 percent of the sales of perchloroethylene imported from Italy

during the 17-month period beginning January 1, 1977, were at LTFV and that the weighted average margin of such sales was 24 percent.

Total imports from these three countries increased from 15 million pounds in 1974 to 41 million pounds in 1977 and increased as a share of apparent consumption from 2 percent to 6.3 percent. This increase occurred at the same time that there was a 66 million pound drop in apparent consumption. In 1978, total imports from the three countries declined to 23 million pounds, with the sharpest decline occurring in the 6-month period after the filing of the complaint with the Treasury Department in June 1978 which was the basis on which these investigations were initiated.

Virtually all the perchloroethylene imported from Belgium, France, and Italy enters the United States through ports located in the Northeastern United States, and nearly all of it is consumed in this market. These imports, which are all drycleaning-grade perchloroethylene, have had a disproportionate impact on the Northeastern market. In 1977, such imports accounted for nearly 40 percent of apparent consumption of the drycleaninggrade perchloroethylene in the Northeast, and even after the decline in 1978, such imports still accounted for about 25 percent of this market.

The information obtained in the investigation clearly establishes that this import penetration was achieved as a result of prices being the same as or below domestic prices and that, had the imports been sold at fair value, they would have been priced considerably higher than domestically made perchloroethylene. Except for one 2-month period, the lowest average weighted price per pound of perchloroethylene during 1976-78 sold in the domestic market was accounted for by imports from either France or Italy.

The Commission's investigation shows that the domestic industry lost sales as a result of this underselling by LTFV imports. Of 14 purchasers identified by U.S. producers as accounts to which sales were lost, all

5

but 3 confirmed that they had purchased perchloroethylene imported from Belgium, France, and/or Italy in lieu of perchloroethylene offered by U.S. producers, and that price was the primary reason for purchasing the imports.

In our judgment, the domestic industry is being injured, within the meaning of the Antidumping Act, by reason of imports of perchloroethylene from the countries under consideration. These imports occurred at a time when the domestic industry was in a substantially weakened position and particularly susceptible to the injury caused by their penetration of the market. From 1976 to 1978, the price of perchloroethylene declined by more than 30 percent. As a result of this decline and rising costs of production, the profitability of the domestic industry declined precipitously. During both 1977 and 1978, the domestic industry suffered substantial operating losses in perchloroethylene operations and was plagued by substantial unused capacity. Thus, it is clear that the presence of LTFV imports being sold at prices below those of domestic producers, with a resulting loss of sales, caused injury to the U.S. producers.

### STATEMENT OF REASONS OF COMMISSIONER BILL ALBERGER

In order for the Commission to find in the affirmative in an investigation under the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)) it is necessary to find that an industry in the United States is being or is likely to be injured, or is prevented from being established,  $\frac{1}{}$  and the injury or the likelihood thereof must be by reason of imports at less than fair value (LTFV). I find in the case of perchloroethylene from Belgium, France and Italy, the domestic industry is not being injured by reason of such imports which the Secretary of the Treasury (Treasury) has determined are being, or are likely to be, sold at LTFV.

### The imported article and the domestic industry

Perchloroethylene is a clear, heavy (1.6 times heavier than water), non-flammable liquid used primarily as a drycleaning and industrial solvent and as an intermediate in the synthesis of other chemicals.

The domestic industry in this case consists of the facilities in the United States devoted to the production of perchloroethylene. Presently, there are seven firms producing the perchloroethylene at 10 plant sites. The seven firms are: Dow Chemical, U.S.A; PPG Industries, Inc.; Vulcan Materials Co.; Diamond Shamrock Corp. (Diamond); E. I. du Pont deNemours & Co. (Du Pont); Stauffer Chemical Co.; and Ethyl Corp.

### LTFV sales

The Treasury investigations of LTFV imports of perchloroethylene from Belgium and France covered sales made during the 6-month period February 1, 1978 through July 31, 1978; its investigation

- 7 -

<sup>1/</sup> Prevention of establishment of an industry is not an issue in this case and will not be discussed further.

of sales from Italy covered the 17-month period January 1, 1977 through July 31, 1978. Price comparisons were made on 100 percent of the sales from Belgium and Italy and on 90 percent of the sales from France made during the periods of investigation. LTFV margins were found on 100 percent of the sales from the 3 countries that were examined. The LTFV margins for sales from Belgium ranged from 59.5 to 60.6 percent of the home market price, with a weighted average margin of 60.0 percent. The margins for sales from France ranged from 23.2 to 36.2 percent of the home market price, with a weighted average margin of 32.4 percent, and the margin for sales from Italy ranged from 13.0 to 35.0 percent of the

# National or regional industry

It was urged by petitioner that the Commission look at injury to a regional market, namely the Northeast. The statute requires us to make our determination based upon "an industry in the United States". The industry may be considered "regional" in character, particularly where: (1) domestic producers of an article are located in and serve a particular regional market predominantly or exclusively, and (2) the LTFV imports are concentrated primarily in this regional market.  $\frac{2}{}$  In this case, the second criterion is met, since all LTFV imports entered the Northeast market, mostly New York City. However, the domestic industry is located in Texas and Louisiana, and distribution is nationwide, so the first criterion is not even close to being satisfied. Thus, I have looked at the national market.

- 8 -

<sup>2/</sup> U.S. Senate, Report of the Committee on Finance to accompany H.R. 10710, Trade Act of 1974, S. Rept. No. 93-1298 (93rd Congress, 2nd Sess.) 1974, at pp. 180-181.

### No injury by reason of LTFV sales

Imports and market share -- Imports from the three countries in question show sharp increases in 1976 from the relatively low to nonexistent levels of 1974 and 1975. Italy was a new entrant in the U.S. market in 1976 and increased its level of imports further in 1977. In 1978, imports from Italy dropped precipitously and represented only 0.7 percent of domestic consumption. Belgium's 1976 imports were nearly ten times those of 1974, but by 1978 the level of Belgian imports was less than half of 1976 and represented 0.8 percent of U.S. consumption. Perchloroethylene imports from France peaked in 1976 and then dropped by more than 35 percent in 1977. In 1978, imports from France dropped still further and held a 1.7 percent share of the domestic market. For the three countries combined, the 6.7 percent import to consumption ratio attained in 1976 represents their largest market share in the 1974-78 period. Following that peak, the combined ratio dropped slightly in 1977 and in 1978, at 3.2 percent, was less than half the 1976 level.

Production and shipments -- 1974 and 1978 represent the peak years for production and shipments by U.S. producers of perchloroethylene. Production dropped by more than 9 percent from 1974 to 1975 and, after maintaining a steady level in 1976 and 1977, climbed back near 1974 levels in 1978. Shipments by U.S. producers dipped by nearly 15 percent from 1974 to 1975, then leveled off for the next two years. However, in 1978, shipments showed a strong increase over the previous three years and even exceeded the 1974 level of shipments.

<u>Exports</u> -- Exports by U.S. producers more than doubled from 1974 through 1978, going from 29 million pounds in 1974 to more than 59 million

- 9 -

pounds in 1978. These levels represent an increase from 4 to 8 percent as a percentage of producers' shipments and would seem to indicate that U.S. producers are quite competitive in the world market. In fact, exports exceeded total imports in three of the five years.

<u>Capacity utilization</u> -- The raw data shows capacity utilization falling from 60 percent in 1974 to a low point of 54 percent in 1977 and rising to 58 percent in 1978. One might assume that an industry operating at such a low level of capacity utilization for 5 years must be injured. However, aggregate capacity for the domestic industry has remained well above total consumption plus exports for the five-year period 1974-78. Thus, there is gross overcapacity and a comparison of production with consumption plus exports yields perhaps a more realistic measure of capacity utilization. 1974 is 99 percent, 1976 and 1977 are 96 percent, and 1978, a period of declining imports and disposal of large stocks of inventory, was 91 percent. Those are strong figures, and any shortfall in actual capacity utilization is the result of capacity far in excess of demand.

<u>Inventories</u> -- U.S. producers' inventories of perchloroethylene increased sharply from 76 million pounds in 1974 to over 157 million pounds in 1977 before falling to about 113 million pounds by the end of 1978. Most of this increase involves one producer, Diamond, which previously supplied Du Pont and built up its inventory on the assumption startup problems would occur in the latter's new plant. There apparently were no such problems, and Diamond was left with large inventories. Factoring Diamond's inventories out of the total, inventories throughout 1975 to 1978 are more level. The total volume of Diamond's inventories

- 10 -

in 1975 through 1977 was larger than total imports in each year, and significantly larger than imports from countries involved in these investigations.

<u>Employment</u> -- Employment was basically steady from 1974 through 1978. In this case, however, employment does not play a particularly important role since a drop in production for most of the chemical industry does not necessarily result in a drop in employment. Employees are generally kept on the payroll to maintain the production equipment to have it ready when production of a chemical resumes. Consequently, employment is not as accurate a reflection of the industry's condition as other factors I have considered.

Profits -- In general, those U.S. producers supplying financial data (only 5 firms did) show sharply declining profits on perchloroethylene operations. Aggregate 1978 data shows a ratio of net operating <u>loss</u> to net sales of 30.7 percent, down from a profit of 37 percent in 1974. This is obviously a disastrous change, and suggests serious problems, particularly for 4 of these 5 firms (the fifth shows healthy profits). Almost all of the firms producing perchloroethylene are large, diversified, multinational corporations in which perchloroethylene plays a relatively small role. It is entirely possible that there are serious allocation problems, since the ratio of net operating profit to net sales for chlorinated solvents operations for 4 of the 5 firms (the 5th did not submit such data) was 22.4 percent, a very healthy showing. The one producer showing profits on perchloroethylene throughout 1974-78 generally priced all other competitors, importers and domestic, with apparent success.

Lost sales -- Three producers identified 14 purchasers of imports from the three countries involved as sales lost during 1976-78. Eleven

- 11 -

were verified by the staff. The other three had switched to other U.S. producers. Price was given as the primary reason for the switch. Several also mentioned that U.S. producers' prices had been artificially high in a time of excess supply. However, many also indicated the decline of the dollar relative to European currencies in the last 6 to 8 months absorbed the price difference and they consequently had switched back to the U.S. product. With the domestic consumption up and the market share and volume of LTFV imports going down in 1978, importers must have lost sales to the domestic industry as well. This decline in LTFV imports began well before this case was filed with Treasury. Even the aggregate of the lost sales do not equal Diamond's lost sale to a fellow domestic producer, Du Pont, which now totally supplies itself through internal production.

<u>Prices</u> -- There is some indication, as I stated in AA1921-Inq. 14, 15, and 16 (U.S.I.T.C. Publication No. 904), that U.S. producers were involved to a significant degree in price reduction efforts. In fact during 1978, while the volume of imports was declining, average prices by U.S. producers dropped considerably. Significant inventories, mostly the result of Diamond's miscalculation, overhung the market, depressing the prices. Since 1974 total producers' inventories have been between three and six times total imports from the three countries involved in these investigations. This oversupply would pressure an industry to lower prices regardless of imports.

- 12 -

# Conclusion

Among the indicators I have considered, capacity utilization, profits, prices, and lost sales appear to suggest injury. However, the capacity utilization problem is explained by excess capacity. The poor profit picture and the low prices are the result of the inventory surplus of one producer which lost its largest account to another domestic producer. Finally, the lost sales that were found were offset by the declining market share of LTFV imports throughout 1978. Consequently, whatever injury may exist is not by reason of LTFV imports from Belgium, France or Italy. This is true whether these imports are considered separately or cumulatively.

# STATEMENT OF REASONS OF COMMISSIONER PAULA STERN

Having considered all the information before me in this investigation, I have determined, pursuant to Section 201 of the Antidumping Act of 1921, as amended, that an industry in the United States is not being or likely to be injured, or prevented from being established, by reason of the importation into the United States of perchloroethylene from Belgium, France, and Italy at less than fair value. In making this determination, I found that while the domestic industry may be in a state of injury, such injury is not caused by these imports.

# The Domestic Industry

Perchloroethylene, a member of a family of chemicals known as chlorinated solvents, is a clear, heavy, non-flamable liquid. The drycleaning industry claims more than 75 percent of U.S. consumption; industrial cleaning of machinery and synthesis of other chemicals use another 20 percent. There are at least seven perchloroethylene producers, of which E.I. duPont de Nemours & Co., Inc. produces only for internal use. Most are large, diverisfied, multinational enterprises in which the perchloroethylene line is of limited importance.

# Imports

Imports from Belgium, France, and Italy, as a percentage of apparent U.S. consumption, rose from 2.1 percent in 1974 to a peak of 6.7 percent in 1976 before declining by more than half to 3.2 percent in 1978. (The ratio of less than fair value imports to U.S. production almost identically

mirrors the ratio of these imports to U.S. consumption.) The share of apparent U.S. consumption of any of these nations has never exceeded 3.1 percent. Combined imports from all other nations, primarily Canada, varied between 1.1 and 2.9 percent of domestic consumption during the period. During the periods of its investigations, the Department of the Treasury examined virtually all sales of perchloroethylene from the three countries and found that all examined sales were sold at less than fair value, with weighted average less than fair value margins of 60.0 percent (Belgium), 32.4 percent (France), and 23.5 percent (Italy) of home market price.

# INJURY

Section 201 of the Antidumping Act, as amended, does not set forth standards for determining whether an industry is being or likely to be injured by reason of less than fair value imports. As a result, the Commission has traditionally exercised considerable discretion in making its determination based on the particular facts in each case.

Section 201 of the Act does require the Commission to find that two conditions have been satisfied before an affirmative determination can be made. First, the Commission must determine that an industry is being or is likely to be injured. This determination is based on certain economic indicators -- consumption, production, capacity changes and utilization, shipments, inventory levels, employment, and profits. Second, the Commission must determine that the injury is "by reason of" the less than fair value imports. Such a finding is based upon an analysis of such factors as market penetration by these imports, lost sales and price depression or suppression

of the impacted competitive products. As for likelihood of injury, foreign capacity to produce for export is also considered. However, the usefulness of each of these indicators varies widely on a case-by-case basis.

Petitioners have asked the Commission to take special note of the effect of less than fair value imports on price through their concentration in the northeast market. However, the domestic industry has not shown that the northeast market, which is less than one-fifth of the national, exerts any special weight in determining prices for this product.

In examining this case, major problem areas emerged in evaluating the data available to the Commission. First, capacity figures for the industry, which have been essentially constant between 1974-1978, have been distorted by the inclusion of a major duPont chemical complex which was completed in 1973, but which produced insignificant quantities through 1974. By 1976 this situation had changed, and in 1978 duPont production was substantial, though solely for internal use.

Second, for related reasons, inventory data should also be read with caution. Diamond Shamrock Corp., one of duPont's major suppliers prior to 1976, anticipated that duPont would have difficulties in bringing its new facility on line and accumulated large inventories in expectation of continued sales to duPont. The former supplier was left with huge inventories since duPont's plant functioned "like a Swiss watch," according to Diamond's own testimony.

Third, a problem exists in the setting of allocation of costs and profits because perchloroethylene is nearly always produced with coproducts in a largely-common facility. Currently, perchloroethylene is manufactured

in the United States by two processes: one utilizes chlorine and ethylene dichloride as raw materials to yield both perchloroethylene and trichloroethylene; the other utilizes chlorine and any one of a number of hydrocarbons to yield perchloroethylene and carbon tetrachloride. In fact, one of the producers, Ethyl Corporation, acknowledged in its Form 10-K Annual Report to the Securities and Exchange Commission for the year ending December 31, 1977, that ". . . it is not practicable in management's judgment to make accurate allocation within the chemicals segment to determine the relative contribution to the Company's operating profits by classes of similar chemical products."

Fourth, radical changes in product mix between 1974 and 1978, due to recent environmental and safety regulations on the use of coproducts, have changed the percentage of plant costs attributed to perchloroethylene production. The proportions of the yields of perchloroethylene and its coproducts are variable within wide ranges in most plants. With the exception of one manufacturer, the cost is low for switching common facility capacity from one coproduct to another as market conditions change. Bearing in mind these four considerations for evaluating the available data, we now turn our attention to the traditional indices of injury.

Data gathered by the staff show capacity utilization declining from 60 percent in the boom year of 1974 to an average of 54.5 percent during 1975-77 before rebounding to 58 percent in 1978. However, these relatively stable figures mask two important phenomena. First, excluding

duPont, whose facility was not fully on line until 1978, one finds for the market-oriented producers a drop in capacity utilization from 67.8 percent in 1974 to 43.2 percent in 1977 and a recovery to 56.3 percent in 1978. The injury appears greater, but the source is now clear -- the transition between 1974 and 1976 of duPont from large customer to large producer for internal consumption. Second, the generally low level of capacity utilization for the industry reflects the fact that the data for all years is calculated using a capacity based on the average product mix during 1977 and 1978. Commission staff has ascertained that while 50 to 60 percent of the product mix was accounted for by perchloroethylene in 1978, only 35 to 40 percent was in 1974. Adjusting for this shift would raise effective capacity utilization for perchloroethylene in earlier years. This would indicate a decline in utilization from 1974 to 1978. Rather than representing injury, however, this decline would merely denote the switching of facility capacity from coproducts to perchloroethylene.

U.S. production declined from a peak of 736 million pounds (1974) to an average of 672 million (1975-77) before recovering to 716 million pounds (1978). Domestic consumption closely follows this pattern. Exports from the United States, which have substantially exceeded imports from all sources in three of the five years, 1974-78, have shown healthy, if irregular, growth. By 1978, exports measured 59 million pounds against imports of only 23 million pounds from Belgium, France, and Italy, and at least one U.S. producer has even succeeded in expanding its market in the European Community.

Employment figures have been relatively stable over the fiveyear period, reaching their lowest level in 1978, the best year of production. However, in the chemical industry, employment is not a very sensitive indicator of economic activity because even in slow periods most employees are retained to operate the facilities with steam instead of chemical inputs.

Inventories show an increase from levels of the exceptional boom year 1974 before declining in 1978. However, once we exclude inventories of Diamond Shamrock, which mistakenly relied on the continuation of duPont's presence in the market as a large customer, inventories generally constitute less than two months of shipments. This is within the normal range.

The financial performance of U.S. producers on their perchloroethylene operations does suggest injury. From a 1974 level of \$22 million, net operating profits moved steadily downward to a \$15 million loss in 1978. Because profits are a residual between sales revenues and costs, it is important to take note of the special way in which the technology of perchloroethylene production has affected cost accounting.

Production costs are allocated among perchloroethylene and its coproducts on the basis of their proportions in the final product of the facility in that year. Declining production of coproducts (not part of the industry for purposes of this proceeding) has increased the share of these costs borne by perchloroethylene. Data developed by the Commission staff indicates that between 1974 and 1978 the share of perchloroethylene

in relation to its coproducts grew at a minimum of 39 percent and possibly as much as 50 percent. Meanwhile, factory costs as a percentage of total perchloroethylene costs of production have grown in the period from 25 percent to 35 percent of total costs. This results from both rising energy costs and allocating facility costs more heavily to perchloroethylene than to its coproducts. The factory costs transferred to perchloroethylene may account for as much as one-fifth of the decline in profits over the five-year period. This cost increase does not represent a true injury to the perchloroethylene industry. It would be more appropriately considered as factory costs of coproducts now borne by perchloroethylene. Had the coproducts been produced in a truly separate facility (which would make the accounting issue clearer but is technically impossible), it would have been impermissible to assign to perchloroethylene, for example, the costs of a carbon tetrachloride plant idled due to environmental regulation.

In summary, economic indicators such as producers' shipments, employment, capacity utilization, and inventories are neutral or favorable. Increasing costs attributed to perchloroethylene production may in good measure be due to a decline in the market for the coproducts which originally bore these costs. Further, as discussed more fully below, prices dropped considerably during the period. Squeezed domestically on both the price and cost sides, profits have fallen. The overall decline has been so significant that I find the perchloroethylene industry to be in a state of injury.

# <u>No Injury By Reason Of Less</u> Than Fair Value Imports

As previously explained, the Commission, in evaluating whether the injury has been by reason of less than fair value imports, traditionally considers evidence of lost sales, import penetration, and price depression or suppression.

In this case the Commission staff has found lost sales to imports of perchloroethylene from Belgium, France, and Italy. During the two and one-half year period ending in mid-1978, these amounted to about 3 percent of domestic consumption. However, half of these imports took place in 1976, before any finding of less than fair value sales. Moreover, between 1974 and 1978, the market share and sales value of less than fair value imports fell while the U.S. sales volume rose. Therefore, it appears that importers have also lost sales to domestic producers.

Price depression is a fact in the perchloroethylene market. However, it results from general domestic oversupply, not by reason of less than fair value imports. The share of the three nations' imports in domestic consumption fell moderately from 6.7 percent (1976) to 6.3 percent (1977) and then precipitously to 3.2 percent (1978). Yet, average unit selling price for domestic sales fell continuously and sharply from 14.0 cents/pound (1976) to 11.9 cents/pound (1977), to 9.4 cents/pound (1978) in the year of lowest import penetration since 1974. Responsibility for price depression must be laid at the feet of the would-be duPont supplier that accumulated huge inventories in 1975-76, held them in 1977, and then sold off much of them in 1978. At their peak, the overhanging supply on the market from this domestic source alone dwarfed the size of total imports from Belgium, France, and Italy.

Thus, we have a case where, in the face of recently expanding consumption, lost sales are accompanied by a sharp decline in the market share of the imports in question and a deepening price depression due to domestic factors. In such a case, I believe that injury does not exist by reason of less than fair value imports.

Unable to find injury by reason of less than fair value imports from Belgium, France, and Italy, I find no likelihood of future injury because the imports have a small and declining market share and there is no evidence of substantial unused capacity in those countries.

### INFORMATION OBTAINED IN THE INVESTIGATION

#### Summary

On February 8, 1979, the United States International Trade Commission instituted antidumping investigations Nos. AA1921-194, 195, and 196 on perchloroethylene--dutiable under item 429.34 of the TSUS--after receiving advice from the Department of the Treasury on January 30, 1979, that perchloroethylene from Belgium, France, and Italy is being, or is likely to be, sold in the United States at less than fair value (LTFV).

Treasury examined 100 percent of the sales from Belgium between February 1, 1978 and July 31, 1978, 90 percent of the sales from France between February 1, 1978, and July 31, 1978, and 100 percent of the sales from Italy between January 1, 1977, and July 1, 1978, finding LTFV margins on 100 percent of the sales examined for all three countries. The margins ranged from 59.5 to 60.6 percent of the home-market price for Belgium, from 23.2 to 36.2 percent of the home-market price for France, and from 13.0 to 35.0 percent of the home market price for Italy. The weighted average margins for these countries were 60.0 percent, 32.4 percent, and 23.5 percent, respectively.

Treasury instituted its investigations after receiving, on June 16, 1978, a complaint filed on behalf of 5 major chemical producers. On July 19, 1978, however, Treasury advised the Commission that there was substantial doubt that an industry in the United States was being or was likely to be injured by alleged LTFV imports of perchloroethylene from the countries in question. The Commission acted on this advice by conducting three 30-day inquiries on perchloroethylene from Belgium, France, and Italy (inquiries Nos. AA1921-Inq.-14, 15, and 16) in July and August 1978. Consequent to these inquiries, the Commission advised Treasury that it should continue its antidumping investigations (USITC Pub. 904, August 1978).

Perchloroethylene is a clear, heavy (1.6 times heavier than water), nonflammable liquid used primarily as a drycleaning and industrial solvent and as an intermediate in the synthesis of other chemicals. Drycleaning consumes more than 75 percent of U.S. perchloroethylene production and imports.

At least seven firms currently produce perchloroethylene within the United States at 10 plant sites, most of which are in Texas and Louisiana. Two firms--Dow Chemical U.S.A. and PPG Industries, Inc.--together account for nearly \* \* of U.S. perchloroethylene production and capacity and, like most other U.S. producers, are large, diversified, multinational corporations. One small producer ceased production in March 1978.

There were approximately 15 importers of perchloroethylene in 1978, located primarily in New York. Of these, one firm--Rhone-Poulenc, Inc.--accounts for \* \* \*; two firms--Thorson Chemical Corp. and Steuber Co., Inc.--account for \* \* \*; and eight firms, including Thorson Chemical Corp., Trans Chemic Industries, Inc., and Montedison (U.S.A.), Inc., account for \* \* \*. The vast majority of perchloroethylene imported into the United States is produced in the three countries under consideration and in Canada.

Data gathered by the Commission indicate downward trends in capacity utilization, in shipments to the northeast market, and in U.S. producers' profitability, while upward trends are evident in exports, employment, and in the ratio of inventories to sales. Capacity utilization fell from 60 percent in 1974 to 54 percent in 1977, before recovering somewhat to 58 percent in 1978. U.S. producers' net operating profits on their perchloroethylene operations deteriorated rapidly from more than \$22 million in 1974 to a net loss of nearly \$15 million in 1978, and shipments of drycleaning grade perchloroethylene to the northeast market declined from 119 million pounds to 77 million pounds in the same period. Exports, on the other hand, more than doubled between 1974 and 1978, while the ratio of inventories to shipments increased from 10.5 percent to 17.4 percent. Although the average number of production and related workers producing perchloroethylene fluctuated by less than 4 percent throughout the period under investigation, the average number of all production and related workers in establishments producing perchloroethylene rose from about 2,700 to nearly 3,500, or by 28 percent.

As a share of total consumption in the United States, imports of perchloroethylene from Belgium, France, and Italy increased from 2.1 percent in 1974 to 6.7 percent in 1976, and then decreased to 3.2 percent in 1978. With respect to consumption of drycleaning grade perchloroethylene in the northeastern region of the United States, imports from these countries increased from 11.4 percent in 1974 to 39.5 percent in 1976, and then fell to 23.1 percent in 1978.

Pricing data gathered by the Commission indicate that the manufacturers' price for perchloroethylene declined from about 15 cents per pound in early 1976 to less than 9 cents per pound in mid-1978, and that in most instances the price for imported perchloroethylene was lower than that for U.S.-produced perchloroethylene by 0.5 to 1.5 cents per pound. In all instances the degree of underselling was more than accounted for by the minimum LTFV margin. The average price per pound of perchloroethylene shipped by U.S. producers declined despite substantial increases in average unit production costs.

The Commission confirmed several instances of sales lost by the domestic producers in the northeast market. Although all distributors indicated that price was their primary reason for rejecting U.S.-produced perchloroethylene, many also stated that the dollar's decline in value relative to European currencies during the last 6 to 8 months had absorbed the price differential between imported and U.S.-produced perchloroethylene and that they were thus returning to domestic suppliers.

## Introduction

On January 30, 1979, the United States International Trade Commission received advice from the Department of the Treasury that perchloroethylene from Belgium, France, and Italy is being, or is likely to be, sold in the United States at less than fair value (LTFV) within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)). 1/ Accordingly, on February 8, 1979, the Commission instituted investigations Nos. AA1921-194 (perchloroethylene from Belgium), AA1921-195 (perochloroethylene from France), and AA1921-196 (perchloroethylene from Italy) under section 201(a) of said act, to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States. By statute, the Commission must render its determinations within 3 months of its receipt of advice from Treasury--in this case by April 30, 1979.

In connection with the investigations, a public hearing was held in Washington, D.C., on March 13, 1979. Notice of the institution of the investigations and the public hearing was given by posting copies of the notice at the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and at the Commission's office in New York City, and by publishing the notice in the <u>Federal Register</u> of February 20, 1979 (44 F.R. 10442). 2/

The Treasury Department instituted its investigations into the fact or likelihood of LTFV sales after receiving a properly filed complaint on June 16, 1978, from counsel acting on behalf of PPG Industries, Inc. (PPG), Pittsburgh, Pa.; Stauffer Chemical Co. (Stauffer), Westport, Conn.; Diamond Shamrock Corp. (Diamond), Cleveland, Ohio; Vulcan Materials Co. (Vulcan), Birmingham, Ala.; and Dow Chemical U.S.A. (Dow), Midland, Mich. During the course of its preliminary investigations, however, Treasury concluded that there was substantial doubt that an industry in the United States was being or was likely to be injured by alleged LTFV imports of perchloroethylene from Belgium, France, and Italy and transmitted this advice to the Commission on July 19, 1978, pursuant to section 201(c)(2) of the Antidumping Act, as amended. Accordingly, on July 24, 1978, the Commission instituted inquiries Nos. AA1921-Inq.-14, 15, and 16 concerning perchloroethylene from Belgium, France, and Italy, respectively, and on August 18, 1978, by a vote of 3 to 2, informed Treasury that there was a reasonable indication that an industry in the United States was being or was likely to be injured by reason of alleged LTFV imports of perchloroethylene from the countries in question. Treasury. consequently, continued its investigations. Treasury's withholding of appraisement notices and its determinations of sales at LTFV were published in the Federal Register of February 2, 1979 (44 F.R. 6821).

1/ Copies of Treasury's letters to the Commission concerning LTFV sales of perchloroethylene from Belgium, France, and Italy are presented in app. A.

<sup>2/</sup>A copy of the Commission's notice of investigation and hearing is presented in app. B.

#### The Product

#### Description and uses

Perchloroethylene, part of a group of chemicals known as chlorinated solvents, is a clear, heavy (1.6 times heavier than water), nonflammable liquid used primarily as a drycleaning and industrial solvent and as an intermediate in the synthesis of other chemicals. Drycleaning consumes more than 75 percent of U.S. perchloroethylene production and imports. Although the trend to wash-and-wear clothing has had an adverse effect on the demand for perchloroethylene in recent years, it has been partially offset by coinoperated drycleaning establishments and an increasing market for the drycleaning of industrial uniforms and wipe-rags. Because coin-operated machines have less efficient solvent (i.e., perchloroethylene) recovery systems than larger units in professional establishments, they require more perchloroethylene per pound of textiles cleaned.

Industrial cleaning of machinery and metal parts accounts for about 10 percent of U.S. perchloroethylene consumption. By immersing metal parts in a bath of perchloroethylene or by suspending them in a vapor of boiling perchloroethylene, oils and greases may be dissolved and washed away. Perchloroethylene's relatively high boiling point makes it particularly well suited for the removal of heavy greases. For most other industrial cleaning applications, trichloroethylene is preferred over perchloroethylene because it is cheaper and because it leaves the cleaned metal cooler so that it can be handled sooner.

Almost 10 percent of the perchloroethylene manufactured and imported into the United States is consumed in the synthesis of other chemicals, particularly chlorofluorocarbons, which are in turn used as refrigerants and solvents. One of the more promising developments in the demand for perchloroethylene is its use in textile finishing, where it is increasingly being used in place of water in scouring, dyeing, and bleaching fabrics. Industry sources, however, do not expect this use of perchloroethylene to ever account for more than 5 percent of total perchloroethylene consumption.

Perchloroethylene is manufactured in a variety of grades, depending upon the use for which it is intended. As initially manufactured, it is quite pure and is used in this grade primarily in the synthesis of other chemicals. For most of perchloroethylene's other uses, stabilizing agents are added to counteract its tendency to decompose. The quantity and type of stabilizing agents added to perchloroethylene determine its grade. Generally, producers manufacture a "drycleaning grade" for the drycleaning industry, an "industrial grade" for metal-cleaning purposes, and a "dual-purpose grade" that serves the needs of both types of users, although even drycleaning grade and industrial grade are somewhat interchangeable. Frequently, small amounts of detergents, fabric softeners, fabric conditioners, and antistatic agents are also added to perchloroethylene used in drycleaning.

Currently, there are two major processes for the manufacture of perchloroethylene in the United States: one utilizes chlorine and ethylene

dichloride as raw materials and yields both perchloroethylene and trichloroethylene; the other utilizes chlorine and any one of a number of hydrocarbons and yields perchloroethylene and carbon tetrachloride. In most plants these co-products can be produced in widely varying proportions, although a certain percentage of the plant's facilities may be designed for one or the other chemical exclusively. Converting a perchloroethylene plant to the manufacture of other chemicals would require a capital investment on the order of several million dollars. In keeping with federal health regulations, sales and production of carbon tetrachloride and trichloroethylene have greatly diminished in recent years, leaving perchloroethylene to assume the dominant role in the utilization of plant capacity. U.S. producers have indicated, however, that they have not produced more perchloroethylene than would otherwise be necessary in order to maintain a reasonable level of capacity utilization.

#### U.S. tariff treatment

Perchloroethylene is dutiable under the provisions of item 429.34 of the Tariff Schedules of the United States (TSUS) at a most-favored-nation rate of 4.5 percent ad valorem. This rate, which has been in effect since January 1, 1969, represents the second of five planned reductions negotiated under the Kennedy round of the General Agreement on Tariffs and Trade (GATT). The statutory rate of duty is 25 percent ad valorem.

Duty reductions planned for perchloroethylene in 1970 (to 4.0 percent ad valorem), 1971 (to 3.5 percent ad valorem), and 1972 (to 3.0 percent ad valorem) were contingent upon certain duty reductions in the tariff schedules of the European Community (EC). Because the required reductions have not yet been made effective by the EC, the U.S. duty rate has remained at the 1969 level. Imports of perchloroethylene are eligible for duty-free treatment under the Generalized System of Preferences.

#### Nature and Extent of Alleged LTFV Sales

Treasury's LTFV determination is based on an examination of perchloroethylene from Belgium and France during the period February 1, 1978, through July 31, 1978, and from Italy during the period January 1, 1977, through July 31, 1978.

For the purpose of determining whether perchloroethylene from Belgium was being, or was likely to be, sold at less than fair value, Treasury considered purchase price and home-market price to be the proper bases of comparison. Purchase price was used since all export sales were made to an unrelated purchaser in the United States through a buying agent in Germany, and homemarket price was used since such or similar merchandise was sold in the market in sufficient quantities to provide a basis for comparison. Using the above criteria, Treasury made comparisons on 100 percent of the perchloroethylene sales to the United States (\* \* \* metric tons, for which the purchase price totaled \* \* \*) during the representative period. Margins ranged from approximately 147 to 154 percent of the purchase price on 100 percent of the sales compared, with a weighted average margin of 150 percent. In relation to the home-market price, as calculated by the U.S. International Trade Commission, the margins ranged from 59.5 to 60.6 percent, with a weighted average margin of 60.0 percent.

For the purpose of determining LTFV sales from France, Treasury compared the exporter's sales price with the home-market price. The exporter's sales price was used because all export sales to the United States were made to related customers which resold the merchandise subsequent to its exportation. Using the above criteria, Treasury made comparisons on 90 percent of perchloroethylene sales to the United States (\* \* \* metric tons, for which the exporter's sales price totaled \* \* \*) during the representative period. Margins ranged from 30.23 to 56.78 percent of the exporter's sales price on 100 percent of the sales compared, with a weighted average margin of 47.82 percent. Compared with the home-market price, the margins ranged from 23.2 to 36.2 percent, with a weighted average margin of 32.4 percent.

For Italy, Treasury compared the purchase price with the home-market price. Because all exports to the United States were purchased prior to the time of exportation by the person for whose account the merchandise was imported, Treasury considered purchase price the most appropriate basis of comparison. Accordingly, Treasury made comparisons on 100 percent of perchloroethylene sales to the United States (\* \* \* metric tons, for which the purchase price totaled \* \* \*) during the representative period, finding margins ranging from 35 to 40 percent of the purchase price on 100 percent of sales of one Italian producer (Rumianca S.p.A.) and margins ranging from 15 to 53.8 percent on 100 percent of sales from the other (Montedison S.p.A.). The weighted average margin on all sales from Italy was 30.8 percent. With respect to the home-market price, the margins ranged from 25.9 to 28.6 percent for Rumianca and from 13.0 to 35.0 percent for Montedison, with a weighted average margin for all imports from Italy of 23.5 percent.

#### The Domestic Industry

At least seven firms currently produce perchloroethylene within the United States. Production is centered in 10 plants or manufacturing facilities, all but 3 of which are located in Texas and Louisiana, a consequence of relatively plentiful raw materials (hydrocarbons and salt) and energy sources in this region. Two firms--Dow Chemical U.S.A. and PPG Industries, Inc.-together account for about \* \* \* percent of U.S. perchloroethylene production and capacity. Most of the U.S. producers, including the above two firms, are large, diversified, multinational corporations, and all manufacture products other than perchloroethylene. Several other types of chlorinated solvents are manufactured at the plants where perchloroethylene is produced. With the exception of one small U.S. producer--Hooker Chemical Co.--which ceased production in March 1978, no firm has ceased production of perchloroethylene since 1972, and there are no known plans to increase capacity or upgrade existing capacity. Hooker reports that its small capacity did not allow it to compete with the relatively lower production costs of the larger producers. After ceasing production of perchloroethylene in 1972, E. I. du Pont de Nemours & Co., Inc. (Du Pont), resumed production in 1973 following its

completion of a large chemical manufacturing complex in Corpus Christi, Tex. Those firms that have produced perchloroethylene within the past 5 years, and their respective capacities, production, shares of total U.S. capacity, and shares of total U.S. production for 1978 are shown in table 1.

There were approximately 15 importers of perchloroethylene in 1978, located primarily in New York. Of these, one firm--Rhone-Poulenc, Inc.-accounts for \* \* \*; two firms--Thorson Chemical Corp. and Steuber Co., Inc.-account for \* \* \*; and eight firms, including Thorson Chemical Corp., Trans Chemic Industries, Inc., and Montedison (U.S.A.), Inc., account for \* \* \*. The five importers identified above maintain storage facilities for perchloroethylene at Bayonne, N.J., where virtually all of the perchloroethylene enters into the United States from the three countries under investigation. Steuber also has storage facilities at Carteret, N.J., and Texas City, Tex., the latter of which accounted for \* \* \*. All the perchloroethylene imported by these five major importers is drycleaning grade. During the period the investigations cover, Dow and PPG imported small amounts of perchloroethylene from Canada and Japan, respectively.

After producing or importing perchloroethylene, a firm may consume the product itself in the synthesis of other chemicals, sell it to another producer or importer, sell it to an end user, or sell it to a distributor. U.S. producers consume approximately 20 percent of all the perchloroethylene they produce in the United States. Du Pont, which consumes all of the perchloroethylene it manufactures, accounts for most of what the producers By far the greatest amount of perchloroethylene, whether produced consume. domestically or imported, is sold through distributors that specialize in supplying the needs of specific industries. Perchloroethylene for use in the drycleaning industry is sold through several hundred distributors which sell cleaning and packaging supplies to commercial drycleaners. Similarly, perchloroethylene for use in metal-cleaning applications is sold through a large number of distributors which sell various cleaning products to the automotive, electronic, and other metal-fabricating industries. By purchasing dual-purpose grade exclusively, many distributors are able to serve both the drycleaning and metal-cleaning industries with the same product. Perchloroethylene for use in the manufacture of other chemicals, when not consumed internally, is sold directly to the end users.

U.S. producers and users of perchloroethylene report that their activities are severely constrained by a wide variety of Government controls and regulations, including environmental quality standards (such as air emissions), health and safe work standards, price controls, and resource conservation. The industry expects that one of its primary challenges in the future, in addition to competition from abroad, will be maintaining reasonable profitability under existing and anticipated Governmental controls. Concurrently, industry sources expect rapidly increasing raw material and energy costs and a growth rate of no more than 1 percent per year in U.S. consumption for the next several years.

Firm and s plant locations s	Annual capacity <u>1</u> /3	Share of total capacity	Production	Share of total production	1978 produc- tion as a share of capacity
:	Million pounds	Percent	: <u>Million</u> : <u>pounds</u> :	: <u>Percent</u> : : : :	Percent
Dow Chemical U.S.A.,:	:	:	:	: :	
Freeport, Tex., :		8	:	: :	
Pittsburg, Ca., : Plaquemine, La:	***	***	• ***	· · · ·	***
PPG Industries, :			:	: :	
Inc., Lake Charles: La:	***	***	: ***	: :	***
Vulcan Materials :	:	;	:	: :	
Co., Geismar, La.,: Wichita, Kan:		***	: ***	: : : *** :	***
Diamond Shamrock :	:		:	: :	
Corp., Deer Park, : Tex:		***	: ***	: : : *** :	***
Du Pont Inc., Corpus: Christi, Tex:		***	: ***	: : : *** :	***
Stauffer Chemical : Co., Louisville, :	:		:	: :	
Ку:	***	***	***	: *** :	***
Ethyl Corp., Baton : Rouge, La:	***	***	:	: : · *** ·	***
Hooker Chemical Co.,:			• • • • • •	• • • •	
Tacoma, Wash., :	:		:	: :	
Taft, La. <u>3</u> /:	***	***	•	: *** :	***
Total:	1,233 :	100.0	: 717	: 100.0 :	64.6

Table 1.--Perchloroethylene: U.S. producers' capacity, production, share of total capacity, share of total production, and production as a share of capacity, by firms, 1978

1/ Based on average product mix during 1977 and 1978, allowance for anticipated maintenance and downtime, 3 shifts per day, 7 days per week.

:

2/ Estimate.

 $\overline{3}$ / Hooker ceased production in 1978.

:

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

:

:

:

Imports of perchloroethylene from Belgium, France, and Italy have a disproportionate impact in the northeastern region of the United States. In 1977 and 1978, approximately 207 million pounds of drycleaning grade perchloroethylene from all sources were consumed in the northeast market, consisting mainly of New England and the States of New York, New Jersey, and Pennsylvania; of that amount 31 percent were imports from Belgium, France, and Italy. These countries account for virtually all imports of perchloroethylene entering through the northeast market, and nearly all of the perchloroethylene that enters this market is consumed there. The ratio of Belgian, French, and Italian imports to consumption for the United States as a whole during this 2-year period was about 5 percent.

Table 2 shows U.S. producers' shipments, exports, imports, and apparent consumption of all grades of perchloroethylene for recent periods. Similar data for drycleaning grade perchloroethylene shipped into the northeast market are shown in table 3. (A complete categorization of U.S. producers' shipments, imports, and consumption of perchloroethylene by grades and by markets, 1974-78, is shown in tables D-1 through D-4, app. D.)

#### Foreign Producers

The vast majority of perchloroethylene imported into the United States is produced in Canada, Belgium, France, and Italy. In 1977, these countries accounted for 32 percent, 23 percent, 22 percent, and 24 percent, respectively, of a total of about 60 million pounds of perchloroethylene imports. Other significant sources of perchloroethylene in the past 5 years have included West Germany and Japan. Table 4 shows U.S. imports of perchloroethylene, by sources, for 1974-78.

Four firms account for virtually all perchloroethylene imported from Belgium, France, and Italy: Solvay et Cie, Brussels; Rhone-Poulenc Industries, Paris; and Rumianca S.p.A. and Montedison S.p.A., both in Milan, Italy. Solvay et Cie's annual perchloroethylene capacity is currently \* \* \* pounds, with a planned increase to \* \* \* pounds by \* \* \*. Between 1974 and 1978, the firm's capacity utilization fell from \* \* \* percent to \* \* \* percent, and about \* \* of its annual production was consumed in Belgium. As a share of its production, Solvay et Cie's exports to the United States increased from \* \* percent in 1974 to \* \* \* percent in 1977, then fell to \* \* \* percent in 1978. Rhone-Poulenc maintained an annual perchloroethylene capacity of more than \* \* \* pounds, while its capacity utilization dropped from \* \* \* to \* \* \* percent in the period under investigation. As a share of its production, Rhone-Poulenc's exports to the United States averaged \* \* \* percent between 1974 and 1977 and fell to \* \* \* percent in 1978. The production and capacities of Rumianca and Montedison are not available. Table 2.--Perchloroethylene: U.S. producers' shipments, imports, exports of domestic merchandise, and apparent consumption, 1974-78

		Total	imports			ercent		3,3	6.9	9.2	6.9	5.0		1
••	••	:Imports:	all :	: other :	· sources:	Percent:Percent:		: 1.1 :	. 2.9 .	: 2.5 :	: 2.9 :	: 1.9 :		OM OTTICIS
mports	ption		:Subtotal:			:Percent		: 2.1	: 3.3	: 6.7	: 6.3	3.2		on and Ir
Ratio of imports	to consumption	<b>W</b> O.		e:Italy	•	t:Percent		- : 0	۱ ۰	1: 1.7	0: 2.2	7 : .7	:	COUNTSST
8		Imports from	••	:Belgum: France : Italy:		:Percent:Percent:Percent:Percent	••	0.2 : 2.	.1: 2.	.9: 3.	2.1: 2.	.8: 1.	response to questionnaires of the U.S. International Trade Commission 25 6 feed of the U.S. International Trade Commission 25 6 6 7 7 7	DINGT TEAM
••••		:Apparent: : con- :	sumption:	:Belg	ion :	pounds :Perc	••		3.3 : 1	673.1 : 1		731.4 :	: Internati	* "
••••	•	:Apparer Exports: con-	duns:	•••••	:Million:Million:Million:Million	nod : spunod:	••	28.8 : 71		••	••	59.2 : 73	the U.S.	
•• •	•	: : Ex]	Total :	• ••	illion:Mi		••	••	37.5 : 5		••	36.9 : 5	: aires of	
		: from :	all : ]	sources:	Million:Mi	: bounds : bounds	••	••	17.7 :	16.8 :	19.1 :	13.8 :	: questionr	
mports		••••	:Subtotal:	•••	llion	: spunod	••	15.4 :	19.8:	45.4 :	40.8 :	23.1 :	sponse to	•
Impo			>		:Million:Mi	: spunod:				: 11.5 :	. 14-1 .			
		[mports from	: m: France		n:Million	spunod :	•	14.1	12.9	20.9		· 12.1	ata submit	A thousand
• ••			ship- : : : : : : ments :Belgium: France : Ital	••	:Million:Million:Million	punod: spunod : spunod : spunod	• • •	4 : T.S	•	L : 13.0		•••	Source: Compiled from data submitted in	IL C Dan
: U.S.	-010	: ducers'	: ship- : ments	••	:Milli	punod	• •						Compil.	statistics of the II & Denortment of Communi-
		Year					1 0 7/-	1975	C/CT	1077	1 0 78		Source:	statistic

northeast	
Table 3Drycleaning grade percholoroethylene: U.S. producers' shipments to the northeast	NE/ MERKET, NE market's imports, and apparent consumption, 1974-78

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce.

Source	1974	:	1975	:	1976	:	1977	:	1978
	:	(	Quantity	(	millio	n p	oounds)		
	:	:		:		:		:	
Belgium	: 1.3	:	6.9	:	13.0	:	13.6	:	5.6
France	: 14.1	:	12.9	:	20.9	:	13.1	:	12.7
Italy		:	-	:	11.5	:	14.1	:	4.8
Canada	: 2.0	:	-	:	6.2	:	19.1	:	10.0
Other	: 6.2	:	17.7	:	10.6	:	-	:	3.8
Total	: 23.6	:	37.5	:	62.2	:	59.9	:	36.9
	:	I	Percenta	ge	distr	ibu	ition,		
	:		Ъ	у	quanti	ty			
	:	:		:		:		:	
Belgium		:	18.3	:	20.9	:	22.7	:	15.2
France	• • • • • •	:	34.4	:	33.5	:	21.8	:	34.4
Italy	•	:	-	:	18.5	:	23.6	:	13.0
Canada		:		:	10.0	:	31.9	:	27.1
Other	- 2014		47.0		17.1		.0	:	10.3
Total	: 100.0	:	100.0	:	100.0	:	100.0	:	100.0
	:	V	Value (1	,0	00 dol	lar	s) <u>1</u> /		
	:	:		:		:		:	
Belgium	: 98	:	681	:	1,331	:	1,446	:	424
France	: 1,447	:	1,421	:	2,271		1,295		945
Italy	: -	:	-	:	1,278		1,434		373
Canada	: 178	:	-	:	<b>Ý994</b>		2,982		1,448
Other	: 531	:	1,973	:	1,104	:	4	:	279
Total	: 2,254	:	4,075		6,978		7,161	:	3,469
	:		ercenta		distr	ibu	tion,		
	:		1	bу	value		•		
	:	:		:		:		:	
Belgium		:	16.7	:	19.1	:	20.2	:	12.2
Trance		:	34.9	:	32.5	:	18.1	:	27.2
Italy	•	:	-	:	18.3		20.0	:	10.8
Canada	: 7.9	:	-	:	14.3	:	41.6	:	41.8
Other	: 23.6	:	48.4	:	15.8	:	.1	:	8.0
Total	: 100.0	:	100.0	:	100.0	:	100.0	:	100.0
	:	:		:		:		:	

Table 4.--Perchloroethylene: Imports, by sources, 1974-78

See footnotes at end of table.

Source :	1974	:	1975	:	1976	:	1977	:	1978
:		Uni	t valu	e (	cents	per	pound)	)	
		:		:		:		:	
Belgium;	7.6	5:	9.9	:	10.2	:	10.6	:	7.6
France:	10.3	3:	11.0	:	10.9	:	9.9	:	7.5
Italy:	-	- :	-	:	11.1	:	10.2	:	7.7
Canada:	9.0	) :	-	:	15.9	:	15.6	:	14.5
Other:	8.5	5 :	11.2	:	10.4	:	21.0	:	7.2
Total:	9.6	5:	10.9	:	11.2	:	12.0	:	9.4
•		:		:		:		:	

Table 4.--Perchloroethylene: Imports, by sources, 1974-78--Continued

1/ Customs import value.

Source: Compiled from official statistics of the U.S. Department of Commerce.

## The Question of Injury or Likelihood Thereof

## Capacity utilization

Production, capacity, and capacity utilization for the domestic producers of perchloroethylene are shown in table 5. For the industry as a whole, capacity utilization fell from about 60 percent in 1974 to an average of 54.5 percent during 1975-77, before rebounding to 58 percent in 1978. The largest producers--Dow and PPG--follow the trend for the aggregate and are currently maintaining capacity utilization ratios of \* \* \* and \* \* \* percent, respectively. Du Pont and Vulcan show the greatest increases in capacity utilization during the period under investigation. As Du Pont has increased production at its new Corpus Christi plant to satisfy its internal consumption needs, its capacity utilization has increased from \* \* \* percent in 1974 (the year in which operations at the Corpus Christi facility began) to more than \* \* \* percent in 1978. The other producers, \* \* \*, show significant declines and have current utilization ratios of less than \* \* \* percent.

### U.S. producers' shipments and exports

U.S. producers' shipments of perchloroethylene were considerably lower in the years 1975-77 than in 1974 and 1978. From 722 million pounds in 1974, U.S. producers' shipments dropped to 620 million pounds in 1975, recovered somewhat to an average of 643 million pounds per year for the next 2 years, and then climbed to 754 million pounds in 1978 (table 2). U.S. producers' shipments of drycleaning grade perchloroethylene to the northeast market, on the other hand, declined in every year but one since 1974. Shipments for 1978, at 77 million pounds, are 17 percent higher than shipments for 1977, but are still more than 35 percent below the total for 1974 (119 million pounds) and 14 percent below the total for 1975 (90 million pounds) (table 3).

U.S. producers' annual exports of perchloroethylene have more than doubled since 1974. From 29 million pounds in 1974, exports increased to 54 million pounds the following year, then decreased somewhat in 1976 and 1977, before increasing to more than 59 million pounds in 1978 (table 2). As a percentage of U.S. producers' shipments, exports increased from 4 percent in 1974 to 8 percent in 1978.

#### U.S. employment

While the average number of all production and related workers in U.S. establishments producing perchloroethylene and other chlorinated solvents increased by 28 percent between 1974 and 1978, the average number of production and related workers producing perchloroethylene alone fluctuated by only 4 percent, i.e., between 453 (1977) and 437 (1978) workers. In most of the chemical industry, a decline in production does not ordinarily result in a decline in employment, since employees are usually retained to operate the production equipment with steam to keep it ready for use when the production of a chemical resumes. Basic changes in employment occur when new plants are opened or when old plants are closed or converted to new methods of producing the chemical. Employment data for the chlorinated solvent and perchloroethylene industries are shown in tables 6 and 7. Table 5.--Perchloroethylene: U.S. production, producers' capacity, and capacity utilization, by firms, 1974-78

		(In	m	illions of	P	ounds)				
Item and firm	:	1974	:	1975	:	1976	:	1977	:	1978
	:		:		:		:		:	
Production:	:		:		:		:		:	
Dow	:	***	:	***	:	***	:	***	:	***
PPG	:	***	:	***	:	***	:	***	:	***
Vulcan	:	***	:	***	:	***	:	***	:	***
Diamond	:	***	:	***	:	***	:	***	:	***
Stauffer	:	***	:	***	:	***	:	***	:	***
Ethy1	:	***	:	***	:	***	:	***	:	***
Hooker	:	***	:	***	:	***	:	***	:	***
Du Pont	:	***	:	***	:	***	:	***	:	***
Total	:	735,959	:	667,863	:	683,251	:	663,670	:	715,848
Capacity:	:		:	·	:	,	:		:	•
Dow	:	***	:	***	:	***	:	***	:	***
PPG	:	***	:	***	:	***	:	***	:	***
Vulcan	:	***	:	***	:	***	:	***	:	***
Diamond		***	:	***	:	***	:	***	:	***
Stauffer	:	***	:	***	:	***	:	***	:	***
Ethy1	:	***	:	***	:	***	:	***	:	***
Hooker	:	***	:	***	:	***	:	***	:	***
Du Pont	:	***	:	· ***	:	. ***	:	***	:	***
Total	:	1.233.000	:	1.233.000	:	1,233,000	:	1,233,000	:	1,233,000
Capacity	:	-,,	:	-,,	:	,,	:	, ,	:	
utilization:	:		:		:		:		:	
Dow	:	***	:	***	:	***	:	***	:	***
PPG	:	***	:	***	:	***	:	***	:	***
Vulcan		***	:	***	:	***	:	***	:	***
Diamond	:	***	:	***	:	***	:	***	:	***
Stauffer	:	***	:	***	:	***	:	***	:	***
Ethyl	:	***	:	***	:	***	:	***	:	***
Hooker		***	:	***	:	***	:	***	:	***
Du Pont		***	:	***	:	***	:	***	:	***
Total 2/		59.7	:	54.2	:	55.4	:	53.8	:	58.1
<u> </u>	•		:		:		:		:	

(In millions of pounds)

1/ Estimate.

 $\overline{2}$ / If Du Pont is excluded from the data, capacity utilization for the years 1974-78 are \* \* \*, \* \* \*, \* \* \*, \* \* \*, and \* \* \* percent, respectively.

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

Table 6.--Average number of employees in U.S. establishments producing perchloroethylene, total, and all production and related workers engaged in the manufacture of perchloroethylene, 1974-78

Item	1974	1975	1976	1977	1978
All employees 1/: All production and related workers 2/: Production and related workers pro- ducing perchloroethylene:	2,718	2,819	3,065		3,492

1/ Does not include Diamond, Stauffer, or Ethyl.

 $\overline{2}$ / Does not include Diamond or Ethyl.

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

Table 7.--Man-hours worked by production and related workers engaged in the manufacture of all chlorinated solvents and of perchloroethylene, in U.S. establishments producing perchloroethylene, 1974-78

(In thousands	ot hou	irs)			
Item	1974	1975	1976	1977	1978
:		:	:	:	;
Production and related workers pro- : ducing all chlorinated solvents <u>1</u> /:	2,882	: : 2,946	: : 2,876	: 2,999	3,061
Production and related workers pro- : ducing perchloroethylene 1/:	840	: : 819	: : 847	: 851 :	: 864
		:	:	:	<u> </u>

1/ Does not include Ethyl or Hooker.

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

## U.S. producers' inventories

Collectively, U.S. producers' inventories of perchloroethylene increased from 76 million pounds in 1974 to more than 157 million pounds in 1977; however, most of this increase is accounted for by Diamond (table 8). Having sold large quantities of perchloroethylene to Du Pont before 1976, Diamond accumulated large inventories in anticipation of production difficulties at Du Pont's new plant. If Diamond is excluded from the data, inventories increase from only \* \* \* million pounds to \* \* \* million pounds in the same period. Diamond affects the ratio of inventories to shipments for the U.S. producers similarly. The data show that while the average ratio of inventories to shipments between 1974 and 1977 for the other producers increased moderately from \* \* \* to \* \* \*, that for Diamond increased from \* \* \* to \* \* \*. All but one of the producers show a decline in their ratio of inventories to shipments in 1978 from those in 1977.

			I	)e	c. 31	-			
Item and firm	1974	:	1975	:	1976	:	1977		1978
:		:		:		:		:	
Inventories: :		:		:		:		:	
Dowmillion pounds:	***	:	***	:	***	:	***	:	***
PPGdo:		:	***	:	***	:	***	:	***
Vulcando:	***	:	***	:	***	:	***	:	***
Diamonddo:	***	:	***	:	***	:	***	:	***
Staufferdo:	***	:	***	:	***	:	***	:	***
Ethyldo:	***	:	***	:	***	:	***	:	***
Hookerdo:	***	:	***	:	***	:	***	•	***
Totaldo:	75.6	:	129.4	:	145.0	:	157.3	:	112.6
Total less Diamonddo:	***	:	***	:	***	:	***	:	***
Ratio of inventories to shipments :		:		:		:		•	
during the preceeding 12-month :		:		:		:		:	
period:		:		:		:		•	
Dowpercent:	***	:	***	:	***	•	***	•	***
PPGdo:		:	***	:	***	:	***	:	***
Vulcando:		:	***	•	***	•	***	•	***
Diamonddo		:	***	:	***	•	***	•	***
Staufferdo		:	***	:	***	:	***		***
Ethy1do:		:	***	:	***	•	***		***
Hookerdo:		:	***	:	***	•	***		***
Totaldo:		:	21.2	:	24.4	•	28.8	<u> </u>	17.4
Total less Diamonddo:			***		***		***		***
		:		:		•		•	

Table 8.-- Perchloroethylene: U.S. producers' inventories of U.S.-produced perchloroethylene, by firms, as of Dec. 31 of 1974-78

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

## Financial performance of U.S. producers

Selected financial data for U.S. producers of perchloroethylene on their U.S. chlorinated solvent operations and on their U.S. perchloroethylene operations are shown in tables 9 and 10. Although the data show that net sales for the reporting producers on their chlorinated solvent operations increased by 46 percent since 1974, their cost of goods sold (direct material, labor, and plant overhead) nearly doubled. Thus, net operating profits declined from \$113 million in 1974 to \$80 million in 1978. The industry's ratio of net operating profit to net sales declined similarly, from 42.6 to 22.4 percent.

The industry shows even less favorable results on its perchloroethylene operations. While the industry's cost of goods sold increased from \$40 million in 1974 to \* \* \* million in 1978, net sales declined from \$71 million to \* \* \* million in the same period. As a result, net operating profits declined from \$22 million to a net loss of nearly \$15 million. \* \* \*. Table 9.--Selected financial data for U.S. producers of perchloroethylene on their U.S. chlorinated solvent operations, by firms, 1974-78

Item and firm	1974	1975	1976	1977	1978
: Net sales: :	:				
Dow1,000 dollars:	***	***	***	***	***
PPGdo:		***	***	***	***
Vulcando:		***	***	***	; ***
Diamond:	***	***	***	: *** :	***
Staufferdo:	***	***	***	: *** ;	***
Totaldo:	309,928	326,550	389,182	: 410,058 :	: 456,979
Cost of goods sold: :	:	: :	:	: :	:
Dow1,000 dollars:	***				***
PPGdo:					***
Vulcando:		***			
Diamonddo:		***			***
Staufferdo:		***	***	***	***
Totaldo:	166,009	202,406	252,976	: 292,042	329,634
Gross profit or (loss): :		و ماد ماد ماد	***	***	***
Dow1,000 dollars: PPGdo:		***			***
Vulcando:	•				***
Diamonddo:		***		***	***
Staufferdo:		***	***	***	***
Totaldo:	The second se				
Administrative and selling :	145,519		. 130,200	• • • •	127,545
expenses: 1/					
Dow1,000 dollars:	***	***	***	***	***
PPGdo:		***	***	***	***
Diamonddo:		***	***	***	***
Staufferdo:		***	***	: *** ;	***
Totaldo:		18,752	: 19,832	: 23,129	23,449
Net operating profit (or :	, ;		; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	:	8
loss): 1/ :	:	: :	<b>:</b>	:	:
Dow1,000 dollars:	***	***	***	: *** ;	: ***
PPGdo:	***	***	***	***	***
Diamond:	***	***	***	: *** ;	***
Stauffer:	***	***		: ***	***
Total:	112,808	87,816	92,919	: 78,756	: 80,071
Ratio of net operating pro- :	:	: :	<b>;</b>	: :	<b>.</b> .
fit or (loss) to net :	:	: :	:	: :	:
sales: <u>1</u> / :	:	;	:	:	:
Dowpercent:			•	•	
PPGdo:			•	•	•
Diamond:				•	•
Stauffer:					
Totaldo:	42.6	32.7	29.5	: 23.7	22.4

1/ Data for Vulcan are not available.

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

Item and firm	1974	1975	1976	1977	1978
Net sales: :	:	:	1	:	:
Dow1,000 dollars:	***	***	***	***	***
PPGdo:	*** :	***	***	***	: ***
Vulcando:	***	***	***	***	***
Diamonddo:	*** :	***	***	***	: ***
Staufferdo:	*** :	***	***	: ***	***
Ethy1do:	*** :	***	***	: ***	: ***
Totaldo:	71,497 :	80,303 :	77,833	: 62,464	: ***
Cost of goods sold: :	:	:		:	•
Dow1,000 dollars:	*** :	***	***	: ***	: ***
PPGdo:	*** :	***	***	: ***	: ***
Vulcando:	*** :	***	***	: ***	: ***
Diamonddo:	*** :	***	***	: ***	: ***
Staufferdo:	*** :	***	***	: ***	: ***
Ethy1do:	*** :	***	***	: ***	: ***
Totaldo:	39,575 :	50,349	56,415	: 56,851	: ***
Gross profit or (loss): :	· · ·	, ,	, 	•	:
Dow1,000 dollars:	*** :	***	***	: ***	: ***
PPGdo:	*** :	***	***	: ***	: ***
Vulcando:	*** :	***	***	: ***	: ***
Diamond:	*** :	***	***	: ***	: ***
Staufferdo:	*** :	***	***	: ***	: ***
Ethy1do:	*** :	***	***	: ***	: ***
Totaldo:	31,922 :	29,953	21,418	: 5,613	: (9,958)
Administrative and selling :	:	:	:	:	:
expenses: :	:	:	:	:	:
Dow1,000 dollars:	*** :	***	***	: ***	•
PPGdo:	*** :	***	***	: ***	•
Diamond:	*** :	***	***	: ***	•
Staufferdo:	*** :	***	***	: ***	: ***
Ethy1do:	*** :	***	***	•	
Totaldo:	4,596 :	6,280	: 7,706	: 5,385	: 4,528
Net operating profit (or : loss): :	:	:		:	:
Dow 1,000 dollars:	*** :	***	***	: ***	: ***
PPGdo:	*** :	***	***	: ***	: ***
Diamonddo:	***	***	***	: ***	: ***
Staufferdo:	***	***	***	•	
Ethy1do:	*** :	***	***	: ***	: ***
Totaldo:	22,291 :	17,809	7,995	: (2,491)	: (14,830) :

,

Table 10.--Selected financial data for U.S. producers of perchloroethylene on their U.S. perchlorethylene operations, by firms, 1974-78

Item and firm	1974	:	1975	:	1976	:	1977	1978
:	•	:	August	:		:	:	
Ratio of net operating pro- :		:		:		:	:	
fit or (loss) to net :		:		:		:	:	
sales: :		:		:		:	:	
Dowpercent:	***	:	***	:	***	:	*** :	***
PPGdo:	***	:	***	:	***	:	*** :	***
Diamond:	***	:	***	:	***	:	*** :	***
Staufferdo:	***	:	***	:	***	:	*** :	***
Ethy1do:	***	:	***	:	***	:	*** :	***
Totaldo:	37.0	:	26.2	:	12.6	:	(4.9):	(30.7)
:		:		:		:	:	

Table 10.--Selected financial data for U.S. producers of perchloroethylene on their U.S. perchlorethylene operations, by firms, 1974-78--Continued

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

## U.S. consumption and market penetration of imports

From 1974 to 1975, apparent consumption of perchloroethylene in the United States dropped from 717 million pounds to 603 million pounds, then partially recovered to 673 million pounds in 1976 (table 2). In 1978, however, more than 731 million pounds of perchloroethylene were consumed, more than in any other year under investigation. As a percentage of consumption, imports of perchloroethylene from Belgium, France, and Italy increased from 2.1 percent in 1974 to 6.7 percent in 1976, but fell to 3.2 percent in 1978.

Unlike total U.S. consumption of perchloroethylene, the northeast's consumption of drycleaning grade perchloroethylene fell throughout the entire period under investigation (table 3). From 1974 to 1978, the consumption of drycleaning grade perchloroethylene in the northeast market fell from 135 million pounds to a little more than 100 million pounds, or by more than 25 percent. At the same time, the ratio of imports from Belgium, France, and Italy to consumption in this market increased from 11.4 percent in 1974 to 39.5 percent in 1976, but then fell to 23.1 percent in 1978. The data for the individual countries in question reflect the trends for the aggregate.

### Prices

Producers and importers were asked to report, on a bimonthly basis, prices and quantities of drycleaning grade perchloroethylene shipped to their three principal customers (distributors) in the northeast market between January-February 1976 and November-December 1978. The prices reported by both producers and importers to this market are f.o.b. Bayonne, N.J. From this information, an average weighted price per pound for each firm for each 2-month period was calculated, the results of which appear in table 11. The data show that average weighted prices in the northeast market declined from a high of 15.4 cents per pound in January-February 1976 (\* \* \*) to a low of 9.2 cents per pound in May-June 1978 (\* \* \*). With the exception of one bimonthly period in 1976-78, the lowest prices are accounted for by either \* \* \*, or \* \* \*.

The data in table 11 are deficient in that they do not include Diamond's prices. Diamond was able to report average prices by year only. A comparison of these prices with average yearly prices of PPG and Dow, however, indicated that Diamond's prices were \* \*\*. Stauffer's prices, shown in table 11, are delivered prices rather than f.o.b. Bayonne, and are thus not strictly comparable with other prices in the table. In only one period (\* \* \*), however, would \* \* \*. Vulcan does not \* \* \*. On the basis of the information available, then, the average weighted price for all importers was lower than that for all U.S. producers in every bimonthly period but two since January-February 1976. In all instances the addition of the minimum dumping margins to the prices of the imported product results in prices in the northeast market that are higher than those of any U.S. producer.

			(In	(In cents per pound)	(pui				
•• ••		U.S.	.S. producers				U.S. producers	ducers	
Per iod	Dow :	PPG		:All report-:	Rhodia	: Mon		Steuber :	All
	chemical;	chemical industries Stauffer	7	: ing U.S. :(France) :producers 3/:	(France)	: U.S.A. : (Italy)	(Belguum: and Italy):	<pre>: (Belguum : (Belguum : reportin :and Italy):and Italy):importers</pre>	reporting mporters 4/
••	••		••	••		••	••		
1976:	••		••	••			••	••	
January-February:	***	***	: *** :	***	***	: *** :	***	***	14.5
March-April:	: ***	***	*** :	***	***	***	***	***	13.7
May-June:	: ***	***	: *** :	***	***	: *** :	***	***	13.4
July-August:	: ***	***	: *** :	***	***	***	***	***	14.1
September-October:	***	***	: *** :	***	***	: *** :	***	***	12.9
November-December:	***	***	: *** :	***	***	*** :	***	***	12.8
: 1977:	••			••			••	••	
January-February:	***	***	: *** :	***	***	***	***	***	14.3
March-April:	***	***	: *** :	***	***	: *** :	***	***	12.6
May-June:	***	***	: *** :	***	***	***	***	***	12.0
July-August:	***	***	: *** :	***	***	: *** :	****	***	10.9
September-October:	***	***	*** :	***	***	*** :	***	***	11.0
November-December:	***	***	: *** :	***	***	***	***	***	9.7
1978:	••		••	••			••	••	
January-February:	***	***	: *** :	***	***	: *** :	* ***	***	10.6
March-April:	: ***	***	: *** :	***	***	*** .	***	***	9.5
May-June:	***	***	: *** :	***	***	: *** :	* **	* ***	9.7
July-August:	***	***	: *** :	***	***	***	***	***	9.4
September-October:	***	***	***	: ***	***	: *** :	***	***	9.4
November-December:	: ***	***	: *** :	***	***	*** :	***	***	11.1
••	••		••	••			••	••	
1/ Weighted on the basis of quantity	asis of qu	antity sold.	ld.						

consumes all of the perchloroethylene it produces; Vulcan does not \* \* \*; and Diamond was only able to provide average 2/ Delivered prices. 3/ The data in this column only include Dow and PPG. Stauffer's prices are delivered prices, not f.o.b. Bayonne; pricing data were not received from Hooker or Ethyl, both of which are small factors in the northeast market; Du Pont prices by year.  $\frac{1}{4}$  The importers listed account for all of the imports from Belgium and France and the majority from Italy.

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

Prices outside of the northeast market for drycleaning grade perchloroethylene decreased correspondingly. From a high of 14.6 cents per pound in July-August 1976, the average weighted price (f.o.b. plant) of drycleaning grade perchloroethylene shipped by U.S. producers outside of the northeast market fell to 8.7 cents per pound in May-June 1978. U.S. producers' f.o.b. plant prices and net sales per pound of drycleaning grade perchloroethylene. however, were higher on the average outside of the northeast market than within it from 1974 through 1977, and somewhat lower in 1978. Prices for other grades of perchloroethylene fell similarly, although they tended to be somewhat higher than prices for drycleaning grade in all periods. Many of the industry's distributors purchase dual-purpose grade exclusively, which they sell to both drycleaning and industrial cleaning users. To maintain their level of sales to these distributors, U.S. producers must offer dual-purpose grade at a price comparable with that of drycleaning grade. Prices for industrial grade must then also fall, or users of this grade will merely switch to dual-purpose grade.

The average price per pound of perchloroethylene shipped by U.S. producers continued to decline after 1974 despite increases in average unit production costs. While the average price per pound of perchloroethylene fell by 9 percent, or by 0.9 cent per pound, between 1974 and 1978, the average production cost per pound rose by 78 percent, or by 4.5 cents per pound. U.S. producers' average unit production costs and average unit selling prices for domestic sales of perchloroethylene, by firms, for 1974 through 1978 are shown in table 12.

The decline in perchloroethylene prices may be at least partly a consequence of the increase in U.S. producers' inventories. Producers' inventories were between three and seven times greater than total imports from Belgium, France, and Italy in each year between 1974 and 1977. If inventories are reduced and shipments are increased by an amount equivalent to imports from these countries for each year of this 4-year period, inventories still increase both absolutely and as a percentage of shipments. Such conditions are indicative of an oversupplied market and would normally pressure members of the industry to lower prices regardless of imports. There is little, however, to indicate that Diamond, which accounts for most of the inventory buildup, initiated price reductions. \* \* \*.

### Lost sales

In response to the Commission's questionnaires, Dow, PPG, and Diamond cited specific instances of lost sales to Belgian, French, and/or Italian perchloroethylene, providing dates, customer information, quantities, and values. Nearly all of the lost sales the producers cited--47 million pounds between January 1976 and June 1978, valued at \$5.8 million--were in the northeast market. Of the 14 purchasers identified by the producers that the Commission contacted, all but three verified that they had purchased perchloroethylene from Belgium, France, and/or Italy on occasion in lieu of perchloroethylene offered by U.S. producers and that the amounts of perchloroethylene the U.S. producers indicated as having lost were reasonably accurate. Three distributors, to whom U.S. producers claimed to have lost sales

Table 12.--Perchloroethylene: U.S. producers' average unit production costs and average unit selling prices for domestic sales, by firms, 1974-77 and January-June 1978

Firm :	1974	:	1975	:	1976	:	1977	:	1978
:		:		:		:		:	
:			Average		mit pr	odu	iction		
:;					cost 1/				
:		:		:		:		:	
Dow Chemical:	***	:	***	:	***	:	***	:	***
PPG Industries:	***	:	***	:	***	:	***	:	***
Vulcan:	***	:	***	:	***	:	***	:	***
Diamond Shamrock:	***	:	***	:	***	:	***	:	***
Stauffer:	***	:	***	:	***	:	***	:	***
Ethy1:	***	:	***	:	***	:	***	:	***
Average:	5.8	:	9.4	:	11.0	:	11.7	:	10.3
:			Averag	ge	unit se	e11	ing		
:				pr	ice 1/				
:		:		:		:		:	
Dow Chemical:	***	:	***	:	***	:	***	:	***
PPG Industries:	***	:	***	:	***	:	***	:	***
Vulcan:	***	:	***	:	***	:	***	:	***
Diamond Shamrock:	***	:	***	:	***	:	***	:	***
Stauffer:	***	:	***	:	***	:	***	:	***
Ethy1:	***	:	***	:	***	:	***	:	***
Average:	10.5	:	13.6	:	14.0	:	11.9	:	9.4
-									

1/ Weighted by quantity sold.

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

.

,

totaling \$607,000 stated that they had merely switched to other U.S. producers. All indicated that price was their primary reason for purchasing imported perchloroethylene; however, many also stated that the dollar's decline in value relative to European currencies during the last 6 to 8 months had absorbed the price differential between imported and U.S.-produced perchloroethylene and that they were returning to domestic suppliers. Several distributors felt that, although the pressure to reduce prices had originated with imported perchloroethylene, U.S. producers' prices in the northeast market had been artificially high in a period of excess supply.

.



## APPENDIX A

## TREASURY DEPARTMENT'S LETTERS OF NOTIFICATION TO THE U.S. INTERNATIONAL TRADE COMMISSION

.

••,



THE GENERAL COUNSEL OF THE TREASURY

WASHINGTON, D.C. 20220

JAN 2 9,7979 30 PM 3 = 20

U.S. INTL. TRADE OF COMISSION

Dear Mr. Chairman:

In accordance with section 201(c) of the Antidumping Act, 1921, as amended, you are hereby advised that perchlorethylene from Belgium is being, or is likely to be, sold at less than fair value within the meaning of the Act.

The United States Customs Service will make available to the International Trade Commission as promptly as possible the file on sales or likelihood of sales at less than fair value of perchlorethylene subject to this determination. This file is for the Commission's use in connection with its investigation as to whether an industry in the United States is being, or is likely to be, injured, or is prevented from being established, by the reason of the importation of this merchandise into the United States.

Since some of the data in this file is regarded by the Customs Service to be of a confidential nature, it is requested that the International Trade Commission consider all information therein contained for the official use of the International Trade Commission only, and not to be disclosed to others without prior clearance with the Customs Service.

Sincerely,

(signod) Robert N. Mundheim

· 6

Robert H. Mundheim

The Honorable

27



# DEPARTMENT OF THE TREASURY

WASHINGTON, D.C. 20220

ASSISTANT SECRETARY

JAN 2 C 1939 JAN 30 PM 3:20

Dear Mr. Chairman:

U.S. INTL. THE SECONDISSION

In accordance with section 201(c) of the Antidumping Act, 1921, as amended, you are hereby advised that perchlorethylene from France is being, or is likely to be, sold at less than fair value within the meaning of the Act.

The United States Customs Service will make available to the International Trade Commission as promptly as possible the file on sales or likelihood of sales at less than fair value of perchlorethylene subject to this determination. This file is for the Commission's use in connection with its investigation as to whether an industry in the United States is being, or is likely to be, injured, or is prevented from being established, by the reason of the importation of this merchandise into the United States.

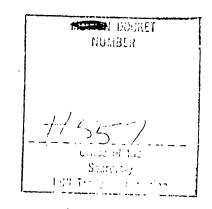
Since some of the data in this file is regarded by the Customs Service to be of a confidential nature, it is requested that the International Trade Commission consider all information therein contained for the official use of the International Trade Commission only, and not to be disclosed to others without prior clearance with the Customs Service.

Sincerel

Robert H. Mundheim

The Honorable Joseph O. Parker Chairman United States International Trade Commission Washington, D. C. 20436

Enclosure



A-29





THE GENERAL COUNSEL OF THE TREASURY WASHINGTON, D.C. 20220

JAN 2 5 1979

70 JAN 30 PN 3:20

Dear Mr. Chairman:

In accordance with section 201(c) of the Antidumping Act, 1921, as amended, you are hereby advised that perchlorethylene from Italy is being, or is likely to be, sold at less than fair value within the meaning of the Act.

The United States Customs Service will make available to the International Trade Commission as promptly as possible the file on sales or likelihood of sales at less than fair value of perchlorethylene subject to this determination. This file is for the Commission's use in connection with its investigation as to whether an industry in the United States is being, or is likely to be, injured, or is prevented from being established, by the reason of the importation of this merchandise into the United States.

Since some of the data in this file is regarded by the Customs Service to be of a confidential nature, it is requested that the International Trade Commission consider all information therein contained for the official use of the International Trade Commission only, and not to be disclosed to others without prior clearance with the Customs Service.

Sincere, H. Mundheim

The Honorable Joseph O. Parker Chairman United States International Trade Commission Washington, D. C. 20436

Enclosure

DUCALI NUMBER Int'l Trada p

# NOTICE OF COMMISSION'S INVESTIGATIONS AND HEARING

# APPENDIX B

# UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

[AA1921-194, AA1921-195, and AA1921-196] PERCHLOROETHYLENE FROM BELGIUM, FRANCE, AND ITALY

Notice of Investigations and Hearing

The United States International Trade Commission (Commission) received advice from the Department of the Treasury (Treasury) on January 30, 1979, that perchloroethylene from Belgium, France, and Italy, provided for in item 429.34 of the Tariff Schedules of the United States, is being, or is likely to be, sold at less than fair value within the meaning of the Antidumping Act, 1921. Accordingly, the Commission on February 8, 1979, instituted investigations Nos. AA1921-194, AA1921-195, and AA1921-196, under section 201(a) of the act, to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States.

Hearing. A public hearing in connection with the investigations will be held in Washington, D.C., on Tuesday, March 13, 1979, at 10:00 a.m., e.s.t. The hearing will be held in Room 117, United States International Trade Commission Building, 701 E Street, NW., Washington, D.C. All parties will be given an opportunity to be present, to produce evidence, and to be heard at such hearing. Requests to appear at the public hearing should be received in writing in the office of the Secretary to the Commission not later than noon Thursday, March 8, 1979.

### A-32

Written statements. Interested parties may submit statements in writing in lieu of, and in addition to, appearance at the public hearing. A signed original and nineteen true copies of such statements should be submitted. To be assured of their being given due consideration by the Commission, such statements should be received not later than Friday, March 23, 1979.

By order of the Commission.

Kenneth R. Mason

Secretary

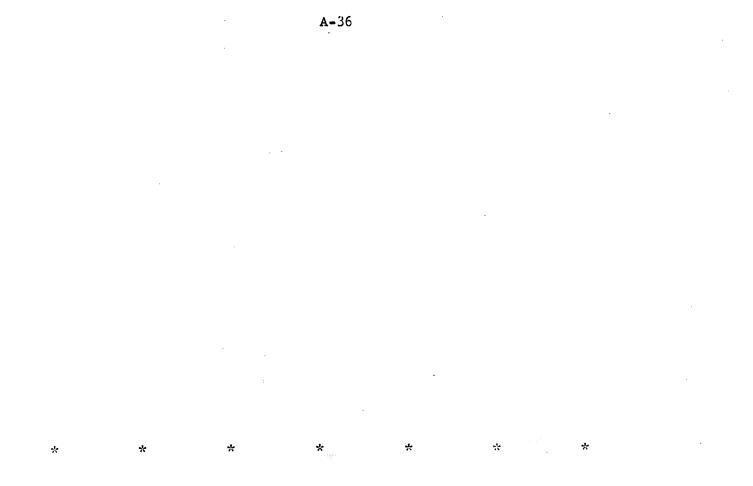
Issued: February 13, 1979



## APPENDIX C

PROBABLE ECONOMIC EFFECTS OF TARIFF CHANGES UNDER TITLE I AND TITLE V OF THE TRADE ACT OF 1974 FOR TRADE AGREEMENT DIGEST NO. 40224, July 1975.

. •



· · ·

# APPENDIX D

# SUPPLEMENTARY TABLES

,

(In million	ns of pour	nds)			
Item	1974 : :	1975 : :	1976 :	1977 <b>:</b>	1978
:	:	:	;	:	
Drycleaning grade perchloroethylene: :	:	:		:	
Shipped to NE market:	119.4 :	<b>8</b> 9.6 :	69.4 :	66.0 :	77.1
Export shipments:	28.1 :	42.2 :	21.3 :	21.5 :	20.3
All other shipments:	245.7 :	179.9 :	203.8 :	180.0 :	207.5
Total:	393.2 :	311.7 :	294.5 :	267.5 :	304.9
Other grades: :	:	:	:	:	
Shipped to NE market:	35.2 :	26.5 :	24.1 :	33.9 :	42.3
Export shipments:	.7 :	11.7 :	20.9 :	22.6 :	38.9
All other shipments:	293.3 :	269.8 :	313.6 :	309.5 :	367.6
Total:	329.2 :	308.0 :	358.6 :	366.0 :	448.8
Total: :	:	. :	:	:	
Shipped to NE market:	154.6 ;	116.1 :	93.5 :	99.9 <b>:</b>	119.4
Exports shipments:	28.8 :	53.9 :	42.2 :	44.1 :	59.2
All other shipments:	539.0 <b>:</b>	449.7 :	517.4 :	489.5 :	575.1
Total:	722.4 :	619.7 :	653.1 :	633.5 :	753.7
:	:	:	:	:	

# Table D-1.--Perchloroethylene: U.S. producers' shipments, by types and by markets, 1974-78

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission, and from official statistics of the U.S. Department of Commerce.

.

,

.

(In milli	ons of	pot	mds)					
Item	<u>1</u> 974	:	1975	:	1976	:	1977	1978
:		:		:		:	:	
Dry-cleaning grade perchloroethylene: :		:		:		:	:	
NE market:	134.8	3 :	109.4	:	114.8	:	106.8 :	100.2
All other domestic markets:	253.9	) :	197.6	:	220.6	:	199.1 :	221.3
Total:		':	307.0	:	335.8	:	305.9 :	321.5
Other grades: :		:		:		:	:	
NE market:	37.0	) :	26.5	:	29.1	:	33.9 :	42.3
All other domestic markets:	291.5	i :	269.8	:	308.6	:	309.5 :	367.6
Total:	328.5	; ;	296.3	:	337.7	:	343.4 :	409.9
Total:		:		:		:	:	
NE market:	171.8	3 :	135.9	:	143.9	:	140.7 :	142.5
All other domestic markets:	545.4	:	467.4	:	529.2	:	508.6 :	588.9
Total:	717.2	: :	603.3	:	673.1	:	649.3 :	731.4
. N		:		:		:	:	

## Table D-2.--Perchloroethylene: Apparent U.S. consumption, by type and by markets, 1974-78

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

.

Table D-3.--Perchloroethylene: U.S. imports for consumption, by types and by markets, 1974-78

		•			
Item	: 1974	: 1975	: 1976	: 1977	1978
LTFV imports:	•	:	•	: :	•
Drycleaning grade perchloroethylene:	•	•	•	••••	e Na star
Imports into NE market	• 15 /	• 10 0	• A5 A	• 10 9 •	23.1
All other imports			: 43.4		23,1
Total	$\frac{15}{15}$	$\frac{100}{100}$	• 15 1		23.1
Other grades:	• 15.4	. 19.0	. 43.4	. 40.0 . 	23.1
Perchloroethylene	. 0	. 0	: 0	· · ·	0
Total:	•		•	• • •	
Imports into NE market	• 15 A	. 10 0	• AE A		23.1
All other imports	. 15.4	. 19.8	: 45.4	40.8	23.1
All other imports Total	$\frac{15}{15}$	. 0		. 10 0 .	23.1
All other imports:	15.4	. 19.0	. 45.4	. 40.0 .	23.1
Drycleaning grade perchloroethylene:	•	• * *	•	•	,
Perchloroethylene	· -: 0	• 0	• 0	. 0.	0
Other grades:	•				J. J
Imports into NE market	-	0	: 0	· · · · · · · · · · · · · · · · · · ·	0
All other imports	. 07				-
Total	0.2	1/./	10.0	: 19.1 :	13.0
Total:	• • • • •	• 1/./	. 10.8	; 19.1 ;	13.8
Imports into NE market	· : 0				^
All other imports	. 0 .	•		: 0 : : 19.1 :	-
Total				$\frac{19.1}{19.1}$	
All imports:	. 0.2	1/./	10.0	19.1	13.0
Dry cleaning grade perchloroethylene:	•				
Imports into NE market	• 15 4	10.0			07 1
All other imports	: 15.4 :			40.8 :	23.1
Total	: 0 :	0			
	: 15.4 :	19.8	45.4	40.8 :	23.1
Other grades:	: :	:		:	
Imports into NE market	: 0 :	0 :	0:	0:	0
All other imports Total	: <u>8.2</u> :	17.7:	16.8_:	19.1:	13.8
	: 8.2 :	17.7 :	16.8 :	19,1 :	13.8
Total:	: :	:	· · · :	:	
Imports into NE market	: 15.4 :	19.8 :	45.4 :	40.8:	23.1
All other imports Total	: <u>8.2</u> :	17.7:	16.8 :	<u> 19.1 :</u>	13.8
	: 23.6 :	37.5 :	62.2 :	59.9 :	36.9
	: :	:	:	:	

(In millions of pounds)

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce.

Table D-4.--Perchloroethylene: Ratio of U.S. imports for consumption to apparent U.S. consumption, by types and by markets, 1974-78

(In per	rcent)				
Item	: 1974	: : 1975 :	: : 1976 :	: : 1977 :	: : 1978
LTFV imports:	:	:	:	:	:
Drycleaning grade perchloroethylene:	•	•	•	•	•
Imports into NE market	. 11.4	: 18.1	· 39.5	: 38.2	· 23.1
All other imports					• 0
Total	4.0				· 72
Other grades:	:	:	:	: 13.5	• 7•2
Perchloroethylene	. 0	: 0	: 0	: 0	: 0
Total:		:	:	:	:
Imports into NE market	9.0	: 14.6	: 31.5	: 29.0	: 76.2
All other imports		: 0	: 0		: 0
Total					: 3.2
All other imports:		:	: 0.7	: 0.5	: 5.2
Drycleaning grade perchloroethylene+	0	: 0	: 0	: 0	: 0
Other grades:	•	•	•	•	•
Imports into NE market	: 0	: 0	: 0	: 0	: 0
All other imports		•			
Total	: 2.5		and the second sec		
Total:	. 2.5	. 0.0	. 5.0	: 5.0	: 3.4
Imports into NE market	: 0	• 0	: 0	: 0	: 0
All other imports	: 1.5				
Total	$\frac{1.5}{1.1}$				
All imports:	• • • • •	• 2• 5	: 2.5	: 2.19	: 10
Drycleaning grade perchloroethylene:	•	•	•	:	:
Imports into NE market	: 11.4	: 18.1	: 39.5	: 38.2	: 23.1
All other imports			: 0	: 0	: 0
Total	. 4.0	: 6.4	: 13.5	: 13.3	: 7.2
Other grades:	:	:	:	:	:
Imports into NE market	: 0	: 0	: 0	: 0	: 0
All other imports	: 2.8			-	: 3.8
Total	: 2.5				
Total:	:	:	:	•	:
Imports into NE market	: 9.0	: 14.6	: 31.5	: 29.0	: 11.2
All other imports	: 1.5				
Total	: 3.3				
	:	:	:	:	•

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce. .

. . . . .