

CALCIUM HYPOCHLORITE FROM JAPAN

**Determination of the Commission in
Investigation No. 731-TA-189
(Preliminary) Under the Tariff
Act of 1930, Together With
the Information Obtained in
the Investigation**

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UNITED STATES INTERNATIONAL TRADE COMMISSION

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Kenneth R. Mason, Secretary to the Commission

This report was prepared by--

Stephen Vastagh, Trade Analyst
Terry Planton, Economist
Wayne Herrington, Attorney Advisor
Marvin Claywell, Accountant
Ken Conant, Commodity Analyst

Lynn Featherstone, Supervisory Trade Analyst

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

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Note.—Data which would disclose confidential operations of individual concerns may not be published and therefore have been deleted from this report. Deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

Investigation No. 731-TA-189 (Preliminary)

CALCIUM HYPOCHLORITE FROM JAPAN

Determination

On the basis of the record 1/ developed in investigation No. 731-TA-189 (Preliminary), the Commission unanimously determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured 2/ by reason of imports from Japan of calcium hypochlorite, provided for in item 418.22 of the Tariff Schedules of the United States, which are alleged to be sold in the United States at less than fair value (LTFV).

Background

On April 25, 1984, Olin Corp. of Stamford, Conn., the principal producer of the subject product in the United States, filed a petition with the U.S. International Trade Commission and the U.S. Department of Commerce alleging that an industry in the United States is being materially injured or threatened with material injury by reason of LTFV imports of calcium hypochlorite from Japan. Accordingly, effective April 25, 1984, the Commission instituted antidumping investigation No. 731-TA-189 (Preliminary) under section 733(a) of the Act. Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by

1/ The "record" is defined in sec. 207.2(i) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(i)).

2/ Commissioner Stern also finds reasonable indication of threat of material injury.

publishing the notice in the Federal Register on May 9, 1984 (49 F.R. 19745). A public conference was held in Washington, D.C. on May 18, 1984, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

We determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of calcium hypochlorite from Japan which are alleged to be sold at less than fair value. 1/ 2/

The domestic industry

Section 771(4)(A) of the Tariff Act of 1930 defines the term "industry" in an antidumping duty investigation as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." 3/ "Like product," in turn, is defined as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to [the] investigation." 4/

Calcium hypochlorite is a white crystalline solid used principally for disinfecting swimming pools. 5/ For this trade it is available in granular or tablet form. Depending on the amount of hydration, it may provide 65 percent

1/ Because there is a well-established domestic calcium hypochlorite industry, material retardation of the establishment of a domestic industry is not an issue in this investigation.

2/ Commissioner Stern determines that there is also a reasonable indication that an industry in the United States is threatened with material injury by reason of imports of calcium hypochlorite from Japan which are alleged to be sold at less than fair value.

3/ 19 U.S.C. § 1677(4)(A).

4/ 19 U.S.C. § 1677(10).

5/ Report, A-1 to A-3. Calcium hypochlorite is also used for treatment of water, in the manufacture of paper, as a bleaching agent in laundries, and in certain other disinfecting uses. Report, A-2 to A-3. However, these non-pool uses represented a minor share of consumption from 1981 to 1983. Report at A-3 and Table 1.

or 70 percent available chlorine. 6/ The 65 percent and 70 percent products are considered interchangeable and identical for use in the pool trade. 7/

The record in this investigation shows that the domestic and imported calcium hypochlorite are essentially identical, both physically and chemically, and are thus like products. Therefore, for the purpose of this preliminary investigation, we conclude that the domestic industry consists of the domestic producers of calcium hypochlorite. 8/ 9/

Condition of the domestic industry--material injury

The pertinent economic and financial indicators show that there is a reasonable indication of material injury to the domestic industry. Domestic consumption of calcium hypochlorite declined from 1981 to 1983, with first quarter 1984 consumption showing little improvement over first quarter 1983. 10/ Domestic production decreased more rapidly than consumption from 1981 to 1983, and declined again from first quarter 1983 to first quarter

6/ Report, A-1 to A-3.

7/ Report at A-2.

8/ There are two producers of calcium hypochlorite in the United States--Olin Corp. and PPG Industries, Inc. A potential third producer, Wesley Water Chemicals (Wesley), has not yet commenced production. Report at A-6.

9/ This analysis is similar to that in our recent investigation, Cyanuric Acid And Its Chlorinated Derivatives From Japan, 731-TA-136 (Final), USITC Pub. No. 1513 (April 1984) (Commissioner Stern dissenting on other grounds). Respondent Nissin Denka Co., Ltd. (Nissin), argues that the like product should include cyanuric acid and its chlorinated derivatives (isocyanurates), because they directly compete with calcium hypochlorite for chlorinating swimming pools. Nissin Post-Conference Brief, pp. 2-6. However, calcium hypochlorite, as a chemical compound, is quite distinct from the isocyanurates. Moreover, the fact that two products are competitive does not necessarily make them "like products" within the meaning of the statute, as our recent determination in Cyanuric Acid illustrates.

10/ Report at Table 1.

1984. 11/ Domestic shipments by domestic producers generally followed production, but export shipments have anomalously increased. 12/

Capacity for calcium hypochlorite production rose from 1981 to 1982 due to a plant expansion, but declined in 1983 as another plant was retired. 13/ Capacity rose again in January-March 1984 compared to January-March 1983 due to the opening of a new plant, but remained at a lower level than in 1981 and 1982. 14/ Capacity utilization for the domestic industry generally decreased from 1981 to 1983, despite the overall capacity reduction. 15/

The number of production and related workers engaged in the production of calcium hypochlorite declined by almost a third from 1981 to 1983. However, the number rose in January-March 1984 as compared with the corresponding period of 1983. The number of actual hours worked declined similarly from 1981 to 1983, before rising in the comparison of January-March 1984 to January-March 1983. 16/

Net sales of calcium hypochlorite increased marginally from 1981 to 1982, but declined significantly in 1983. 17/ During the interim period ended March 31, 1984, net sales declined further compared with the corresponding period in 1983 despite a small gain in units shipped. Significantly, the ratio of gross income to net sales for the industry has decreased in each period of the investigation indicating that in this industry pricing levels

11/ Report at Table 2.

12/ Report at Table 3. This issue will be explored more fully in any final investigation.

13/ Report, A-8 to A-9.

14/ Report at A-9.

15/ Report at Table 2. Capacity utilization in the first quarter of both 1983 and 1984 is shown at nearly 100 percent. This is not necessarily representative of the year as a whole, as a comparison of the annual and first quarter figures for 1983 shows, since nearly half of total annual consumption occurs in the first quarter. Report at A-8.

16/ Report at A-11.

17/ Report at A-12.

necessary to offset cost increases were not obtainable. 18/ Aggregate operating income declined more steeply than gross income due to the decreased shipment volumes and lower gross income ratios.

Reasonable indication of material injury by reason of alleged less than fair value imports--causation

Section 771(7)(B) of the Tariff Act of 1930 directs the Commission to consider, among other factors, (1) the volume of imports of merchandise under investigation, (2) the effect of such imports on domestic prices, and (3) the impact of such imports on the domestic industry. 19/

Imports of calcium hypochlorite from Japan increased during the period 1981-1983 in both absolute and relative terms. Imports for consumption from Japan rose from 6.9 million pounds in 1981 to 7.0 million pounds in 1982, and then to nearly 11 million pounds in 1983. 20/ The increases from 1981 to 1983 occurred despite decreases in domestic consumption. Imports for consumption from Japan declined, however, from 3.3 million pounds in January-March 1983 to 2.8 million pounds in the same period in 1984. 21/ Thus, the ratio of imports from Japan to apparent domestic consumption increased slightly from 1981 to 1982 and increased more sharply in 1983. 22/ This ratio decreased somewhat in January-March 1984 from that of the comparable period for 1983. 23/

The pricing information available in this preliminary investigation indicates imported calcium hypochlorite from Japan undersold domestic producers' prices in every quarter of the period January 1981 to March 1984 by margins of 6 to 15 percent in the repackager market, where most import sales

18/ Report at Table 10.

19/ 19 U.S.C. § 1677(7)(B).

20/ Report at A-16.

21/ Id.

22/ Report at A-17.

23/ Id.

are said to have been made, and generally undersold domestic producers in the industrial market and pool-trade distributor market as well. 24/ Prices of domestic producers and importers show a general decline in all three markets over the period. 25/ The apparent existence of underselling and the general price decline are indications of price suppression, which has adversely affected the profitability indicators of the domestic industry.

Inventories of U.S. importers increased from 1981 to 1983 and from the first quarter of 1983 to the first quarter of 1984. 26/ During the period from 1981 to 1983, the United States replaced Australia as the chief export market for Japanese calcium hypochlorite. 27/ Information presently available indicates that Japanese calcium hypochlorite capacity has increased from 1980 to 1983 and capacity utilization, though high, has declined from 1981 to 1983. 28/

Conclusion

As previously noted, the economic and financial data show that there is a reasonable indication of material injury. Specifically, domestic production, shipments, capacity utilization, employment, and profitability have all declined during all or most of the period investigated. In light of the information available in this preliminary investigation as to increasing imports from Japan and indications of apparent underselling, we conclude that there is a reasonable indication that a domestic industry is materially injured by reason of imports of calcium hypochlorite from Japan which are alleged to be sold at less than fair value.

24/ Report at A-24. See other related price factors. Report, A-18 to A-20.

25/ Report, A-20 to A-23.

26/ Report at A-14.

27/ Report at A-15.

28/ Report, A-15 to A-16.

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INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On April 25, 1984, a petition was filed with the U.S. International Trade Commission and the U.S. Department of Commerce by counsel on behalf of Olin Corp. (Olin). The petition alleges that calcium hypochlorite (CH) is being, or is likely to be, sold in the United States at less than fair value (LTFV), and that by reason of such sales an industry in the United States producing and selling the like product is materially injured, or is threatened with material injury. Accordingly, effective April 25, 1984, the Commission instituted investigation No. 731-TA-189 (Preliminary) under section 733(a) of the Tariff Act of 1930 to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of the allegedly LTFV merchandise. The statute directs that the Commission make its determination within 45 days after its receipt of a petition, or in this case, by June 11, 1984.

Notice of the institution of the Commission's investigation and of the public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register of May 9, 1984 (49 F.R. 19745). 1/ The public conference was held in Washington, D.C., on May 18, 1984, at which time all interested parties were afforded the opportunity to present information for consideration by the Commission. 2/ The Commission voted on the investigation on June 4, 1984.

Nature and Extent of Alleged Sales at LTFV

In order to calculate the alleged LTFV margins, the petitioner made comparisons based on 1983 data between the Japanese home-market prices for sales of bulk granular CH to the first independent customers and the ex-factory price for sales for export to the United States. The resulting margins range from 27 to 43 percent 3/ for Nippon Soda Co., Ltd. (Nippon Soda), and Nankai Chemical Industry Co., Ltd. (Nankai), which together are alleged to account for the major portion of Japanese exports of CH to the United States.

The Product

Description

CH is a white crystalline solid. Its chemical composition is $\text{Ca}(\text{OCl})_2$. In its pure form, CH in solution provides 70 percent available

1/ A copy of the Commission's notice is presented in app. A. A copy of the U.S. Department of Commerce's notice is presented in app. B.

2/ A list of witnesses appearing at the conference is presented in app. C.

3/ The petitioner calculated the margins by subtracting the respective U.S. price from the Japanese home-market price and by dividing the result by the U.S. price.

chlorine. This high-purity product is usually the active ingredient in powdered bleaches. It normally contains about 1 percent water and is referred to as anhydrous CH.

A hydrated product containing up to about 10 percent water was developed in the early 1970's. This product contains approximately 65 percent available chlorine and is considered safer than the anhydrous product because of its improved resistance to accidental self-sustaining decomposition. The hydrated product is always preferred where long-term storage is a consideration.

The 65- and 70-percent concentration products are considered interchangeable and identical for use in the pool trade. The domestically produced and imported products are also considered identical by U.S. producers, importers, and purchasers.

Manufacturing processes

Crude CH is produced by reacting lime (calcium oxide) with the filtrate (hypochlorous acid) from chlorine/caustic production. In the Olin process * * *. In the process used by PPG Industries, Inc. (PPG), * * *.

To produce commercial grade CH each producer has developed a proprietary process to control crystallization and drying. Olin's process is * * *.

According to U.S. patents issued to Nippon Soda, it is believed that in its process caustic soda is blended with a CH solution to produce sodium chloride (salt slurry) and a hydrated lime slurry, which is chlorinated under reduced pressure to produce CH and sodium chloride. These two chemicals are separated in a classifier into hydrated filter cake and solid salt. Salt is the raw material for chlorine/caustic production. The hydrated filter cake is dried to the appropriate moisture content selected by the manufacturer for granulation, ease of handling, safety, and desired end use.

Uses

CH is usually a granular product that is available in various package sizes. Its principal use is as a chlorinating agent in swimming pools. The person responsible for pool maintenance would test the pool for chlorine content with a test kit or other instrument to determine if the chlorine content is less than 1 part per million in the water, ^{1/} in which case a chlorinating agent should be added. Granular CH may be added by broadcasting (throwing) it into the pool. For those people who do not desire to add a chlorinating agent every day, CH is available in tablet form. The tablet is placed in a chlorinating device. The tablet dissolves slower in the water than granular CH, thus gradually providing available chlorine. New tablets are added after several days depending on the hardness of the water.

^{1/} The amount of available chlorine should not exceed 2 parts per million in water.

CH is also used for treatment of drinking (potable) water and sewage, in the manufacture of paper, and as a bleaching agent in laundries, as well as in other applications such as an algicide, bactericide, deodorant, disinfectant, and fungicide.

Substitute products

CH as a disinfectant competes with several other products, including trichloro isocyanuric acid (trichloro), dichloro isocyanurates (dichloro), sodium hypochlorite liquid, and chlorine gas. These products, however, are not identical to each other. Differences include the available chlorine rating, ease of handling during application, rate of chlorine release, and other factors. Trichloro and dichloro reportedly gained market share at the expense of the other disinfectants during the 1970's. Some expect gains for CH consumption due to expected reduction in use of chlorine gas. The primary substitute products for CH in the pool trade are dichloro and trichloro. The following tabulation shows shipments to the U.S. pool trade market of dichloro and trichloro as well as CH (in thousands of pounds):

<u>Year</u>	<u>Dichloro and Trichloro</u>	<u>CH</u>
1981.....	***	***
1982.....	***	***
1983.....	***	***

CH as a bleaching agent also competes with various other bleaching agents. The primary commercial bleaching agents are chlorine, chlorine dioxide, CH, sodium hypochlorite, sodium perborate, hydrogen peroxide, sodium hydrosulfite, dichloro, trichloro, and sodium chlorite. These bleaching agents differ from each other in their suitability for the different materials to be bleached and the various temperatures of the bleaching processes. Each user selects the bleaching agent that provides the desired performance for the desired price. All bleaching agents have disadvantages which must be considered in selecting one for a specific end use. Sodium hypochlorite (a liquid substance) has remained the principal substitute for CH (solid substance) for decades in those cases where a liquid bleaching agent is preferred to a solid one.

CH has displaced most of the U.S. consumption of chlorinated lime, which has less than 40 percent available chlorine. The remaining consumption of chlorinated lime in the United States is for general sanitation and disinfecting sea water, reservoirs, and drainage ditches (where chemical purity is unimportant).

U.S. tariff treatment

CH is classified under item 418.22 of the TSUS, with a column 1 rate of duty of 3.8 percent ad valorem and a column 2 rate of duty of 25 percent ad valorem. 1/ The current column 1 rate of duty is the fifth stage of eight staged reductions resulting from concessions made by the United States in the most recent round of the Multilateral Trade Negotiations (MTN), which will result in a most-favored-nation rate of duty for this item of 2.4 percent ad valorem on January 1, 1987. Least developed developing countries (LDDC's) designated in general headnote 3(d) of the TSUS are granted the full U.S. MTN concession rate (2.4 percent Ad Valorem) and imports entering under item 418.22 are eligible for duty-free treatment under the Generalized System of Preferences (GSP). 2/

The U.S. Market

Structure of the market and channels of distribution

Pool market.—There are four levels of suppliers providing CH to end users in the pool market:

Primary suppliers
(producers and importers).

All primary suppliers sell CH to repackagers, distributors, and retailers. However, Olin sells * * *, PPG sells * * *, Toyomenka * * * and ICD * * *.

1/ Col. 1 rates of duty of the TSUS are most-favored-nation (MFN) rates, and are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA. However, such rates do not apply to products of developing countries which are granted preferential tariff treatment under the Generalized System of Preferences or under the "LDDC" column.

The rates of duty in col. 2 apply to imported products from those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA. Such rates do not apply to products of the People's Republic of China, Hungary, Romania, or Yugoslavia.

2/ The GSP is a program of nonreciprocal tariff preferences granted by the United States to developing countries to aid their economic development by encouraging greater diversification and expansion of their production and exports. The GSP, implemented by Executive Order No. 11888, of November 24, 1975, applies to merchandise imported on or after January 1, 1976, and is scheduled to remain in effect until January 4, 1985. It provides for duty-free treatment of eligible articles imported directly from designated beneficiary developing countries.

Secondary suppliers
(repackagers).

There are approximately 30 to 40 repackagers in the United States. They purchase CH from the primary suppliers in bulk or packaged in their branded containers and sell them to the third- and fourth-level suppliers in packaged form.

Third-level suppliers
(distributors).

There are approximately 500 to 700 distributors in the United States. They purchase CH from the primary and secondary suppliers in packaged form and sell to the fourth-level suppliers, as well as to end users.

Fourth-level suppliers
(smaller and larger
retailers/dealers).

These retailers/dealers purchase from one or more of the other suppliers, always in packaged form, and sell to the end users. The number of retail stores where CH is sold is estimated to be more than 17,000.

Many of the repackagers and distributors of pool chemicals can be classified in more than one of the supplier categories. Furthermore, almost all repackagers, distributors, and retailers manufacture, distribute, and/or sell other chemicals and other pool-related equipment and accessories in addition to CH.

Nonpool market.—The nonpool market for CH is primarily made up of a large number of small users, and is supplied principally through distributors. Individual distributors will sell primarily to the pool trade or primarily to industrial customers, but almost all distributors sell for both pool and nonpool use. Sales to both categories are typically made at the same prices and with the same branded products. However, whereas the pool trade buys all container sizes from 1 to 100 pounds, the industrial users buy in 100-pound or larger drums almost exclusively.

Large-volume nonpool users who want to buy a generic product from the manufacturer purchase on a competitive-bid basis. The number of these large-volume users is small, and consists of major detergent and household chemical product manufacturing companies. Olin advertises to nonpool users to a minimal extent in industrial trade journals. Special promotions and purchasing incentives that are offered to the pool trade are not generally offered to the nonpool trade.

The Commission's questionnaire asked the following question of all U.S. producers and importers (all primary suppliers):

Please describe what your firm believes has been the effect (1) of the subject imports from Japan and from other countries and (2) of the U.S. producers' and repackagers' marketing strategies on (a) your firm's sales, pricing, and market share, (b) on U.S. market conditions, and (c) on the firms in the distribution chain (distributors, retailers, and so forth).

The responses received from producers and importers are reproduced in appendix D.

U.S. producers

Olin (Stamford, Conn.) produces CH at Charleston, Tenn. Until September 1982 Olin also produced CH in Niagara Falls, N.Y., but the plant was closed at that time. Olin stated that the reason for closing its Niagara Falls, N.Y., facility was a reduction in sales. CH accounted for * * * percent of Olin's total revenue in 1983.

PPG (Pittsburgh, Pa.) produces CH at New Martinsville, W. Va., and Barberton, Ohio. The plant in West Virginia is called "Natrium" in the trade press. The sale of CH accounted for * * * percent of PPG's total revenues in 1983.

Wesley Water Chemicals (Wesley) (Montrose, Ala.) owns a plant capable of producing CH at Daphne, Ala. The plant has not yet produced CH, however. A Wesley official stated that * * *. Wesley has not revealed the plant's expected capacity. Industry sources expect that it will produce approximately 5 million pounds per year. Wesley is a producer of several other different chemicals and is adding CH to its product line.

Pennwalt Corp. ceased CH production in 1979. A spokesman indicated that the reason for closing its Wyandotte, Mich., CH facility in 1979 was Pennwalt's pessimistic assessment of the market and their position as a high-cost producer, with costs expected to increase. Other industry sources suggest that Pennwalt's plant was not meeting EPA standards, and that modernization was apparently deemed uneconomical.

Both Olin and PPG have large-capital investments in their plants. Major expenses are for utilities, depreciation, and pollution control. Because of their high fixed costs, the companies strive to run their plants near to capacity, thereby lowering their unit costs of production.

Olin.—Olin packages its CH under several Olin brand names, of which HTH (R) is the largest and most widely known. Container sizes range from 1 pound to 125 pounds. Olin also packages bulk product in 100-to-300 pound drums labeled generically. In addition, Olin packages product in various sized containers with brand names owned by the customers. The latter are referred to as private label.

Olin's branded containers are shipped * * *.

* * * * *

Olin advertises the HTH (R) brand of CH to the general public via television and print media, * * *. Cooperative advertising is also offered to retailers to provide local advertising in connection with their stores. Retailers must provide proof of advertising to an outside agency, which verifies the cooperative advertising claim and then pays the retailer for a share of the advertising cost in accordance with the programs's rules for that year.

* * * * *

When a lower price is offered to one of Olin's customers from another supplier, and Olin wishes to meet that price, a document entitled "Competitive Price Request" (CPR) is prepared for approval.

* * * * *

PPG.—* * * PPG's CH * * *. * * * packages come in 400-pound, 100-pound, 75-pound, 50-pound, 35-pound, 25-pound, 7.5-pound, 6-pound, and 1-pound sizes. * * *. PPG sells CH to * * *.

U.S. importers

The principal importers of CH from Japan are Toyomenka, Inc; * * *; ICD Group; and UR Industries. The first two are U.S. subsidiaries of Japanese trading companies; the latter are independent U.S. importers. * * * also imported small quantities. The nature of the operations of the importers is described below on the basis of information submitted in response to the Commission's questionnaires.

Toyomenka.—Toyomenka imports CH from Japan produced by Nippon Soda. It has been actively engaged in this business for more than 20 years. * * *.

Toyomenka sells CH under the brand name of Hichlon (R). * * *.

* * * * *

* * *.—* * * commenced sales of CH in the United States in * * *.

* * * * * A-7

ICD Group.—ICD imports 70-percent CH produced by * * *.

* * * * *

UR Industries.—This firm imports CH produced by * * *.

* * *.—This firm imported * * *.

* * *.—* * * imports 65-percent CH * * *.

Apparent U.S. consumption

Table 1 shows U.S. producers' shipments, U.S. imports, and U.S. exports of CH. Apparent U.S. consumption and the ratio of imports to consumption are also calculated in table 1.

Table 1.—Calcium hypochlorite: U.S. producers' shipments, imports from all sources, exports, and apparent U.S. consumption, 1981-83, January-March 1983, and January-March 1984.

* * * * *

Apparent U.S. consumption declined from * * * million pounds in 1981 to * * * million pounds in 1982 and to * * * million pounds in 1983. Consumption in January-March 1983 was * * * million pounds compared with of * * * million pounds in January-March 1984. Nearly one-half of the total annual consumption occurs in January-March.

Consideration of Material Injury to an Industry in the United States

U.S. production, capacity, and capacity utilization

Table 2 shows U.S. producers' CH capacity, production, and capacity utilization. Olin increased its productive capacity in 1981 by expanding its Charleston plant * * * by about 30 percent. The decision to expand was prompted by Pennwalt's decision to stop CH production. The decision by PPG to build a large, modern CH plant in West Virginia to eventually replace its older

Table 2.—Calcium hypochlorite: U.S. production, practical capacity, 1/ and capacity utilization, by firms, 1981-83, January-March 1983, and January-March 1981

* * * * *

and smaller Ohio facility was also made at that time. In September 1982, however, Olin discontinued production at its Niagara Falls plant. Olin stated that it was not a planned retiring of the plant, but rather that it was caused by a reduction of sales of CH. Olin further states that it maintains the plant, and that it could resume production within 3 to 4 months.

The Natrium plant of PPG was built to produce * * * million pounds per year. The plant began production in January 1984 and produced * * * pounds in January-March 1984. PPG's spokesmen stated that the plant is expected to be able to produce approximately *** million pounds in all of 1984; it is expected to be producing at its designed capacity * * *.

PPG's capacity data in table 2 include only *** pounds for January-March 1984 for the Natrium plant. Olin's capacity data excludes the mothballed Niagara Falls plant, dating from September 2, 1982, although it could be argued that it is idle capacity; capacity utilization rates would be lower if Niagara Falls were included.

U.S. producers' domestic and export shipments

Table 3 shows U.S. producers' domestic and export shipments of domestically produced CH.

Table 3.—Calcium hypochlorite: U.S. producers' domestic and export shipments of domestically produced CH, by firms, 1981-83, January-March 1983, and January-March 1984

* * * * *

U.S. producers' domestic shipments decreased steadily from * * * million pounds in 1981 to * * * million pounds in 1983. Such shipments increased by * * * percent in January-March 1984 compared with those of January-March 1983. U.S. producers' export shipments track official U.S. export statistics very closely, except in 1981, when official exports were 40 million pounds compared with the producers' reported * * * million pounds. The difference could have been exported by distributors or other third parties. Although domestic shipments declined sharply from 1982 to 1983, export shipments increased slightly. Unit values of export shipments are consistently * * * those of domestic shipments.

Table 4 shows U.S. producers' imports and domestic and export shipments of CH imported from Japan. * * *.

Table 4.—Calcium hypochlorite: U.S. producers' imports and domestic and export shipments of imported merchandise, by firms, 1981-83, January-March 1983, and January-March 1984

* * * * *

U.S. exports

Table 5 shows U.S. exports of CH by principal markets. The primary use of the exported CH is the same as that used in the United States, i.e., disinfecting swimming pools.

Table 5.—Calcium hypochlorite: U.S. exports, by selected markets, 1981-83, January-March 1983, and January-March 1984

(In thousand of pounds)					
Market	1981	1982	1983	January-March—	
				1983	1984
Canada	9,109	7,429	6,939	3,706	1,759
Australia	7,578	6,992	11,008	1,670	3,693
Republic of South Africa	4,804	297	573	110	717
West Germany	1,234	930	794	415	198
France	1,426	970	863	299	455
Netherlands	2,492	2,745	3,632	989	1,020
United Kingdom	982	594	924	255	425
Mexico	1,185	714	196	13	40
Venezuela	1,561	5,101	725	175	1,104
Colombia	1,218	1,202	1,818	352	706
Guatemala	1,836	394	562	201	115
Brazil	986	1,330	1,144	402	44
U.S.S.R.	0	2,204	1,330	887	0
Japan	0	1/	280	0	70
All other	5,731	8,133	10,277	3,457	2,199
Total	40,142	39,035	41,065	12,931	12,545

1/ Less than 500 pounds

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

U.S. exports of the subject products remained stable at around 40 million pounds per year, despite decreasing U.S. consumption. Export sales in January-March 1984 were also similar to those in the corresponding period of 1983, at 12 to 13 million pounds.

U.S. producers' inventories

Table 6 shows U.S. producers' inventories of domestically produced CH. * * *. U.S. producers' inventories declined from * * * million pounds in 1981 to * * * million pounds in 1982 and to * * * million pounds in 1983. Inventories in January-March 1984 were down from those in January-March 1983.

Table 6. Calcium hypochlorite: U.S. producers' end-of-period inventories of domestically produced product, by firms, 1981-83, January-March 1983, and January-March 1984

* * * * *

U.S. employment, wages, and productivity

Table 7 shows the number of employees and hours worked in the production of CH and table 8 shows wages received by production and related workers producing CH.

Table 7.—Average number of employees, total and production and related workers engaged in the manufacture of hypochlorite, and hours worked by such employees, by firms, 1981-83, January-March 1983, and January-March 1984

* * * * *

Table 8.—Wages and total compensation paid to production and related workers engaged in the production of CH, and output per hour, 1981-83, January-March 1983, and January-March 1984

* * * * *

The number of production and related workers producing CH fell from * * * in 1981 to * * * in 1983, but then rose to * * * in January-March 1984. The increase in 1984 was due to the startup of the Natrium plant. Hours worked in producing CH followed the trends as that in the number of production workers.

Olin's Charleston, Tenn., plant was visited by the Commission's staff. It appeared to be a modern, clean, well-maintained plant with good employee and community relations. An internal Olin article, which discusses productivity at the Charleston plant is reproduced in appendix E.

Olin's average hourly wages are * * * of PPG. The Charleston, Tenn., production workers of Olin are not organized by a union, whereas PPG's workers are members of a union in Ohio as well as a union in West Virginia. Output of CH per hour is highest in the January-March periods for both firms, when the plants have been operating at or near 100-percent capacity utilization (table 2). Olin's output per hour is * * *.

Financial experience of U.S. producers

Olin furnished usable income-and-loss data for both its overall establishment operations and its operations producing CH. PPG supplied income-and-loss data only for its CH operations. Both firms maintain separate cost centers for their CH operations. 1/ * * *.

* * * * *

Overall establishment operations.—The income-and-loss experience of Olin on its establishment operations is presented in table 9 for 1981-83, January-March 1983, and January-March 1984. Net sales of all products declined annually from * * * million to * * * million, or by * * * percent, during 1981-83. Net sales were * * * million in January-March 1984, compared with * * * million in the corresponding period of 1983. Net sales of CH were * * * percent, * * * percent, and * * * percent of total establishment sales in 1981, 1982, and 1983, respectively.

Table 9.—Income-and-loss experience of Olin Corp. on the overall operation of its establishment within which calcium hypochlorite is produced, 1981-83, January-March 1983, and January-March 1984 1/

* * * * *

Calcium hypochlorite.—The income-and-loss experience of U.S. producers on their CH operations is shown in table 10. The quantity of CH sold declined annually from * * * million pounds in 1981 to * * * million pounds in 1983, or by * * * percent. The quantity of CH sold rose slightly to * * * million pounds during January-March 1984, compared with * * * million pounds in the corresponding period of 1983. The value of net sales of CH also declined annually during 1981-83, from * * * million to * * * million, or by * * * percent. The value of net sales continued to decline during January-March 1984, probably due to lower prices, while the quantity of net sales rose. Net sales were * * * million in January-March 1984, down * * * percent from the

1/ Each producers' CH operation is housed within its own separate building.

Table 10.—Income-and-loss experience of Olin Corp. and PPG Industries on their operations producing calcium hypochlorite, 1981-83, January-March 1983, and January-March 1984.

* * * * *

* * * million achieved during the corresponding period of 1983. The unit value of net sales fluctuated between a high of * * * per pound during January-March 1983 to a low of * * * per pound in the corresponding period of 1984. * * *.

* * * * *

Operating income fell sharply from * * * million, or * * * percent of net sales, in 1981 to * * * million, or * * * percent of net sales, in 1983. Operating income was * * * million, or * * * percent of net sales, during January-March 1984, compared with * * * million, or * * * percent of net sales, in the corresponding period of 1983. * * *. PPG's 1981 operating income was * * *, or * * * percent of net sales, and reflected a * * *. PPG's 1983 operating income was * * *, or * * * percent of net sales. During this period PPG * * *.

Cash flow from operations declined * * * from * * * million in 1981 to * * * million in 1983, and from * * * million during January-March 1983 to * * * million during January-March 1984. PPG * * * million during January-March 1984.

Capital and investment

The following replies were received from Olin and PPG relative to actual and potential negative effects of LTFV imports of CH on their firms' growth, investment, and ability to raise capital:

* * * * *

Capital expenditures and research and development

U.S. producers' investment in productive facilities employed in the production of CH rose in each of the reporting periods, from * * * million to * * * million on a cost basis and from * * * million to * * * million on a book-value basis (table 11).

Table 11.—Investment in productive facilities, capital expenditures, and research and development expenses, by firms, 1981–83, January–March 1983, and January–March 1984

* * * * *

Capital expenditures for facilities used principally in the production of CH amounted to * * * million in 1981, * * * million in 1982, and * * * million in 1983. Such expenditures were * * * million for January–March 1984, compared with * * * million in the corresponding period of 1983.

Research and development expenditures made by U.S. producers relative to their CH operations amounted to * * * million, * * * million, and * * * million in 1981, 1982, and 1983, respectively. Such expenditures were * * * million during January–March 1984, compared with * * * million in the corresponding period of 1983.

Consideration of Threat of Material Injury to an Industry in the United States

There are various factors which may contribute to the threat of injury to the domestic industry, including the ability of the foreign producers to increase the level of their exports to the United States and the likelihood they will do so, any increase in U.S. importers' inventories of the subject products, and any increasing trends in the quantity of imports and U.S. market penetration. Import trends are discussed in the section of the report entitled "Consideration of the causal relationship between imports allegedly sold at LTFV and the alleged material injury."

U.S. importers' inventories

The following tabulation shows U.S. importers' inventories of CH imported from Japan (in thousands of pounds):

* * * * *

Importers' inventories increased from * * * days supply of shipments at the end of 1981 to * * * days supply of shipments at the end of 1982, but decreased to * * * days supply of shipments at the end of 1983. Importers' inventories increased from * * * pounds in January–March 1983 to * * * pounds in January–March 1984.

Ability of foreign producers to generate exports and availability of export markets other than the United States

There are three firms producing CH in Japan at present: Nippon Soda (Tokyo), Nissin Denka (Yamagata Prefecture), and Nankai (Osaka). According to statistics of Japan's Ministry of International Trade and Industry (MITI), Japanese production of high-grade bleaching powder, a synonym for CH, was as follows (in millions of pounds):

Production

1981	82.8
1982	72.7
1983	79.7

Japanese exports of CH are shown in the following tabulation (in thousands of pounds):

Market	1981	1982	1983
United States	7,840	8,463	11,643
Australia	12,546	11,718	7,452
Iran	6,806	3,737	5,487
Canada	3,089	2,859	4,592
Indonesia	3,587	4,489	3,882
U.S.S.R.	5,644	882	3,748
Hong Kong	2,720	2,432	3,364
All other	15,897	16,790	16,625
Total	58,129	51,370	56,793

Japanese producers, in response to questions of the Commission about their exports to the United States of CH in 1983 commented that the considerable increase was due chiefly to the cold summer in 1982 versus the hot summer in 1983. They stated that it is hard to predict changes in their export quantity to the United States during 1984 because it depends on the weather in the United States, changes in the domestic capacity of the two U.S. producers, and the U.S. demand for cyanuric acid derivatives, which have a similar use.

An official of Toyo Soda Manufacturing Co., (the parent firm of Nissin Denka) suggested, however, that there will be no significant growth of the Japanese producers' shipments to the United States in 1984 because * * *.

Other plants capable of producing CH are located in Ulsan, Republic of Korea (Korea); Saskatoon, Canada; and Johannesburg, South Africa. The Canadian plant is reported to have technical problems and has not

supplied the U.S. market to date. There have been very small amounts of CH imported from Korea (as shown in table 12) but none from South Africa. Olin owns 50 percent of the plant in South Africa.

The following tabulation shows Nippon Soda's production, practical capacity, and capacity utilization:

* * * * *

The following tabulation shows Nissin Denka's production, practical capacity, and capacity utilization:

* * * * *

The following tabulation shows the share and source of CH imported from Japan, as reported by the U.S. importers (in thousands of pounds):

<u>Producer</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>Jan-March—</u>
Nippon Soda—————	***	***	***	***
Nissin Denka—————	***	***	***	***
Nankai—————	***	***	***	***

Consideration of the Causal Relationship Between Imports Allegedly Sold at LTFV and the Alleged Material Injury

U.S. imports

Japan is the only notable source of imports of the subject products, as shown in the table 12. Aggregate U.S. imports of CH from Japan increased slightly, from 6.9 million pounds in 1981 to 7.0 million pounds in 1982, and further increased to 11.0 million pounds in 1983. Imports during January–March 1984 totaled 2.8 million pounds, representing a decrease of 8 percent from the level of imports in the corresponding period of 1983.

Unit values of imports of CH from Japan were \$0.61 per pound in 1981 and 1982, then declined to \$0.55 in 1983, and further declined to \$0.54 in January–March 1984.

Table 12.—Calcium hypochlorite: U.S. imports, by sources, 1981–83, January–March 1983, and January–March 1984

Source	1981	1982	1983	January-March—	
				1983	1984
Quantity (1,000 pounds)					
Japan	6,895	6,975	10,843	3,299	2,847
Republic of Korea	0	0	72	72	0
All other	1	2	42	—	1/
Total	6,896	6,977	10,956	3,371	2,847
Value (1,000 dollars)					
Japan	4,228	4,260	5,914	1,799	1,523
Republic of Korea	0	0	41	41	0
All other	1	2	27	0	1
Total	4,229	4,262	5,982	1,840	1,524
Unit value (per pound)					
Japan	\$0.61	\$0.61	\$0.55	\$0.55	\$0.54
Republic of Korea	0	0	.57	.57	0
All other	1.00	1.00	.64	0	1.00
Average	.61	.61	.55	.55	.54

1/ Less than 500 pounds

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

Market penetration of imports

Imports of CH from Japan as a share of apparent U.S. consumption are shown in table 13. Market penetration of imports from Japan was * * * percent in 1981; it increased slightly to * * * percent in 1982 and increased sharply to * * * percent in 1983. Market penetration was * * * percent in January–March 1984, somewhat less than the * * * percent in the corresponding period of 1983.

Table 13.—Calcium hypochlorite: U.S. imports from Japan and apparent U.S. consumption, 1981–83, January–March 1983, and January–March 1984

Marketing and related issues

There are two basic markets for CH in the United States. The pool-trade market, which is by far the largest, and the nonpool trade or industrial market, which accounted for approximately * * * percent of total sales in 1983. Each market has characteristics that require different marketing techniques.

Pool market.—The pool market comprises three levels: repackagers, distributors, and retailers. Most sales to repackagers are made on a spot basis, dictated by demand from the end users throughout the summer season. However, some of the customers contract for their needs for a longer time period (usually a year) and place monthly orders for delivery. However, these contracts are binding only with respect to maximum price. If a purchaser can obtain the product from an alternate source at a more advantageous price, it may switch suppliers, after providing the original supplier an opportunity to make a price concession. Although orders may cover large quantities, shipments are normally delivered in truckloads (30,000 to 40,000 pounds).

Because CH is heavily used in the swimming pool market, much of the sales activity takes place in anticipation of the summer season. "Early-buy" sales are usually negotiated during the fourth quarter of each year. During this period, known as the "preseason," suppliers may offer discounts and other incentives to attract larger commitments. Although, Olin, the petitioner, normally offers payment terms of net 30 days, payments for preseason sales are delayed until June. Importers offer terms up to 90 days on preseason sales.

A number of repackers reported that they were suffering supply problems in 1983 and 1984, even though they had purchased by contract during the preseason. 1/ Some had experienced delays in deliveries, and others had been put on monthly allocations. In a telephone conversation, * * * informed the staff that in mid-1983 the industry had predicted a glut in the CH market for 1984, but that a shortage occurred because (1) PPG failed to bring its new production facility to full capacity because of technical problems associated with startup operations and (2) although there were rumors in the industry that imports from Canada would enter the market, 2/ these imports did not materialize. Mr. Ron Vale's testimony was similar * * *.

During the staff conference, counsel for Nippon Soda and Nissin Denka did not confirm shortages of supply in 1983 but testified that some repackagers were placed on "allocation" by Olin in April-May 1984. The April 1984 allocation was confirmed by a large repackager in a confidential affidavit. 4/ Earlier allocations by Olin were in 1973-74 4/ and in 1980-81. 5/ Purex Corp. began purchasing imported CH from Japan in 1981 to supplement their requirements that Olin allegedly did not want to supply. 5/

1/ Telephone inquiries with * * *.

2/ Although Saskatoon Chemical of Canada contacted U.S. repackagers about potential sales for 1984, they have not been successful in bringing their facilities to an operational state.

3/ Transcript of the hearing, p. 68.

4/ The confidential affidavit of * * *.

5/ Testimony of Mr. Ron Vale of Purex Corp., transcript of the hearing, pp. 66 and 67.

Olin confirmed that shortages occurred in 1980 but stated they were alleviated by the expansion of its Charleston, Tenn., plant in 1981. 1/ Olin explained the April-May 1984 shortages as follows: Olin announced a price increase in April that was to be effective 4 weeks from the date of the announcement. Olin's customers placed large orders in order to get the preincrease price. Olin was unable to cover this surge of orders from inventories and, therefore, allocated its supplies among its customers based on their historic purchases. Olin's counsel testified that by mid-May 1984 this shortage had been alleviated. 2/ Nissin Denka's post-conference brief cites a * * * .

Finally, it was alleged by * * * that Olin had technical problems with 10 million pounds of CH and was forced to reprocess it, thus limiting domestic availability. Olin denied this at the staff conference, stating that although problems had caused the company to recall some CH in the past, this is by no means uncommon in the industry. Olin stated that the amount recalled was far less than the 10 million pounds mentioned. 3/

Two repackagers mentioned delivery problems in 1983 and 1984. Historically, U.S. producers shipped orders immediately and shipments could be received within 2 to 3 weeks according to these buyers. * * * stated that his shipments from Olin were * * * months behind schedule. * * * stated that his orders from * * * were * * * drums short on the last shipment. 4/

Although repackagers claim supply problems, distributors apparently have not had as many problems. These distributors purchase packaged CH from Olin, PPG, independent repackagers, or from importers. The majority of the distributors contacted by the staff stated that they are not experiencing supply problems with U.S. producers. They also stated that demand is strong for CH in 1984. Purchases by distributors of packaged products are not as sensitive to small price variations as purchases of bulk product by repackagers. A number of incentives, such as discounts, rebates, "free" merchandise, and trips, are available to distributors that purchase Olin's branded product in sizable quantities. Distributors report that there are price premiums associated with Olin's HTH brand, rendering price comparisons difficult between the imported and U.S.-produced product.

Both importers and U.S. producers generally pay the transportation costs themselves; price comparisons were made on delivered price basis. Reported U.S. inland shipping costs as a share of U.S. f.o.b. prices are: * * * .

1/ Id., p. 39.

2/ Id., pp. 102-113.

3/ Olin's post conference brief, p. 4.

4/ Ron Vale, Purex, indicated that it takes 6 weeks under optimal conditions to receive the Japanese product (staff conference transcript, p. 84).

Nonpool market.—CH is sold in the nonpool or industrial market in a manner completely different than it is in the pool market. Large industrial users typically invite bids from qualified producers. Firms wishing to supply the large industrial accounts must first have their CH qualified internally by the user to guarantee consistent performance of the product. Suppliers are chosen on the basis of product quality, lowest bid price, and assurances of delivery. Imports from Japan are * * * factor in this market.

Prices

CH is sold by the two U.S. producers and by the importers both on an f.o.b. (plant, U.S. warehouse, or port of entry) basis and on a delivered basis. The U.S. producers initially quote prices on an f.o.b. basis, but often provide allowances for freight (for freight equalization or to meet other competitive situations), effectively establishing a delivered price. Importers more often quote delivered prices, owing to the flexibility of delivery to the various ports of entry. Both the producers' and importers' price data in this report are converted (if needed) to delivered prices.

U.S. producers' prices.—U.S. producers' prices in the repackager market initially increased from * * * per pound in January–March 1981 to * * * per pound in October–December 1981, or by about 10 percent. Prices then began to gradually decline throughout 1982 and 1983, to * * * per pound in January–March 1984. This represents a 15-percent decline from the October–December 1981 high (table 14).

Prices to the industrial market were generally stable in 1981. U.S. producers' weighted-average prices then began to steadily decline from * * * per pound in January–March 1982 to * * * per pound in January–March 1984, representing an 18-percent decline (table 15).

In the pool-trade distributor market, U.S. producers' weighted-average prices are generally lowest in July–September and highest in January–March. Prices initially increased 12 percent from January–March 1981 to January–March 1982. Prices then consistently dropped, except for a brief rise in January–March 1983. Prices fell from * * * per pound in January–March 1982 to * * * per pound in January–March 1984, or by 15 percent (table 16).

Importers' prices.—Importers' prices to the repackagers were very stable in 1981, remaining at * * * per pound throughout the year. During January–March 1982 prices increased by 8 percent to * * * per pound. Importers' prices to repackagers began to decrease during the 1982–83 season. The decline continued, to * * * per pound, in January–March 1984, representing a drop of 14 percent from that of prices in January–March 1982 (table 14).

Importers' weighted-average prices in the industrial market were very stable from January–March 1981 to July–September 1981. Prices in 1982 varied by no more than 3 percent. Weighted-average prices then began to decline, from * * * per pound in July–September 1982 to * * * per pound in January–March 1984, representing an 11-percent drop (table 15).

Table 14.—Calcium hypochlorite: Weighted-average delivered prices for sales to repackagers by U.S. producers and importers of the Japanese product, by quarters, January 1981–March 1984

Period	Importers		U.S. producers		Margins of Underselling or (overselling)
	Quantity	Weighted- average price	Quantity	Weighted- average price	
	<u>1,000 lbs</u>	<u>Per pound</u>	<u>1,000 lbs</u>	<u>Per pound</u>	<u>Percent</u>
1981:					
Jan.–Mar.—	***	***	***	***	6
Apr.–June—	***	***	***	***	8
July–Sept—	***	***	***	***	9
Oct.–Dec—	***	***	***	***	15
1982:					
Jan.–Mar.—	***	***	***	***	7
Apr.–June—	***	***	***	***	7
July–Sept—	***	***	***	***	8
Oct.–Dec—	***	***	***	***	14
1983:					
Jan.–Mar.—	***	***	***	***	7
Apr.–June—	***	***	***	***	13
July–Sept—	***	***	***	***	11
Oct.–Dec—	***	***	***	***	8
1984 Jan.—					
Mar—	***	***	***	***	7

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

Table 15.—Calcium hypochlorite: Weighted-average delivered prices for sales to nonpool-trade industrial users by U.S. producers and importers of the Japanese product, by quarters, January 1981–March 1984

Period	Importers		U.S. producers		Margins of underselling or (overselling)
	Quantity	Weighted-average price	Quantity	Weighted-average price	
	1,000 lbs	Per pound	1,000 lbs	Per pound	Percent
1981:					
Jan.–Mar.—	***	***	***	***	12
Apr.–June—	***	***	***	***	10
July–Sept—	***	***	***	***	10
Oct.–Dec—	***	***	***	***	18
1982:					
Jan.–Mar.—	***	***	***	***	12
Apr.–June—	***	***	***	***	6
July–Sept—	***	***	***	***	2
Oct.–Dec—	***	***	***	***	8
1983:					
Jan.–Mar.—	***	***	***	***	4
Apr.–June—	***	***	***	***	0
July–Sept—	***	***	***	***	0
Oct.–Dec—	***	***	***	***	(3)
1984 Jan.—					
Mar. ———	***	***	***	***	4

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

Table 16.—Calcium hypochlorite: Weighted-average delivered prices for sales to pool-trade distributors by U.S. producers and importers of the Japanese product, by quarters, January 1981–March 1984

Period	Importers		U.S. producers		Margins of underselling or (overselling)
	Quantity	Weighted-average price	Quantity	Weighted average price	
	1,000 lbs	Per pound	1,000 lbs	Per pound	Percent
1981:					
Jan.–Mar.—	***	***	***	***	<u>1/</u>
Apr.–June—	***	***	***	***	<u>1/</u>
July–Sept—	***	***	***	***	<u>1/</u>
Oct.–Dec—	***	***	***	***	0
1982:					
Jan.–Mar.—	***	***	***	***	16
Apr.–June—	***	***	***	***	10
July–Sept—	***	***	***	***	1
Oct.–Dec—	***	***	***	***	<u>1/</u>
1983:					
Jan.–Mar.—	***	***	***	***	19
Apr.–June—	***	***	***	***	6
July–Sept—	***	***	***	***	10
Oct.–Dec—	***	***	***	***	12
1984 Jan.—					
Mar.—	***	***	***	***	20

1/ Not available.

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

In the pool-trade distributor market, quantities reported by importers fluctuated widely, thus making trend analysis difficult. 1/ During the entire period, however, prices steadily dropped in periods when data were reported (table 16).

1/ Most sales of imported product to distributors are made only after repacking by domestic firms; therefore, sales by importers at this level are relatively rare.

Margins of underselling.—Japanese CH consistently undersold the U.S.-produced product in the repackager market. Margins fluctuated between 6 and 15 percent; however, they usually hovered between 6 and 9 percent (table 14).

In the industrial market the Japanese CH undersold the U.S. product during 1981 and 1982. The only instance of overselling occurred in 1983, when U.S.-produced CH undersold the Japanese product by 4 percent. Prices seemed to be about equal between the U.S.-produced and Japanese material in 1983 (table 15).

Importers' prices to the pool-trade distributor market were sporadic, making price comparisons difficult. However, in every period in which comparisons could be made, Japanese CH undersold the U.S. product (table 16).

Lost sales

The U.S. producers cited 22 allegations of lost sales to imports of CH from Japan; these allegations involved 17 purchasers. The staff contacted 12 of these purchasers concerning 17 allegations.

* * * stated that he rejected a quote of * * * per pound from * * * in favor of a * * * per pound quote from an importer in 1983. He is currently buying U.S.-produced product, now at * * * per pound.

* * * acknowledged buying * * * pounds of Japanese CH in 1982. He buys predominantly for price considerations and the Japanese price was * * * per pound compared with a * * * per pound quote from a U.S. producer. He further stated that he believes he has lost * * * pounds of business to the consumer market because of Japanese imports.

* * * was alleged to have purchased * * * pounds of Japanese CH because of low prices. * * * confirmed that * * * had rejected a quote of * * * per pound from a U.S. producer in favor of a * * * per pound price from an importer.

* * * denied * * * allegations. He stated that they have not purchased Japanese CH in 2 years. * * * advised that the Japanese CH generally is lower priced; however, for him the price is not low enough to compensate his company for the added delivery time it takes to obtain the imported CH.

* * * denied a lost sale allegation of * * * pounds. He stated that * * * had not purchased any Japanese CH during the period specified in this allegation. He further stated that he does not buy Japanese CH for price considerations, but rather because he was dissatisfied with Olin's marketing techniques; namely, the discounts and rebates Olin offers which "confuse the price structure." * * * likes to deal with the importers of the Japanese CH because "they deal on a dollar for dollar basis."

* * * denied * * * lost sale allegations concerning * * * pounds of CH. * * * had not purchased any Japanese product in the period specified, but he did feel that the importers were definitely setting the price.

* * * denied a lost sale allegation of * * * pounds. He stated that the initial quote of * * * per pound by the U.S. producer was "ridiculous" given the condition of the market, and within 30 days the U.S. producers' price was down to * * *.

* * * denied an allegation from 1982. He stated that the quantity was too high and the U.S. producer's alleged price was not consistent with market conditions at the time.

* * * could neither confirm or deny the allegation. He stated that he had purchased Japanese material based on better service and to have an alternate source of supply.

* * * allegations involving * * * firms and * * * pounds of CH could not be confirmed because officials at these companies refused to answer any questions over the telephone.

Exchange rates

The nominal value of the yen in terms of dollars declined by 21 percent from January-March 1981 to October-December 1982. It then strengthened by 11 percent in January-March 1983, and remained fairly stable throughout the remainder of the year. However, when these figures are adjusted for inflation by the Producers' Price Index, the "real" dollar-per-yen exchange rate declined even further in 1981 and 1982 than the nominal rate. The real value of the yen in terms of dollars declined by 22 percent from January-March 1981 to October-December 1982. The real exchange rate then strengthened only by 9 percent in January-March 1983, before beginning a slow decline of 2 percent during 1983, as shown in the following tabulation (January-March 1981=100):

Period	Dollars/yen index (nominal rate)	Dollars/yen index (real rate)
1981:		
January-March	100	100
April-June	94	92
July-September	89	88
October-December	92	91
1982:		
January-March	88	87
April-June	84	83
July-September	79	79
October-December	79	78
1983:		
January-March	87	85
April-June	87	83
July-September	85	81
October-December	88	83

Source: International Monetary Fund, International Financial Statistics
April 1984.

APPENDIX A

NOTICE OF THE COMMISSION'S INSTITUTION OF
A PRELIMINARY ANTIDUMPING INVESTIGATION

**INTERNATIONAL TRADE
COMMISSION**

(Investigation No. 731-TA-169
(Preliminary))

**Calcium Hypochlorite From Japan;
Import Investigation**

AGENCY: International Trade
Commission.

ACTION: Institution of preliminary
antidumping investigation and
scheduling of a conference to be held in
connection with the investigation.

EFFECTIVE DATE: April 25, 1984.

SUMMARY: The United States
International Trade Commission hereby
gives notice of the institution of
investigation No. 731-TA-189
(Preliminary) under section 733(a) of the
Tariff Act of 1930 (19 U.S.C. 1673b(a)) to
determine whether there is a reasonable
indication that an industry in the United
States is materially injured, or is
threatened with material injury, or the
establishment of an industry in the
United States is materially retarded, by
reasons of imports from Japan of
calcium hypochlorite provided for in
TSUS item 418.22, which are alleged to
be sold in the United States at less than
fair value.

FOR FURTHER INFORMATION CONTACT:

Mr. Stephen Vastagh, Office of
Investigations, U.S. International Trade
Commission, 701 E Street, NW.,
Washington, D.C. 20436, telephone 202-
523-0283.

SUPPLEMENTARY INFORMATION:

Background

This investigation is being instituted
in response to a petition filed on April
25, 1984, by Olin Corp. of Stamford,
Conn., the principal producer of the
subject product in the United States. The

Commission must make its determination in this investigation within 45 days after the date of the filing of the petition, or by June 11, 1984 (19 CFR 207.17).

Participation

Persons wishing to participate in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's Rules of Practice and procedure (19 CFR 201.11), not later than seven (7) days after the publication of this notice in the **Federal Register**. Any entry of appearance filed after this date will be referred to the Chairman, who shall determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service of Documents

The Secretary will compile a service list from the entries of appearance filed in this investigation. Any party submitting a document in connection with the investigation shall, in addition to complying with § 201.8 of the Commission's rules (19 CFR 201.8), serve a copy of each such document on all other parties to the investigation. Such service shall conform with the requirements set forth in § 201.16(b) of the rules (19 CFR 201.16(b)).

In addition to the foregoing, each document filed with the Commission in the course of this investigation must include a certificate of service setting forth the manner and date of such service. This certificate will be deemed proof of service of the document. Documents not accompanied by a certificate of service will not be accepted by the Secretary.

Written Submissions

Any person may submit to the Commission on or before May 24, 1984, a written statement of information pertinent to the subject matter of this investigation (19 CFR 207.15). A signed original and fourteen (14) copies of such statement must be submitted (19 CFR 201.8).

Any business information which a submitter desires the Commission to treat as confidential shall be submitted separately, and each sheet must be clearly marked at the top "Confidential Business Data." Confidential submissions must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6). All written submissions, except for confidential business data, will be available for public inspection.

Conference

The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 9:30 a.m. on May 18, 1984, at the U.S. International Trade Commission Building, 701 E Street NW., Washington, D.C. Parties wishing to participate in the conference should contact Stephen Vastagh (202-523-0283), not later than May 16, 1984, to arrange for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference.

Public Inspection

A copy of the petition and all written submissions, except for confidential business data, will be available for public inspection during regular hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 701 E Street NW., Washington, D.C.

For further information concerning the conduct of this investigation and rules for general application, consult the Commission's Rules of Practice and Procedure, Part 207, subparts A and B (19 CFR Part 207), and Part 201, subparts A through E (19 CFR Part 201).

This notice is published pursuant to section 207.12 of the Commission's rules (19 CFR 207.12).

Issued: May 4, 1984.

Kenneth R. Mason,
Secretary.

[FR Doc. 84-12486 Filed 5-8-84; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B
NOTICE OF COMMERCE'S INSTITUTION OF
AN ANTIDUMPING INVESTIGATION

DEPARTMENT OF COMMERCE**International Trade Administration**

[A-588-401]

**Calcium Hypochlorite From Japan;
Initiation of Antidumping Investigation****AGENCY:** International Trade
Administration, Import Administration
Commerce.**ACTION:** Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping investigation to determine whether calcium hypochlorite from Japan is being, or is likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of the merchandise are materially injuring, or threatening to materially injure, a U.S. industry. The allegation of sales at less than fair value includes an allegation of critical circumstances under section 773(e) of the Tariff Act of 1930, as amended (19 U.S.C. 1673) (the Act). If our investigation proceeds normally, the ITC will make its preliminary determination on or before June 11, 1984, and we will make ours on or before October 2, 1984.

EFFECTIVE DATE: May 21, 1984.

FOR FURTHER INFORMATION CONTACT: Steven Lim or Paul Tambakis, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, D.C. 20230, telephone: (202) 377-1776 or 377-0186.

**SUPPLEMENTARY INFORMATION:
Petition**

On April 25, 1984, we received a petition filed in proper form from counsel for Olin Corporation, on behalf of the U.S. industry producing calcium hypochlorite. In compliance with the filing requirements of § 353.36 of the Commerce Regulations (19 CFR 353.36), the petition alleges that imports of the subject merchandise from Japan are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (19 U.S.C. 1673) (the Act), and that these imports are materially injuring, or threatening to materially injure, a U.S. industry. Petitioner calculated United States price based on the F.A.S. values for imports of the subject merchandise (as reported by the U.S. Department of Commerce, Bureau of Census). Since the petitioner was unable to secure home market or third country prices for the merchandise subject to this investigation, foreign market value was based on United States producers' costs for the merchandise adjusted for cost differences in Japan. Using this comparison, petitioner showed dumping margins of approximately 27.00 to 43.00 percent. Also, critical circumstances have been alleged under section 733(e) of the Act.

Initiation of Investigation

Under section 732(c) of the Act, we must determine, within 20 days after a petition is filed, whether a petition sets forth the allegations necessary for the initiation of an antidumping investigation and whether it contains information reasonably available to the petitioner supporting the allegation of sales at less than fair value. We have examined the petition on calcium hypochlorite and we have found that the petition meets those requirements. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping investigation to determine whether calcium hypochlorite from Japan is being, or is likely to be, sold at less than fair value in the United States. We will also determine whether "critical circumstances" exist in this case. If our investigation proceeds normally, the ITC will make its preliminary determination by June 11, 1984, and we will make ours on or before October 2, 1984.

Scope of the Investigation

The merchandise covered by this investigation is "Calcium Hypochlorite", provided for in item 418.2200 of the Tariff Schedules of the United States.

Notification to ITC

Section 732(d) of the Act requires us to notify the U.S. International Trade Commission of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all non-privileged and non-confidential information. We will also allow the ITC access to all privileged and confidential information in our files, provided it confirms that it will not disclose such information either publicly or under an administrative protective order without the written consent of the Deputy Assistant Secretary for Import Administration.

Preliminary Determination by ITC

The ITC will determine by June 11, 1984, whether there is a reasonable indication that imports of calcium hypochlorite from Japan are materially injuring, or threatening to materially injure, a U.S. industry. If that determination is negative, the investigation will terminate; otherwise, the investigation will proceed according to the statutory procedures.

Dated: May 15, 1984.

Alan F. Holmer,
Deputy Assistant Secretary for Import Administration.

[FR Doc. 84-13617 Filed 5-18-84; 8:45 am]

BILLING CODE 3510-05-M

APPENDIX C

LIST OF WITNESSES APPEARING AT
THE COMMISSION'S CONFERENCE

CALENDAR OF PUBLIC CONFERENCE
Investigation No. 731-TA-189 (Preliminary)
CALCIUM HYPOCHLORITE FROM JAPAN

Those listed below appeared as witnesses at the United States International Trade Commission's conference held in connection with the subject investigation on May 18, 1984 in the Hearing Room of the USITC Building, 701 E Street, NW., Washington, D.C.

In support of the imposition of antidumping duties

Beveridge E. Diamond, P.C., Washington, D.C.
on behalf of

Olin Corp.

George Turnipseed, Director of Marketing
and sales for Pool Chemicals.

Peter Kosche
Robert Bertrand
Mari-Jo Scopac

Alexander Sierck)
Elisabeth Robinson) --OF COUNSEL

Rogers & Wells, Washington D.C.
on behalf of

PPG Industries, Inc.

Robert McInyre) --OF COUNSEL

In opposition to the imposition of antidumping duties

Arnold & Porter, Washington, D.C.
on behalf of

Nippon Soda (Japanese producer)
Ron Vale, Purchasing Manager, Purex Corp.
Andrew Jasper, Sales Manager, Toyomenka America

Patrick McCrory)
Duane Thompson)
Paul Ryerson) --OF COUNSEL
Richard Johnson)

Whitman & Ransom, Washington, D.C.
on behalf of

Nisshan Denka Co. (Japanese producer)

Max Schutzman)
Jay Gladis) --OF COUNSEL
Thomas Bailey)

APPENDIX D
U.S. PRODUCERS' AND IMPORTERS' STATEMENTS
REGARDING THE U.S. MARKET

* * * * *

APPENDIX E

ARTICLE ON PRODUCTIVITY AT OLIN'S
CHARLESTON, TENN., PLANT



Charles Brown, director of manufacturing, addresses the Steering Committee.

Charleston: 'Super Responsive' Employees

Employees at Charleston are "super receptive" to the Employee Involvement Team program. They prove it by enthusiastically participating in a wide range of projects aimed at improving their jobs and Olin's competitive position.

A plant profile developed from interviews with hourly and salaried workers clearly identifies one pronounced characteristic—high morale. This can be attributed to the fact that employees know they can play a role in the decision-making process for many facets of the plant's operation.

The spirit evident among Olin people generally shows up in the words of our workers. One in production says, "We, as employees, are a valuable resource. We help the company solve many problems, which is to the advantage of all of us. It makes Olin more competitive and our jobs better."

This attitude led EITs to complete 77 projects since the program began at Charleston in June 1982. With 35 percent of the employees currently involved with the projects, the total number of workers who support the EIT concept is far greater.

Is the program contributing to increased productivity? The answer to this question is a definite "Yes", according to Chuck Newton, plant manager at the inception of the program.

He encouraged the formation of the EIT program after listening to a presentation on its benefits by Bill Ridenour at a plant managers' meeting in the Fall of 1981.

"At the time, I knew very little about the concept," he states. "However, we did have a system in effect in the plant which encouraged input by our hourly workers. This was started

by Charles Brown (plant manager before Mr. Newton, now a director of manufacturing) who added further motivation. Therefore, our employees were probably prepared for the same elaborate EIT concept."

From the outset, the only requirement that Newton placed on the program was to set its primary goals: improving plant communications, and the involvement of all levels in the problem-solving process. His theory maintains that once plant communications are improved, money will be saved and productivity will increase.

He attributes the success of the program to the "super receptiveness" of the employees, both hourly and salaried, to the concept. "I can't say enough about the workers here. I think this program fits their work ethic perfectly. We have always had cooperative people on all levels, but this program gives them a chance to contribute to the operation of the plant in a way they never had before. And they seized the opportunity."

As soon as the program began, employees formed involvement teams in the production and maintenance areas, as well as in accounting, traffic, purchasing, security, and the quality lab. Projects included developing a cross-training procedure for accounting, installing a new safety railing, improving service in the lunchroom, upgrading the efficiency of production processes, and instituting a trial shift-rotation schedule.



Chuck Newton

A steering committee meets five or six times a year to review the overall direction of the program, but it does not get involved in initiating or approving projects. Approvals to implement projects go through normal channels as do all other requests for capital or policy changes.

Approval presentations range from informal discussions to formal meetings where team members use elaborate displays such as charts and slides to make their points.

Team members can depend on their facilitator for guidance and counseling. The program at Charleston got off to a fast start under the initial coordinator Whit Diggs, who has since taken an assignment at Niagara Falls. Now this role is filled by Harold White, an industrial engineer, who keeps a hectic pace helping to nurture teams while running leader/facilitator workshops. Most of the initial training and orientation meetings required to get the program off the ground were conducted by Regional Training Managers Bob Allgood and Wes Ezell.

The Charleston program produced two unique aspects. One is the existence of a plant-wide EIT formed in February of 1983. This team is led by Phil Margeson, the industrial-relations manager, with representatives from all major areas of the plant (hourly and salaried), including the plant manager. The second unique aspect is the number of hourly workers serving as team leaders. In one leader/facilitator workshop alone, 10 of the 16 participants were hourly employees. Some of them come to the plant on their days off to attend team meetings.

Continued on Page 6



Accounting EIT: From left—Carol Williams, Jackie Botts, Pam Borden, Pat Briden-dall, Wynell Marlow.



Production Services EIT for HTH group: Left to right, back row—Windem Davis, Larry Shamblin, Tim McKay, Larry Cordell; front row—Bob Griffin, Jimmy Lee.

Super-Responsive Employees

Continued from Page 3

However, Newton sees nothing unusual about this. He noted that hourly workers at Charleston have traditionally proven to be exceptionally dedicated and responsible.

But it takes a combination of hourly and salaried teams to make the program successful, and Charleston has this. In fact, Charles Brown director of manufacturing, calls the program a "model for the Chemicals Group to follow"

Brown, a staunch supporter of the EIT concept, took time from a busy schedule to tell the steering committee that he was "very pleased with the results" of the program. "You put an idea into operation very quickly. All of the teams in the program should be complimented."

He stressed that the importance of the program was getting employees involved in the decision-making process for improving their job environ-

ment. Once this is done, EIT efforts contribute to productivity in many ways, some of which translate into cost savings. But the major contribution comes from eliminating barriers between different levels of employees so that the plant can function efficiently and smoothly as a productive team.

Charleston is proving this can be done

EITs . . . What They Think of Them

Employee support for the EIT program is strong. Essentially, it gives workers a feeling that they do play an important role in the operation of the plant. Here are a few comments answering the question: "What does the EIT program mean to you?"

"It utilizes a valuable resource...the employees."
Henry Payne
Chlor Alkali



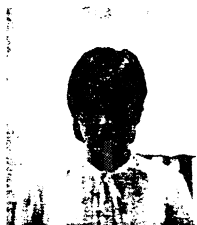
"The system is working well. Now, while we're on the job, we're thinking about what can be done to help."
Doug Pirkle
HTH filter
louvre operator



"It generates a lot of employee interest, so it's well worthwhile."
Don Moore
HTH supervisor



"I definitely see the program continuing. It's the perfect way to resolve any problems."
Pam Borden
Accounting



"There is a great feeling of accomplishment, knowing you did something that helps all of us."
Jack Beard
HTH filter
louvre operator



"It gives a format to express ourselves. We never had that before."
J. W. Marshall
Maintenance
team leader



"I've never seen a better way for employees to communicate. I think there was a credibility gap in the beginning, but any doubts that it would work have been put to rest."

Phil Margeson
Ind. Rel. manager



"Everything we do helps us in our jobs and makes things run smoothly."
Ted Swafford
HTH filter
louvre operator



"A five-year debate over a conveyor was resolved by one of our teams in six months. That is the type of response you get with this system."

Lee Allen
HTH filter
louvre operator



Charleston Team Accomplishments

Selected Projects

Charleston has a very successful EIT program, with about 35 per cent of the employees currently working on team projects.

Obviously it is impossible to report on the contributions made by all the teams. A synopsis of a few selected projects, however, can show the scope of the program—which includes teams from almost every department—and the dedication of team members.

All of the teams function in a similar manner. They make a list of items in their work areas that need improving, then meet on a regular basis to find solutions to these problems. If their recommendations are approved, the EITs implement them.

The frequency of team meetings ranges from weekly sessions to monthly ones. The time it takes to complete projects varies from days to months. Some teams prefer to concentrate on major projects which take months to solve, while others complete many less time-consuming activities.

The following examples of teams in action reflect the dedication of their members, while demonstrating the wide variety of activities they are engaged in.

Improving Quality

A team in the Chlor-Alkali plant proved that problems can be solved even if it requires the purchase of new equipment.

For years, workers in this area faced the nagging problem of a satisfactory process control for 50% NaOH. The two-fold problem involved a potential safety hazard in the sampling process, and, at the same time, a caustic product that was below quality specifications.

A team of Henry Payne, Sam Ray, Chuck Kibble, Ray Ledford, and Ed Knapp decided to solve this problem as one of its projects.

After much brainstorming and research, this EIT determined that a specialized piece of equipment—a Dynatrol specific-gravity instrument—could analyze the caustic solution without continuously presenting a safety hazard, so that any deviations from the higher-market-value caustic could be corrected immediately, which improves profitability.

The recommendations included a price for the unit, about \$5,000, a suggestion for its location, which would take advantage of existing piping needed for installation, and a written guarantee from the manufacturer that the instrument could be returned for a complete refund within six months if it was not satisfactory.

The unit is being currently tested.



J. W. Marshall (right center) and PN staff workers discuss projects with (from left) Paul Black, Bobby Allred, and Jerry Witt of Charleston's Maintenance B-shift EIT.



Chlor-Alkali D-shift Alpha team (left to right) Ed Knapp, Chuck Kibble, Sam Ray (seated), Henry Payne.



HTH B-shift EIT group, including (from left) Don Moore, Ted Swafford, Doug Pirkle, and Jack Beard, found answer to troublesome dryer problem.



A-shift EIT members Bill Casteel, Lee Allen, and Chris Richeson tell PN reporter about a major HTH filter problem they solved over eight-month period.

Reviewing Activities

Obviously the concerns of the workers are many and varied, but they are all striving to improve their plant's operation while working smarter, not harder.

The plant's EIT steering committee meets periodically to review objectives of these various teams and to keep track of the program; but it does not actually approve or reject any of the projects.

This group was formed in April 1982 to outline and establish parameters for the Employee Involvement Team program. It encourages participation in the program through the enthusiasm of various members who are department heads, and it provides a format for recognizing achievements of the teams.

The committee is chaired by Harold White, program facilitator, and consists of James Mason, Bob Nicholson, Tom Thomas, Bill Moore, Larry Murray, Phil Newman, Don Moore, Jim Keigher, and Chuck Newton.

Plant-Wide EIT Enters Second Year

Celebrating its first anniversary, Charleston's plant-wide EIT has achieved a string of solid accomplishments over the past year. Led by Phil Margeson, industrial-relations manager, the group consists of John Beard, Pat Bivens, Tommy Dodson, Bill Driggers, Jerry Farrell, Joe Gravelle, Marvin Hudson, Gary McAmis, Don Moore, Mike Stakely, Jerry Wade, and Chuck Newton.

This EIT is a vehicle for employees from all departments to communicate better with one another. One major project last year resulted in a modification of the work-rotation schedule to benefit workers. The new schedule has employees working morning to evening to night shifts in clockwise rotation. This is easier for the employees to adjust to, and—at the end of each third shift—they get a long weekend.

Representatives of the team usually survey workers in their own areas to develop a list of proposed projects. This EIT generally meets once a month for two hours. Part of the team's duties involves interviewing suppliers and evaluating their proposals.

Another project, an unusual one for EIT consideration, concerned the employees' food service at the plant. Besides more appealing food in the cafeteria, plant vending machines now are kept filled. It all adds up to a more enjoyable work environment.

Members of this EIT serve two years.

It's a unique approach, and it's really working.

Cutting The Paperwork

If you've ever complained about not getting a payment from the accounting department fast enough, maybe it was your own fault. You might not have filled out the necessary document properly. Maybe you left out your Social Security number or a medical number needed to process the papers.

It may be annoying to you, but think how frustrating it is to the accounting-department people who have to process many documents over and over again because they are not filled out properly.

The accounting-department team is working on many projects aimed at making record-keeping easier and paper processing simpler. The group includes team leader Pam Borden, along with Pat Bridendall, Jackie Botts, Carol Williams, Donna Wingard, Lynn Heron, and Wynell Marlow. One project they are developing is a training manual to help employees understand the needs of the accounting department. This project is an extension of an orientation manual the group developed earlier for new department personnel.

They also have developed a simplified document to record shipments in and out of the warehouse.

Reducing paperwork is a specialty of this team.

More Wear For Fewer Dollars

A production-services team in the HTH plant recommended cloth overalls that could be

Help Boost Plant's Efficiency

washed and reused, instead of disposable ones.

By using cloth garments, the team consisting of Bob Griffin, Jim Lee, Windem Davis, Larry Shamblin, Tim McKay, and Larry Cordell increased the use of a pair of coveralls by 400% from one day to five.

They also introduced the use of cloth gloves which only need be purchased two or three times a year. This has resulted in significant dollar savings.

Elaborate Presentations

Once any team determines what it needs to implement solutions to problems, the case must be presented for approval. Obviously, the more extensive the project, the more elaborate the presentation.

A presentation developed by a maintenance EIT headed by J. W. Marshall and the members shown at right, is one example of a well-researched report.

The presentation consists of a written document, overhead transparencies, and 29 color slides.

The presentation labels the steam leaks as dangerous, hazardous, and costly. The team's solution: upgrade the quality of piping used, by standardizing the plant-wide specifications.

Dedication And Determination

The determination of the workers to stay with a problem until they find solutions is reflected in the projects of two EITs in the HTH plant.

One team—led by Don Moore, with Ted Swafford, Doug Pirkle, and Jack Beard—spent nine months taking notes on a malfunctioning louvre dryer in order to correct an air-flow problem that created an inconsistent product as well as extra work.

After much trial and error, they discussed a method of plugging up part of the shaft, which in turn produced the proper air flow.

Another team in the same plant—consisting of Bill Casteel, Lee Allen, and Chris Richeson—spent eight months solving a filter problem. The answer involved sealing grooved channels on each side of the filters and using wider filter cloths.

Both teams helped ease the workload for all workers in these areas, while saving money by reducing downtime.

100 Per Cent Participation

The seven people in the warehouse section of



Maintenance-B EIT (from Left) Bill Dodd, Alan Ware, Oliver Cross, Johnny Sorrels, Jerry Witt, Eddie Ballard, Bobby Kessler, Paul Black, Terry Williamson, Gary McMahan, J. W. Marshall

the maintenance department formed an EIT a year and a half ago. They've met once a week since then, and have completed a number of projects.

The team includes Don Burris, Preston Debord, Buster Green, Bob Klein, Jack McCarter, Glen McCracken, Louis McCray, and Shan Qualls.

Its projects ranged from setting up a procedure to eliminate overcrowding of work-order bins to reorganizing the massive catalog needed for keeping track of the thousands of items that move through the warehouse.



Major movers in Charleston's Warehouse EIT: (from left) Jack McCarter, Preston Debord, Glen McCracken, Buster Green, Shan Qualls, Bob Klein.

This catalog project included redefining items, so that their description would be more appropriate and helpful, and adding such pertinent information as details of application. In short, the catalog is now more useful, which saves time for everyone.

Anyone requesting an item gets exactly what he wants, and the warehouse staff can retrieve it for him faster. The catalog has been programmed into a computer, which permits the description to be called up on a CRT screen as well as in hard-copy form.



Plant-wide EIT reviews first year's progress (clockwise from left) Jerry Wade, Don Moore, Tommy Dodson, Marvin Hudson, Phil Margeson, Gary McAmis, Pat Buens, Chuck Newton, Bill Driggers

Facilitator Views EIT Concept

EIT facilitators keep things moving. They have to help form new teams, train leaders, advise on presentations, counsel on conducting meetings, and even chair the steering committee.

Today Harold White performs these duties at Charleston. Although assigned to the plant as

an industrial engineer, he now spends about 80 per cent of his time with EITs. Judging from the success of the program, he is really doing a good job.

As any facilitator must be, White is a staunch advocate of the EIT concept. A student of EIT trends and statistics, he notes that the Number One item on a national survey listing the major benefits workers derive from



Harold White heads up Charleston's EIT Steering Committee

employee involvement was "getting a feeling my job is important."

White endorses this finding.

"The real benefit of an EIT program lies not in how many dollars you save, or what recognition you give to the teams, but rather in helping people understand that what they are doing is important.

"When everyone feels he or she is part of a team, communications will improve and productivity will increase."

Charleston employees are proving this to be true.

