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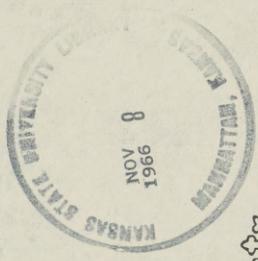
PRICES OF QUININE AND QUINIDINE

GOVERNMENT
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HEARINGS
BEFORE THE
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY
OF THE
COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE
EIGHTY-NINTH CONGRESS
SECOND SESSION
PURSUANT TO
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MAY 16, 17, 18, AND 23, 1966

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PRICES OF QUININE AND QUINIDINE

MONDAY, MAY 16, 1966

U.S. SENATE,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:07 a.m., in room 2228, New Senate Office Building, Senator Philip A. Hart (chairman) presiding.

Present: Senators Hart and Hruska.

Also present: S. Jerry Cohen, staff director and chief counsel; Dr. John M. Blair, chief economist; Dr. Walter Measday, economist; Horace L. Flurry, general counsel; Peter N. Chumbris, chief counsel for minority; Patricia Y. Bario, editorial director; and Gladys E. Montier, clerk.

Senator HART. The committee will be in order. This morning the subcommittee opens hearings on the prices of quinine and quinidine. Originally, our attention was directed to quinidine. This is a drug used to restore regularity in the heart rhythm of a patient suffering from certain types of cardiac arrhythmia, or irregular heartbeat. This is a condition most frequently found among older people. It is often incapacitating and sometimes fatal. Once a patient's heart rhythm has been restored by the use of the drug, he well may have to rely on a daily maintenance dosage for the remainder of his life. So, in this sense, on occasions the cost can be literally a matter of life and death.

Members of Congress, many of us, received complaints about rising quinidine prices. Some of them were forwarded to this subcommittee. In addition, I am told that inquiries to the Food and Drug Administration were so numerous that that agency prepared a form letter of reply.

Our question is, what has caused the rise in the price of this essential drug? Last year the retail price for 100 three-grain tablets, that is about a month's supply for the average patient, manufactured by one of the largest companies, rose from \$5 to over \$10. A year and a half ago one could buy the products of smaller manufacturers at much lower prices. No longer is this true. The retail price for products of smaller manufacturers rose from the range of \$1.50 to \$2 the 100, to \$7 to \$8 the 100. U.S. drug manufacturers, both large and small, have had to pay much higher prices for quinidine in bulk form. Manufacturers who could buy the bulk powder for less than \$1 an ounce at the beginning of last year were paying from \$4 to \$6 an ounce a year later. The price increase of quinidine reflects higher prices for quinine, since most of the quinidine used today is chemically converted from quinine.

Less than 2 years ago a manufacturer paid 30 to 40 cents an ounce for bulk quinine sulphate. Today an ounce costs between \$2 and \$3. Now there is no doubt that many factors have contributed to the present skyrocketing prices of quinine and thus of quinidine. The real problem then is not so much identifying the causal factors, but rather assessing their relative importance.

The difficulty of the problem has been compounded by the fact that the raw material supply—the bark of the cinchona tree—as well as the processing facilities, are located abroad. Supplies of cinchona bark come primarily from Indonesia and the Congo, while nearly all of our bulk quinine and quinidine comes from one company in the Netherlands, plus two in West Germany.

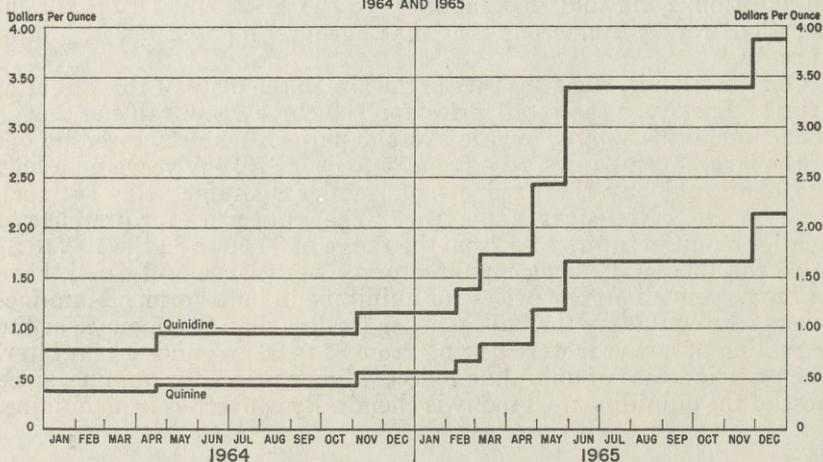
Another factor that complicates our effort has been that releases from the U.S. stockpile have added substantially to the world supply. Between 1961 and 1964, our Government sold more than 9½ million ounces of surplus quinine from its stockpile. All but 1 million ounces went to the Dutch, despite the fact that 4½ million ounces had been set aside for American small business. The price paid by the Dutch averaged about 20 cents an ounce. In 1965 quinine was being sold by these same interests in the United States for around \$2 an ounce.

The essential question which concerns us, to which these hearings will be directed, is whether these extraordinary price rises have been due primarily to the normal forces of inadequate supply and excessive demand in a free market, or to the artificial control of supply and the manipulation of prices by an international cartel.

What we are really talking about is the rather dramatic increase that began in April 1964 and continues through to date. This chart (chart 1), which was prepared by the Legislative Reference Service in the Library of Congress, and which will be made a part of the record at the appropriate point, dramatizes, I think, the reason that many of us in Congress and in the Food and Drug Administration were barraged by inquiries.

CHART 1

QUININE AND QUINIDINE
NOTIFICATION OF PRICE CHANGES BY BOEHRINGER TO S.S.T.
1964 AND 1965



Source: Correspondence from Boehringer to S.S.T.

This morning we have two witnesses. It is our hope that we may be able to hear from both of them. We have received a statement only from Mr. Price, which I am told came in Saturday. I am advised we have not had a statement from Mr. Stebel. Except as the two witnesses may raise something as they describe their experience in this area which would require interruption, I would hope that we could have the statements, and then the committee staff would offer for the record certain documents relative to the statements, following which I think a clearer understanding of the subject of this morning will be gained by all of us.

Senator HRUSKA. Mr. Chairman?

Senator HART. Senator Hruska.

Senator HRUSKA. Mr. Chairman, I don't know what has transpired up until now, but we are embarking into a new field. I repeat again these fields are technical. They have a large amount of background and history and they take a lot of information even to get on the track to understand what the witness is talking about. We have no advance copy of the statement. We have very little to go on, and it puts us at a great disadvantage, a tremendously great disadvantage.

I am going to suggest one of these times, Mr. Chairman, when we have a repetition of what we have this morning—where we walk into a hearing virtually cold—that we defer the meeting until such time as we can prepare properly for it and be in a position where we can ask intelligent questions, not only the first question, but the second, third, and fourth questions, to really get at the essence of these things. I don't say this reprovingly. I say it as mildly as I can. But I assure the chairman that I shall persist in this type of suggestions, that we act more as a deliberative body rather than merely an agency, a body, or committee this is possessed of ears and doesn't get at the real root of the thing.

Senator HART. I hope that the committee will be said in this instance to finally have gotten at the root of this when we conclude, but I am not at all unsympathetic with the Senator from Nebraska's concern. It is a complex subject. I am advised by staff that in the course of the preparation of the hearing the information in the hands of the staff was available to the minority.

Senator HRUSKA. Mr. Chairman, it wasn't available to me. Whatever the committee might have gotten was available to me but it wasn't brought, as I understand it, until sometime Saturday, that is the statement was brought Saturday. I don't know what advance time the witnesses have, but I say this again, it has been known for some time that this hearing would be held today. If the committee and the committee staff is not able to get the work done, I suggest we give ample time in which it can be done, and not come here and be forced to accept a lot of information and testimony which we are not able to get into beyond the face and the superficial aspects. It becomes very difficult.

Senator HART. I must confess, as the Senator from Nebraska does, that while the material was in the committee staff hands, I myself have not analyzed it. But I do hope that as we conclude this hearing, all of us will be able to interpret intelligently what has developed. I know that if any of us can, the Senator from Nebraska can, though neither of us has had much of a headstart.

Senator HRUSKA. That might be, it might not be, Mr. Chairman. But the fact is that the record will not contain many of the things that intelligently should be appearing concurrently in the record instead of some member of the staff or of the committee subsequently putting something in the record to explain that put in the first, second, or the third day of the hearing.

That has been one of the consistent procedures here and I raise the point again.

Senator HART. The witnesses, neither of them are responsible for this, although we do have a rule that asks that statements from witnesses be delivered 48 hours before the hearing. This is one of the rules least observed in the committee, but we always announce it in the hope that someday everybody will comply.

Senator HRUSKA. May I ask at this time, have we statements from the witnesses for tomorrow and the next day?

Senator HART. I am advised that they will not be available within the time rule. They are being run off now and will be available this afternoon.

Mr. Price, would you advise us of your experience in the field we are studying. As I have indicated, your statement is in hand. It will be printed in the record as though given in full. As you go along if there is any amplification you desire to make, you may do so.

**STATEMENT OF ROBERT PRICE, ATTORNEY, AND FORMERLY
PARTNER IN THE LAW FIRM OF KUPFERMAN & PRICE, LEGAL
COUNSEL FOR HEXAGON LABORATORIES**

Mr. PRICE. Thank you, Mr. Chairman. Members of the committee and staff, my name is Robert Price.

Senator HART. I indicated, Mr. Price, that as you went along if you wanted to amplify, all right. But don't summarize because as it has been indicated, we have not had a chance ourselves to read it.

Mr. PRICE. Fine. My name is Robert Price, and I am an attorney, a member of the Bar of the State of New York and the U.S. Federal Courts and until December 31, 1965, a member of the law firm of Kupferman & Price, 500 Fifth Avenue, New York City, which was general counsel to a small public company, Hexagon Laboratories, Inc., New York City.

I should like to say at this point with reference to Senator Hruska's remark that I was advised very adequately by your staff that a written statement had to be in hand. I did not intend to make a written statement. On Thursday or Friday I decided to put it down in black and white and send it on to the committee, and I apologize if it didn't come within the 48-hour rule. But if there was a fault, Senator Hart, it was mine, because I was told very clearly with more than ample time that it should be in hand. The delay is my fault and not the staff's.

I am delighted to appear before this committee because I know of its excellent reputation and the work that you have done over the years. I view this committee as an important weapon in preserving our free enterprise system, a system which needs protection from the internal and external forces in the world today.

I have been asked to speak to you this morning and relate, to the best of my knowledge and recollection, certain incidents in connection with the disposition by the Federal Government of a certain amount of quinine which was at one time in the U.S. Government stockpile.

I would like to say this: from the dates in 1961 and 1962 when I worked on this case until this time, I have been involved in a variety of other activities completely unrelated to this matter. I would like to state that the most astonishing thing that I now find is that the price of quinine is approximately \$2 an ounce as opposed to the 20 cents an ounce it was over a few short years ago. When I was asked about my interest in testifying, I indicated, and I indicate now that my recollection is not clear, but I have done the best I can with whatever notes and records and time I have had available and with whatever documents I have been able to find.

While I may tend to speak in the current tense, the facts are as I knew them at that time and virtually nothing has happened from that time to this to either persuade me or dissuade me that these facts are not now as I knew them at that time.

On January 26, 1955, the then Office of Defense Mobilization advised GSA of its determination that the existing stockpile of quinine was no longer necessary because of the apparent obsolescence of quinine for use in time of war. As you know, in formulating the procedures for this disposition the Stockpiling Act, Public Law 520, required that GSA develop a plan of disposition and publish a notice in the Federal Register. No disposal can be made until 6 months after publication of the Federal Register.

On August 2, 1958, the first Federal Register published notice of the proposed disposition of approximately 13,860,000 ounces of quinine. This plan was procedurally defective and the revised notice was withdrawn by publication in the Federal Register and the revised notice was published on April 1, 1959. Both of these plans proposed to sell the entire quantity of quinine through a negotiated sale. In October 1959, after the expiration of the 6-month period, offers were received from three firms. These were rejected by GSA which concluded that it was not in the best interest to dispose of this material at the bid price.

Subsequent to this period, GSA disposed of approximately 4 million ounces in three separate bids. In each of these bids, Dutch interests, specifically N. V. Nederlandsche Kininefabriek, submitted the winning bid. The first time they bid in excess of 8 cents per ounce, the second time in excess of 9 cents per ounce, and the last time by bidding in excess of 18 cents per ounce. This last bid is significant because 18 cents per ounce is an amount judged to be in excess of their own replacement cost at that time. This third bid was bid twice. At the first of these, Hexagon, our client, bid 12 cents per ounce, and the Dutch bid slightly in excess of 12 cents per ounce. GSA refused to accept the bids and canceled its offer again. The next time, Hexagon bid 14 cents per ounce and the Dutch bid in excess of 18 cents per ounce. Hexagon bid the highest amount we, as a small American company could, consistent with sound economics. The Dutch were apparently so interested in obtaining this quinine that they bid an amount which we thought was in excess of their own cost. I should like to point out that the Dutch took 4 million ounces, one batch at 8 cents, the next

batch at 9 cents, and the next batch at 18 cents, and that quinine today, only 4 or 5 years later, is selling at \$2 per ounce. The reason I stress this will soon be seen when I discuss the relationship of the Dutch and the price of quinine throughout the world.

It may be significant at this time to recollect what I learned about an alleged world Dutch cartel. These winning high bids were submitted by a firm alleged to be related to a world quinine cartel and presently under injunction and then under injunction by the U.S. District Court for the Southern District of New York, for predatory quinine practices in the late 1920's. That firm, still under injunction, was permitted to bid for our stockpile and won the bid.

I made some inquiries at that time in numerous trips to Washington, and based upon my notes I would like to comment about the alleged Dutch cartel.

In 1892, European manufacturers apparently formed a syndicate which regulated the price of quinine and the original Dutch factory was *Amsterdamsche Kininefabriek*, founded at Amsterdam in the Netherlands in 1881 and another company founded at Maarsse in 1894. An alleged 1892 agreement of European manufacturers pushed quinine prices upward and at the same time depressed the prices of the raw bark. At the same time, the Dutch interests in Ceylon uprooted thousands of trees and dumped the bark on the market. This led to the Java growers in 1894 organizing for the processing of the bark and the manufacture of quinine in Java. Under this organization production began in 1896 in Java.

Under the Dutch Government, the Kina Bureau was established in Amsterdam under a very tight agreement which was to have gone into effect in 1913, but was delayed somewhat by late signatures. This was an organization of European quinine manufacturers, determined primarily to protect their own interests. World War I interfered with this arrangement and made it largely inoperative. Prices for quinine soared and one merely had to have possession of quinine during World War I in order to determine whatever price he wanted for it. An agreement eventually was made with the growers of Java to supply the cinchona bark at a fixed price to the Allied Governments.

A second agreement was made in 1923 which was largely a repetition of the first, but the necessity for the agreement arose through the temporary depression of 1921 and 1922. The third agreement was made in 1928 between three Netherlands producers and the reason for this is interesting. In late 1927 the U.S. Government had initiated an antitrust action against Kina Bureau and the domestic producers, Merck & Co. and New York Quinine Chemical Works. I learned that the essence of the agreement and the establishment of the Kina Bureau is expressed in section 10 of the Quinine Convention. Under this section the Kina Bureau, controlled by the Dutch, has control in the most complete extent over the deliveries of the bark by the producers adhering to this accord and over the sale of quinine sulfate made by the manufacturers and they also controlled the overall price of quinine throughout the world.

The effect of the worldwide price-fixing cartel was strongly felt in Europe and in the United States, and in late 1927, as I stated, the U.S. Department of Justice initiated an antitrust action under the Sherman and Clayton Acts designed to halt the effect of this worldwide cartel on the U.S. market.

In my attempts to obtain quinine from the stockpile for my client, I came across this judgment, a copy of which I have here—and I am certain that the staff of the committee has—signed by the Honorable Francis A. Winslow of the U.S. District Court of the Southern District of New York. The defendants in this action had entered into a perpetual consent agreement prohibiting in broad and inconclusive language, any of the defendants from taking steps injurious to the quinine market.

(The document referred to (exhibit 1) may be found in the appendix, p. 111.)

Yet, it appeared at the time of these GSA bids, around 1960 and subsequently, that several of these defendants enjoined under this decree apparently were engaged still in the unlawful practices prohibited by the U.S. district court. At the time of these bids, the world market price was apparently arbitrarily being fixed by the Dutch interests at 20 cents per ounce around the world. The same group had set the price for an American producer of 30 cents per ounce on the world market. One of the principal defendants in the 1927 consent decree, the one I mentioned before, N. V. Nederlandsche Kininefabriek, was the past successful bidder in several quinine bids disposed of by GSA.

I complained on behalf of my client at that time, to GSA and the Small Business Administration that the behavior of this defendant in bidding amounts in excess of its own replacement cost was probably a violation of the above-mentioned consent decree. Yet, in my discussions with GSA, my words and the U.S. district court order apparently fell on deaf ears. As further evidence at that time of the continued existence of the cartel at least continued to me, it was interesting to note that no other world quinine interests or cartel member chose to compete with this successful bidder in this important bidding.

I claimed in a memorandum, which I circulated freely throughout Government agencies, that it was in the best interest of the United States to prohibit this defendant from continuing to participate in these bids.

At that time, though there was a substantial decline in the use of quinine in the United States, Hexagon, our client, I believe was the only domestic manufacturer of quinidine, an important drug used in connection with certain heart diseases. Many large American drug companies had encouraged our client, Hexagon, to continue to develop quinidine and because of the quality of the Government quinine stockpile, which was not excellent quality, which had been deteriorating, and because of the spoilage and waste inherent in any of these bids we found it economically unfeasible to bid more than we did during the several bids. For a small American company to have learned how to make quinidine was a real plus for the United States. In the event of war, many heart patients, and I guess now that there were 75,000 domestic users of the drug quinidine, would have been cut off from the supply and with a domestic manufacturer, the large American distributors felt we had a real asset.

After the first three sales by GSA, as a result of discussion, we decided to ask GSA to set aside part of the remaining stockpile for bidding solely by American domestic small business to avoid a predatory international bid. At an industrywide conference that had been

called by the Department of Commerce on April 21, 1960, clear reference was made by people other than Hexagon, that consideration should be given to a small business set-aside.

I was met with the argument that the Government had to sell to the highest bidder, yet GSA refused to realize or if they did realize, they certainly didn't articulate that at that time it was in the best interest of our Nation to encourage American use of our own stockpile particularly when the past high bids were coming from a bidder who was apparently continuing to bid at a cost above its own replacement value. The thrust of congressional enactments since World War II has been to aid small business and it was with this in mind that I went to the Small Business Administration to urge that they urge GSA to make the set-aside.

When we first became counsel to Hexagon Laboratories, I learned of the problem and it seemed to me quite strange, that the General Services Administration would not on its own try to aid American business. I made inquiries in Washington and soon learned of the Dutch cartel. I was advised in numerous visits that the Dutch Government was operating with the aid of the State Department to compel GSA to dispose of the goods in such a way as to aid the Dutch cartel. And this to me was understandable I suppose. The State Department had a primary interest in keeping good relations with our allies, and how the stockpile was disposed of was a matter that was undoubtedly of concern to the State Department. You will recall that in 1960 the NATO alliance was in some sense not as tight as it is today, and in other senses I suppose tighter, but the State Department had its primary interest to protect, and I was advised that the State Department was operating to make sure that the Dutch weren't annoyed. I was even advised that if I went to the State Department perhaps something could be done about it, but I decided then that a small American company had little enough success apparently in fighting GSA that to take on the State Department at the same time was not only unwise but would probably be a sheer waste of time.

As a result of the intervention, however, of the Small Business Administration, the quinine was divided into a set-aside, and the first half was sold on February 2, 1962, to the Dutch at an average bid price of slightly over 20.58 cents per ounce. A month later the portion set-aside for small business was offered in five lots. Four of these ranged in amounts from under 115,000 ounces to slightly over 1 million ounces while the other lot, No. 3, was over 2.5 million ounces. GSA's terms for the domestic small bidder—and this was extremely significant; if not disastrous to us then, it was certainly not helpful—I would like to repeat GSA's terms were strangely onerous.

GSA required a 20 percent deposit accompanying the bid, and an irrevocable sight letter of credit to cover the balance of the sales contract we signed. Since the quinine could be withdrawn only over a 5-year period, these terms required a very sizable commitment of capital by a small business, and it was normally very difficult for a domestic small business to raise both 20 percent and the irrevocable letter of credit. We were fortunate. We were able to enter bids on all five lots. We did so with the proviso that if we were successful in obtaining lot No. 3, that was the 2.5 million ounce lot, on which we bid 19.5 cents, our bids on the other four lots totaling 2.2 million were to be disregarded.

Despite the fact that we were the highest bidder on all, the bids on lot No. 3 were thrown out and we were awarded the other four on the bid price of an average of 20.9 cents per ounce. Later GSA told us that none of the other small firms had met the bid on lot No. 3, which was not very surprising that no other firm did. I thought we could do it and then perhaps allow the other portions to go to other American small business. In fact, there were bids on some of the other lots that we were successful on. Apparently GSA had set on lot No. 3 and on the other lots an upset figure which was a minimum figure designated as the average price paid by the Dutch cartel in the earlier unrestricted offering. Still later, lot No. 3 was sold on an unrestricted basis, and it all went to the Dutch at an average price of 23.6 cents per ounce.

I would like to stress again that the price of quinine today is apparently \$2 an ounce, which made that portion of the quinine in the U.S. Government stockpile a fairly good investment.

The terms of this bid, the upset price and the letter of credit, all these requests seemed to be designed to thwart small business from getting quinine instead of obtaining it.

We subsequently tried to amend the terms of the contract to make it less burdensome on a small business, but GSA constantly wanted additional consideration for the Government. But this consideration was never made clear to us. I would like to point out that, as the members of this committee and the staff know probably far better than I, for a small business to obtain a substantial amount and an irrevocable sight letter from a commercial bank is not an easy thing. My client spent a lot of time in New York, where fortunately there are a large number of commercial banks, in obtaining this and it was not easy to come by.

This consideration for an amendment of the contract was never made clear, and I had a number of meetings here in Washington. We were just told that a contract was drafted, and unless we were willing to raise our price or do something else, they just couldn't make the terms less onerous on us. I would like to point out that this was even though the quinine was held in a Government stockpile warehouse, I believe in the middle of Pennsylvania, and we were in effect putting up a sight letter of credit on material that we didn't have, and if the letter of credit wasn't good the Government could have just told the guard, "Don't let them have the quinine."

While ultimately GSA used the Dutch purchase price as the upset price, this was supposedly based on an October 10, 1961, letter from the Comptroller General. It was strange to us that the arbitrary price should be determined by a company that was then under injunction and that it should be controlling even though it was a member of the cartel.

When we lost the bid on lot No. 3, I wrote a letter dated March 28, 1962 (exhibit 2), and sent copies of it to a number of Government agencies.¹ In effect I stated:

1. That in this bid we should have been granted item No. 3 because in our bid we clearly stated that if we were successful in item No. 3,

¹ See appendix, p. 115.

the other bids were to be disregarded. Hence our instructions were not followed in this regard.

2. If the 19.5 cents on No. 3 was rejected because it was below the price established by the Dutch, this was a strange way of regulating the price of a stockpile sale.

I should like to say—without repeating other matters that I stated in the letter, because I believe it is in your file and certainly it should be—from the time I first got into this case, on several trips to Washington, I met with a number of people who were mostly not very helpful. I will say that I did speak with a Col. John R. Lemp, who was at that time in the Small Business Administration and he was extremely helpful and courteous and a credit both to the U.S. Government and to the Small Business Administration. I made several trips to GSA and met with various individuals, and left completely perplexed, both before and after they agreed to the “set aside.”

I was representing a small American company producing a drug of value to 75,000 heart patients, apparently the only domestic manufacturer, and yet GSA and other agencies seemed to oppose our getting something out of our stockpile. And when they finally did allow us to take this quinine, it was as I said, with a 20-percent downpayment and an irrevocable sight letter of credit. It was as if the Federal Government was determined to show no priorities in aiding American business, yet at the same time the Congress was mouthing encouragement for small business in American industry. No one at GSA seemed helpful to the problems we or other small businesses faced.

I think ultimately the set-aside came about because GSA or the Comptroller General, probably the latter, or perhaps the State Department, felt that we were not going to be worn out and we were just determined to see if we could get some quantity of this.

We subsequently won a bid, but even at that point with what we had to put up in both the deposit and the letter of credit, and the terms under which we won it, and the price under which we obtained it, it was such as to make it a small victory.

Members of the committee, this concludes my testimony. I am hopeful that if the hearings develop and your evidence develops that a predatory course of conduct was present, either now or in violation of the 1927 decree, that this committee will take steps to be certain that this course of conduct by the cartel is not repeated in the future. Thank you for inviting me.

Senator HART. Thank you for coming, Mr. Price.

Mr. Stebel, if you would give us your experience relative to this attempted purchase we would appreciate it.

STATEMENT OF J. STEBEL, PRESIDENT OF THE CHEMICAL SERVICE CORP., NEW YORK, N.Y.

Mr. STEBEL. Yes, sir. My name is J. Stebel; I am president of the Chemical Service Corp., of 82 Beaver Street, New York, N.Y. First, let me say that while Dr. Blair asked me to have a statement for him by Friday of last week, I did not then realize the importance to you of such a statement. Otherwise, I would have submitted copies of my letters to the GSA of March 22, 1962, and April 2, 1962, which I

have here and these would have been the gist of my statement in any event. I shall be glad to read these to you, if you so desire.

Senator HART. If you will for the record.

Mr. STEBEL. This letter is to Mr. Stanley B. Hanes, Chief Agriculture Branch of the GSA:

Reference is made to my visit with you yesterday after the above bid opening. This has reference to a bid marked on this letter.

The right of the Government to withdraw bids is conceded. However, the method of the offering in this case, and indicated rejection of bids, strikes us as being most unreasonable to say the least.

Here is a case where sale is restricted to small business; and in passing, it strikes us that what is considered small business is rather ridiculous but we realize this is a matter of law, but most unreasonable, nevertheless.

What we take very serious exception to in this case, are the following:

1. A five year letter of credit, which for small business to obtain is almost impossible; banks generally refuse to issue such long credits especially to small business, which, in order to obtain such credit might have to deposit, to use the vernacular, an arm and a leg, or their right eye.

2. Notwithstanding the above letter of credit requirements, the amount of deposit of 20 percent which is required with the submission of bid would be held by the Government, with proportional credit on the amount of Quinine withdrawn each year. As shown you yesterday, if one would consider a deposit of \$100,000 the maximum credit per year against this deposit would be 20 percent; the value of this money on the basis of only 5 percent a year—and money is worth more than 5 percent a year to business whether it is large or small—would come to close to \$40,000, not peanuts for small business.

3. Another serious objection is that subsequent to the bidding we learned that a minimum price of .205 per ounce was set—this figure being based on a sale made to the Dutch syndicate of the previous 50 percent. Now, if this was the intention of the GSA, do you not think it would have been fair to small business (and every time we say small business we almost laugh at what is called small business) to apprise them of this condition, so that they would not have to break their backs and waste a lot of valuable time trying to arrange their financing; it took us almost a month to work out such financing, time we could ill afford to lose.

4. You indicated that the matter of setting terms of payment was out of your hands, but the matter of limiting withdrawal to 20 percent was done because of the questionable value of Quinine Sulphate some years hence. Because of this questionable value, and all the other conditions above referred to our own bids—the high ones in several cases—are very realistic ones indeed, and merit serious consideration.

Mr. Hanes, we have been in this Quinine Stockpile sales picture since the first offering, and want to add that you have done a terrific job for the Government in the handling of the liquidation of this stockpile, in that after you rejected the first bids for the entire stockpile, you subsequently broke it up into a number of parcels, and your return has been quite substantially more.

What we say here in relation to this week's offering is intended as constructive criticism with the hope that small business will be given a fair shake and not have almost insurmountable difficulties placed in their way.

I submitted copies of these letters to Senators Javits, Keating, Mr. Celler, John E. Horne, Administrator of Small Business, Colonel Lemp, Small Business, and Senator Smathers, all of whom responded to the letter.

(The letter of March 22, 1962 (exhibit 3) may be found in the appendix, p. 116.)

Mr. STEBEL. I will read you my letter to Mr. Hanes of April 2, 1962, with reference to a new bid opening April 20, 1962:

We note that this proposal again calls for a five-year letter of credit, the objection to which we discussed with you at your office recently after the previous offering and which was subsequently covered by our letter to you of March 22nd.

There has also been no changes in your deposit requirements, which as indi-

cated to you in our letter of March 22nd is high cost money and would result in a very substantial cost to a successful bidder even on a five percent interest value of such money.

Without waiving our strenuous objection to the five-year letter of credit, we feel that insofar as the deposit is concerned, that if anyone is successful in getting a letter of credit for such a period, this should encompass the entire amount of the bid, and when such letter of credit is received by you, the deposit made with the bid should be returned.

We have read the current proposal carefully, we hope, but fail to find anything in it restricting the bidding to small business in which case it strikes us here again the Dutch syndicate has all the advantages.

In passing, we overlooked mentioning to you in our letter of the 22nd that the representatives of the Dutch syndicate who had attended the previous opening on March 21, seemed to be the only ones that knew that there was an upset price as they openly mentioned at the time.

We fail to understand the reason so many extremely difficult conditions have been put in the sale of the quinine since it was first offered. There has been and continues to be many sales by your agency of stockpile surplus such as rubber, tin, coconut oil, palm oil, et cetera, et cetera, and we do not recollect that any such sales had so many "strings" attached.

We write not so much by way of criticism, but with the hope that something constructive would develop in the interest of buyers such as we who have been purchasers of surplus materials from government facilities for perhaps 40 years and might thus be called "regular customers".

To summarize, we again repeat the following objections as made previously :

1. Long-term letter of credit requirements.
2. Deposit which will take the form of the letter of credit to finally liquidate and thus is high cost money.
3. No restriction to small business.

Finally, we should like to know whether or not you have again set an upset price, and if so, what this is.

Copies of these were sent to the same gentlemen as previously.

(The letter of April 2, 1962 (exhibit 4) may be found in the appendix, p. 117.)

Mr. STEBEL. Now, I had a letter from Senator Javits referring to this correspondence, and in a part of his letter he said :

I am pleased to note that one of your suggestions has been adopted by the GSA and that changes have been made to facilitate participation by small business.

Gentlemen, thank you.

Senator HART. The two letters will become a part of the record, and the staff has other documentation that were referred to in Mr. Price's testimony, which ought to become a part of the record also.

Mr. Cohen.

Mr. COHEN. Mr. Chairman, inasmuch as Mr. Price has mentioned the decree, I would ask that it be placed in the record¹ together with the indictment in that particular case,² together with excerpts from an article in Fortune magazine³ at about that same time which went into some detail about the circumstances surrounding the case against the cartel.

Mr. Price, I am going to do this a little bit backwards. Inasmuch as you talked about the letter of credit device and the upset price, we have here certain documents from the State Department and from GSA which I would like to put into the record, starting at that point. You may have comments after we finish with those, after which we have a series of documents that will give the background up to that

¹ (Exhibit 1.) See appendix, p. 111.

² (Exhibit 1.) See appendix, p. 111.

³ (Exhibit 5.) See appendix, p. 118.

point, which may cause additional comment on your part whatever you would care to make in view of this statement.

I would also like to place into the record an Executive order of December 19, 1959, Defense Mobilization Order, which was in effect until May 2, 1962, having to do with disposal of the stockpile (exhibit 6). It in effect gave the State Department, together with the Interior, Commerce, Agriculture, and Defense, a veto over any plan for disposal that might be adopted by GSA. In other words, all of these Departments had to approve any plan.

(The Executive order of December 19, 1959, follows:)

EXHIBIT 6

DEFENSE MOBILIZATION ORDER V-7, REVISED (FEDERAL REGISTER OF DECEMBER 19, 1959, P. 10309)

TITLE 32A—NATIONAL DEFENSE, APPENDIX

CHAPTER I—OFFICE OF CIVIL AND DEFENSE MOBILIZATION

[D.M.O. V-3 Cancelled]

DMO V-3—POLICY REGARDING SURPLUS MATERIALS ACQUIRED UNDER THE DEFENSE PRODUCTION ACT

[D.M.O. V-7, Revised]

DMO V-7—GENERAL POLICIES FOR STRATEGIC AND CRITICAL MATERIALS STOCKPILING

By virtue of the authority vested in me by Reorganization Plan No. 1 of 1958 and Executive Order 10773, it is hereby ordered:

1. *General role of the strategic stockpile.* The strategic stockpile shall take account of the potentiality of limited war and general war and shall assume rapid mobilization in the event of an emergency.

2. *Period covered by stockpiling.* All strategic stockpile objectives shall be limited to meeting estimated shortages of materials for a three-year emergency.

3. *Stockpile objectives.* Strategic stockpile objectives shall be adequate for limited or general war, whichever shows the larger supply-requirements deficit to be met by stockpiling. Stockpile objectives shall be determined on the basis of time required for supplies of materials in a national emergency to match essential needs of the emergency. The objectives shall consist of (1) a "basic objective," which assumes reliance on sources of supply factored to reflect estimated supply risks, and (2) a "maximum objective," which includes an additional allowance to take into account the complete discounting of sources of supply beyond North America and comparably accessible areas.

Until such time as the essential needs of the nation in the event of a nuclear attack (including reconstruction) can be determined, the maximum objective shall not be less than six months' usage by industry in the United States in periods of active demand.

4. *Emergency requirements.* The requirements estimates for both limited and general war shall reflect specific requirements so far as they are applicable and available. Otherwise it shall be assumed that the total requirements would about equal the consumption by industrial capacity, considering necessary wartime limitation, conservation, and substitution measures. Requirements shall be discounted for wartime losses of consuming capacity to the extent that such losses can be reliably estimated.

5. *Emergency supplies.* Estimates of supply for the mobilization period shall be based on readily available capacity and known resources. The share available to the United States shall be discounted to reflect the risks involved internally in supply countries, the risks of concentration of the source, the risks of overseas shipping and the vulnerability of domestic sources to destruction. Domestic supplies shall be discounted in cases of excessive concentration to the extent of the estimated time required to restore capacity that may be damaged.

6. *Provision for special-property materials.* Prospective needs for high-temperature and other special-property materials shall be considered on the basis of a three-year period beginning not more than two years in the future. Estimates of requirements therefor shall be included in the computation of objectives when there are indications of reasonably firm minimum requirements. In this connection arrangements shall be made for the regular availability of objective scientific advice to assist in such evaluation.

7. *Frequency of supply-requirements reviews.* The supply-requirements balance for any material that is now or may become important to defense shall be kept under continuing surveillance and shall be given a full-scale review at any time that a change is believed to be taking place that would have a significant bearing on the wartime readiness position. Supply-requirements balances shall be examined at least once a year to ascertain the need for a full-scale review. Priority of review shall be given to materials under procurement.

8. *Procurement policy.* The basic objectives shall be attained expeditiously. If necessary, sources of supply shall be expanded. Procurement, however, shall be tapered as the basic objectives are approached. The maximum objective shall be reached on a lower priority basis by such means as (1) deliveries under existing contracts, (2) transfers from other Government programs, (3) purchases with available foreign currencies, (4) barter of U.S. agricultural surpluses, and (5) programs to maintain the mobilization base under paragraph 9. Future long-term contracts shall contain termination clauses whenever possible.

9. *Maintenance of the mobilization base.* The mobilization base shall relate to the projected supply capacity, including standby capacity, that would be readily available for an emergency commencing on any assumed date rather than to the output of a given period. Stockpile procurement to maintain this capacity shall be undertaken only within the maximum objective. Although various measures that are feasible shall be considered for meeting a mobilization deficit of materials, measures other than stockpiling shall be undertaken only after it is clear that stockpiling is not the best solution. All inventories of Government-owned materials held for long-term storage are a part of the mobilization base. If they are sufficiently large they may eliminate the need for a producing mobilization base segment.

10. *Upgrading to ready usability.* Where the general basis for estimating supplies of a material, including allowance for plant vulnerability, does not call for a sufficient quantity in a form suitable for immediate use to meet the initial surge of demand and abnormal conditions of intensive mobilization, a minimum readiness inventory—approximately a six months' requirement—shall be provided near centers of consumption. An interagency review should be undertaken to determine whether a need for a larger or lesser allowance may exist. Materials in Government inventories may be upgraded only when the net cost is less than the cost of new material. Materials will not be upgraded to such a degree, however, as to impair flexibility of use. Payment in kind may be used within the objectives to finance the upgrading, provided that the release of materials to pay for the upgrading will meet disposal criteria.

11. *Beneficiation of subspecification materials.* Subspecification-grade material in Government inventory may be beneficiated within the limits of the maximum objectives when this can be accomplished at less net cost than buying new material.

12. *Cancellation of commitments.* Commitments for deliveries to national stockpile and Defense Production Act inventories beyond the maximum objectives shall be canceled or reduced when settlements can be arranged which would be mutually satisfactory to the supplier and the Government and which would not be disruptive to the economy or to projects essential to the national security. Such settlements may take into account anticipated profits and cover adjustments for above-market premiums. The settlement of commitments may be made through the payment of cash or through the application of surplus property or resale of materials. Responsibility with respect to the settlement of commitments in the light of over-all interests of the Government rests with the Administrator of General Services, who shall keep other agencies advised and consult with them to the extent appropriate.

13. *Retention of Defense Production Act inventories.* Within the limits of unfilled maximum stockpile objectives, stockpile-grade materials acquired under the Defense Production Act shall be retained for national stockpile purposes.

14. *Disposals.* The Director of the Office of Civil and Defense Mobilization will authorize the disposal of excess materials whenever possible under the fol-

lowing conditions: (a) avoidance of serious disruption of the usual markets of producers, processors, and consumers, (b) avoidance of adverse effects on international interests of the United States, (c) due regard to the protection of the United States against avoidable loss, and (d) except when the materials are channeled to other agencies for their direct use, approval of the Departments of the Interior, Commerce, State, Agriculture, and Defense, and other governmental agencies concerned, and consultation as appropriate with the industries concerned.

In making such disposals preference shall be given to materials in the DPA inventories.

Disposals of materials that deteriorate, that are likely to become obsolete, that do not meet quality standards, or that do not have stockpile objectives, are to be expedited.

The Administrator of General Services shall be responsible for conducting negotiations for the sale of materials and will consult with and advise the agencies concerned.

15. *Public notice on disposals.* Generally, the sale of excess materials acquired under the Defense Production Act will be made only after appropriate public announcement of the quantity or quantities to be offered in a specified period of time.

16. *Direct Government use.* Government agencies which directly use strategic and critical materials shall fulfill their requirements through the use of materials in Government inventories that are excess to the needs thereof whenever such action is found to be consistent with overall disposal policies and with the best interests of the Government. Except where appropriate in the judgment of the Administrator, General Services Administration, the requirements of section 14, above, with respect to approval by Government departments or agencies and consultation with industries, shall not be applicable to transfers of strategic and critical materials for direct Government use.

17. *Declassification of stockpile data.* The Office of Civil and Defense Mobilization shall declassify stockpile data to the maximum extent feasible when it determines with the concurrence of agencies concerned that the national security would not thereby be jeopardized.

Defense Mobilization Order V-3 (19 F.R. 1511, Mar. 19, 1954) is hereby canceled.

Defense Mobilization Order V-7 (23 F.R. 4333, June 14, 1958) is hereby superseded.

These policies are effective immediately.

Dated: December 10, 1959.

LEO A. HOEGH,

Director, Office of Civil and Defense Mobilization.

Mr. COHEN. As I am sure you are aware, up until about 1960 the disposal plan was set up in such a way that the entire amount had to be sold in one amount.

Mr. PRICE. Yes.

Mr. COHEN. Nine million ounces, which would have made it impossible for anyone but—

Mr. PRICE. But the Dutch to bid.

Mr. COHEN. The Dutch to bid.

Mr. PRICE. Yes.

Mr. COHEN. And that subsequently when SBA interjected itself into the situation, and finally received the approval of GSA, a plan was developed to set aside this 4,500,000 ounces. You talk in your statement about the strangely onerous conditions that were then placed on that disposal, which in your opinion seemed to indicate it made it very difficult for a small American company to take advantage of the "set-aside" that had been made.

I would like to read you an extract from a memorandum from the Department of State between W. F. Pelt, commercial secretary of the Netherlands Embassy, and Donald S. Spigler:

Mr. Pelt said he has consulted his Government concerning the proposed disposal of quinine, and that his Government appreciated the opportunity to express its views.

This is prior to the time that any disposal had been made.

Mr. PRICE. This is from the Dutch to the State Department?

Mr. COHEN. That is right, this is on July 11, 1960:

He stated that The Netherlands would have preferred a disposal plan spread over 7 years rather than the 5 years proposed by the United States, but would not raise a formal objection on this point. However, The Netherlands attached great importance to one provision which it would like to have us add to the disposal plan—a requirement that the successful bidder establish a letter of credit in advance to cover the entire quantity of quinine to be sold.

Mr. Pelt explained that this proposal, if adopted, would help rule out the possibility that an irresponsible speculator might purchase the quinine. Such a purchaser might find himself short of funds after having acquired a portion of the material, and have to dump his holdings on the market in order to obtain funds with which to acquire additional lots. Comment: The requirement would also tend to rule out bids by smaller firms with limited capital and less well established financial ratings, in favor of large organizations such as the Dutch quinine cartel.

I told Mr. Pelt that the decision by GSA concerning such details as letters of credit is not made until shortly before bids are solicited, which would be more than 6 months hence. I pointed out that with respect to the last offering of quinine GSA had imposed just this requirement, and possibly would do so again. I said that I would recommend that the Department suggest to GSA that the requirement be imposed in this case, but that I could give no assurance as to the outcome.

Mr. Pelt found the above approach acceptable, and said that his Government accordingly had no objection to the quinine disposal plan.

Mr. PRICE. Do you want me to comment?

Mr. COHEN. I will just put in another because they all relate to the same problem and possibly you can comment on all of them.

Mr. PRICE. All right.

(A copy of the memorandum of July 11, 1960 (exhibit 7), may be found in the appendix, p. 121.)

Mr. COHEN. Then on July 15, 1960—4 days later—there is a recommendation from Harlan Bramble, Acting Director, Office of International Resources of the State Department, to GSA:

The Department recommends that the successful bidder or bidders be required to furnish a letter of credit in advance to cover the entire quantity of quinine involved in each sale, even though deliveries may be scheduled over an extended period. Such a provision would tend to rule out the possibility that a purchaser might find it necessary to sell initial acquisitions of the quinine at reduced prices in order to acquire funds with which to pay for additional lots. Adoption of this recommendation would thus help to ensure avoidance of market disruption.

Now, of course, on the basis of the Executive order that I have just mentioned, these recommendations became more than just recommendations. And as both you and Mr. Stebel have indicated, you objected to this, but nevertheless the condition was imposed.

Do you have any further comments at this point in regard to the letter of credit?

Mr. PRICE. Well, none except that I am delighted to note that the State Department Office of International Resources is undertaking a marketing task, and to insure the price of quinine be stabilized. I would have thought that the Department of State memo with the comment that ruling out small organizations would not have—I would have thought that they were more sophisticated by 1960. My only real

comment on this is that I was told that these things were happening, by a number of people, some in GSA who didn't want it quoted and I remember one man was even hesitant that I was writing, and made notes on a yellow pad as we were talking. These things were happening, and I must admit that in 1960 I didn't really believe these things could happen this way. I suppose I didn't think they would be in writing, though. I was sure it was happening, but I didn't think I could find it happening.

Throughout GSA and Small Business, the attitude was, "Look, why don't you go away because you are not going to beat it. This is going on. The State Department is checking with the Dutch." That is what I referred to in my initial remarks. But it is comforting to know that this committee has found these documents, and I hope something can be done to at least prevent repetition in the years ahead.

Mr. COHEN. Mr. Stebel, do you have any comments?

Mr. STEBEL. No, I have nothing to add to what Mr. Price has said. That would about cover my sentiments there.

(The letter dated July 15, 1960 (exhibit 8), may be found in the appendix, p. 122.)

Mr. COHEN. Now in regard to the upset price device that you mentioned, which was the second condition you described as strangely onerous. You discussed at that point in your statement the price in the world market, and the fact that the price bid by the Dutch was such that it wouldn't even cover your own costs in marketing the quinine or the quinidine. We have here a memorandum from GSA to State on March 6, 1962 (exhibit 9), which says:

For your official information only, our determination as to an acceptable price will be based on an upset figure equal to the lowest price accepted under the first unrestricted sale which was held on February 2, 1962.

That was a sale to the Dutch you described.

Then, just 3 days later on March 9, and 11 days before any bids were opened we find the following memorandum from the State Department:

Mr. Pelt of the Netherlands Embassy called, at his request on Mr. Spigler to keep him currently informed. He said that the American company which is "friendly" to the Dutch quinine company has determined that it is ineligible to bid on that portion of the quinine set aside for bidding by American small business firms.

Although the Dutch firm is most interested in this quinine, Mr. Pelt was disposed to advise the firm not to attempt to find ways of participating in this small business offering. The position on this is based on the presumption that the GSA will have an upset price below which bids would not be accepted.

This is 11 days before the bids were opened.

He assumed that this price would be the price at which the quinine had been sold at the previous offering (in the previous sale the Dutch firm was the high bidder by a substantial margin). If this analysis is correct, Mr. Pelt felt reasonably certain that little, if any, quinine would be purchased by small business bidders and that the remainder would then be offered by GSA at a later sale on an unrestricted competitive bidding. Mr. Pelt asked whether Mr. Spigler could confirm or otherwise comment on this analysis. Mr. Spigler said he could not undertake to do that but that we would check with GSA and then express such comments as seem possible.

A day or two later, after discussing this matter with Mr. John Harlan, GSA, I phoned Mr. Pelt and said that our comment would be restricted to the following:

(1) The GSA was, of course, under obligation to maximize the return to the U.S. Government from disposal sales.

(2) If the GSA has an upset price below which it will not accept bids the GSA would not, as it were, tip its hand in advance to prospective bidders. Mr. Pelt said he thought he understood this statement and expressed his appreciation for getting it.

Do either you, Mr. Price, or Mr. Stebel, have any comments with regard to the upset price situation?

Mr. PRICE. I have none. The memorandum which you just read speaks for itself, loud and clear; I don't see what I could add.

Senator HRUSKA. Mr. Chairman, I assume the memorandum will be made an exhibit.

Senator HART. The series of documents as you have indicated will be made a part of the record.

Senator HRUSKA. In their entirety?

Senator HART. In their entirety.

(Memorandums dated Mar. 6, 1962 (exhibit 9) and Mar. 9, 1962 (exhibit 10) may be found in the appendix, p. 122.)

Senator HRUSKA. May I ask a question of Mr. Price? This was March 9, 1962. Was your company active in all these contacts and negotiations at that time?

Mr. PRICE. Yes, Senator, yes, very active through 1961 and 1962. We didn't become general counsel until, I think, early 1961, and at that time they were already in the quinine bidding, unsuccessfully, I might add, and they remained in it up until the end.

Senator HRUSKA. Did you consider yourself eligible in March 1962 to bid on that part of the quinine set aside for small business firms?

Mr. PRICE. Well, we considered ourselves eligible and so did Small Business Administration. We met the requirements and we were permitted to bid on that small set-aside. We did bid and we were successful.

Senator HRUSKA. Were there other American companies who were interested in bidding on that set-aside amount?

Mr. PRICE. Yes, sir, and they did.

Senator HRUSKA. Sir?

Mr. PRICE. And they did bid.

Senator HRUSKA. They did?

Mr. PRICE. Others did bid. I don't recall their names. Perhaps Mr. Stebel does, but I am sure it is a matter of record.

Senator HRUSKA. Were there any other American companies that were interested in getting some of that amount but who considered themselves ineligible under Small Business Administration standards?

Mr. PRICE. No; I don't think under those standards. I think far more American companies would have bid had the burden of the bidding not been as onerous, the 20-percent downpayment and the irrevocable sight letter of credit. The terms that GSA put down for small business made it such that an average small business couldn't think of engaging in that type of financing even though they needed the quinine and could have used it to create jobs and sell products. I couldn't give you the figures, but I dare say only a small number were able to bid, were able to get the sight letter of credit from a commercial bank for a period of 5 years, far fewer than would have wanted to do it.

I think we may have been the only small business under the terms of the SBA definition of small business. We may have been the only

one that was eligible that could get the letter of credit from a commercial bank. As I said in my statement, it was probably because we were in the New York market, and because Hexagon had just gone public, and we were making a small profit and a number of other ethical drug products, and had a good reputation that we were able to do it. But it was not easy. None of the major banks were willing to go with us on it.

Senator HRUSKA. Did you understand that this letter of credit requirement applied only to small business firms?

Mr. PRICE. Those were the only—yes. I say I am certain of that because I think the sight letter of credit and the 20-percent downpayment, those two requirements were for this small business “set aside” bid, and those requirements did not exist, if I remember correctly, in any other bidding where the Dutch were successful. We knew that to go in against the Dutch on these other bids was silly. The Dutch bid, as I indicated in my statement, above their own replacement cost. And frankly, as an attorney, I questioned my clients even bidding what they did. But they were scientists interested in developing it, and perhaps they didn’t give the best business judgment they should have, but they were determined to develop quinidine, and they did make it, and it is a credit to them that they did.

But the onerous burdens were only for the small business bids, and did not exist to the best of my knowledge on the other bids where the Dutch were successful, nor did an upset price exist on the other bids. Only for our bid.

Senator HRUSKA. Could the GSA at that time have accepted a price that was lesser than that available and not be in violation of the law for disposal of surplus property?

Mr. PRICE. I think they could. I say that because the only thing ever cited to me in defense of the upset price was a regulation of the Small Business Administration that I have somewhere here on this table, in a letter of the Comptroller General, which did not seem either persuading or controlling. I was advised both before and after—well, primarily subsequently to that—that the regulation was not controlling. That GSA could have disposed of this in a healthy economic manner as opposed to an upset price determined by the Dutch cartel, particularly where not only these memoranda that have been placed in the file, but other courses of action by the U.S. Government indicate knowledge on the part of the Government that there was a predatory interest determining this price to force American business to compete with that price seemed to me not only unwise but unhealthy.

To answer your question again, it was my recollection at that time that they could have disposed of it in another manner.

Senator HRUSKA. Well, I suppose the search of the documents and the regulations and the law will determine that question pretty much. But it would seem from what you say that it would involve a law and statutory authority to GSA saying, “You can sell this, you must sell it for the highest price. However, if it is to a foreign company, maybe you can accept a lesser price.” Is that what you are trying to say?

Mr. PRICE. No. I think I am saying the opposite, Senator. I am saying that the function of GSA, and properly so, was to dispose of stockpile material at the highest price to the Government. However,

I believe there is a provision—and I am not as up on this as I was at that time—which permits disposals to domestic small business at lower prices, to aid industry, create permanent jobs, and aid commerce.

I think that the statutory requirement, the statutes existing at that time would have permitted a lower price to small business rather than a lower price to anyone else.

Senator HRUSKA. And when you say statute, do you mean the statute law governing GSA?

Mr. PRICE. I mean an enactment by the U.S. Congress, a statute as opposed to a regulation which is promulgated outside of the Congress.

Senator HRUSKA. But it would have to expressly refer to surplus sales. It would have to expressly refer, wouldn't it, to surplus sales to GSA, not the Small Business Administration?

Mr. PRICE. Yes; and I think—now I am going to insert another record, if this will be of help to either the committee or the staff. Let me first state that the document I am reading from is a letter from the Comptroller General of the United States or his office, dated June 20, 1962, and that cites the various statutes permitting—at least to my reading then and now—that statutory language does exist or did exist to permit the disposition by GSA of amounts from the stockpile at lower price to small business. I am sure that the committee has this letter.

Senator HRUSKA. It would be helpful if it could be inserted at this point so we have that point nailed down.

Senator HART. It will be made a part of the record at this point.

Mr. COHEN. I think that document will also show that SBA could in fact require GSA to make a "set aside" for small business.

(The letter, dated June 20, 1962 (exhibit 11), follows:)

EXHIBIT 11

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, June 20, 1962.

XXXXXXXX

KUPFERMAN & PRICE,
500 Fifth Avenue,
New York, N.Y.

GENTLEMEN: Further reference is made to your letter of March 28, 1962, enclosing a copy of your letter of the same date to the Administrator of General Services protesting, on behalf of Hexagon Laboratories, Inc., the administrative action taken on that firm's bid under Invitation No. MPAR-(S)-43, dated February 23, 1962, covering the sale by the General Services Administration of a quantity of Quinine sulphate powder.

The record shows that the material involved was a portion of a stock of quinine acquired by the Government under authority of the Strategic and Critical Materials Stock Piling Act, 53 Stat. 811, as amended, 50 U.S.C. 98-98h. Based upon an official determination that there was no longer any need for stockpiling quinine, notice was issued of the proposed disposition thereof pursuant to section 3(e) of the cited act, 50 U.S.C. 98b(e). The propriety of setting aside fifty percent of the quantity of about 9,524,000 ounces of quinine on hand for offering exclusively to small business firms, under the provisions of section 15 of the Small Business Act, 15 U.S.C. 644, was submitted to and approved by this Office on the terms indicated in our decision of October 10, 1961, 41 Comp. Gen. 250, to the Administrator of General Services. We suggested therein that in view of the statutory requirement applicable to the sale of stockpile material, that "the plan * * * of disposition shall be fixed with due regard to the protection of the United States against avoidable loss on the sale * * *," and of the provisions of section 127.15-2(d) of the Small Business Administration regulations authorizing withdrawal of a set-aside if the contracting officer considers that a small

business award "would be detrimental to the public interest (e.g., because of unreasonable price) * * *," administrative consideration might appropriately be given to first advertising the non-set-aside portion of the quinine stock and using the price realized on that sale as a basis for determining whether, on the subsequent advertising of the set-aside portion, acceptance of the best bid thereon "would result in 'avoidable loss,' or for establishing an upset price for the set-aside." It is administratively reported that, in accordance with our suggestion, the quinine stock acquired by the Government at an average cost of 63.2 cents an ounce, was divided into approximately two equal quantities and that the non-set-aside portion, comprising approximately 4,761,725 ounces of quinine, was sold to the high bidder under Invitation No. MPAR-(S)-38, dated December 11, 1961, at an average price of about 20.55 cents an ounce.

Invitation No. MPAR-(S)-43, bearing bid opening date of March 21, 1962, requested bids on the remaining stock of quinine, set-aside for disposal to small business concerns only, comprising approximately 4,762,279 ounces of quinine powder. Based on the storage of the quinine at five separate locations, it was divided into five lots and bids on each lot were requested under items Nos. 1 to 5 of the invitation. Of the five bids received on all or a part of the quinine, Hexagon was the high bidder on each of the five items. On items Nos. 1, 2, 4 and 5, comprising a total quantity of 2,240,767 ounces of quinine, its bids on the four lots involved, ranging from a computed price of about 20.81 to 21.08 cents an ounce, totaled \$467,400, or an average price of about 20.86 cents an ounce. Its bid price on item No. 3, covering a total stated quantity of 2,521,512 ounces of quinine, was \$493,000, or a computed price of about 19.55 cents per ounce. Hexagon's bid contained the proviso that it was limited to a total amount of \$493,000 and the further proviso that "If successful on item 3 disregard other bids." By contract No. GS-OOP(S)12954(SOM) dated March 22, 1962, Hexagon's bid on items Nos. 1, 2, 4 and 5 was accepted. No award was made of item No. 3 of the invitation.

It is your contention, in substance, that, since Hexagon was the "successful" bidder on all five items, in accordance with the order of choice stated in its bid it should have been awarded item No. 3 instead of items Nos. 1, 2, 4 and 5.

We agree that under the terms of Hexagon's bid it indicated a first choice for the material covered by item No. 3, and that the higher prices quoted on items Nos. 1, 2, 4 and 5 were not intended to be evaluated against its bid on item No. 3 so as to justify disregarding its indicated order of choice for the sole purpose of realizing a greater monetary return to the Government. However, contrary to your contention, we construe the word "successful" as contemplating an actual award rather than merely being the higher bidder. It could only become the "successful" bidder on item No. 3, if award had been made thereon, and it would seem to be unreasonable to read the bid as meaning that Hexagon did not want an award on other items if no award at all was made on item No. 3. It necessarily follows that, since it did not receive the award and thus was not "successful" on that item, the contracting officer was authorized to consider Hexagon's alternative bid on items Nos. 1, 2, 4 and 5 and to make an award thereon.

The record shows that Hexagon's bid on item No. 3, based on the quantity of quinine involved, was over \$25,000 less than the average price realized on the prior sale of the non-set-aside portion of quinine. For this reason the contracting officer determined that, in keeping with the statutory requirement that the Government be protected against "avoidable loss" on the sale of stockpile material, no award should be made on item No. 3 of the invitation. In view of the right reserved to the Government, under paragraph 3 of the General Sale Terms and Conditions of the invitation, to reject any or all bids and, unless otherwise specified by the Government or by the bidder, to accept any one item or group of items in the bid, as might be in the best interest of the Government, we perceive no proper legal basis for questioning the contracting officer's action in the matter, so long as his determination to reject all bids on item No. 3 was not based merely upon evaluation of Hexagon's bids on the other items against its bid on item No. 3.

While, for the reasons above stated, our Office would not be justified in disturbing the award was made, the record further shows that, as indicated by Hexagon's letters of April 10, 1962, to the General Services Administration and to its trucking agent, Jones Motor Company, Mechanicsville, Pennsylvania, Hexagon has withdrawn approximately 108,000 ounces of quinine covered by the contract as awarded. Since such action must be regarded as consti-

tuting an acquiescence in the award as made, Hexagon could not, in any event, now be heard to complain that a different contract should have been awarded by the Government.

Very truly yours,

JOSEPH CAMPBELL,
Comptroller General of the United States.

Mr. PRICE. Everything we asked for and we now claim and then claimed was onerous and that we objected to, we certainly did it with knowledge that it was lawful and permissible and feasible. We knew we weren't asking for new enactment or we weren't asking for the moon. We were asking for protection for domestic small business.

I even said to GSA at one point—to the people down there at a meeting where I was exasperated when it finally ended—I said:

Look, just create the set-aside and my client won't bid. I don't mind that. It is huge. Just allow it to be distributed outside of the quinine cartel.

After a while you sort of get annoyed when you keep losing bids, and you know the winner isn't winning on skill or talent but winning because they can just bid what they want to bid. The upset price that we were bound by was a price set by the Dutch at a prior bid where they bid a substantially larger amount than they had to bid to win that amount. So obviously, they knew that this was all in the works. The deck was stacked against us from the beginning.

I didn't have the memos that were just submitted to the files and made part of the record, but I was told that they existed, and I was told in a lot of subtle ways that they existed and that we should not try because we would never get any quinine.

Senator HRUSKA. While you have that statute there, could you give us the citation of it?

Mr. PRICE. I had it but I will be happy to go back and find it. Actually the letter is what you want, Senator. It is a letter dated June 20, 1962, from the Comptroller General of the United States, and it is signed by the Comptroller General of the United States.

Senator HRUSKA. That is an opinion, that is a ruling?

Mr. PRICE. Well, it is an opinion.

Senator HRUSKA. I wanted the statutory—

Mr. PRICE. He cites the statutes and I want to go back so you will know subsequently where it came from:

"Section 15 of the Small Business Act, 15 U.S.C. 644," I think it is, that is one statute. And certain other statutory regulations which affect this. Section 127.15-2(d) of the SBA regulations authorizing withdrawal of the set-aside. And section 3(e) of 50 U.S.C. 98(b), there is a paren, small something or other end paren, which I can't read in my copy. Those are the basic statutes under which what we claim could have been done and should have been done.

Senator HRUSKA. Thank you very much.

Mr. PRICE. Thank you.

Senator HART. I would ask the staff together to determine whether the cited statutory requirements may appropriately be printed rather than just the citation.¹

Mr. COHEN. Of course, the whole point, Mr. Price, is that American businessmen could not meet the original price that the Dutch bid for

¹ Exhibit 12. The statutes may be found in the appendix, p. 123.

the reasons stated. This was one reason for getting the Small Business Administration to make a set-aside for small business. Then when the SBA set as an upset price the same price that the cartel had bid originally for it, it had the effect really of nullifying the set-aside; isn't that correct?

Mr. PRICE. Yes it did. We might as well have gone into open bidding against the Dutch and bid a tenth of a point more and gotten it that way, rather than going through the motions and having additional burdens of a 20-percent down payment plus an irrevocable sight letter of credit thrown on us.

Mr. COHEN. And even with those restrictions, your bid was only a penny below what the Dutch had bid originally?

Mr. PRICE. Yes. We bid more than my client should have bid at that time. I can say that. Our clients became involved in really the scientific development of quinidine, and were determined to work up quinidine. The company was run then and is now primarily run completely by scientists, who have done well, I might add, scientifically, but the economics in the situation did not justify in my opinion that price being bid, because they were just shaving it so close that one more round of wage increases at the plant and they would have been in the red on the whole production.

Mr. COHEN. This is Hexagon you are talking about?

Mr. PRICE. Hexagon, right.

Mr. COHEN. That is the only company in the United States that could process quinidine; is that right?

Mr. PRICE. At that time Hexagon was the only manufacturer of the drug quinidine, the only domestic manufacturer.

Mr. COHEN. From quinine?

Mr. PRICE. From quinine.

Mr. STEBEL. Might I make a comment, Mr. Chairman?

Senator HART. Certainly.

Mr. STEBEL. The fact that the bidding was so limited is due to the conditions imposed, the conditions forced a syndication of in one case of perhaps 7 or 8 bidders, in another case 10 or 12 bidders, so that united they could meet these conditions, with the result that you had only 2 or 3 bidders. There's one other thing, of course—while Hexagon was interested in quinine for the quinidine, quinine as such had some marketability. We were interested in quinine as salable merchandise, not as production or raw material as Hexagon did, because theirs is a very important function, but I just thought I would explain that thing, that it wasn't entirely consumption by one particular company, but there were other buyers, like our company.

Mr. COHEN. You made the statement in one of your letters, I believe, that you have never seen a disposal which had so many restrictions, attached as this particular one.

Mr. STEBEL. That is true. We bought palm oil from a stockpile, 1 million pounds or more, and it was just a sale made out of a stockpile in which the Government had plenty more and they could have had restrictions on it too. When we bought, the Government may have had 100 million pounds, yet there were no restrictions. They sold from the stockpile and they sold it again. The same thing with castor oil. Every month they sold castor oil, 3 or 4 million pounds of castor oil. The rubber and tin I don't know, of course. But these other

items get a little closer to our field. So we know that in the case of castor oil and in the case of palm oil and perhaps other things——

Mr. COHEN. Did you bid on other things?

Mr. STEBEL. There were no restrictions. You made your purchase. You had so much time to remove it. You had to put up so much money with your bid. In some cases you didn't need deposits. I think in some GSA bids they didn't even require deposits.

Mr. COHEN. But you had never run up against this letter of credit?

Mr. STEBEL. No, not in the 40-odd years we have been in this business have we seen anything like this.

Mr. COHEN. Have you run up against an upset price before in your 40 years of business?

Mr. STEBEL. Well, not exactly. Bids might have been rejected on occasion as being insufficient. GSA would say that wasn't enough and would resell it again.

Mr. COHEN. Of course, in your letter you point out one of the things that upset you about the upset price was that the Dutch knew about it in advance and you didn't.

Mr. STEBEL. Yes, because we would have been out. At that time, you see shortly before, a year or so before this, the Government was ready to sell this quinine for 7 cents an ounce. This is a copy of a wire from Mr. H. F. Holtz, Commissioner of Defense Materials Supply, GSA, dated November 18, 1959:

"Will you accept" et cetera, et cetera, "at 7 cents an ounce?"

Senator HART. Without objection we will add that to the record. (Exhibit 13.)

(The wire dated November 18, 1959, referred to, may be found in the appendix, p. 129.)

Mr. PRICE. I did a substantial amount of checking around before I started complaining—this goes to your question about the upset price—and I found no example of an upset price actually being recorded. There were rejections for low bids, but never where the upset price or the cause for rejection was price hid by a potential competitor of the then-bidder for the stockpile content.

I would like to say this, because I am not sure that I cover it in my statement. I know I did not. The 13 million ounces or so that the Government had in its stockpile was hanging over the world quinine market, and this I learned was bothering the Dutch more than anything else in their attempt to regulate the price of quinine. Once this was disposed of, as is now the case, it is primarily gone, the price has skyrocketed to \$2 an ounce from 20 cents an ounce or even slightly less, and the losers are the users of quinine, the patients of both the drug quinine and the heart patients who use the drug quinidine. And for the Government to have cooperated—by the Government I speak specifically of individuals who may have cooperated with the Dutch in this, and not of the Government in general—for those who may have cooperated in this disposition in this fashion were in effect not only harming the public but also harming the competitive market for this drug, and permitting a situation to exist which they should have known about at that time. There was ample proof in the business community of the world Dutch cartel.

Dr. BLAIR. Mr. Chairman, I would just like to ask Mr. Price and Mr. Stebel to comment on the fact that there didn't seem to be too

wide a margin between the upset price and the world price. Out of that margin would have to be absorbed freight costs as well as the cost of obtaining the letter of credit. If one bid, as you did, Mr. Price, 19.5 cents, you would have to add your freight costs from the various Government warehouses to your plant, and probably 2 to 3 cents an ounce to cover the costs of the letter of credit and bid deposit. The so-called world price as published in the Oil, Paint & Drug Reporter was 31.5 cents. Would not this narrow margin itself have had the effect of tending to exclude other small firms from offering bids on that portion that had been set aside specifically for domestic small business?

Mr. PRICE. Yes. As I stated in my opening remarks, the burdens plus the price at which we eventually got it made it a very hollow victory. As I subsequently stated, it was not a wise purchase on my client's part at that time. The margin was so small in the production of quinidine or even in the sale of quinine, so very small that just a simple round of wage increases at the plant would have put them into red ink. And why they went ahead with it this way—I was their attorney and I was prepared to do whatever they wanted to do in this, but undoubtedly dozens and dozens of companies that would have sought the quinine, had the Government disposed of it—I wouldn't have asked the Government to dispose of it at the 8 or 9 cents that they sold the original batch to the Dutch, but even at a reasonably lower price with a small margin of profit that could exist—why GSA didn't do that is clear from some of the documents you have read and from what we have learned.

But the fact remains that an awful lot of American small business either moved together in syndicates as was stated a minute ago to try to get the letter of credit, or else just abandoned the whole thought of working with that thin a margin.

Dr. BLAIR. I would like to ask either you or Mr. Stebel or both this question. If you had exceeded the price of the Dutch; namely, if you had bid 21.7 cents and the world price had been 31.5 cents, do you think you could have operated profitably on such a transaction?

Mr. STEBEL. No, no.

Mr. BLAIR. Mr. Price, your shaking your head doesn't appear in the record.

Mr. STEBEL. The price at that time in the market was somewhere between 23 and 27 cents an ounce.

Dr. BLAIR. In other words, the Oil, Paint & Drug Reporter—

Mr. STEBEL. That is the Bible of the industry, so to speak, that is right. So the market then would be somewhere below 30 cents. Let's put it at 26. There isn't anybody in our trade that could have paid the Dutch price, because it just wasn't there, unless we knew, of course, that quinine in 1965 and 1966 would be from \$2.50 down to about \$2. But no one knew it at that time.

Mr. PRICE. Dr. Blair, my head shaking doesn't appear in the record so I will state that at 21 cents we would have lost money. We couldn't have made it. We couldn't have produced quinidine at 21 cents. The shadings were going at a tenth of a cent every day, and I remember clearly advising my client to give it up, because what with production costs and mounting expenses, they shouldn't have done it. But they did it. And it is now \$2 an ounce or more. Some people listen-

ing to this may think that my client has done well. I would just like to state that I don't think it has yet been stated that subsequent to this, the U.S. Government reclaimed it all for the stockpile.

So, it is now back, I have left the matter but I think we are now in the U.S. Supreme Court on this matter. But as soon as the price started going up, for one reason or another, the Government reclaimed it. My client is going to wind up losing a chunk of money on this.

Mr. COHEN. We will get into that aspect of it tomorrow.

Mr. PRICE. Yes, I am not at all familiar with that.

Mr. STEBEL. One other thing in relation to the selling and market price. In this proposal there was a considerable quantity of dosage. When I say dosage, I mean quinine and quinine salts in the form of capsules and tablets which would require reworking, so the people like us couldn't possibly bid 20 or 21 cents. That would be for Hexagon you see, because once we got through our costs would have been substantially higher than the then current market.

Dr. BLAIR. In other words, you didn't have in mind using it as a raw material.

Mr. STEBEL. No.

Dr. BLAIR. To process it into quinidine.

Mr. STEBEL. No, we would sell some of the dosage. Some of the dosage would be sold after we had it assayed, to determine that it conformed to FDA requirements. It would be sold in the form that it was. Some other dosage had deteriorated.

Dr. BLAIR. The bulk you would sell to large or small drug manufacturers?

Mr. STEBEL. All around the country, that is right, packers and others.

Senator HART. Mr. Stebel, maybe you can answer a hypothetical question that nobody can with certainty. If at the time your bid was under consideration it had been accepted and you would have received 4.5 million ounces. Would the present market price be \$2.50 an ounce?

Mr. STEBEL. I am quite sure it would.

Senator HART. Not withstanding the fact that you would have gotten the "set-aside"?

Mr. STEBEL. We are going back to 19—this started in 1959. Now this stockpile could have been sold long before, long before 1966.

Senator HART. My question goes to this. If the volume of the stockpile set aside for small business had gone to small business on your bid of 20 odd cents in 1962, would the present market price be about \$2.50 or wouldn't it?

Mr. STEBEL. I would say, yes. I don't think this would have had any relation to it, because of the controls.

Senator HART. What would you have been able to do with 4.5 million ounces in attempting to thwart the cartel control which you indicate prevailed anyway?

Mr. STEBEL. We don't know what the cartel might have done. They could very well have come along and said, "Gentlemen, here is x dollars. We want the stock." There is always those things. We can't speak for what the cartel might have done or the Dutch.

Senator HART. You mean if you had gotten 4.5 million, they could have come to you with an extraordinarily high profit offer?

Mr. STEBEL. It would not have to be extraordinary. We hit and run if we can.

Senator HART. Under SBA and GSA disposition orders is there ever any condition attached as to what would happen after the material gets into small business hands?

Mr. STEBEL. No.

Mr. PRICE. I haven't started answering your question, Senator Hart. I do not want my silence to be interpreted as agreement. If you are ready for me to answer this series of question, I would be happy to. It was my understanding, but we never approached it, that we are bound to retain it. We always went in with the assumption that we would. You see, we were a manufacturer, a small company seeking to grow in the next decade. We never purchased it and I am certain my clients never would have sold it to the Dutch, just as a matter of principle and policy. I just couldn't conceive of it. I think at one point they probably would have dumped it in the Hudson River first, because that was their state of mind.

I do not think they would have sold it to anybody at a profit. They bid in good faith to use it. They had expansion plans for their own properties and everything else.

I would like to say this, that I think that had this 4.5 million ounces gone to domestic small business, the world price would have certainly been more competitive. What might very well have happened was that the Dutch might have dropped the world price to 13 cents and knocked us out that way. That is what could have happened.

I would say that we would have had a large weapon on the market to keep the price, but eventually we would have used up the 4.5 million ounces and at that point the price would have mounted.

Basically, more American consumers would have gotten quinine and quinidine at lower prices than they were since able to get it, and this probably could have kept going maybe for another year or two. But sooner or later we would run out.

I think all the Dutch wanted to do was make sure it was controlled. I think they would have been happy to let the U.S. Government keep it if they had a binding agreement it would never be disposed of. They just wanted it off the market. But Hexagon, I am confident, would not have sold if they had made a thousand percent profit on the product, certainly never to—apart from regulations and laws—never to the Dutch and never to another predatory interest. They may have shared it with other American businesses that they were helping to develop quinidine.

Senator HART. Well, in a sense this is irrelevant to the immediate subject matter, but it strikes me, and it could very well have occurred to Senator Hruska, too: if the purpose of SBA set-aside is to encourage growth by small business, the law leaves a gaping hole unless it insures against the use by small business of the raw material disposed of to them simply as an item for immediate turnover at a profit to big business.

Mr. PRICE. I agree, except for a distress sale by small business, that is right. We never contemplated disposing of it. We had just gone public. We had several hundred thousand dollars in bond money, so I am sure we could expand. We never even thought about disposing of it.

Senator HRUSKA. Would the chairman yield?

Senator HART. Surely.

Senator HRUSKA. How much did you actually buy in that 1961 bidding? There were five lots, were there not? How much did Hexagon buy?

Mr. PRICE. It was 1962, I think, was it not? Was it 1962?

Senator HRUSKA. 1961 or 1962, or whenever it was.

Mr. PRICE. What was it, 2 million? Yes, we bid—the total amount we obtained was I think about 2 million ounces, was it? I have the figures here.

Senator HRUSKA. 2.2 million, wasn't it, at 20.9 cents? Was that it?

Mr. PRICE. They chopped it up into five bids. We lost item No. 3. We were the high bidder there, but they did not give it to us. That was 2.3 million, I think, and take 2.3 from whatever they divided, the four point something, that is what we obtained in four separate bids which we could withdraw only on a 5-year period, and for that we bid a price of slightly over 20.5 cents per ounce, I think.

Senator HRUSKA. Part of that was withdrawn, was it not, by the Government later on?

Mr. PRICE. No, no. We withdrew part of it initially. I have forgotten. And then the Government took back the bulk of it.

Senator HRUSKA. Yes; it was withdrawn from the sale. There was 2.2 million ounces, and 1 million were really frozen by the Government, were they not?

Mr. PRICE. Some amount, I am not familiar with this. After we won it, and after it became our property still in the Government warehouse, we started withdrawing monthly certain amounts, 10 or 100,000 ounces, I have forgotten what the figures were. I am not sure I ever knew these because this was after I got out of this problem.

The Government then took it all back, said, "Under the law we can cancel it."

Senator HRUSKA. There was some litigation and the Government prevailed?

Mr. PRICE. In the court of claims I think, or perhaps the U.S. district court.

Senator HRUSKA. And the government prevailed and it was determined by the judicial authorities that they had a right to withdraw that and reclaim it.

Mr. PRICE. Right.

Senator HRUSKA. Or whatever technical term.

Mr. PRICE. This is on appeal now.

Senator HRUSKA. Doesn't that in part answer the question? How much did you actually use of that 2.2 million? How much did you actually have delivered from the government warehouse to your factories?

Mr. PRICE. I do not know that figure, but I could find it out. I just do not know. I don't know. I suppose I have the figure somewhere, and it is probably ascertainable by looking at the papers on file in the court.

Senator HRUSKA. Yes.

Did the Government also freeze some for the Dutch in the sales to the Dutch?

Mr. PRICE. Did they also take it back?

Senator HRUSKA. Yes.

Mr. PRICE. I believe they did, yes. That was satisfactory to the Dutch. All the Dutch wanted to make certain, that no competitor had it. They were very happy to have the Government reclaim it, I am sure of that.

Senator HRUSKA. Doesn't this answer in part the question that Senator Hart put to you, that had you been successful in buying, would the market price still have gone up to \$2.40? You did actually buy 2.2 million. You used some quantity of it, and the price still went up didn't it?

Mr. PRICE. No; but the price did not go up while we were using it.

Senator HRUSKA. It did not?

Mr. PRICE. I have forgotten what the chart was. The price started to rise after I either learned that the Government was going to reclaim it or after it became apparent that we were running out of our amounts.

Mr. COHEN. I might just say we had prepared charts in this area as to the price and when the price rose, which we hope to use in the next few days of hearings.

Mr. PRICE. Good.

Senator HRUSKA. Mr. Chairman, I would like to suggest this: There have been some rather harsh things said about the State Department, some in the prepared statement and some in the interpolations, particularly of Mr. Price, also against GSA, also against Small Business Administration, inferentially against the Department of Justice, because of the existence of a decree enjoining some certain defendants in this very field. In looking over the list of witnesses scheduled to appear before us in this current series of hearings, I see no names of any of these departments. I do hope that in justice to these several departments and agencies, that the staff will arrange for them to come here and give an accounting of themselves in the light of what misgivings Mr. Price has expressed, and the charges he has made. Certainly this Congress and this committee would be interested in knowing whether the Small Business Administration statute has been circumvented and has been violated as has been alleged here by this witness. I do not know what plans the staff has or what the majority has in mind here, but it seems that that would be a logical way to develop this whole picture.

Senator HART. I was advised before the hearings, that both State and GSA were advised of the area that we would be studying, and the documents that would be introduced, and that they would be free, in the event they so desired, to make comment on them, indeed to be present today and tomorrow.

I do not know whether they have accepted that invitation, but surely it is renewed. I think in fairness, perhaps the Senator from Nebraska will recall, that the SBA has not been criticized by either Mr. Price or Mr. Stebel.

Senator HRUSKA. No, they have not been criticized, Mr. Chairman, but certainly their area of operation has been dealt with in testimony here. The Chair is nothing if he is not courteous. He is the most courteous and polite man on the Hill, I do believe, in addition to being a very effective Senator. But I would suggest we go a step further, not only invite these people to appear to comment, I would

like to request their presence, and if they do not come we would kind of like to have an accounting as to why they would not want to come here. I would like to serve notice, that is, it is only on the basis of a request, which is a polite way of course, an invitation to come if they want to, that if we do not have them come here and make some explanations in response to that invitation, maybe they will get a more stern invitation.

Senator HART. With that underscoring of the invitation, I am sure that they will respond.

Mr. COHEN. Before they respond, it might be best to go through some of the other documents that we have here. The key point that you made was that the cartel wished control, and we have discussed so far how that control extended to attaching conditions to the set-aside at the request of State Department and in the first instance the Dutch Embassy. Just how anxious the Dutch were to gain control of this entire amount I think we can best go into by going back to the earlier negotiations.

As you might recall, the announcement that the stockpile was to be disposed of as being obsolete was made in 1955. I would like to read you a series of documents from 1955 to 1958—extracts from documents—to determine how the actual events fit in with your idea of how this thing has operated to date, and how they relate to the premise you have set forth here that control was the important thing that the Dutch wanted over this stockpile.

First, I will read from a GSA document dated September 7, 1956, "Meetings Held on September 4 and 5 in Regard to the Quinine Disposals," a State Department document. It states in part:

In general, Mr. Moerell, of the Netherlands Embassy, summed up the position of the Dutch by saying they would be interested in the U.S. Government's quinine under two conditions: (1) That the Dutch be permitted to purchase the total quantity, and (2) that there be no general advertising of this sale in the Federal Register.

(Exhibit 14.)

(The document may be found in the appendix, p. 129.)

Mr. COHEN. On November 27, 1956, another GSA document entitled "Conference with Dutch Re: Quinine Disposal." (Exhibit 15.)

Mr. Moerell raised some questions regarding the insertion of a notice in the Federal Register and felt that negotiations should occur prior to such insertion. Preliminary negotiations will take place prior to the notice in the Register as soon as the Dutch appoint their representatives authorized to negotiate.

(The document may be found in the appendix, p. 130.)

Mr. COHEN. Then in a document dated August 20, 1957, from the Administrator of GSA (exhibit 16), the following extract:

From conversations with its representatives, the Department of State has indicated that it will strenuously oppose domestic sales of the stockpile quinine as this would seriously disturb relations with the Netherlands Government and with the Government of the Republic of Indonesia.

(The document may be found in the appendix, p. 131.)

Mr. COHEN. From another document, again a GSA document, dated August 10, 1956 (exhibit 17), after explaining that although GSA felt that our domestic industry should be consulted, the consultations were limited to two companies, both of which had long been involved with the cartel and were subject to the 1928 consent decree:

At the last report Mr. Weirich [BDSA] said that he has contacted both [companies]; both firms expressed no interest in the material and did not feel an industry advisory committee meeting would be required.

(The document may be found in the appendix, p. 132.)

Mr. COHEN. Now up to this point we have the picture of both the GSA and the State Department having gone into the disposal problem with the Dutch and the Netherlands Embassy. The State Department has strenuously objected to any domestic producers getting any of the stockpile, and the agencies supposedly have contacted the two American companies who were both named in that cartel decree, and they both have said they were not interested.

Do you have any comment at this point before I go on with these documents?

Mr. PRICE. I have none.

Mr. STEBEL. It could well be that these two manufacturers the names of whom you have there are those two that went out of the quinine business, which would account for the lack of interest?

Mr. COHEN. Yes; I think this is true.

Mr. STEBEL. Because in one of them we liquidated an inventory for them. I am referring to Merck & Co. We liquidated an inventory of quinine for them some years back when they discontinued the production of quinine. The other one was NYQ. Those are just two.

I know they would be considered as factors.

Mr. COHEN. I think the companies were Merck and S. B. Penick.

Mr. STEBEL. That is NYQ. They took over NYQ.

Mr. COHEN. On August 4, 1958, after publication of the notice of sale, which would in effect have given the entire amount to the cartel, American Quinine Co. wrote to GSA for confirmation of "rumors in the trade that such a sale was contemplated."

GSA's reply was:

All information on the disposal of quinine is contained in the official notice published in the August 2 issue of the Federal Register, copies of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C., at 15 cents a copy.

(Exhibit 18). So that American Quinine appeared to have gotten less cooperation than you did in their efforts to find out what was happening to the disposal.

(The document may be found in the appendix, p. 133.)

Mr. STEBEL. Might I ask if you ever got a copy of that Register, because it was indicated that that figure was about \$200,000 or a little under. There was purportedly a notice in one of the Registers that there was a sale pending to the Dutch for something around \$200,000, \$190,000, or a little over, and American Quinine, having read it in the Register, stopped the sale. That is why I asked if you had that one listing the price at which it was sold.

Mr. COHEN. Which brings us to the point as to why it was to be sold at 7 cents an ounce at this point in 1958 when ultimately it was sold for around 20 cents an ounce.

Mr. PRICE. I think the original sale contemplated by GSA was less than 7 cents an ounce; is that right, Mr. Stebel?

Mr. STEBEL. You are referring to where, this thing?

Mr. PRICE. The original notice in the Federal Register when American Quinine had interfered and stopped it from being dumped. It

was a couple of pennies. A penny or two was the original thing before American business—

Mr. STEBEL. It was about 17 million ounces, 14, 15, or something in that order.

Mr. COHEN. This first notice appeared on August 2, 1958, and limited the sale solely and exclusively to European bidders, on the grounds that the stockpile of quinine must be reprocessed in order to bring it up to U.S.P. standards, and that the U.S. lacks the necessary facilities for processing.

Mr. STEBEL. That was not so.

Mr. COHEN. This was what the notice in the Register said. We will get to the reasons.

Mr. STEBEL. The buyers always have an opportunity, which we had, too, to have assays made, and we had assays made. I go to 1959, "Samples of quinine salts for U.S.P., quinine powder, meets all requirements." This is an outside official laboratory, Bendiner & Schlesinger, in New York.¹ These were before we bid. This goes to 1959.

Mr. COHEN. I think that should be made a part of the record because in 1958 the disposal notice was based on the grounds that it would have to be reprocessed. It would not have come up to U.S.P. standards.

The reason for that is contained again in a GSA memorandum dated June 22, 1956 of a meeting with the Dutch representatives in 1956 when the Dutch stated that:

If the quinine would be purchased from the stockpile by the Dutch, it would require reprocessing in order to bring it up to the quality [U.S.P. 15] of that used by the processors.

The stocks held in the stockpile were purchased according to the specifications contained in U.S.P. 11 and 12—

According to the Dutch, these were lower specifications,²

And again, Combinatie, which is the Dutch cartel, part of it at least, stated in a memorandum presented via the Dutch Embassy and the State Department, on November 20, 1956 (exhibit 21):

Now, as to the price the U.S. Government can expect, one has to consider the fact that the quinine will have to be reworked * * * this quinine being manufactured 14 years ago cannot satisfy the present requirements.

(The pertinent section of the memorandum may be found in the appendix, p. 134.)

Mr. COHEN. So that the determination that the total stockpile would be sold only to European processors was based on Dutch representations that the entire amount would have to be processed in order to bring it up to the U.S.P. standards that were then in effect.

This argument was accepted by the GSA apparently without any check or analysis, because a letter from the GSA on August 20, 1957, states:

In addition, it should be stated that quinine is currently being sold under the requirements of U.S.P. 15 and that it will be necessary for purchasers of the stockpile quinine to beneficiate the material up to the requirements of this latter specification—³

¹ (Exhibit 19.) See appendix, p. 133.

² (Exhibit 20.) See appendix, p. 134.

³ (Exhibit 16.) See appendix, p. 131.

And there is no indication that the GSA or anyone else have actually checked it up to this point to determine whether this in fact was true.

Mr. COHEN. Now following this notice, American Quinine had written their letter, and American Quinine in effect challenged this allegation by the GSA. American Quinine said to GSA on August 15, 1958, 2 weeks after publication of notice in the Federal Register:

The third statement that the quinine will have to be reprocessed to meet present standards, if the quinine had been properly stored, this is only partially the truth. The requirements of the U.S.P. have been changed slightly since the quinine was stockpiled, but much of it should easily pass the latest requirements. It is doubtful whether any of the quinine in the stockpile would be reprocessed if sold to a European cartel. (Exhibit 22.)

(The letter may be found in the appendix, p. 135.)

Mr. COHEN. And then at that point GSA asked the FDA to make an assay of the stockpiled material and the FDA reported on December 4, 1958, that in fact the stockpile did not need any reprocessing to bring it up to the USP-15 requirement.

We have here as an exhibit the report of the Food and Drug Administration (exhibit 23).

(The document may be found in the appendix, p. 136.)

Mr. COHEN. So that we have a situation here where based on the representations of the Dutch, the American Government was prepared to sell the entire amount to the Dutch at a price of around 6 or 8 cents. And if it had not been for the letter by the American Quinine Co., this procedure would not have been challenged; the stockpile would not have been checked by the FDA; and it would not have discovered that the Dutch argument that it needed to be reprocessed was in fact false.

Mr. STEBEL. Except one correction which has no particular significance at this point.

The price was not 6 or 7 cents, it was a little under 2 cents.

Mr. COHEN. You say it was 2 cents?

Mr. STEBEL. About 2, not 6 or 7. It was about \$200,000 on 14 to 16 million ounces. That would come to less than 2 cents an ounce. Fourteen million ounces at 2 cents would come to about \$280,000, so that would be less than 2 cents an ounce.

Mr. COHEN. I think you are probably referring to the separate sale for the dosage forms in which you are particularly interested.

Mr. STEBEL. No; that was the entire inventory. That was for the entire stockpile of 14 or 17 million ounces, including dosage and including total quinine.

Mr. COHEN. It is your understanding that it was to go at 2 or 3 cents?

Mr. STEBEL. Less. If you take 17 million ounces, I do not know what the quantity was, let's make it less, say 14 million ounces at 2 cents an ounce comes to \$280,000, and their bid was something around \$200,000 or a little under, which makes it below the 2 cents an ounce.

Mr. COHEN. At least there is no disagreement with the fact that it was under 6 cents an ounce and the Dutch cartel almost got the entire stockpile.

Now the Small Business Administration comes into the picture in 1961, when at the request of yourself and other small companies, after it had been made clear that this stockpile did come up to U.S.P. current requirements, the SBA asked, in a letter of June 28, 1961—

That in consideration of all factors the Small Business Administration formally recommends that there be set aside for exclusively small business bidding as provided for by section 15 of the Small Business Act 50 percent of the 9 million plus ounces of quinine sulphate to be offered for sale by General Services Administration (exhibit 24).

(The document may be found in the appendix on p. 138.)

Mr. COHEN. Following that letter, GSA objects in a letter of July 26, 1961, saying:

The setting aside of approximately 50 percent of the quinine for small business bidding would place restrictions upon the sale which would be incompatible with the full, free, and open competition that was contemplated by the industry advisory meeting and by the notice published in the Federal Register.

(The GSA letter of July 26, 1961 (exhibit 25), may be found in the appendix, p. 139.)

Mr. COHEN. Then GSA, as we've heard, went to the Comptroller General and the Comptroller General supported the SBA. We already have discussed that letter, which was put into the record when Senator Hruska was discussing the legal aspects of the right of the GSA to require a set-aside. So we have a situation where the Dutch, through their Embassy and representatives, had done everything possible to get the entire amount—or at least to control the entire amount—and at one time almost had it for less than 6 cents an ounce. In fact on November 10, 1959, the GSA had approved the sale of the entire stockpile to the Dutch at 6.6 cents an ounce. Following the reassaying of the stockpile at the request of American Quinine, that particular order was set aside. Then the Small Business Administration and the Comptroller General in fact required the GSA to make a set-aside. We have already had unfolded the story of the efforts the Dutch then made to gain control of the amount that had been set aside through the devices that you two gentlemen have described here today—which have been explained in some detail in the documents that we put into the record.

So that probably, Mr. Price, your original suggestion, that control was the important thing, takes on added meaning in terms of the documents that we have seen. Would you care to comment on that?

Mr. PRICE. Nothing except to—

Senator HRUSKA. Will the gentleman yield?

The Senate is now in session. The Senator would like very much to be there before a very auspicious as well as important occasion. We will hear this answer, but that is about all we can. If you have any other documents, put them in the record or introduce them in the morning.

Mr. PRICE. I have no answer except to agree with what the counsel has stated.

Senator HRUSKA. I want to just say this, and I shall not pursue nor belabor the point. I do not think there is any better witness that ever appeared before this committee than counsel, Mr. Cohen. However, even he when he steps down from his office as counsel and becomes a witness, as I understand it, is subject to the 48-hour rule. If there is any special dispensation in that regard, it is something that I am not informed about, and it would have been helpful for minority counsel as well as this Senator if we had been informed just a little bit as to what the testimony was that the counsel was going to adduce.

Mr. COHEN. May I just say in regard to that, sir, that in regard to the material I have presented as I understand it, minority counsel was briefed on Friday morning as to this material.

Senator HRUSKA. I directed the question to minority counsel just a minute ago. He received none of the exhibits, nor was he told about the contents thereof except to say that they were not, that it was not the desire of the majority staff to disclose them until this morning.

Now that is a subject which we will pursue further with the chairman, but I do think we will make a lot more wholesome progress if we sort of adhere to the rules of the committee. Maybe there is some disposition to change the rule, but I hope not because it is one way we can make some progress. We will have an opportunity to discuss it further. I do not want to foreclose you, but I do have to get away.

Before the chairman left, he asked that I announce that we will stand in recess until 10 a.m., in room 1318 of this office building. At that time we will hear representatives of R. W. Greeff & Co. of New York. We stand adjourned.

(Whereupon, at 12:05 p.m., the hearing adjourned to reconvene at 10 a.m., Tuesday, May 17, 1966.)

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and expansion. From a small collection of colonies on the eastern coast, it grew into a vast nation that stretched across the continent. The early years were marked by struggle and conflict, as the colonies fought for their independence from British rule. The American Revolution was a turning point in the nation's history, leading to the birth of a new republic. The years following the revolution were a time of rapid growth and development. The United States expanded its territory westward, acquiring new lands and settling them. The industrial revolution brought about significant changes in the way people lived and worked. The United States emerged as a major power in the world, with a strong economy and a growing military. The nation's history is a testament to the resilience and ingenuity of its people. It is a story of a nation that has overcome many challenges and continues to grow and prosper.

PRICES OF QUININE AND QUINIDINE

TUESDAY, MAY 17, 1966

U.S. SENATE,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:05 a.m., in room 1318, New Senate Office Building, Senator Philip A. Hart (chairman) presiding.

Present: Senators Hart and Fong.

Also present: S. Jerry Cohen, staff director and chief counsel, Dr. John M. Blair, chief economist; Dr. Walter Measday, economist; Horace L. Flurry, general counsel; Peter N. Chumbris, chief counsel for minority; James S. Schultz, minority counsel; Patricia Y. Bario, editorial director; and Gladys E. Montier, clerk.

Senator HART. The committee will be in order. We resume this second of four scheduled days of hearings. I think I ought to indicate on the record my own reaction to the attitude of our Department of State and the General Services Administration toward this subcommittee as we undertook to analyze and prepare for these hearings.

As we indicated yesterday, substantial numbers of documents were obtained which bear on the question, and both of these departments cooperated fully with us in making available materials and helpfully interpreting them for us. Fairness, I think, requires that I express this on the record.

There are three additional documents which were intended to be inserted yesterday, which without objection will be inserted as they are identified.

Mr. COHEN. A letter from the American Quinine Co. to the General Services Administration, dated August 15, 1958, objecting to the original plan that had been arranged for the sale of the entire stockpile to the European interests (exhibit 22).

Also, yesterday we had put in the record a perpetual consent order of 1928 which related to the cartel in this area,¹ and I think it might be helpful for the record to have two summaries taken from the standard references in this area, one by Wallace & Edminister and one by Holland, which relate to the historical development (exhibit 26).

(The letter and two summaries referred to may be found in the appendix, pp. 135 and 140.)

Senator HART. Today it is my understanding we have two witnesses whom I am delighted to welcome, Mr. Harry Y. deSchepper

¹ Exhibit 1, p. 111.

and Mr. Ira Vandewater, both are with R. W. Greeff & Co. of New York. Mr. deSchepper did file a statement, and it will be helpful at this point if you would read that. As you go along, feel free to interpolate or add, and before proceeding why don't you introduce the very able counsel of your company.

**STATEMENT OF HARRY Y. deSCHEPPER AND IRA VANDEWATER,
OF R. W. GREEFF & CO., INC, NEW YORK CITY; ACCOMPANIED
BY PAUL F. NASH, COUNSEL, OF TURK, MARSH, KELLY & HOARE
LAW FIRM, NEW YORK CITY**

MR. deSCHEPPER. I will do so, Mr. Chairman. Mr. Chairman, members of the subcommittee, my name is Harry Y. deSchepper. I am president of R. W. Greeff & Co., Inc. I was elected to this office in 1963. I succeeded Mr. Ira Vandewater, who is sitting to my left. Sitting to my right is Mr. Paul Nash of Turk, Marsh, Kelly & Hoare, our corporate counsel.

I came with R. W. Greeff & Co., Inc., in 1936, the year I immigrated into the United States from my native country, the Netherlands. I became a naturalized American citizen in 1946 after 4 years of Army service. Prior to joining R. W. Greeff & Co., Inc., I worked for 5 years for the Shell petroleum organization in The Hague, Holland.

On behalf of my company I wish to express appreciation, Mr. Chairman, for the opportunity to testify before your subcommittee.

R. W. Greeff & Co., Inc., is a New York State corporation, incorporated in 1918. We are a sales organization, selling chemical and pharmaceutical raw materials and intermediates as well as specialty products to the chemical, pharmaceutical, and allied industries, mostly in the domestic American market.

Our export sales are negligible. Our imports consist largely of cinchona derivatives, mostly quinine and quinidine, which we purchase in Holland from a firm named N. V. Bureau voor den Kinineverkoop Buramic in Amsterdam, which is the sales organization of the only cinchona derivatives factory in Holland, the N. V. Nederlandsche Kininefabriek in Maarssen. This factory extracts these compounds from cinchona bark. We sell these products in the United States to manufacturers of proprietary and ethical pharmaceutical products and, to a much lesser extent, to bottlers of tonic water and for miscellaneous purposes.

Our company has been in this business for some 50 years. A comparison between U.S. Government import statistics and our own import records seems to indicate that we are the largest importers in the United States, probably to the extent of roughly 50 percent.

Our quinine and quinidine sales last year amounted to about 12 percent of our company's total sales, expressed in dollars.

R. W. Greeff & Co., has no manufacturing facilities and no financial interests in such facilities. We buy the products which we sell for our own account and sell them in our own name. We pay our suppliers promptly for the goods we purchase. Credit risks with our customers are our own. We do our own advertising. We have 12 salesmen, including myself. Most of our personnel have been with us for considerable periods of time. Our company is well known in the trade.

I understand that the purpose of the present hearings is to investigate the considerable rise in the prices of quinine and quinidine over the past few years.

Quinidine is used principally as the active ingredient in ethical pharmaceutical preparations for treatment of arrhythmic heart conditions. These conditions occur mostly in older people. Many of these people live on pensions or retirement income, and the multiple increases in the price of this indispensable remedy is a real hardship on them.

In my opinion, the reason for the high prices on quinidine is a world-wide shortage of cinchona bark, which is the raw material from which quinine and quinidine are extracted. Quinidine is produced also by chemical conversion from quinine.

I believe some historical background is useful for an understanding of the problem.

I am by no means an expert in this field, and I have never seen a live cinchona tree. Also, I have never been in the tropics where these trees occur. Our company does not handle cinchona bark, neither are we engaged in extraction operations, but we naturally follow developments as closely as possible, since, as I have mentioned, we have been importers of quinine and quinidine for more than 50 years and fully hope to continue in this business.

It is a known fact that many years ago, the Dutch developed cinchona plantations in the Netherlands East Indies (now Indonesia) and that the bark produced there accounted for well over 90 percent of the world supply. These plantations were run scientifically by independent plantation companies, and an ample bark supply was available at all times. During the Japanese occupation of this territory, the plantations were neglected, and when Indonesia gained its independence after the war, this process of deterioration continued. For its own quinine factory (taken away from the Dutch) and for its trade with Communist countries, Indonesia stripped the plantation trees of their bark without planting new trees. Pilferage was considerable, and some quantities of bark are still being smuggled out of the country and sold in Singapore. The Indonesian Government has had an export embargo on usable bark for many years now. Recent political developments in Indonesia, hopefully, could mean an improvement in this deplorable situation, but so far information appearing in the newspapers about the Indonesian situation seems confusing, to say the least.

Our Dutch suppliers of quinine and quinidine were, naturally, well aware of these unfortunate developments in respect to their raw material supply situation, and some years ago they started cinchona plantations in a tropical highlands region of the Congo suitable for this purpose. They have invested a large amount of money in this venture, and progress has been made, but I need not emphasize that the political climate in this territory is also anything but helpful to the development of this new source. It takes from 10 to 15 years for a cinchona tree to be productive, so nothing much can be expected from these plantations until 1969-70. Meanwhile, some prewar plantations in the Congo are producing bark, but transportation to seaboard is said to be a major problem.

In South America, where the cinchona tree is a native species in remote tropical mountain areas, the collection of this "wild" bark has

been started, but the quinine content of such bark is completely unpredictable and may range from nothing to a high of 7 percent. I am told that 5 percent is about the economical minimum for extraction.

Then there is a small plantation in Guatemala which was started by the American Government toward the end of the last war; I understand that a moderate amount of bark is derived from this operation.

In 1962, after several years of deliberation, the American Government decided to offer its wartime stockpile of quinine sulfate in bulk for sale, and the Dutch producers at that time made confirmed purchase contracts with the Government for about 8.4 million ounces of quinine sulfate and hydrochloride in bulk to be supplied over a period of 5 years. After some 5.4 million ounces against these contracts had been delivered to the Dutch, who reprocessed the material in Holland, the Government unilaterally canceled the contracts in June 1964, and the news of this cancellation had a disastrous effect on prices asked for the already limited supplies of bark still available in various parts of the world. Particularly on the Singapore market, the prices for bark multiplied.

Consequently, our suppliers are now basing their sales prices for quinine and quinidine on the replacement cost of the scarce bark, and, as a result, we do not know what we have to pay for these goods until they are ready for shipment from Holland. We are making every effort to keep our sales prices within reason. The next few years are certainly going to be very difficult both with respect to prices and supplies.

We have made every effort to supply our quinidine sulfate customers about to the extent of their purchases from us in the past few years. Complaints from patients about the high cost of quinidine tablets in the pharmacies are legitimate. In my opinion and as mentioned before, the only reason is the high cost of bark over which we, obviously, have no control.

We have reason to believe that our company has been buying and supplying quinidine sulfate at the lowest cost anywhere.

Proceeding to the quinine salts, these, as far as we are concerned, are in really short supply, and we are only able to obtain a part of our customers' requirements. Our consideration here is that quinidine sulfate is an ethical drug essential to sufferers of heart disease. Therefore, it is given preference over quinine sulfate and quinine hydrochloride, the major quinine salts, which go almost entirely into proprietary medicine, over-the-counter cold remedies and, to a much smaller extent, into soft drinks, tonic waters. A number of manufacturers of proprietaries containing quinine have discontinued their products or are changing their formula to exclude quinine on account of the large increase in price. This business is likely to be lost to us forever.

The war in Vietnam probably has contributed indirectly to the rise in prices of cinchona bark. Some types of malaria do not respond to treatment with synthetic drugs which are available in any quantity so quinine has to be used in some instances. There is no reason for alarm here. According to a summary in the publication, *Chemical Week* of April 25, 1966, the U.S. Government has 4,138,145 ounces in its stockpile of quinine sulfate. A 3-week treatment of malaria with 5 grains of quinine sulfate 3 times a day involves 315 grains, so

there is enough quinine sulfate in the stockpile for over 5 million treatments.

To the best of my knowledge, there is no substitute, natural or synthetic, that can fully take the place of quinine in the treatment of all types of malaria, though most known types of malaria respond to treatment with synthetically produced remedies. Quinine has been synthesized in the United States, but the cost of commercial production is prohibitive.

As regards quinidine for the treatment of heart disease, there are suggested substitutes such as sodium diphenyl hydantoin, procainamide HCl USP (Squibb's Pronestyl), cycloguanil pamoate (Parke Davis' CI-501, not yet FDA approved). I am not qualified to judge the effectiveness of these products.

Summarizing what I consider the essential points of my statement, I would like to say that: (1) I do not believe that there is a shortage of quinidine in the United States. (2) I fully sympathize with the hardship experienced by elderly people with low incomes who suffer from the type of heart ailment that requires quinidine treatment. (3) There is more demand for quinine in the United States than we can supply today, but the magnitude of the U.S. Government stockpile rules out any shortage for malaria treatment of U.S. military personnel.

Mr. Chairman, members of the subcommittee, I hope that my statement will contribute to an understanding of the problem.

Thank you.

Senator HART. Thank you, sir. Mr. Vandewater, did you care to make any comment or statement at this time?

Mr. VANDEWATER. No, not at this time, I have nothing special.

Senator HART. Before I ask the staff to develop further the information, I understand that the basic point that you make, Mr. deSchepper, is that the cost, the now higher cost of products derived from quinine reflects actually the shortage of bark available for the basic production. Is that a fair statement?

Mr. DESCHEPPER. That is correct, Mr. Chairman, that is correct.

Senator HART. And you have cited the regions of the world from which your bark is obtained, and the uncertainties that affect its production in the important producing areas over the period of the last 10 or 15 years.

Mr. DESCHEPPER. That is correct, sir.

Senator HART. Mr. Cohen?

Mr. COHEN. Mr. deSchepper, I am going to read to you and Mr. Vandewater three or four documents from Government files relating apparently to the existence of the Dutch quinine cartel, and then I will ask for your comments and for Mr. Vandewater's comments on what was said.

First is a document dated August 23, 1956, prepared by Mr. Lightman, of the State Department. (Exhibit 27.)¹ Mr. Lightman says:

The latest report in our files on the quinine cartel is a dispatch (No. 1953, dated April 27, 1951) from The Hague. It gives no information on the specific international membership of the Kina Bureau but does indicate that, as of 1951, the Bureau was actively functioning. According to the dispatch, " * * * the Kina Bureau is operating at this time in much the same manner as in

¹ See appendix, p. 143.

previous years. The transfer of sovereignty of the Netherlands East Indies to the Indonesian Government has not affected their operations to any degree. The Kina Bureau has an agreement with the Indonesian Government whereby manufacturing and sales of quinine and related products are recognized to be a part of the Indonesian economic structure, and the Indonesian Government has delegated full responsibility and authority to the Kina Bureau to act as its agent in all matters concerning production and sales of quinine and related products. The Kina Bureau has long-term contracts with cinchona producers which, in practice, cover practically 100 percent of the production. Under the new Indonesian Government there are no restrictions on cinchona sales to non-members of the cartel, but, as long as the Government (Indonesia) honors the present Kina Bureau contracts, there is, in practice, little or no cinchona bark available for sales to non-members of the cartel.

Then a document from an intergovernment meeting of December 17, 1956. (Exhibit 28.)¹ This is a memorandum for GSA files by Harry LeBovitz, dated December 19, 1956:

Mr. Wolf thought that the State Department should come up with a positive recommendation and a course of action; and in his own case it was his opinion, after consulting with his legal department, that the best way to handle the quinine disposal would be through the presentation of a special bill to Congress requesting authorization to negotiate with the Dutch. If Congress should authorize such a negotiation, it would relieve the various government agencies from the responsibility involved in dealing with a cartel. At any rate, Mr. Wolf felt the State Department should advise, in a letter to GSA, that they have completed their exploration of the international market impact of GSA quinine disposal, and the BDSA representative said that she would also supply a letter to GSA with their own recommendations for the quinine sale.

Finally, yesterday we received a letter in the record (Exhibit 16)² which had been sent to the Attorney General of the United States by the Administrator of GSA asking for his approval or his suggestions on the disposal. As was read into the record yesterday, one paragraph said:

This Administration has determined that further negotiations with the Netherlands quinine interests respecting the sale of the stockpile quinine will result in a greater financial return to the Government than will be realized from sale into domestic consumption over a longer period of time. From conversations with its representatives, the Department of State has indicated that it would strenuously oppose domestic sales of the stockpile quinine as this would seriously disrupt relationships with the Netherlands Government and the Government of the Republic of Indonesia.

With that as a background, the Department of Justice was asked for their opinion. I quote now from a letter from the Department of Justice (Exhibit 29)³ which reads as follows:

It is our view that this proposed sale to a group of Dutch companies, which will in all probability be able to largely control the price and supply of quinine to all world markets, including the United States, raises serious antitrust problems. However, the correspondence and documents enclosed with your letter indicate there are other important factors that have a bearing on the advisability of consummating this sale, which may, on balance, outweigh the antitrust considerations.

Of course, those antitrust considerations go back to the original 1928 decree and the probability—as pointed out in the letter—of control of the price and supply of quinine in the world markets:

We believe that the balancing of these factors is not the function of this Department.

¹ See appendix, p. 145.

² See appendix, p. 131.

³ See appendix, p. 145.

Now I ask first, Mr. deSchepper, if you would comment on the quinine cartel to the extent you have knowledge of it as it is laid out in these memorandums and letters from the State Department and GSA?

Mr. DESCHEPPER. Well, sir, I was not in charge of the quinine and quinidine sales of our company at that time. It was not until late 1962 and in 1963 when I became chief executive officer that I took over this responsibility. I have no comment on the documents.

Mr. COHEN. Can you tell us anything about the existence of the Dutch quinine cartel?

Mr. DESCHEPPER. I have no positive knowledge of the existence of a Dutch quinine cartel.

Mr. COHEN. You are importers from the Dutch Combinatie which was named as a defendant in that decree; is that correct?

Mr. DESCHEPPER. That is correct.

Mr. COHEN. And as you know, Greeff was also a defendant in that particular decree.

Mr. DESCHEPPER. I know that.

Mr. COHEN. Do you know anything of their operations, their supply problems, how they price?

Mr. DESCHEPPER. Very superficial knowledge, by conversations I have had with the suppliers on various occasions, they they rotate all around the purchase prices we have to pay with the shortage of both quinine and quinidine supplies, or in other words, we wanted to purchase more than they are prepared to let us have.

Mr. COHEN. So that your knowledge about supply would come only through your conversations you might have had with suppliers?

Mr. DESCHEPPER. That is correct, sir.

Mr. COHEN. You have no personal knowledge of the supply problem of quinine?

Mr. DESCHEPPER. Well, if this is of any value to you, I might say that we receive innumerable unsolicited offers of cinchona bark which I refer to our Dutch suppliers, because I feel if they can buy more bark, we get more quinine.

Now in one or two instances we have followups from the firms that offered us this cinchona bark, and they later on told us that they did not sell to the Dutch suppliers because they were not prepared to pay high enough a price.

Mr. COHEN. I mean you have no personal knowledge of what the supply situation is in Indonesia or in the Congo or any place else?

Mr. DESCHEPPER. No, sir. What I stated in my opening statement, I have mostly from newspapers and trade magazines, and of course, I have been told in a superficial manner by our Dutch suppliers that they have these problems.

Mr. COHEN. You make a big point in your statement of the supply problem, and also of the reported embargo by Sukarno on Indonesian bark.

Mr. DESCHEPPER. This is public knowledge, and I feel that is the main reason, the only reason for that matter.

Mr. COHEN. Then your statement on supply is based primarily on public knowledge, things you have read in the newspapers and trade magazines?

Mr. DESCHEPPER. Yes, sir.

Mr. COHEN. Mr. Vandewater, you were with the company, with Greeff, during this period of time. What can you tell us about the operations of the Dutch cartel?

Mr. VANDEWATER. I know nothing about the operations of the Dutch cartel. We never had anything to do with them at all.

Mr. COHEN. You have had dealings with the Combinatie. This is the combination that you import from; isn't that correct?

Mr. VANDEWATER. As a buyer of their products.

Mr. COHEN. And your only connection with them then is as a buyer of their products?

Mr. VANDEWATER. A buyer of their products. We have heard these names that you have mentioned over the years, but we know nothing of the operation at all.

Mr. COHEN. You have never played any other role?

Mr. VANDEWATER. Never.

Mr. COHEN. Let me read to you a memorandum to the file.

Senator HART. The several documents, the excerpts of which you have quoted from will be made a part of the record.

Mr. COHEN. Memorandum to the file from Harry LeBovit of GSA, June 22, 1956 (Exhibit 20):¹

Messrs. Vandewater of R. W. Greeff and Company, Incorporated, and J. H. Vanderheide of Fries Brothers, Incorporated, connected with the Dutch quinine interests visited me on June 21st. The purpose of their call was to discuss the disposal of surplus quinine from the stockpile. Apparently they had been informed by the Dutch Embassy in Washington about State Department discussions regarding the future disposal of quinine from the stockpile and were concerned about the effect on the market such disposal would create.

The following data regarding quinine was provided by the visitors:

"Currently quoted consumer price is 28 cents per ounce and the total world consumption at present is 350,000 kilograms. The Dutch are carrying about a two-year world supply in stock, (stored in Holland), and the plantations in Indonesia apparently have about a 10-to-15 year supply. By holding back on these stocks the Dutch are still able to protect the price to some extent."

Now, do you have any reason to disbelieve this GSA memorandum in regard to supply and to their comments about what the Dutch have been able to do in Indonesia?

Mr. VANDEWATER. Are you addressing me, sir?

Mr. COHEN. Either one of you.

Mr. VANDEWATER. What is the date?

Mr. COHEN. This was in 1956.

Mr. VANDEWATER. 1956.

Mr. COHEN. The GSA there is talking about the situation in Indonesia of supplies that were available there and the ability of the Dutch to control those supplies. Now both of you I understand have testified that you know practically nothing about how the cartel or the Dutch interests operate, so I suppose you have no reason to disagree with this particular statement; is that correct?

Mr. VANDEWATER. No, and as I recall it, after all, this is a long time ago, when you get my age you begin to forget things, but whatever information—I mean Vanderheide was a director of the Dutch factory, and this information I am sure must have been supplied by him. It wasn't something that I knew anything about.

Mr. COHEN. Do you know anything about it, Mr. deSchepper?

¹ See appendix, p. 134.

MR. DESCHEPPER. Nothing beyond what Mr. Vandewater just said. Mr. Vanderheide was, as he said, a director of the Dutch quinine factory, and I must assume that Mr. Vandewater went down there upon his invitation as a courtesy. But I honestly know nothing about the operation of the alleged cartel.

MR. COHEN. Of course, this relates to the supply problem too, and you would have no reason, I trust, to disbelieve this GSA memorandum with regard to the supply in Indonesia, would you?

MR. DESCHEPPER. I haven't had an opportunity to read it, but I assume that I would have no reason, if they state that. I have no way of checking it.

MR. COHEN. In your statement you talk about supply. This would seem to contradict to some extent at least what the supply situation has been, at least during the past years.

MR. DESCHEPPER. Well, sir, I mean I am talking about today, and this memorandum is 1956.

MR. COHEN. Of course, the memorandum states that there was a 15-year supply back in 1956. Assuming no more cinchona bark had been planted or harvested, that supply would probably take the cartel up to 1971, on the basis of what the GSA states is stored back in 1956.

MR. DESCHEPPER. You mean the cinchona bark?

MR. COHEN. That is right.

MR. DESCHEPPER. I am honestly not familiar with the bark. I have never handled bark. In my statement which I presented at the opening, the information in there is from what I have read in the trade papers and reports I have had from people that have been in Indonesia recently, and whatever little information our Dutch suppliers have given me.

MR. COHEN. Let's come up to today. Let me read to you a State Department memorandum which is based on an airgram of February 2, 1966, that the State Department received from Indonesia (exhibit 30)¹:

We think that there is a strong possibility that Combinatie—

This is your suppliers—

is trying to lay the blame elsewhere for the present high prices, when a major part of the steep price rise is probably due to speculation. This may or may not involve Combinatie and the other major European processors.

There is little doubt that Indonesian bark production has declined, undoubtedly in part due to neglect of plantations but also in some measure due to a general decline in world demand for quinine since the 1930's. But Combinatie's claim that the GOI bans bark exports, though plausible and serving their own purposes, is not exactly true. The plausibility of the claim rests on a Sukarno announcement of such an embargo. In fact, however, Indonesian policy has been to retain the production from government estates for processing at BKF—

Which as you know is their own processing plant—

while permitting private entrepreneurs to export bark provided they supply an equal amount to BKF. According to the Embassy, even this last restriction is frequently evaded in practice and substantial quantities of bark produced by private enterprises (no figures available) are exported, a fact of which Combinatie must be aware.

Now this seems to say that there has been no actual embargo of bark from Indonesia, and this is the State Department's own representa-

¹ See appendix, p. 146.

tives reporting to them from Indonesia. Do you have any reason to doubt that statement?

Mr. DESCHEPPER. I have no particular reason to doubt it, but I would suggest that you communicate with the Indonesian Embassy as I did a few weeks ago I believe, and ask them for the latest decree of the Indonesian Government on cinchona. I don't have it with me, but I believe I sent to Dr. Blair. Am I right?

Mr. COHEN. Yes, and, of course, that decree as I think you are aware related to conservation of trees by requiring licenses to cut on the basis that new trees be planted in order to conserve the resources of Indonesia.

Mr. DESCHEPPER. That is right, plus a permit required to operate plantations, which I assume give the government control. But this is all I know about it.

Senator HART. Mr. Cohen, would you identify for the record the document from which you last read?

Mr. COHEN. State Department document entitled "Quinine" dated February 2, 1966, and it has at the top "FE—Mr. Barnett, SPA—David C. Cuthell." Also reading from another Department of State incoming telegram which I shall not put in the record because of its confidential nature, dated December 30, 1965, is the statement:

However, abundant supply additional raw bark is available, and BKF is prepared to put on second shift of workers to process any additional bark [the party in question] can buy from producers to supply BKF.

Mr. DESCHEPPER. I am sorry, sir, would you kindly repeat that? I didn't follow it.

Mr. COHEN. It is a Department of State telegram from the Embassy at Jakarta, informing the Secretary of State that "abundant supply of additional raw bark is available."

The reason I ask these questions is you have in your statement repeatedly talked about a shortage of supply and about an embargo by Sukarno, which as you say you got mostly from secondary sources.

Mr. DESCHEPPER. Correct.

Mr. COHEN. The State Department itself indicates that there is no practicing or actual embargo, and that there is an abundant supply of raw bark in Indonesia. I am just asking if you have any specific knowledge to counteract the State Department position.

Mr. DESCHEPPER. No, sir.

Mr. COHEN. Do you, Mr. Vandewater?

Mr. VANDEWATER. I do not.

Mr. COHEN. Mr. Vandewater, I have a series of documents here, portions of which I will read to you and then ask you to comment. This is a GSA report to the file re quinine. The first is dated July 2, 1956 (Exhibit 31):¹

I also went over the details of my discussions with Messrs. Vandewater and Vendeheide (see memorandum to file dated June 22, 1956). The general procedure of selling quinine to a select group of interested buyers or countries by negotiation was considered. Mr. Brandon, Department of State, said that he had been in conference with the Indonesian representative and a proposal similar to that suggested by the Dutch, that interested countries should join to buy the U.S. Government quinine in order to keep it off the market and prevent disruption of price levels, was presented.

¹ See appendix, p. 146.

That was July 2, 1956. Now a GSA memorandum of August 31, 1956 (Exhibit 31):¹

The first verbal proposal by the Dutch stipulated a 7-year program. However, when I told them that this appeared rather unreasonable they did drop the bid to 5 years.

* * * Mr. Vandewater said that the Dutch would only negotiate for the entire quantity since they must get complete control or they would not be interested in quinine. Mr. Vandewater felt that the Dutch are willing to pay the highest possible price to prevent disruption of the market.

That is August 31, 1956.

Then we have a letter on R. W. Greeff Co.'s stationery from Mr. Vandewater to Mr. Floete, administrator of General Services (Exhibit 33),² in which you made the point:

We feel very strongly that only a sale to the Dutch would create less disastrous effects on world markets.

That date is December 29, 1959.

Now these documents, Mr. Vandewater, seem to indicate that you in fact were negotiating on behalf of the Dutch for the purchase of the Government stockpile.

Mr. VANDEWATER. I don't know, this word "negotiate" is kind of difficult. The earlier dates that you talk about I was in Washington with a representative of the Dutch, and some of these things, I did write the letter on December 29, 1959, to Mr. Floete. I have said right along in the task meeting in 1960, and I have said repeatedly, that it was my own opinion that a sale to the Dutch made the most sense. Any other sale to anybody would disrupt the market. I was thinking primarily of our own business which was small then, and it is still small, and I have never changed my opinion that the GSA acted wisely in negotiating with the Dutch for the sale of this material.

I think we ought to realize first that this was something that the Dutch weren't trying to, or we in helping them, whatever we could—after all, I went down there, as Mr. deSchepper said a moment ago, as a courtesy to our people. If I could be helpful in anyway, I wanted to be helpful. But I don't think we should overlook the fact that we—when I say we, I am including R. W. Greeff and the Dutch—didn't push the GSA into selling this material. They wanted to sell it. It wasn't something that we initiated.

Senator HART. On that point, would it be fair to say that as far as the Dutch interests were concerned, we could sit on this stockpile until it turned green and they would be very happy?

Mr. VANDEWATER. Well, looking back at it now, the Government would have been wise to sit on it.

Senator HART. But the motive as far as the Dutch are concerned is not to introduce anything from this stockpile into the market, and if it has to be introduced, they want it all. Is that a fair statement of the attitude?

Mr. VANDEWATER. I don't quite follow that, sir.

Senator HART. Do I understand from the documents which Mr. Cohen just submitted, that if the stockpile was to be disposed of, the Dutch wanted it all?

¹ See appendix, p. 146.

² See appendix, p. 149.

Mr. VANDEWATER. Well, I think they felt that that was the only way for the proper handling of it.

Senator HART. From their point of view, I am sure it was.

Mr. VANDEWATER. Yes, from their point of view.

Mr. COHEN. Mr Vandewater, you made numerous representations to the State Department and GSA, at least to the extent that they had the feeling that you were representing the Dutch cartel. For instance, "Mr. Vandewater said that the Dutch would only negotiate for the entire quantity since they must get complete control or they would not be interested in the quinine."

Who were you speaking for when you made that statement?

Mr. VANDEWATER. Well, I don't recall now.

Mr. COHEN. You deny that the statement was made?

Mr. VANDEWATER. It probably was made.

Mr. COHEN. A GSA memorandum already in the record states:

Representation by Vandewater in the meeting of June 21, 1956, with GSA. They stated that if the quinine would be purchased from the stockpile by the Dutch, it would require reprocessing in order to bring it up to the quality of that used by the processors.

Mr. VANDEWATER. Well, that was true for part of the stockpile.

Mr. COHEN. Had you examined this stockpile?

Mr. VANDEWATER. You mean physically?

Mr. COHEN. Yes.

Mr. VANDEWATER. You mean the condition of it?

Mr. COHEN. Yes.

Mr. VANDEWATER. Some of it we had.

Mr. COHEN. And had you examined it on request from the Dutch combinatie?

Mr. VANDEWATER. No.

Mr. COHEN. Well they were the ones that were interested in buying it. You were representing—whether or not you use the word "negotiate"—you represented them.

Mr. VANDEWATER. We didn't represent them.

Mr. COHEN. Let me just ask you one question, Mr. Vandewater. What were you doing at the State Department and GSA meetings in which the State Department and GSA memorandums refer to you as representing the Dutch interests and making these various proposals and statements? What was your position there?

Mr. VANDEWATER. A number of times I accompanied this Mr. Vanderheide, and the rest of the time I must have—I don't know how it came about.

Mr. COHEN. Both GSA and the State Department seem to be under the impression that you were representing the Dutch interests. Are you telling us now that their impression was wrong?

Mr. VANDEWATER. I don't know about the word "representing". I had no authority from them to do anything. I was transmitting certain information that had been given to me to pass along to the GSA.

Mr. COHEN. You were transmitting information from whom?

Mr. VANDEWATER. From the Dutch.

Mr. COHEN. The Dutch. You mean the Dutch would tell you what to do and then you would transmit that information?

Mr. VANDEWATER. In a great many cases, like those three draft agreements that Dr. Blair has.

Mr. COHEN. I suppose some people might think that if someone says to you, "Go to the GSA and the State Department and make these representations," that it might be interpreted that you were representing those interests.

Mr. VANDEWATER. It could be.

Mr. COHEN. By the way, how did you communicate with the Combinatie, whose interests you were—I don't want to use the word "represent"—whose interests you were presenting to the State Department and GSA? How did you know what they wanted you to do?

Mr. VANDEWATER. Through Mr. Vanderheide.

Mr. COHEN. Who is Mr. Vanderheide?

Mr. VANDEWATER. Who is he?

Mr. COHEN. Yes.

Mr. VANDEWATER. He was a director of one of the quinine factories living in this country at that time.

Mr. COHEN. Did you have any communication with any of his superiors in Holland?

Mr. VANDEWATER. I wouldn't know. I just don't remember.

Mr. COHEN. When you got answers from the State Department or from GSA, you got indications of what they were interested in, who did you communicate them to?

Mr. VANDEWATER. I don't know what period you are talking about now.

Mr. COHEN. From 1955 up to 1962.

Mr. VANDEWATER. A great deal of it through Mr. Vanderheide.

Mr. COHEN. And did you have any direct communication with—

Mr. VANDEWATER. I doubt it.

Mr. COHEN. You recall we subpoenaed all of your records—I am sure you recall it—from 1955 up to the present time, and there didn't appear to be in the records a single communication between yourself and your supplier.

Mr. VANDEWATER. About this.

Mr. COHEN. About quinine or quinidine or about anything.

Mr. VANDEWATER. You mean in 1955?

Mr. COHEN. From 1955 to date.

Mr. DESCHEPPER. We don't have the 1955 files because files are sent to our warehouse after 3 years, and after another 4 years they are automatically destroyed. But we did show all the correspondence we have to Dr. Blair, and he picked out certain documents.

Mr. COHEN. But there was no correspondence in the correspondence you showed us from Greeff to the Combinatie.

Mr. DESCHEPPER. You mean today?

Mr. COHEN. No.

Mr. DESCHEPPER. Over the last few years?

Mr. COHEN. In the last few years or any of the years that we subpoenaed.

Mr. DESCHEPPER. We don't correspond with the Combinatie because the sales organization is the Buramic and we showed all our correspondence with the Buramic.

Mr. COHEN. Who?

Mr. DESCHEPPER. Buramic is the sales organization of the only quinine factory in Holland.

Mr. COHEN. Then it is your testimony here that you had no correspondence with any one but the sales organization, is that correct, in Holland?

Mr. DESCHEPPER. We had a few letters which we showed to Dr. Blair. For instance, I wrote occasionally, sent them newspaper clippings on quinine and quinidine, and those I would send to Nedchen because they are not handled by the sales organization, I happen to know that.

Mr. COHEN. Mr. Vandewater, where did you get your information on how much to bid on the stockpiles?

Mr. VANDEWATER. I beg your pardon?

Mr. COHEN. How much to bid. You were presenting the bids at that time, were you not?

Mr. VANDEWATER. You are talking about the draft agreements of 1958 or something else?

Mr. COHEN. The Federal Register listed the sale and certain bids were made in reference to those notices. As we understand it, you presented those particular bids. Where did that information come from?

Mr. VANDEWATER. I am sorry, but unless you pin it down, from 19—the bids really, the bids that were made by the Dutch for the stockpile were made through their Washington representatives, their Washington representative, actual bids.

Mr. COHEN. Well, when you made your statement, for instance, that the Dutch had to have all or they weren't interested, from where did you receive that information?

Mr. VANDEWATER. I don't know. Maybe I concocted that myself. I don't remember. That goes back to 1956 again.

Mr. COHEN. That is right.

Mr. VANDEWATER. I just don't remember.

Mr. COHEN. You wouldn't have said it unless you had been instructed by someone to say it.

Mr. VANDEWATER. Not necessarily so.

Senator HART. If I could interrupt, why would it make sense to you that the Dutch would want it all or nothing?

Mr. VANDEWATER. As I said before, I think that made the most sense for them to have it.

Senator HART. From the point of view of the Dutch cartel.

Mr. VANDEWATER. Not Dutch cartel, but from the point of view of the least destruction to the market everywhere including the United States.

Senator HART. And you define destruction of the market, a lowering of retail prices?

Mr. VANDEWATER. That is correct, and if this could have gotten into the hands of people, as is evident now by the rising cost, if it could have gotten into the hands of people, they could have just ruined the price all over the world. We would have suffered.

I mean, when I say we, R. W. Greeff would have suffered because we wouldn't have sold any quinine during this period as long as this stuff was in the hands of somebody, and they could have upset the market all over. And I have said many times that I think this made the best sense for it to go to the Dutch, and I must stick to that opinion.

Mr. COHEN. Well, I won't belabor this point with you, Mr. Vandewater, any further. You seem to have indicated that you have been directed by someone connected with the Dutch interests to appear before the GSA and the State Department and to make certain representations in regard to what the Combinatie attitude, feeling, and conditions were concerning the disposal of the stockpile. Is that a fair statement?

Mr. VANDEWATER. Yes; that is a fair statement.

Mr. COHEN. Now let me quote to you a memorandum to the files, March 3, 1959, from chief, Agriculture Branch MPA (a division of GSA), "Subject: Quinine—Discussion with Representatives of Dutch Interests." (Exhibit 34.)¹ The GSA memorandum here is quoting Vandewater. It says:

The Dutch had made an agreement with the planters to give them a percentage of the sales proceeds. This was necessary to protect them against loss of production in sale of bark during the processing and sale of the stockpile of quinine. They felt this agreement could be extended for a further 6-month period and they would make an effort to get such agreement—without it the Dutch could not undertake purchase of the quinine. The Dutch pointed out this large quantity of quinine coming on the market would necessarily, if proper safeguards and planning were not had in advance, disrupt the flow of bark, disrupt the processing plants and the market generally. Thus, there were different interests where approval must be had before the purchase was undertaken and each one must be compensated for the loss or disruption.

Now, of course, this kind of statement by yourself would require some rather, I would think, intimate knowledge of how the cartel operated, if in fact as it says here they made an agreement with the planters to give them a percentage of the sales proceeds so as to curtail production. Now who instructed you to make that statement?

Mr. VANDEWATER. Is this March 3, 1959?

Mr. COHEN. March 3, 1959; yes.

Mr. VANDEWATER. Vanderheide, he was present there.

Mr. COHEN. You are the one that is quoted as making the statement.

Mr. VANDEWATER. I don't see how I could because I wouldn't have been able to make such a statement.

Mr. COHEN. Do you recall such a statement being made?

Mr. VANDEWATER. I do not. Where is it?

Mr. COHEN. Do you have a copy?

Mr. VANDEWATER. I have it here. Where does it say that; that I made this statement?

Mr. COHEN. It says:

The Dutch were represented by—

And again they use the word "represented"—

by Mr. Ira Vandewater, president, R. W. Greeff & Co., and Mr. J. H. Vanderheide of Fries brothers, Inc., chemists.—

Mr. VANDEWATER. Right.

Mr. COHEN (reading).

* * * This discussion brought out the following: * * * The Dutch had made an agreement with the planters to give them a percentage of the sales proceeds.

Do you see that in paragraph two?

¹ See appendix, p. 150.

Mr. VANDEWATER. It doesn't say I said that and I certainly couldn't have said it because I had no knowledge of anything of that kind.

Mr. COHEN. Did you participate in the discussions as the memorandum says?

Mr. VANDEWATER. I am sure I didn't—I don't know how to put that, I would doubt that I had—I think I could say that I did not participate in this. Participation means that I had some active, that I said some active things, which I did not do.

Mr. COHEN. Do you have any personal knowledge as to whether or not an agreement did in fact exist?

Mr. VANDEWATER. I have no knowledge whatever.

Mr. COHEN. So you are not in a position to deny the truth of anything contained in this statement then? As far as you know, it could be true?

Mr. VANDEWATER. If this was said, it must have been said by Vanderheide, and I must assume that it was true.

Mr. COHEN. Who is the second largest producer of quinine in the United States, I mean in the world? Is that a German firm?

Mr. VANDEWATER. Producer? We don't produce anything.

Mr. COHEN. But there are firms in Europe, two German firms.

Mr. VANDEWATER. There are two German firms. Today there are two German firms in Europe that I know of, and there is some in England and some in France.

Mr. COHEN. But isn't it your understanding that the Germans are the second largest producers next to the Dutch, isn't that correct?

Mr. DESCHEPPER. You can see that from the import statistics. I would think so.

Mr. COHEN. 13 million ounces or more of surplus quinine were announced for disposal by the U.S. Government. Did you have any discussions with anyone or do you have any knowledge as to why the Germans did not participate in that sale?

Mr. VANDEWATER. No knowledge whatever.

Mr. COHEN. Did you have any discussions with any of your contacts as to why the Germans did not participate in the sale?

Mr. VANDEWATER. None whatever.

Mr. COHEN. Would it surprise you at all if you were to learn that a third of the stockpile that was sold to the Dutch eventually ended up in the hands of the German firms?

Mr. VANDEWATER. Possible, I wouldn't know.

Mr. COHEN. It wouldn't surprise you at all if that happened?

Mr. VANDEWATER. I just don't know.

Mr. COHEN. Do you have any knowledge as to whether the Dutch interests generally deal with the Germans, in terms of their supplies?

Mr. VANDEWATER. I just don't know.

Mr. COHEN. Do you know whether or not the Dutch get any of their bark from the Congo, either yourself or Mr. deSchepper?

Mr. DESCHEPPER. I do believe so, sir. I seem to recall they told me so.

Mr. COHEN. Let me read you a document dated January 10, 1951, to the State Department from Leopoldville which is not reproduced because of its classified nature. It is called Belgium Congo Quinine Cooperative:

The consul general here informed orally by an officer of the Directorate General of Agriculture of the colonial Government at Leopoldville that Congokina concluded an agreement with the Dutch Kina Bureau a short time ago for the

division between them of the world market for cinchona bark and quinine. The consul general has been promised a written statement of the terms of the agreement which is said to be based on a sales ratio of two for the Dutch to one for the Belgians with Congokina enjoying a monopoly in the Belgian monetary area.

And then I read from a State Department airgram dated a few years later, January 20, 1966 (Exhibit 35):¹

However, because of the world surplus, the Belgian administration in the Congo encouraged planters to reduce the area devoted to cinchona trees to 2,000 hectares, between 1955 and 1960.

Doesn't that suggest to you that the agreement between the Dutch, the largest supplier, and the Germans to deliberately cut back production.

Mr. DESCHEPPER. This graph you mean? That seems to indicate the Belgians involved, is that right?

Mr. COHEN. The Congo, as I am sure you know, is where the Germans get the bulk of their bark, the Dutch getting the bulk of their bark in Indonesia.

Mr. DESCHEPPER. I didn't know that. I assume that is correct. I don't believe the Dutch got large amounts of bark from Indonesia direct. I think they probably get it from the Singapore market. I seem to recall a remark to that effect.

Mr. COHEN. I don't recall such a remark in any of our documents. The documents we have had seem to indicate their bark comes from Indonesia.

Mr. DESCHEPPER. I am sure they are more correct than the remarks I have heard in that case.

Mr. COHEN. Should you have other information, which you know yourself, we would be very happy to receive it.

Mr. DESCHEPPER. I am sorry, it is all secondhand.

Mr. COHEN. We have three documents here then. One is the document that we read to Mr. Vandewater, which indicated that the Dutch were going to pay the planters in Indonesia to cut back on the supply of bark. Then we have these other two documents relating to the supply in the Congo, indicating that the Dutch and the Belgians entered into an agreement to divide the market and subsequently the Belgians cut back the supply in the Congo, is that correct?

Mr. DESCHEPPER. That is what you read, sir.

Mr. COHEN. This was about the time the U.S. stockpile was coming on the market, 1955-60?

Mr. DESCHEPPER. That is correct.

Mr. COHEN. So that if in fact there was a cutback in supply, it would more or less seem to have been the result of actions by the Dutch cartel, would it not, based at least on these documents?

Mr. DESCHEPPER. I cannot judge that because I am not familiar with the situation.

Mr. COHEN. Mr. Chairman, our chief economist has pulled together certain documents which statistically go to the question of production and the question of supply and price that we have been discussing; if there is no objection, he will proceed.

Senator HART. Proceed.

Dr. BLAIR. Mr. Chairman, I shall try briefly to summarize these charts for the record. Chart 1 was introduced into the record at the

¹ See appendix, p. 151.

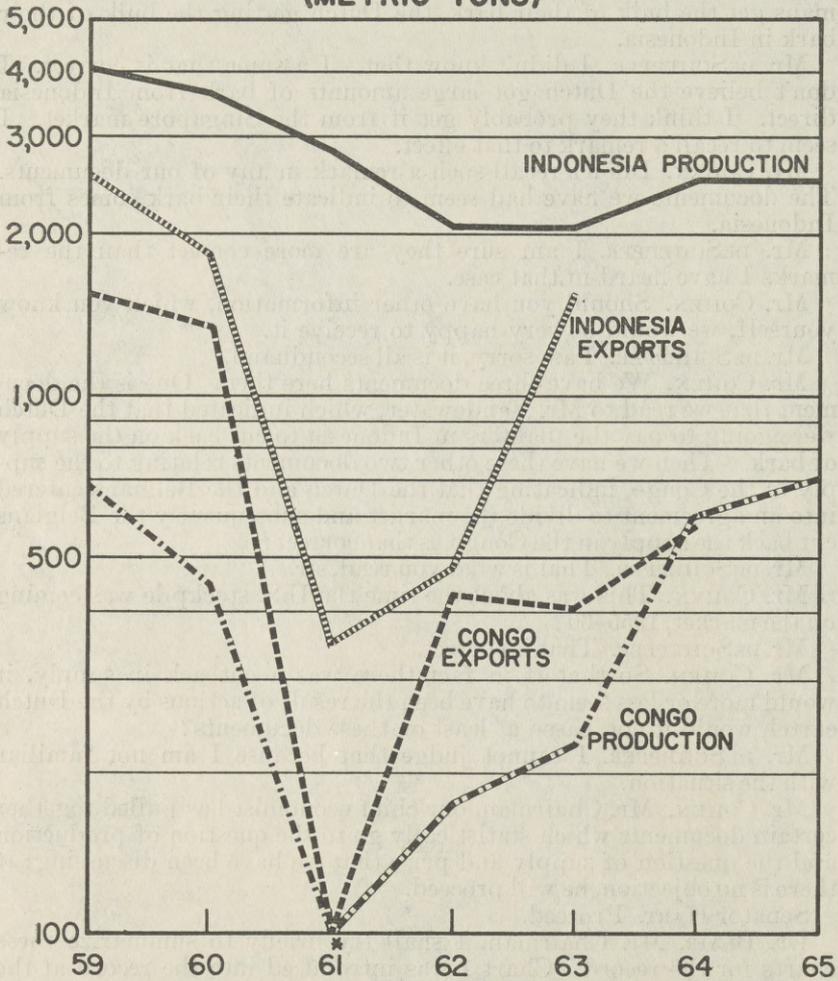
beginning of the hearings. With respect to the first chart which I shall introduce today, chart 2, the data are, should we say, not the firmest statistical material that has ever been compiled. However, they are probably adequate to indicate the general trend though not perhaps the exact level at any given year.

Senator HART. Can you give us the source?

Dr. BLAIR. Yes, sir. The sources are attached to each of the charts. What Chart 2 appears to indicate is a sharp decline in both Indonesian and Congolese production and exports of cinchona bark at the time the

CHART 2

PRODUCTION AND EXPORTS OF CINCHONA BARK INDONESIA AND CONGO (METRIC TONS)



U.S. stockpile was being released to the Dutch interests. It will be noted that the top line on the chart which refers to Indonesian production shows a decrease from 4,044 metric tons of bark in 1959 to 2,087 metric tons in 1962, a decline of nearly half. The decline in exports from Indonesia during this same time was precipitous—from 2,856 in 1959 down to only 344 tons in 1961, and to 476 tons in 1962. Thereafter, both Indonesian production and exports moved upward, which, it should be noted, was prior to the price increase of 1965. In other words, these increases in output cannot be attributed to the natural increase in supply expected from a rising price.

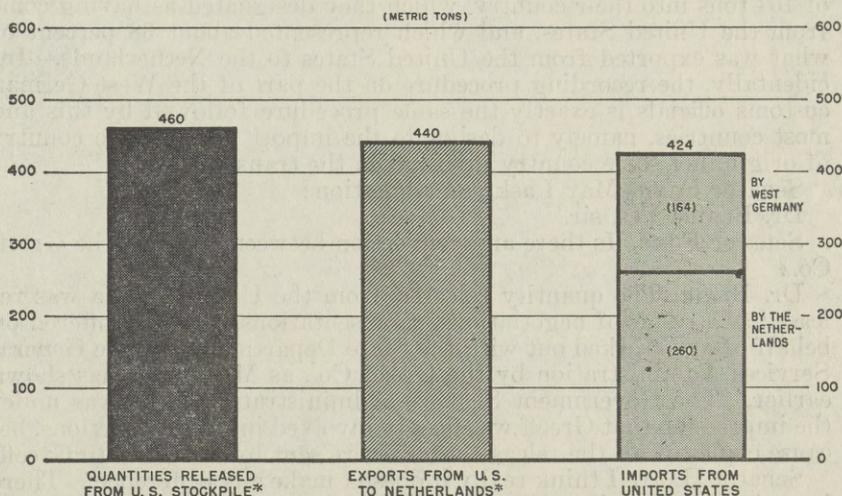
Congolese exports and production, as shown by the two lower lines, manifested pretty much the same behavior, Congolese production declining from 680 metric tons in 1959 to only 90 tons in 1961, and then rising to 601 tons in 1964. Congolese exports showed a very precipitous decline, falling from 1,537 tons in 1959 to 3.7 tons in 1961, and rising in the subsequent years—again before the price increase of 1965.

In other words, there appears to have been a reduction in production and exports of the raw material from the growing areas commensurate with the releases from the stockpile. Had these decreases in output and exports not occurred, the releases from the stockpile would have constituted such an accretion to world supply that markets might indeed have been seriously disrupted.

The next graph, chart 3, reveals a division between the Dutch and the German interests of the U.S. stockpile after it was purchased by the Dutch and exported to Holland. It will be noted that the total

CHART 3

STOCKPILE RELEASES, EXPORTS TO NETHERLANDS AND IMPORTS FROM UNITED STATES, 1961-64
QUININE AND TOTAQUINE*



* Quantities Released and Exports to the Netherlands include 217 metric tons of Totaquine.

Source: Stockpile releases: General Services Administration
Exports to the Netherlands: Bureau of the Census FT-410
Import figures: Compiled by the Legislative Reference Service,
Library of Congress

length of the three bars is about the same. The total quantity released from the U.S. stockpile was 460 metric tons, the exports from the United States to Netherlands 440, and the imports from the United States 424.

If these figures seem somewhat high, it should be noted that, in order to place the figures all on a comparable basis, it was necessary to include in the quantities released and in exports 217 metric tons of totaquine, a cinchona derivative, which is a lower cost substitute for quinine. This was due to the fact that the import figures from Holland and West Germany utilized a classification which embraced totaquine.

The most significant part of this chart is represented by the third bar to the right, which shows that of the 424 metric tons imported by the Netherlands and West Germany from the United States, 164 or a little over a third ended up in West Germany. It will be recalled that the West German firms, which include the second and third largest producers of quinine and quinidine, did not bid on the U.S. stockpile. This showing is probably statistically explainable by the fact that the customs officials in West Germany, when they received quinine from Holland which came originally from the U.S. stockpile, recorded it as coming from the country of origin, the United States. This would explain the appearance of 164 tons as having been imported by West Germany from a country which neither raises the bark nor manufactures quinine.

Mr. Chairman, the next charts go to the question—

Senator HART. Doctor, in simple language, what you are telling us is the stockpile disposed of to the Dutch by the U.S. Government was split by the Dutch two to one with the Germans. Is that the inference you suggest, or is that the conclusion you draw?

Dr. BLAIR. That is certainly the conclusion to be drawn from the fact that the West German customs officials recorded the importation of 164 tons into their country, which they designated as having come from the United States, and which represented about 38 percent of what was exported from the United States to the Netherlands. Incidentally, the recording procedure on the part of the West German customs officials is exactly the same procedure followed by this and most countries, namely to designate the import as from the country of origin, not some country involved in the transshipment.

Senator FONG. May I ask you a question?

Dr. BLAIR. Yes, sir.

Senator FONG. Is there any connection between this and the Greeff Co.?

Dr. BLAIR. The quantity released from the U.S. stockpile was released as a result of negotiations, representations, and bids offered on behalf of and worked out with the State Department and the General Services Administration by the Greeff Co., as Mr. Cohen has shown earlier. The Government Services Administration itself was under the impression that Greeff was deeply involved in the transactions, because copies of all the release orders were sent by the GSA to Greeff.

Senator HART. I think really it doesn't make any difference. There is no imputation about Greeff. We are just trying to find out what happened to what was released by the Government, isn't that the purpose?

Mr. NASH. Correct, but the record should reflect, Mr. Chairman, that the bids accepted by GSA were never submitted by Greeff & Co., and nothing that we have discussed this morning has indicated as much.

Dr. BLAIR. Well, I need not repeat—

Senator Hart. I think for the purposes of this chart it is clear that what we are seeking to do is to identify the ultimate disposition of the surplus.

Mr. NASH. Surely.

Dr. BLAIR. Which in turn may shed light on the question as to why the Germans did not bid on the stockpile in the first instance and made virtually no effort to secure any of this very large quantity of quinine which represented about 2 years' supply for the Dutch, probably over 3 years' supply for them and over a year's supply for the world.

Chart 4 bears on the question of whether there actually has been a shortage in the United States. The upper grid shows imports and average unit values by year from 1956 to 1965 for quinine and other cinchona alkaloids, except quinidine, while the lower grid shows the same data for quinidine.

Dr. BLAIR. It will be observed that there was a very steep increase in imports in 1961 and 1962 into the United States, probably representing imports back to this country of the material that had been sent to the Dutch or the Germans. The fall in imports in 1963 may have been the natural consequence of excessive imports in the previous year.

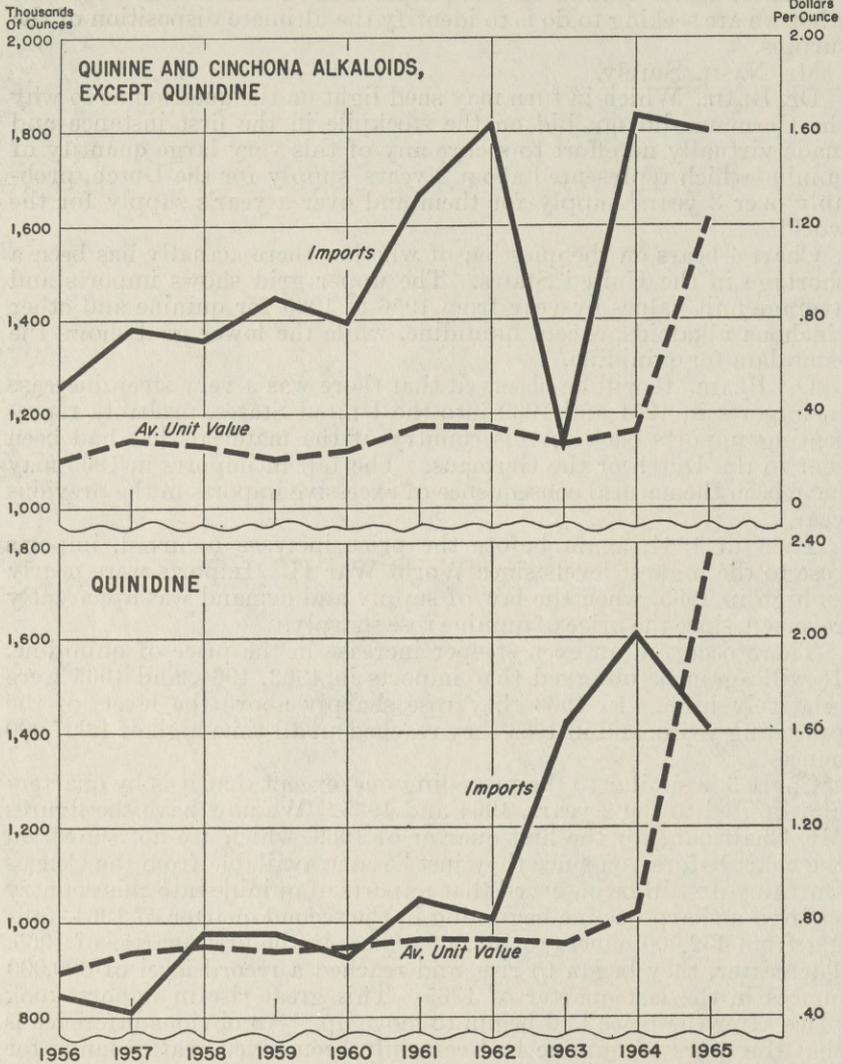
Then in 1964, again before the price increase occurred, imports rose to the highest levels since World War II. Imports were nearly as high in 1965, when the law of supply and demand was apparently reversed, since the price of quinine rose sharply.

There occurred an even steeper increase in the price of quinidine. It will again be observed that imports in 1963, 1964, and 1965 were relatively high. In 1963 they rose sharply above the levels of the preceding years, and in 1964 they reached an all-time high of 1,607,000 ounces.

Chart 5 is similar to the preceding one, except that it is by quarters and limited to the 2 years, 1964 and 1965. We now have the figures Mr. Chairman, for the first quarter of 1966, which are not shown on the chart before you since they just became available from the Census Bureau. It will be observed that imports of quinine into this country suffered a sharp decline beginning in the second quarter of 1964, falling from 432,000 ounces to 168,000 ounces in the first quarter of 1965. Thereafter, they began to rise, and reached a record level of 600,000 ounces in the last quarter of 1965. This great rise in imports took place after the price had begun to move up. An obvious inference is that the users of quinine had certainly been given real grounds for apprehension concerning their ability to secure adequate supplies by the sharp decline in imports that took place in the latter part of 1964 and the first quarter of 1965. As a consequence they were more than willing to pay these higher prices. By the fourth quarter of 1965, when imports had reached this extraordinary level of 600,000 ounces, the price had risen to \$2.21, as compared to 39 cents in the third quarter of 1964—just before imports began to fall off.

CHART 4

IMPORTS AND AVERAGE UNIT VALUES
 Quinine and Cinchona Alkaloids (Except Quinidine), and Quinidine
 1956-1965

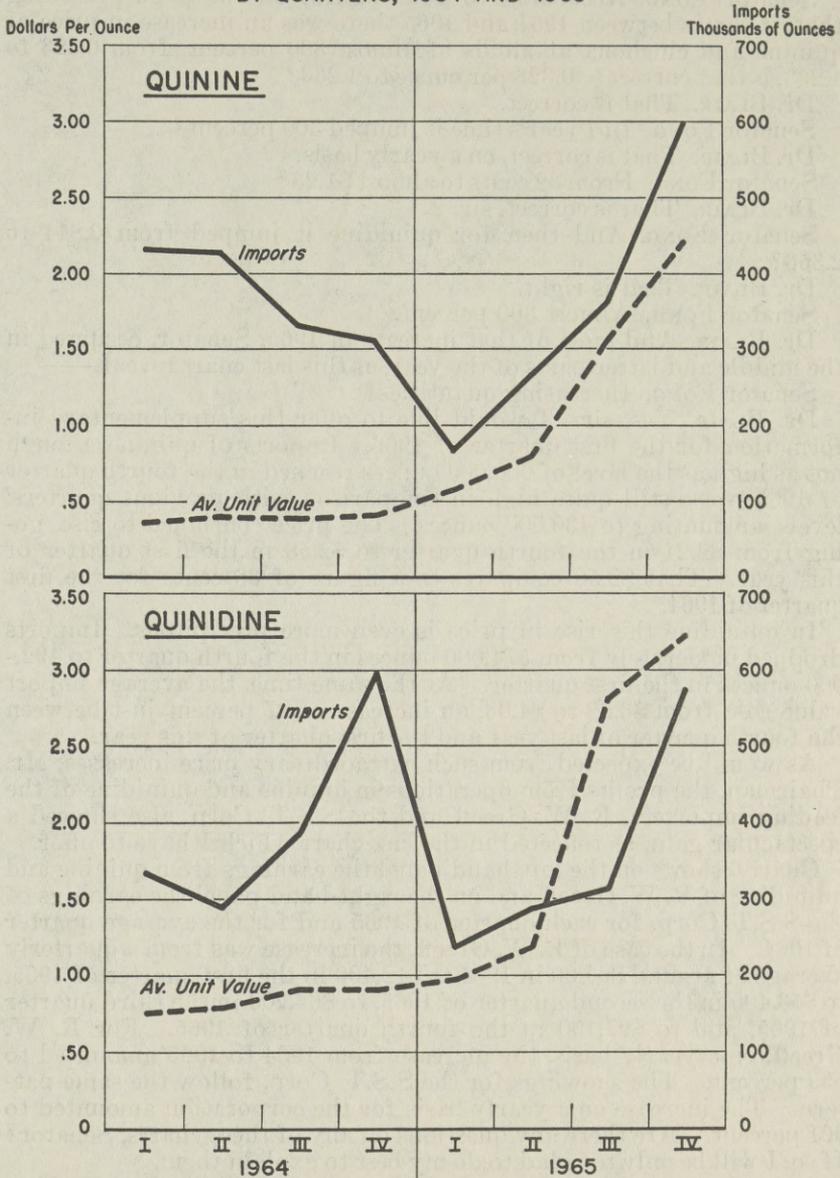


Source: 1956-1963: Bureau of the Census FT 110,
 1964-1965: Special tabulation by Bureau of the Census

CHART 5

QUININE AND QUINIDINE
IMPORTS AND AVERAGE UNIT VALUE

BY QUARTERS, 1964 AND 1965



Source: Special tabulation by Bureau of the Census

Dr. BLAIR. The behavior of quinidine also shows a sharp decrease in imports in the first half of 1965, a precipitous increase in price and a sharp rise in imports in the latter part of the year.

In both cases the rise in imports was not accompanied by any decrease in price. Rather the reverse.

Senator FONG. According to your figures on the page preceding that, it shows between 1964 and 1965 there was an increase in price of quinine and cinchona alkaloids of almost 300 percent, from 0.323 to 1.233, is that correct? 0.328 per ounce to 1.233?

Dr. BLAIR. That is correct.

Senator FONG. In 1 year's time it jumped 300 percent?

Dr. BLAIR. That is correct, on a yearly basis.

Senator FONG. From 32 cents to almost \$1.23?

Dr. BLAIR. That is correct, sir.

Senator FONG. And then for quinidine it jumped from 0.844 to 2.356?

Dr. BLAIR. That is right.

Senator FONG. Almost 300 percent.

Dr. BLAIR. And most of that increase in 1965, Senator, occurred in the middle and latter parts of the year, as this last chart reveals—

Senator FONG. Increasing quantities?

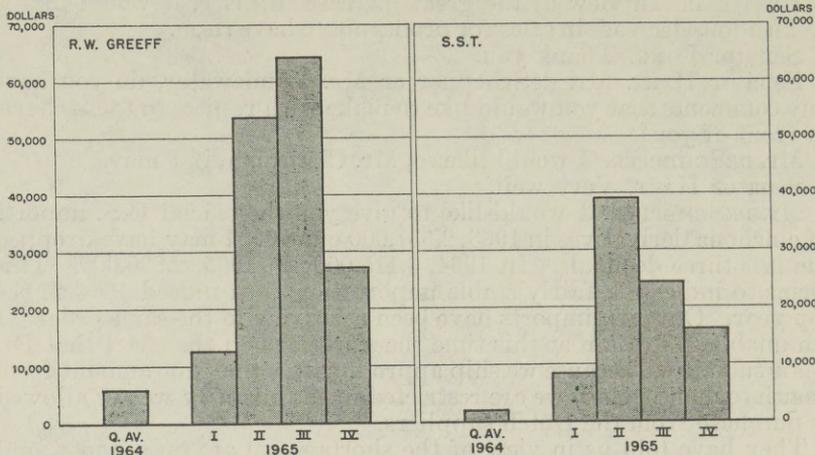
Dr. BLAIR. Yes, sir. I would like to offer this supplementary information for the first quarter of 1966. Imports of quinine, though not as high as the level of 600,000 ounces reached in the fourth quarter of 1965, were still quite high in comparison with previous quarters' levels, amounting to 430,000 ounces. The price continued to rise, going from \$2.21 in the fourth quarter to \$2.58 in the first quarter of this year. That \$2.58 compares to a figure of 36 cents for the first quarter of 1964.

In quinidine this rise in price is even more precipitous. Imports dropped moderately from 574,000 ounces in the fourth quarter to 492,000 ounces in the first quarter. At the same time, the average import value rose from \$3.22 to \$4.08, an increase of 27 percent just between the fourth quarter of last year and the first quarter of this year.

As would be expected from such extraordinary price increases, Mr. Chairman, the profits from operations in quinine and quinidine of the leading importers, R. W. Greeff and the S.S.T. Corp. also showed a spectacular gain, as reflected in the last chart which I have to offer.

Chart 6 shows on the left-hand panel the earnings from quinine and quinidine of R. W. Greeff and on the right-hand panel the earnings of the S.S.T. Corp. for each quarter of 1965 and for the average quarter of 1964. In the case of R. W. Greeff, the increase was from a quarterly average of around \$6,000 in 1964 to \$12,400 in the first quarter of 1965, to \$53,400 in the second quarter of 1965, to \$64,200 in the third quarter of 1965, and to \$27,100 in the fourth quarter of 1965. For R. W. Greeff, on a yearly basis, the increase from 1964 to 1965 amounted to 559 percent. The showings for the S.S.T. Corp. follow the same pattern. The increase on a yearly basis for the corporation amounted to 901 percent. Are there any questions on any of these charts, Senator? If so, I will be only too glad to do my best to explain them.

NET INCOME FROM QUININE AND QUINIDINE
R. W. GREEFF AND S. S. T. CORPORATIONS
QUARTERLY, 1964 (AV.) AND 1965



Source: Reports by Companies to Subcommittee.

Senator HART. You were restrained and didn't draw many conclusions. I think I must be fair and say that I have some tentative conclusions based on the charts and I think that anyone looking at them would react the same way.

Dr. BLAIR. Senator, surviving for nearly three decades in this type of work has taught me the necessity of restraint.

Senator FONG. The corporation profit shows an increase to 559 percent. That came about, following your chart which you showed us, showing that the imports were approximately the same for the year 1964; is that correct, or are they higher?

Dr. BLAIR. Senator, are you talking for the Nation as a whole or for R. W. Greeff?

Senator FONG. For R. W. Greeff.

Dr. BLAIR. We have not shown imports for the individual companies. We have them. Some of the companies made it quite clear that they would be most appreciative if we did not disclose the figures on imports on an individual company basis.

Senator FONG. What I am trying to find out is this. You have an average quarter in 1964 of about what, 6,000 or 7,000 ounces for R. W. Greeff, and in 1964 from the chart the imports were lower than the imports in 1965; is that correct?

Dr. BLAIR. Yes, sir; that is correct, and in the case of R. W. Greeff, their imports were substantially lower for the year 1965 than 1964 in the case of quinine. In the case of quinidine their imports were nearly as high.

Senator FONG. What I am trying to ascertain is whether this is really a fair presentation when you take into account the amount imported, the amount sold. If more is sold naturally there will be more profit.

Dr. BLAIR. Yes, but there was somewhat less imported.

Senator FONG. Less imported and less sold, and therefore it ended up with a profit 559 percent higher?

Dr. BLAIR. In view of the great increase in price, it would take a tremendous decrease in sales for profits not to have risen.

Senator FONG. Thank you.

Senator HART. Mr. deSchepper or Mr. Vandewater, do you have any comments that you would like to make with respect to those charts in front of you?

Mr. DESCHEPPER. I would like to, Mr. Chairman, if I may.

Senator HART. Very well.

Mr. DESCHEPPER. I would like to give you the official U.S. imports of cinchona derivatives in 1963, 2,537,000 ounces. I may have dropped the last three decimals. In 1964, 3,115,000; in 1965, 2,896,000. This seems to indicate a fairly stable importation with indeed 1964 as the top year. Our own imports have been relatively in the same order. I am unable to explain at this time the gyrations on the chart that Dr. Blair submitted, because we ship approximately the same amount from month to month, since we are restricted in the quantity we are allowed to purchase from the Dutch suppliers.

They have told us in view of the shortage we are on a quota, and this quota they fulfill every time they have stated the quota. The quota has been fairly stable, somewhat higher this year than it was in the past 2 years.

I would like to say that our suppliers have raised their prices to us several times, as was indicated in the charts. In each instance as our cost price runs up, we naturally increased our sales price, and proportionately. As the dollar value per ounce of the material increased, the dollar value of our margin increased proportionately. We sell our imported products at replacement costs, so some material afloat was sold at the higher price after an increase may have become effective.

Just as we will have a larger dollar margin in a rising market, we stand to lose money in a declining market.

Senator FONG. Do you mean that you had a stockpile?

Mr. DESCHEPPER. No, sir; we keep practically no stock.

There was a point raised that at a certain time our quinine imports were lower and our quinidine imports were higher than the previous year. This is explained as I have mentioned in my opening statement. We try to put the emphasis on the quinidine imports, because quinidine is an essential heart remedy. I am personally convinced that there is no shortage of quinidine in this country. There are very high prices indeed.

I feel we have no control over these prices because we have no control over the prices we pay to our foreign suppliers.

Thank you, Mr. Chairman.

Senator HART. We welcome any further comment that you might like to add for the record with respect to the gyrations. My question throughout all of these hearings demonstrate that I was referring to history. But if there is no shortage as you have described it, why such a high price?

Mr. DESCHEPPER. As I stated, I personally believe it is due to the high cost of bark, and the shortage of bark, rather the shortage of bark from which I must assume a high price has resulted. This bark I am pretty sure is mostly in the hands of speculators.

Senator HART. The information in the record has been made as complete as practicable by obtaining from State and Commerce, I would assume, the fullest information they have available with respect to the availability of bark, but let me give you one reaction I have to these charts.

It seems to me, and again I footnote the fact that I am not expert on this matter, that when both quinine and quinidine came into this country in dramatically increased quantity, it did so after the price here had increased over 300 percent, and that in less than a year.

Mr. DESCHEPPER. I don't believe—I would have to check my statistics on that, sir, but I believe—I mean the U.S. import statistics indicate that 1964 was the largest import year of the three, 1963, 1964, and 1965, and in 1965 the price increased, the real record price increase in our cost of material we imported occurred in 1965, not in 1964, not as far as we are concerned anyway.

Senator HART. That is what I am talking about. It would seem to me—and quite aside from the fact that as you yourself commented, this quinidine is an essential drug for heart cases—a very proper response on our part would be to cite this aspect and indeed the full record, and ask the Justice Department to review, in light of that 1928 decree, whether there is basis here to inquire whether there is a capacity on the part of the sources from whom you draw to manipulate a product that has a very significant relationship to a lot of people in this country whose need for it is such that they can't take it or leave it. They have to have it.

Mr. DESCHEPPER. I am sure you are correct, sir.

Senator FONG. Mr. deSchepper, your company has been in business for 50 years according to your statement.

Mr. DESCHEPPER. Yes, sir.

Senator FONG. So, therefore, I assume that your business in quinine and quinidine has been profitable for a long time.

Mr. DESCHEPPER. It has been reasonably profitable most of the time. Once in awhile in a declining market it has not been profitable, but those are few instances. The market, if I may add this, Senator, the market for quinine and quinidine up to I would say—I am not an expert, as I mentioned before, but I have this for my records—up to about 1962 was a very competitive market, and it is only when the shortage developed abroad that it became more of a distribution to customers clamoring for material than a sales proposition, and I can tell you when you are a salesman there is nothing worse than you have to tell your customer he can't get all that he wants to buy, and he has to pay a higher price for it in the meantime.

Senator FONG. Not knowing the inner workings of the company, and noting that we show here an increase of 559 percent in profit from one quarter to the other between 1964 and 1965, and your statement that you have no control over prices which have been quoted to you, could you explain this tremendous profit of 559 percent? Is that accounted for by your increasing your prices tremendously, or is it accounted for by other factors?

Mr. DESCHEPPER. Well, sir, I am sure that Dr. Blair's figures are correct; I would like to check them through. But I would like to repeat what I said a moment before, that if prices are raised on imported products in our type of business, as the price per unit per ounce of quinine and quinidine goes up in dollar value, so goes up the

dollar value in the margin which we normally make percentage-wise on this material, and if our profits, as is said, went up to 500-some-odd percent, that must have been a period when the prices also went up 500-some-odd percent, which is quite possible, because they did go up that much. Our purchase costs went up more than that, sir, over the past 3 years.

Senator FONG. Could you state to the committee that the percentage of markup which your company did make between the years of 1964 and 1965 went up materially, or did it remain about the same?

Mr. DESCHEPPER. Not the percentage, sir. I mean the dollar value did.

Senator FONG. The dollar value went up?

Mr. DESCHEPPER. The dollar value did.

Senator FONG. Your percentage did not go up?

Mr. DESCHEPPER. I beg your pardon?

Senator FONG. I said your percentage of markup.

Mr. DESCHEPPER. Not in that period.

Senator FONG. Would you furnish to this committee a list of the prices that were quoted to you?

Mr. DESCHEPPER. I have done so, sir.

Senator FONG. May I ask you another question? Are any of your stockholders, or substantial stockholders, interested in the parent company in Holland known as the N. V. Nederlandsche Kininefabriek?

Mr. DESCHEPPER. This is not a parent company. My company is a privately owned company and has no interest in any Dutch company, at least as far as I know. You asked about the stockholders?

Senator FONG. Yes.

Mr. DESCHEPPER. Well, I am sure I can say, "no". I can't speak for all the stockholders, but I am sure that the answer is "no".

Senator FONG. The substantial stockholders?

Mr. DESCHEPPER. The substantial stockholders; definitely no.

Senator FONG. And you have no connection?

Mr. DESCHEPPER. No, sir.

Senator FONG. Between your company and—

Mr. DESCHEPPER. We have no connections with our Dutch suppliers except the one as buyer and supplier, and we naturally on occasion at their request, we will be of assistance to them, as we have been when they were considering buying the stockpile. This assistance, to the best of my knowledge, was restricted to the usual courtesy that anyone would display to a customer or supplier visiting a foreign country.

Senator FONG. Thank you.

Mr. DESCHEPPER. I receive the same courtesy when I go to Holland.

Senator HART. I have indicated my reaction to the charts, but as I indicated, the record will remain open if there is any further comment you would like to make about them.

Senator HART. The subcommittee appreciates very much your appearing this morning and helping us identify the sources of price fluctuation.

We will adjourn, to resume in this room tomorrow morning at 10.

There are two witnesses. First will be the other importing firm—reference to which was made in the charts by Dr. Blair this morning, S.S.T. Corp., Mr. George Turner, will represent the firm, and from the Department of Defense, the Deputy Assistant Secretary, Dr. Fisk.

(Whereupon, at 12:05 p.m., the subcommittee adjourned until 10 a.m., Wednesday, May 18, 1966.)

PRICES OF QUININE AND QUINIDINE

WEDNESDAY, MAY 18, 1966

U.S. SENATE,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:10 a.m., in room 1318, New Senate Office Building, Senator Philip A. Hart (chairman) presiding.

Present: Senator Hart.

Also present: S. Jerry Cohen, staff director and chief counsel; Dr. John M. Blair, chief economist; Dr. Walter S. Measday, economist; Horace L. Flurry, general counsel; Peter N. Chumbris, chief counsel for minority; James S. Schultz, minority counsel; Patricia Y. Bario, editorial director; and Gladys E. Montier, clerk.

Senator HART. The committee will be in order.

This morning, we will hear first from Mr. George Turner, of the S.S.T. Corp., New York City, and following that, as we indicated yesterday, Dr. Fisk, of the Department of Defense.

Is Mr. Turner here?

STATEMENT OF GEORGE H. TURNER, CHAIRMAN OF THE BOARD, S.S.T. CORP.; ACCOMPANIED BY JEROME H. TICK, COUNSEL

Mr. TURNER. Yes, I am.

Senator HART. Mr. Turner, if you would, introduce your associate for the record.

Mr. TURNER. My associate is Mr. Jerome H. Tick. He is a member of our board of directors and legal counsel for our firm.

Senator HART. It is my understanding that you have not any prepared statement, and you are appearing under subpoena served on you about 48 hours ago.

Mr. TURNER. Senator Hart, I would like to fill in briefly upon my qualifications to appear here before the committee.

Senator HART. We would welcome it.

Mr. TURNER. I am Col. George H. Turner, U.S. Army, retired after 42 years of Active and Reserve service, presently chairman of the board of S.S.T. Corp.

To bring in more fully my capabilities, during World War II and a number of years before and after, I was actively engaged in medical supply, principally in the European theater of operations, as Chief of the Medical Depot Branch, where I was responsible for the supply of Armed Forces in England, France, Belgium, Holland, Germany, and Italy.

After returning to civilian status—Active to Reserve—in 1946, I became associated with Mr. A. C. Schoenewaldt, Sr., and Mr. Fred Schmitz. In 1948, we formed the Schmitz-Schoenewaldt-Turner Corp. Two years later, it was necessary to form an account's principal business, so we called it the S.S.T. Corp. and the old name, Schmitz-Schoenewaldt-Turner, then became a small brokerage company to handle brokerage accounts, particularly on the importation of essential oils all over the world. Essential oils are identified as oil of citronella from Formosa, oil of lemon grass from India, oil of rosewood from Brazil, and all other oils required by the essential oil industry.

We also were very large brokers and selling agents in mercury from our western mercury mines, together with supplemental supplies from Italy, Spain, Yugoslavia, and Mexico.

The background of our company was to serve the pharmaceutical industry mainly. Mr. Fred Schmitz actively ran it at that particular time.

In 1953, Mr. A. C. Schoenewaldt, Sr., died of cancer. At that time, Mr. A. C. Schoenewaldt, Jr., was elevated to junior partner.

In 1958, I suffered the loss of my other partner, Fred Schmitz, by heart attack, who was then 49 years of age. At that time, C. David Hanson became a partner of our company.

We have been actively supplying the major pharmaceutical houses of the United States with pharmaceutical chemicals from all of Europe, particularly England, France, Holland, Germany, and other supplemental amounts where we could locate them. We have kept this up over these years and we will, on September 1, complete 18 years of our corporate being.

I would at this time like to explain the absence of Mr. A. C. Schoenewaldt, Jr. Approximately 8 years ago, he developed a melanoma, which is in most cases fatal. A very successful operation was performed and I am happy to state that he is alive this day. Around January of this year, Mr. Schoenewaldt, Jr., was very actively engaged in assembling all the data required by this committee, and particularly at the request of Dr. Blair and all of these various aspects. In fact, he worked day and night on this, together with Mr. Tick and an outside accountant from the accounting firm of R. T. Lingley, of New York City.

It was noted that he was deteriorating, but I did not realize how serious it was.

At this particular time, I must point out that every second year, in March, Mr. Schoenewaldt went to Europe to meet with various people from which we purchased these pharmaceuticals to determine what the supply situation was, what we could count on for the balance of the year, and any other matters that might be brought before him. This particular time, I found that he was under the doctor's care. In consultation with Mr. Tick, we determined that we had no indication that a committee hearing was to be held in the immediate future, and after due deliberation, Mr. Tick said, "Go ahead with your plans, and at the same time, take full advantage of your doctor's orders, that you do have a long rest."

So instead of maybe a 3- or 4-week trip, they stretched it out to 6 weeks. Practically $3\frac{1}{2}$ of the 6 weeks were for rest and recuperation. In fact, he is in Spain right now on a motor trip, enjoying the sun and recuperating.

When Dr. Blair came to our office, he was somewhat upset by the fact that Mr. Schoenewaldt was not present. We had an agonizing decision to make, what to do about him. We called his doctor, Dr. Finucane, who stated that he was suffering from hypertension, an acute form of cardiovascular disease, and in his opinion, he should remain in Europe and continue the rest of his vacation and recuperate along the lines in which he was progressing. He had eliminated a severe bronchitis, which had also developed at that time.

I do say this, that Mr. Schoenewaldt will be back on June 1. If at that time, at the conclusion of this hearing, there are additional facts you may want to ascertain from him, we are absolutely certain that he will be able to come down here and answer anything additional that you may want.

Senator HART. Thank you very much.

Mr. Cohen?

Mr. COHEN. You have been with the firm, then, since its very beginning?

Mr. TURNER. That is right.

Mr. COHEN. You are acquainted with the operation of the firm and the products you buy and the prices you sell at?

Mr. TURNER. I am.

Mr. COHEN. With your vast experience in the Army, you are familiar with these world markets and how they operate, at least in the areas in which you deal?

Mr. TURNER. That is right, Mr. Cohen.

Mr. COHEN. On April 17, 1964, an order was signed by Edward A. McDermott, director of the Office of Emergency Planning, Executive Office of the President, establishing the stockpile objective for quinine at 4,130,000 ounces (Exhibit 36).¹ The date was April 17, 1964.

On that same date, April 17, 1964, you were sent a letter (Exhibit 37)² from your supplier, which I believe is C. F. Boehringer & Sons—

Mr. TURNER. Mannheim, Germany.

Mr. COHEN (continuing). Saying:

We wish to inform you that owing to the steadily increasing prices for cinchona bark we were compelled to fix new quotations for quinine and quinidine salts. The new prices for quinine salts are 15-percent and the prices for quinidine salts 20-percent higher than those handled so far. They will become effective on April 20, 1964; i.e., that from this date onwards quinine and quinidine orders shall be executed at the increased quotations only.

We are preparing new pricelists at present and shall airmail them to you with the least possible delay.

In view of the urgency and importance of the price increase we cabled you, this afternoon as under:

And then they list the cable.

For your information, a similar letter was sent to Charles L. Huisking which, I believe, is another importer, by their suppliers Buchler & Co., saying that on April 17 they, too, were going to raise prices, at about the same amount (Exhibit 38).³

Can you explain why these price increases were given to you on exactly the same day that the stockpile objective was established?

¹ See appendix, p. 152.

² See appendix, p. 152.

³ See appendix, p. 153.

Mr. TURNER. I would not know that. All I know is we received a notification from Boehringer. Whether or not anyone else received letters from their supplier, it is no knowledge of ours.

Mr. COHEN. Of course, you received it on the same day that the stockpile objective was established; is that correct?

Mr. TURNER. If that is the way the record shows.

Mr. COHEN. It would appear, at least from this particular record, that the freezing of the stockpile resulted in your major supplier notifying you of an increase in the price that you were to sell to your clients; is that correct?

Mr. TURNER. All we know from our supplier is that they are continually advising us that there are increasing difficulties with bark and that was the reason for raising their prices.

Mr. COHEN. Coincidentally, it happened on the same day that the stockpile was frozen.

Mr. TURNER. That could be a coincidence, but our thinking on it—we have no thoughts on it whatsoever other than receiving their notice and having to adjust our prices accordingly.

Mr. COHEN. The record will also show that your major German competitor raised his price at exactly the same time.

Mr. TURNER. I have no knowledge of that at all.

Mr. COHEN. This was, in fact, a reason, or at least the tentative reason for the raising of that price to yourself. It would appear to have little relationship to supply, would it? Your prices are going along at a very steady level then an announcement is made and then the price immediately goes up. This could seem to be the consequence of something else rather than a supply problem, could it not?

Mr. TURNER. Yes. They raised the price, Mr. Cohen. I don't know, other than they have their own reasons, I imagine, by looking at their costs and determining to raise them at that particular date. It happens to be a coincidence that all those other events took place, but they did not inform us why or when. They merely said, this is it and this is the price.

Mr. COHEN. Their only variable cost would be the price they would have to pay for cinchona bark; is that correct?

Mr. TURNER. That and also the percentage of quinine contained in that bark and the costs which accrue to the manufacturer.

Mr. COHEN. But it would be related to their own supply of cinchona bark?

Mr. TURNER. Absolutely.

Mr. COHEN. Your supplier is, in fact, the processor of that bark to quinine.

Mr. TURNER. That he is.

Mr. COHEN. Do you put those prices into effect after you receive them?

Mr. TURNER. Right after that. We computed them and put them into effect. Every time we receive a notice of a price increase, we put them into effect at the earliest practical time.

Mr. COHEN. Why?

Mr. TURNER. Because we have to realize that there were certain stocks on hand and certain stocks that would be coming. So, therefore, we had to raise it up to be sure that we would not be on the short end of the price thing as we made deliveries to our customers,

each week or each month, while waiting for new shipments. We might then be selling low-priced material and replacing it with higher priced material in subsequent shipments.

Mr. COHEN. Is there any interrelationship between Boehringer and yourselves as an importer?

Mr. TURNER. None whatsoever. We purchase from them and sell in the United States. That is our function.

Mr. COHEN. It is conceivable they could notify you that prices were to be raised, but you could, in view of the market in this country, raise them a lesser amount or you could even hold the price and take a little less profit if you wanted to, could you not?

Mr. TURNER. At that particular time, we used the same markup as we always did, the few cents, whatever it happened to be, per ounce and then deliver them to the customer.

Mr. COHEN. As I understand, this is not a markup that you based on your own operation, but was rather a price that was in fact given to you by Boehringer?

Mr. TURNER. We took the price from Boehringer. To that, we must figure our overhead, which is exceedingly high in New York City, approximately 70 percent, all costs involved, and arrive at a figure where some profit would accrue to the corporation. The price is predicated on those calculations.

Mr. COHEN. As I understand it, Boehringer had given you the price at which you were to sell the product in this country?

Mr. TURNER. They gave us the price that would apply, but then we have to be sure that we have enough income to cover our expenses and produce a little profit and also pay our taxes.

Mr. COHEN. Did you in fact take the Boehringer price and quote that price to your own buyers?

Mr. TURNER. No, we just added on an additional amount—took the Boehringer price and added to so much per ounce, as every businessman does.

Mr. COHEN. Did you raise the percentage which is the same amount as the price given to you by Boehringer?

Mr. TURNER. No. Not that large. A nominal increase.

Mr. COHEN. Boehringer gave you a price. You have certain fixed costs?

Mr. TURNER. That is right.

Mr. COHEN. Well, here is a price notification from Boehringer, the one that I have just referred to. It says:

These quotations are to be understood free customers domicile, including 1 percent cash discount. As usual, they include 5 percent for you as well as 1 percent, (quinine) respectively; one-half percent (quinidine) to cover delivery charges.

Please rest assured that we shall send you our complete price list with a minimum of delay.

They, in fact, were telling you what to charge in your ultimate price to the buyer, were they not?

Mr. TURNER. Except this; in 1965 when we had to really raise the prices to take care of our increasing costs.

In previous years, we adhered very, very closely, in fact, to that particular price indicated by Boehringer to us. It was only in 1965 that we had to adjust our prices.

Mr. TICK. Are you referring now to 1964, to April of 1964?

Mr. COHEN. That is correct—I believe that was November of 1964.

Mr. TICK. November of 1964?

Mr. COHEN. No, you are right. That was April of 1964.

Mr. TICK. Mr. Cohen. I think at that time, the selling price of the S.S.T. Corp. was the price that they paid for the merchandise and their margin of profit was the 5-percent discount that they had received. In 1965, the margin of profit was increased over the 5 percent. I think that is where Mr. Turner is being confused and that is where the confusion lies.

Mr. COHEN. Well, at least where this price increase was concerned, as we have seen, the similar price increase was announced by your competitor Huisiking and you increased it, the amount you were told to do so, according to the price list given by your supplier; is that right?

Mr. TURNER. In 1966, right. To cover costs.

Mr. COHEN. Of course, the reason this is significant, I think, is you are aware that Boehringer was included in that 1928 decree, having to do with what has been loosely described as price-fixing and market-dividing agreements in world markets for quinine.¹

One of the provisions in that decree was that defendants are perpetually enjoined, restrained, and prohibited from fixing resale prices, resale terms, resale discounts, resale allotments or territory with respect to any quinine or cinchona derivative sold to persons entering or held within the United States.

You are aware of that decree?

Mr. TURNER. I had no knowledge of it.

Mr. COHEN. It might be helpful when you have an opportunity to take a look at that decree and the terms of it.

Mr. TURNER. Mr. Tick will so note it and we will look it up.

Mr. COHEN. Particularly with this particular method of pricing your product to your sellers?

Mr. TURNER. Right.

But, in 1965, Mr. Cohen, it was our decision, whether we could add on or just try to get along and live with that 5-percent discount.

Mr. COHEN. What did you do in 1965?

Mr. TURNER. As I say, in 1965 it was our decision to do that. In 1964, we went along with the prices given us.

Mr. COHEN. What did you do in 1965?

Mr. TURNER. It was our decision to add on to that price in order to take care of the increasing costs. In 1965, we had to do something about the costs we were running into in the distribution of this product. In addition, we were advised by our supplier that in view of the mounting costs of production, he is going to have to pass along to us additional costs. What they were, we did not know at the time, but they were going to determine at later times when the batches were completed and charge us, send us debit notes to offset these increased costs. We had to find some way of setting up some reserve to account for these extra charges we were going to be faced with, unknown charges.

¹ See exhibit 1, p. 111.

MR. COHEN. Well, for instance, in view of that statement, we have a letter here to S.S.T. from Boehringer Corp., dated November 29, 1965 (Exhibit 39),¹ in which they inform you:

We should like to inform you that the steadily increasing prices for raw material compelled us to adjust our quotations for quinine and quinidine with the effect from December 1, 1965. The new prices are reading as under.

They give you the new prices. Then they say:

These quotations are to be understood free customer's domicile, including 1 percent cash discount. As usual, they include 5 percent for you as well as 1 percent quinine, resp. one-half percent quinidine to cover delivery charges.

Are you telling us now that you, in effect, disregarded instructions as contained in this letter?

MR. TURNER. We didn't disregard instructions but we sold it at \$4.10 an ounce delivered to the customer. That price that you mentioned, I think, figured out to \$3.86. We had to determine our price. We arrived at that price to set up the reserve, from which we would have to subtract the moneys to pay for these increased costs which we knew we were facing, in accordance with the verbal agreement. Later on, a letter came through telling us it was going to have to be.

MR. COHEN. A letter came to you from whom?

MR. TURNER. In April 1965, Mr. Hanson was over there and they told him at that time they are going to have to pass along some increased costs to us. Mr. Hanson said the main thing is keep shipping; never mind about that; we have to have a supply. They are clamoring, people need it; do not hold up on shipments; do not divert it elsewhere; keep the supply coming; we will work out the problem of getting you paid, so we will at least be able to come out even on this thing, if nothing else.

MR. COHEN. You came out a little better than even on it. Did you not?

MR. TURNER. It all depends on how you look at the figure.

MR. COHEN. I think we had a chart in here yesterday (chart 6)—do you have a copy of that book of charts?—this is a net income chart comparing 1964's quarterly average with 1965; in 1965, it was literally hundreds of percent higher than it was in 1964. I think the average was 901 percent.

MR. TURNER. In 1964, Mr. Cohen, that was a very bad year. It was a year in which we had an onerous contract at a fixed price, in which we took a terrific loss. In fact, in looking at the figures, we made, in 1964 on quinine, something like \$7,800. In 1965, although we had less units to work with, we had a higher price, which gave you a larger dollar volume, plus the fact that we had bought some domestic material a few months before, which was delayed in shipment, but finally did come in. It gave us a much better profit than we had ever counted on.

So what happened, when you look at your figures, when you compare 1965, it is an extraordinarily good year compared to a very poor year. Then the figures get out of balance.

But this, in actual computations, when we looked at our overall figures, in 1965, our net profit before taxes was 5 percent, whereas

¹ See appendix, p. 153.

our net profit, 1964 before taxes, was approximately 2.5 percent, based on the figures which Dr. Blair gave to Senator Hart.

Mr. COHEN. Have you ever had a better year than 1965?

Mr. TURNER. Back in 1951, yes.

Mr. COHEN. 1965 is the best year you have had since 1951?

Mr. TURNER. I would say that.

Mr. COHEN. This is from quinine and quinidine you are talking about?

Mr. TURNER. Not only that. We had great sales in mercury and other commodities which enjoyed quite a price rise. Of course, we worked on the basis of brokerage from the mines, we work on 1 percent commission, but the dollar volume is extremely high when you work on mercury. At a price of \$800 a flask, when you sell a million dollars' worth, profits tend to rise.

Mr. COHEN. We are talking primarily about quinine and quinidine.

Mr. TURNER. That is why I am trying to figure out the overall profit. When you boil it all down, we made, actually 2.5 percent after taxes.

Mr. COHEN. Then you have never had a better year in terms of quinine and quinidine than you had in 1965?

Mr. TURNER. No, 1965 was our best year.

Mr. COHEN. Let me read you a letter dated November 4, 1964, from Boehringer & Sons to S.S.T. (Exhibit 40.)¹ It reads:

In view of the continuously deteriorating supply position of raw materials for quinine and quinidine salts and the thus concurrent pressure on the prices of some raw materials, it has just been decided that a price increase of 25 percent on quinine and 20 on quinidine salts is to go into immediate effect. Furthermore, it was decided that this price advance shall be carried through more or less tacitly, as by proceeding in this manner we try our best to avoid that the suppliers of raw materials raise immediately their prices too. This, of course, can't be entirely prevented but we wish to delay their action, at least.

Mr. TICK. Is this the letter of November 4?

Mr. COHEN. It was stamped "received November 9," but written on November 4.

Do you have that letter?

Mr. TURNER. I have it, sir.

Mr. COHEN. Is this not a little unusual way for a price increase to go into effect in the face of short supply, based on your own experience? If there was in fact a short supply, one would almost expect the producers of raw material to raise their price, rather than the processors.

Mr. TURNER. The producers of the raw material did raise their price. In all the trade journals, in fact, all the offers that came to us on bark, they were astronomically high, the prices of bark. Then the percentage of quinine contained in that bark was questionable.

Mr. COHEN. This letter says:

Furthermore, it was decided that this price advance—

This price advance—

shall be carried through more or less tacitly, as by proceeding in this manner we try our best to avoid that the suppliers of raw materials raise immediately their prices too.

It would appear that this was a price advance initiated by the processors and not by the growers. In fact, the processors wanted

¹ See appendix, p. 153.

you to help them keep the thing quiet so the growers would not know about it and raise their prices. It does not say the growers have raised their prices and therefore, we have raised ours. It says, in effect, we are going to raise ours, but keep it quiet so the growers will not know about it.

Mr. TURNER. That is the squeeze play between the people supplying raw materials and the people making the manufactured product. Everyone does not want to get out on a limb and want to be squeezed by high prices. But eventually, the people who produce the raw materials, or the processor, the manufacturer of the finished article, it is always a continual battle to get the most money for the material they produce, whether it be a raw material or a finished product.

Mr. COHEN. I am sorry, I did not get that.

Mr. TURNER. It is a continuous battle for a manufacturer or processor to try to buy low-priced materials so he has a better profit picture. It is also a battle for the grower or producer of component parts of an article to always try to get the highest price he can so he can stay afloat. It is a continuous spiral. It is a vicious cycle all the way.

Mr. COHEN. My point is if there was in fact a shortage of supply of bark, and now we are talking about November 1964——

Mr. TURNER. Right.

Mr. COHEN. One would expect that it would be the growers who would be raising the price rather than the processors.

Mr. TURNER. They did right along. Although in this letter, he is trying to hold them down, hoping that they would not find out that the processor had increased the price of the finished material. Still and all, other people were going out all over the world competing for these supplies, so it was being raised.

They found out shortly after that, if you look in the 1965 correspondence, every month or two there is a letter stating that, we are continually faced with this higher priced bark. They did not say they were not getting any bark. They said higher priced bark. In any conversation, it could be found they were getting lower yields.

As an example, ordinarily, in a normal year, you may pay \$100 for a ton of good grade guinine bark, say from Indonesia or the Congo, that would contain 6 to 8 percent total quinines. The wild cinchona bark from the forests of South America contain only 2 percent. They told us, and we read also in the trade journals, that they were getting less and less cultivated bark from these plantations in the Congo and Indonesia, and they had to go and reach for this poor grade stuff produced in South America.

Then also, these cultivated plantations, they were neglected first in Indonesia after the Dutch pulled out. These plantations were neglected, and so were those in the Congo. The mixup in the Congo prevented the ordinary care which you give a grove. So they were faced with higher priced bark.

So, if you bought bark, say \$100 a ton in the old days and got 6 to 8 percent yield, now you are getting, and are paying \$100 a ton, say, for 2 percent bark. That is a 300 to 400 percent increase in your cost.

Mr. COHEN. What is the basis for this information you have just given us?

Mr. TURNER. Just what you read in trade journals about the low content of bark now arriving from the jungles, and also the fact that the shortage of the 6 and 8 percent stuff is most pronounced.

I think in Chemical News, there was an article in there just about that.

Mr. COHEN. This testimony you have just given us is based only on what you have read in the trade journals?

Mr. TURNER. This is only what I have read in the trade journals. I think it could be traced down and found to be in actual fact.

Mr. COHEN. I think possibly you were not here yesterday, but there was an attempt by the State Department to trace it down. The State Department material read into the record yesterday indicated there was ample supply of high-grade bark in Indonesia.

Mr. TURNER. When? What date was that wire sent?

Mr. COHEN. That wire was in 1966 and referred back to about the last 3 or 4 years.

Mr. TURNER. But in 1966, Mr. Cohen—this is 1966. That might have been sent maybe a week or two ago. We have just improved our relations with Indonesia in the past month or two. Prior to that, Mr. Sukarno was always veering to the Red China influence.

Mr. COHEN. The State Department memorandum indicated that there has never been an embargo on bark from Indonesia.

Mr. TURNER. But lately, I would say, from 1965 on, it was not coming into the Western channels. It was moving more in Eastern channels.

Mr. COHEN. How do you know that?

Mr. TURNER. Only by what you read in the papers, but everything being produced and exported was not coming to us—in your trade journals, too.

Mr. COHEN. Of course, we have talked to some of those trade journals and they say, we called up S.S.T., and we called up Greeff, and they are the ones who told us about the shortage. The State Department tells us in fact that there is plenty of bark available in Indonesia and there has never been, in effect, an embargo by Sukarno on bark coming out.

Mr. TURNER. If that were the fact, why would people send missions all over South America asking these countries please to give them all the bark they can, this miserable 2-percent bark, if 6- and 8-percent bark was available in the Congo and also in Indonesia?

Mr. COHEN. Who has been sending people all over South America?

Mr. TURNER. All the buyers. They have been canvassing all the different countries in South America where wild cinchona bark is available.

Mr. COHEN. What buyers are you referring to?

Mr. TURNER. The buyers who process the cinchona bark. And also exporters, agents all over, that realize here is an opportunity to make some extremely good business in the buying and selling of the bark and exporting it to these people who are hard pressed for bark.

Mr. COHEN. Where does Boehringer get its bark?

Mr. TURNER. They used to get it mainly from the Congo, from the plantations and where they have plantations today. But this is still, again—they have never told us that, or factually, only by conversation did we develop that, that they got it from there. Also they told

us whenever we got an offer for bark, to be sure to bring it to their attention. Every time some exporter would claim that he had 200 or 300 tons of bark in Peru or Ecuador, and so on, we would refer it to Boehringer, that here is a possible source; we hope that by getting this, you can increase your shipments to us of quinine and quinidine.

But in most cases, when they got there, it was too late. Someone else bought it.

Mr. COHEN. If there were in fact a shortage of bark, how do you explain the fact that the imports of quinine and quinidine in 1965 were the highest of any year of record, I think since the Second World War except for 1961?

Mr. TURNER. I did not say there was a shortage in bark. I said there were higher prices and lower yields. Consequently they could buy a great deal more of low-yield bark and still account for first-class production, but just put more of the bark into production and gather it all over, wherever they could get it from.

Mr. COHEN. You say you did not say there was a shortage of bark?

Mr. TURNER. I did not say that at any time. I said there was a shortage of high-grade bark.

Mr. COHEN. Well, Boehringer gets most of their bark from the Congo. That is high-grade bark, is it not?

Mr. TURNER. This is only hearsay. They have never put in writing they get all theirs there. We know that they had plantations there. But they were not limited to that. I am sure wherever they could get it—I do not know where importers in Hamburg or Rotterdam bought their material. We do not know where they buy their stuff.

I know our suppliers try to keep an ample supply of bark for a few years. We would have had a much higher rise earlier if they had to depend upon a price rise for the higher priced bark. You average it out. You take your low inventory, you take your higher inventory, you try to arrive at some average price.

Mr. COHEN. We note it moved up, but you indicate here you do not think it was because of a shortage of supply. You seem to indicate that it was because the supply was of a lower grade. Is that right?

Mr. TURNER. That is in every journal that you ever read, or every paper you ever read about the situation. When it was brought up, someone wrote an article about the situation in quinine. Then, in conversation, when you talk to different people in the trade, they say, this is what is happening. People come to you and say, we want to develop a new source of bark, say in Ecuador. They have a great deal of statistics that can tell you all about this thing, and you have to depend on it.

Mr. COHEN. When you talk about "these people" are you talking about people from Boehringer?

Mr. TURNER. No, no, people who are trying to increase the supply of bark to be available to these processors.

Mr. COHEN. Boehringer has never told you they have had to go look for bark other than in the Congo?

Mr. TURNER. They have told us they have to buy it wherever they can get their hands on it.

Mr. COHEN. You know, as a matter of fact, do you not, that Boehringer gets all its bark from the Congo?

Mr. TURNER. We do not know. I do not think they get it all from there. They could not possibly. There is not that much available. When new plantations come into being—a tree takes 7 years for fruition. I think it is about 4 more years now before these new plantations they are interested in will come to bear. Then I think the supply situation will change drastically.

Mr. TICK. I think, Mr. Cohen, the correspondence shows that Boehringer has written to us and asked us to forward on to them any indications of the existence of bark anywhere, because they were sorely in need of it.

Mr. COHEN. Do you know whether or not they have bought any of the bark that you referred to?

Mr. TURNER. We would have no knowledge of that, because if we received an offer on bark, we immediately forward it to Boehringer and they would then take up the matter of the purchase of bark directly with the people that were offering it. I assume, without having knowledge of the fact, that some of these things came to pass, otherwise, they would not ask us to continue to forward them.

Mr. COHEN. It makes it a little difficult to pin down, because as you point out, you do not know where they buy their bark from.

Mr. TICK. No, we do not.

Mr. COHEN. You do not know whether they follow your leads up.

Mr. TURNER. Only by hearsay.

Mr. TICK. Not even by hearsay. The only knowledge we have is the offer we forward to them, of Mr. X, offering bark. That is it unless Boehringer advises us by letter.

Mr. COHEN. The amount of quinine and quinidine you received in 1965 is one of the highest years you have ever had?

Mr. TURNER. No, 23 percent less than 1964.

Mr. COHEN. 1965 was the second highest year you have ever had outside of 1964, is that not correct?

Mr. TICK. I do not know that as a fact, and I am not sure Mr. Turner knows that as a fact.

Mr. TURNER. We would have to go back into all the years.

Mr. TICK. We have not developed figures for 1963 or 1962 or 1961 as to quantities imported.

Mr. COHEN. You mean to say you do not know how much you imported in 1961, 1962, 1963?

Mr. TURNER. We do not have the figures. We would have to compile them. We do not keep statistics on what we bring in each month.

Mr. TICK. As a matter of fact, Mr. Cohen, the correspondence between Dr. Blair and myself will indicate that the Bureau of Census statistics on this matter of our imports differed materially from our records and that they were so material that it made us feel that these figures might not be the basis upon which a fair comparison could be made.

Dr. BLAIR. Mr. Chairman, if I might interrupt, there were substantial differences in the figures as reported by S.S.T. and Greeff to the subcommittee, as contrasted to the figures which the Bureau of Customs had recorded for the Treasury Department, a copy of which then goes to the Census Bureau for tabulation. These differences have been reconciled. The principal cause of the difference was a rather strange one. In compiling the data, the Census Bureau uses com-

puters, and it uses certain checking devices in the operation of the computer. One of the checking devices is that the computer divides automatically the quantity into the total dollar value, giving the average unit realized value or price. And the prices that the computer was deriving were so far out of the range of its experience—that is, what it had been programed for—that it simply rejected them.

Consequently, it was necessary to put back into the census import figures which the computer had automatically rejected as a result of the way in which it was programed. There were a few other discrepancies, but they have been ironed out and the figures as shown on the charts for 1964 and 1965 represent substantial agreement between those submitted by the importers and those recorded by the census.

Mr. TICK. I am sorry, I was not aware of that fact. I only had the figures that did not check out, did not substantially conform to the figures that we had developed.

Senator HART. Mr. Chumbris.

Mr. CHUMBRIS. I have one question here.

You point out that after April 17, 1964, after the Executive order on the stockpiling of 4,100,000, that there was an increase in the raw material; therefore, an increase in the price of the quinine and quinidine.

Now, I notice in the second quarter of 1964, according to a chart put in by Dr. Blair yesterday, there were 429,000 ounces at 40 cents an ounce for quinine and 290,000 ounces at 78 cents for quinidine.

Then, in the third quarter, there was an increase in quantity and a decrease in price, from 40 cents to 38 cents on the quinine, an increase from 78 cents to 90 cents on the quinidine.

Then, in the fourth quarter, the quinine went back to 40 cents and the quinidine remained almost constant at 90 cents.

In the first quarter of 1965, the price increased to 56 cents, but there was a drop of quantity from 308,000 to 168,000 on the quinine and a drop of 596,000 to 236,000 on quinidine.

But the big jump, according to these charts, was between the second and third quarters of 1965 in both quinine and quinidine. For example, in the second quarter of 1965, you had 79 cents for quinine and it jumped to \$1.56. And the fourth quarter—that was almost a 100 percent increase in the price. In the fourth quarter, it went to \$2.21, or approximately a 50-percent increase from the third quarter.

On quinidine, you went from \$1.18 to \$2.80, or over 100 percent, probably a 150-percent increase on quinidine, and in the fourth quarter, it went to \$3.22, or an additional 40 cents, which would make about one-seventh, or about a 14-percent increase.

Now, how do you account for this big jump or over 100 percent on quinine and 150 percent on quinidine between the second and third quarters of 1965?

Mr. TICK. Well, may I say that I do not know what the source of those figures are, but it appears from our records that we never had such a price increase from quarter to quarter. I am talking from memory, but it does not appear from our records that our prices increased that drastically.

Mr. CHUMBRIS. May I bring this out, so you can reflect it in your answer? Another chart put in by Dr. Blair yesterday on the profit share would show that Greeff jumped from the second quarter—in the

first quarter, and did about \$12,000. The second quarter, in 1965, it went to \$52,000 or \$53,000. The third quarter—this is net income from quinine and quinidine. The third quarter, Greeff went to \$63,000 profit. In the fourth quarter, it dropped down to about \$27,000.

Your corporation, SST, from a low in 1964 of about \$1,000 or \$1,500, you jumped in the first quarter to about \$9,000. In the second quarter, you went up to approximately \$39,000 profit. In the third quarter, you dropped down to about \$23,000, and in the fourth quarter, it went down to about \$15,000 or \$16,000.

So the increase in price in the second and third quarters and fourth quarter is also reflected in your profit, both yours and Greeff's.

Now, we would like to know what explanation, what unusual thing happened that the jump—the order on stockpiling was April 17, 1964. Now, the big jump on the price, percentage-wise, would be between the second and third quarters of 1965, or about a little over a year later.

Mr. TICK. I can answer you very specifically, because there is a simple answer to the large profit we showed in the second quarter of 1965. Number one, our imports of materials were substantially increased in that quarter over the first quarter and were substantially in excess of that which we received in the third quarter. So that with this great demand for the product, as soon as this merchandise came in, it immediately went out. With our large imports in the second quarter of 1965, immediately translating themselves into sales, we have a greater number of units that we sold in the second quarter as compared to the first quarter at a higher price level, all of which resulted in a higher profit.

In addition to that, during the second quarter of 1965, we received deliveries on contracts that we had made some time before, from companies other than Boehringer, and because of the delayed deliveries on these contracts, there was a substantial profit. We had purchased that material at a relatively low price. It was delivered in the second quarter of 1965 and sold in that quarter, thereby increasing the profit for the second quarter of 1965.

Mr. CHUMBRIS. I do not want to get into a debate, but in the second quarter, you bought—not you, but the imports—these are import figures. They could be you and a few others.

Mr. TICK. Are you referring to a chart now, sir?

Mr. CHUMBRIS. Yes, I am referring to a chart, "Quinine and Quinidine."

Mr. TICK. The problem is that I do not know whose figures these are. The facts are that S.S.T. received in the second quarter of 1965 so many ounces of quinine and so many ounces of quinidine on imported merchandise, and we also were able to take delivery on so many ounces of quinine and quinidine which we had bought domestically some time before. Therefore, because of this delivery in the second quarter of 1965, we had greater units, greater dollar volume, which resulted in a greater profit.

Mr. CHUMBRIS. I want to make it clear, I am not so concerned about the profit that you and Greeff are making. That is another issue. What we are concerned about are two things: Is there a shortage of quinine and quinidine, and if there is not a shortage and the people are led to believe that there is a shortage and are paying these high

prices on that belief, then we would like to straighten that out as much as possible.

The second thing we are interested in is the price. You noted that the reason for the profit is because of the tremendous increase in imports. But you only went from 236,000 to 288,000, and your price went from \$0.97 to \$1.18. Then you went from 288,000 to 312,000. The price went up 150 percent. Then you increased from 312,000—not you, but all the importers—from 312,000 to 574,000, which was almost double your imports, but your price only went up 50 percent instead of the 150 percent on a very small increase in imports.

Mr. TICK. It is difficult for me to answer your question on the basis of these statistics which you give me. I can answer your question precisely and specifically with respect to S.S.T. on the figures we have submitted because these have been established by our accountant.

If I might refer you to the submitted material—

Mr. CHUMBRIS. But again, let me say, I am not concerned about you alone, I am concerned about what was the significant world event, if there was such a thing, that caused the sudden jump 1 year after this order was put into effect, of 100 percent as to quinine and 150 percent as to quinidine, in cost, the price for the product that came to this country.

Mr. TICK. I can answer that on the basis of the correspondence we were constantly receiving from our supplier, Boehringer, whereby they were advising us that they were having increasing difficulty in obtaining bark at reasonable prices and that the prices they had to pay for bark were going up and up and up, and in addition to that, there was a shortage of bark. This is what we were advised by Boehringer, and it all appears in our correspondence, copies of which you have.

When you add to that the knowledge that you acquire by reading newspaper articles and trade publications, it would seem to confirm this fact. It becomes explainable in terms of a shortage of bark. But we have no knowledge as to whether or not a shortage of bark in fact existed. We have no way of determining. We do not deal in bark, we have never dealt in bark, and it is only recently that we have been getting offers on bark which we just take, make a copy of, and send to Boehringer. And that is the end of it.

So if these facts that we read in the trade publications are so, that there is a shortage of high-quality bark, or bark of any kind, this would account logically for the price increase.

For instance, as Mr. Turner explained in his hypothetical situation, if 3 years ago it was possible to buy 6 percent bark for \$100 a ton and now you have to pay \$100 a ton for 2 percent bark, even though there may be ample 2 percent bark available, you have a 300-percent increase in your cost of your raw material. Now, if the cost of processing 2 percent bark is the same as the cost of processing 6 percent bark, and as to this we really do not know, but I am trying to be logical in explanation—bark is ground up and processed, or whatever is done to it. It is put through machinery, chemical process, et cetera. If the same procedure has to be applied to 2 percent bark as to 6 percent bark, it would appear logically that you then have a 300-percent increase in your cost of processing.

If these are the facts, it would logically account for the increase in price of quinine and quinidine.

Mr. COHEN. If, on the other hand, they were not the facts, it would logically not be an explanation for the rising price of quinine; is that not so?

Mr. TICK. Absolutely, Mr. Cohen. If, in fact, what we know or think we know is not so—

Mr. COHEN. If in fact the State Department documents are correct, and if, in fact, there was a sufficient quantity of high-quality bark from Indonesia, and if, in fact, there was ample high-quality bark available from the Congo, then it would be extremely difficult to explain this rise in price, would it not?

Mr. TICK. Mr. Cohen, if in fact there was an adequate supply of high-quality bark, then it would be difficult to explain the price increase on the basis of a shortage of high-quality bark.

Mr. TURNER. I would agree to that.

Mr. TICK. There is no argument as to that, sir.

Mr. COHEN. Now, after you had experienced some difficulty in getting bark from your major supplier—

Mr. TICK. We never bought bark.

Mr. COHEN. I am sorry, I got so involved with bark here—the bark is worse than the quinine.

You experienced difficulty in getting quinine and quinidine from Boehringer. You got a letter from Boehringer dated July 23, 1965 (Exhibit 41).¹ This is at the time when the price of quinine in this country was greater than \$1.50 an ounce.

Mr. TICK. July 23, 1965?

Mr. COHEN. Yes, sir. The average price of quinidine was \$2.08 an ounce and the average price of quinine was \$1.50 an ounce. You have to measure that against the price in 1964 of 36 cents an ounce and 75 cents an ounce, respectively.

Your price, as of May 28, 1965, was \$1.65 an ounce for quinine and \$3.36 an ounce for quinidine, again to give us the background. The price of quinine that you were selling had gone up from 36 cents an ounce on January 1, 1964, to \$1.65 an ounce on May 28, 1965.

And the price of quinidine had gone up—this is as sold by you—from January 1, 1964, at 78 cents to May 28, 1965, at \$3.39.

In other words, there had been a rather rapid increase in prices of quinine and quinidine sold by yourselves in an approximately year and a half period. Is that correct?

Mr. TICK. I have not checked the figures, but I will accept it if you tell me these are the figures shown by our correspondence.

Mr. COHEN. We got these from Boehringer to you and the fact that your sale price had, in fact now tripled between 1964 and the middle of 1965.

Mr. TICK. Without checking it, Mr. Cohen, I will accept that.

Mr. COHEN. Now, in 1965, on July 23, you got a letter from Boehringer. They say: "Gentlemen"—they have underlined "Request for future requirements for quinine and quinidine."

¹ See appendix, p. 154.

Although it is a rather theoretical question at the present time we should appreciate if you would tell us what quantities of quinine and quinidine you could sell at the now valid prices if we had sufficient material.

Now, what did you tell Boehringer when you got this invitation?

Mr. TICK. I do not know, sir. Did we reply to the letter?

It does not appear that we replied to that letter, sir.

Mr. COHEN. You did not reply to that letter?

Mr. TICK. It does not appear here.

Mr. TURNER. We do not find any copy here and do not recollect any.

Mr. TICK. Unless it appears in our files. I have just searched for a reply in our files up to around August 10.

Mr. COHEN. You have told us you had difficulty getting quinine and quinidine—and about the shortage of supply. Your prices have tripled. In 1965, the price, the announced price for quinine is \$1.65 an ounce, and for quinidine, \$3.39. Here you get a request from your major supplier—how much of the stuff do you want at the “now valid prices” at three times of what I guess they would call the less valid prices.

Mr. TICK. I do not know if there is a reply. As I say, I have not gone through my total correspondence file. There may or may not be a reply.¹ I have just looked in August, and I do not find a reply.

But I would say to you that I do not think we have said that we had great difficulty in getting quinine and quinidine supplies. We were very happy, under what we considered to be the situation, with the supplies that we were in fact getting. We found Boehringer most cooperative in helping us out of any situations that we got into where we needed their help.

It is true that in 1965, we received approximately 23 or 24 percent less material. But we were under the impression that there was a worldwide shortage, and we had an understanding why we would receive less if this worldwide shortage existed.

But they did help us out wherever they could with our important customers, and they did see to it that at least those customers that we had been supplying in the past continued to get the supplies.

Mr. COHEN. At those kinds of prices, would you not be even more happy if you could get a greater supply and sell them to your customers?

Mr. TICK. Well, if you are asking me why there is no reply, I cannot tell you. It may very well be because it is a rather theoretical question.

Mr. COHEN. This “Request for future requirements for quinine and quinidine”—that is not a theoretical question.

Mr. TICK. They start by saying, “Although it is a rather theoretical question.” I assume if there is no reply, there is no reply because whoever received this letter and acted upon it—took it—as a rather theoretical question.

Mr. COHEN. Who did receive the letter and act upon it?

Mr. TICK. I would assume Mr. Schoenewaldt. That would be basically within his area of responsibility.

Mr. COHEN. Let us ask Mr. Turner. Do you have any knowledge of this letter?

¹ Subsequently Mr. A. C. Schoenewaldt, Jr. of S.S.T. Corp. advised the subcommittee: “With respect to Boehringer’s letter of July 23, the S.S.T. Corp. did not reply thereto nor did Boehringer follow up on same.” (June 7, 1966.)

Mr. TURNER. No, that would normally be received by Mr. Schoenewaldt, and he never discussed it with me.

Mr. COHEN. You never discussed this matter with Mr. Schoenewaldt?

Mr. TURNER. No.

Mr. TICK. If you will look through our total correspondence file, you will find we were always requesting more material—could we get another 10,000 ounces of this or 8,000 ounces of this.

Mr. COHEN. Precisely the point. You have always been requesting material and you get a letter asking how much material at the new valid price? It is almost sure that you would answer it.

Mr. TICK. I am sure you will find correspondence—you will find in our correspondence requests for material which were declined or denied. So now in fact, we requested it and did not get it.

Mr. COHEN. Up until that time, Boehringer did not seem to think it a valid price. He says, "At the now valid price," et cetera.

Mr. TICK. The point is we were then requesting material at the new valid price and not getting it. It probably impressed Mr. Schoenewaldt that it was truly a theoretical question, because his requests for material were declined.

Mr. COHEN. Just so the record will be clear, a moment ago I thought you said you were very happy with the material you were getting, and you compared it to 1965. I think you will also remember that 1964 was probably the biggest year you have ever had.

Mr. TICK. Without going through the figures for prior years, I would assume so.

Mr. COHEN. So 1965 was not far away from 1964.

Mr. TICK. Twenty-five percent less.

Mr. COHEN. Twenty-three percent less.

Mr. TICK. 23.4 percent, right.

Mr. COHEN. You tell us you were satisfied with the amounts you were getting, but you were continually asking for more material.

Mr. TICK. I did not say we were satisfied, Mr. Cohen, with the amounts we were getting. I said that under the circumstances, from what we had heard and read about the worldwide shortage of the product, under these circumstances, we felt that Boehringer was treating us fairly by giving us the quantities that they gave us. We wanted more, we could have used more, and we would have loved to have received more.

Mr. COHEN. Of course, after that, if you will notice the charts, the quarterly charts, after July, it would appear to be almost at the same date—after that time, the imports for industry as a whole to this country soared dramatically.

Mr. TICK. I beg your pardon, sir?

Mr. COHEN. In this quarterly chart, called "Quinine and Quinidine Imports and Average Unit Value, By Quarters," after July of 1965, at what Mr. Boehringer calls the now valid prices, the imports of quinine and quinidine in this country increased rather dramatically, did they not?

Mr. TICK. Not for us.

Mr. COHEN. The industry as a whole.

Mr. TICK. If these figures are accurate, the answer would be yes.

Mr. COHEN. Possibly if you replied to the letter, it would be just as dramatic for your own company.

Mr. TICK. We were requesting material and not getting it.

Mr. COHEN. Let me ask Mr. Turner—does this strike you as at all unusual, as the imports are rising dramatically, the prices are rising more dramatically?

In other words, you have a situation where, as the supply increases, the prices also increase.

Mr. TURNER. Only because your processors gave you a price increase and you had to go along with it.

Mr. COHEN. That is, the processors were giving you more material, giving industry as a whole more material; they were also instructing you to charge greater prices.

Mr. TURNER. No, only in their letters—

Mr. TICK. Mr. Cohen, I do not think you will find anything in our correspondence where they instructed us what to charge. We purchased a raw material, a product from them at a cost. Our resale price of this product was up to us. Because of competitive market conditions, the firm sold it at a certain price for a period. And another period came along where they did not sell it at that price, but they added on an additional profit.

Mr. COHEN. So that the record is clear, we do have those documents in the record. It does indicate that for a certain period of time, at least in 1964, you did sell at the price you were requested to sell at by Boehringer.

Mr. TICK. No, sir.

Mr. COHEN. Then Mr. Turner said that in 1965 you raised your margin a little bit.

Mr. TICK. I do not think Boehringer ever requested us to sell at any price. They gave us the cost of the material and included in this cost was an allowance to us. We sold at that cost because the allowance to us was sufficient.

When we felt that the allowance—

Mr. COHEN. The record will speak for itself on this point.

Mr. TICK. That is what it is, a price notification to us of our cost of the product, not of our reselling price.

Mr. COHEN. But after that, it says, "as usual they include 5 percent for you as well as 1 percent (quinine) resp. half percent (quinidine) to cover delivery charges."

Mr. TICK. Precisely.

Mr. COHEN. That was the price at which you sold the product.

Mr. TICK. Because the 5-percent profit included in the price was sufficient profit for us. If we felt it was not sufficient, we increased the rate of profit.

Mr. COHEN. Whatever you call it, the record is fairly clear on this profit. The record we are talking about is as supply increases, the price goes up at a greater rate.

I was asking Mr. Turner, based on his long years of experience, if this is not a rather unusual situation.

Mr. TURNER. It is, except, Mr. Cohen, that when the processor passes on the price increase to you, there is nothing you can do about it.

Mr. COHEN. But it almost looks, does it not, from this chart that the sellers, the people that were supplying you, deliberately had cut back

on imports until such time as the price got up. Then, when the price comes up, you have almost a sea of material flowing into this country.

Mr. TURNER. We did not cut it back. We were continually asking, "Keep sending in more material." All our correspondence shows every other week, "Please send up more, why are we not getting enough?" They keep saying, "We are doing our best, we are having our difficulty." They tried to keep increasing supplies where they could.

The cutback on, say 23.4 percent less in 1965 than 1964, which they, in the correspondence, say is due to their bark difficulties.

Mr. COHEN. I was just asking you, based on your general experience, if it is not rather unusual that imports are cut dramatically. Then, when the price goes up dramatically, the imports then follow the price back up in even more dramatic fashion.

Mr. TURNER. Speaking for my own company, Mr. Cohen, we did not cut back anything. We were just asking all the time to give us more material.

Mr. TICK. Mr. Cohen, we tried to evaluate our 1962 and 1963 imports without having any figures. It is Mr. Turner's best recollection that we did not suffer the cutback in importation of these products, as shown by that chart. This may have happened in the industry generally, but it did not happen with our company.

Mr. COHEN. Were you at all aware that your supplier, Boehringer, got a supply of quinine from the American stockpile?

Mr. TICK. Who do you want to answer that?

Mr. COHEN. Do you know that, Mr. Turner?

Mr. TURNER. We have no knowledge of it whatsoever.

Mr. COHEN. Testimony showed yesterday that of the stockpile that we sold to the Dutch interests, approximately one-third of it ended up in the hands of the German suppliers. Do you have any knowledge of that?

Mr. TURNER. None whatsoever.

Mr. COHEN. It almost leaves one with the feeling that the Germans and Dutch were working together in terms of the purchase and sale of this quinine and quinidine, does it not?

Mr. TURNER. I would have no knowledge of that. Is it in this chart that they received it?

Mr. COHEN. Yes; that the Germans received one-third of the quinine and quinidine—

Mr. TURNER. The only knowledge we have is what this chart says, that some went there. Who got it, we have no knowledge.

Mr. COHEN. The Germans and the Dutch are the largest producers in the world—the Dutch are the largest and the Germans second, are they not?

Mr. TURNER. That is what I believe.

Mr. COHEN. So if the Dutch and the Germans were in fact working together—

Mr. TURNER. We do not know if they were or not.

Mr. COHEN. If they were, it might explain how supply could be curtailed so dramatically into this country until the prices went up and how the imports went up.

Mr. TURNER. I cannot comment on that. All our experience right along has been that we were doing fine year after year until, from 1964 on, our troubles started on supply.

Mr. COHEN. Pardon me?

Mr. TURNER. From 1964 on is when we experienced trouble in getting additional supplies. Prior to that, we used to get our normal supply and it was quite difficult to sell it.

Mr. COHEN. From the net impact, it looked like from 1965, your troubles were over.

Mr. TICK. That is quite possible.

Mr. TURNER. It also shows there is a gradual decline now, if you will notice. They keep dropping off, those last quarters. The fourth quarter showed a considerable drop.

Mr. COHEN. I suspect if all your years in quinine and quinidine were as good as they were in 1965, you would be very satisfied with that particular operation, would you not?

Mr. TICK. I would think so, from a profit point of view.

Mr. COHEN. You mentioned the fact that your various suppliers had talked to you in terms of bark they might have available. We have a letter here from Mr. Van der Spek to the Greeff Co. It says, "S.B. Penick & Co.—disposition of cinchona products" (Exhibit 42).¹

With reference to your letter of November 8 we inform you that we have examined whether we can use the surplus stock offered by Penick.

We will have to rework the quantities, as decoloration, etc., makes the sale as such impossible.

Moreover there are among the products as per specification many varieties which are not sold any longer and of which only the sulfate to be extracted, is important. The minor alkaloids are not interesting either, in view of our large stocks of raw product.

This is from the Dutch to the Greeff Co. They are importers. The Dutch seem to indicate that at this time, at least on November 22, 1965, they had large stocks of raw products. Did Penick ever offer that stock to you?

Mr. TICK. May we read the letter? I am sorry, I did not hear it.

Mr. COHEN. Surely.

Mr. TICK. It does not appear in our records that Penick offered it to us.

Mr. TURNER. I have never seen any such offer.

Mr. TICK. If the merchandise required reworking, we have no facilities for reworking.

Mr. COHEN. You pointed out that a number of people with supplies had approached you and you passed that on to Boehringer. I wondered if Penick had approached you after they were turned down by the Dutch.

Mr. TICK. I shall have to check that for you. There may have been a telephone call to somebody in the office who immediately said, we are not interested. I can check that for you.²

Mr. COHEN. It might be important for the record. The Dutch were notifying the Greeff Co. that they had large stocks of raw product. That does not sound too much like a shortage situation.

Mr. TICK. It is not consistent with our knowledge or experience, sir.

Mr. TURNER. This looks like a Duke's mixture, too, this material.

Senator HART. Mr. Chumbris?

¹ See appendix, p. 154.

² Mr. A. C. Schoenewaldt, Jr., S. S. T. Corp., subsequently advised the subcommittee: "I should further like to advise you that Penick did not offer to our company the material offered to and turned down by the Dutch * * *" (June 7, 1966).

Mr. CHUMBRIS. I think the subject has been pretty well explored.

Senator HART. Thank you very much, gentlemen. The several items which you indicate you might, with reference to your records, find available in response to some of the questions will be made part of this record if you will forward them.

Mr. TICK. At the moment, I only remember this last one, sir. Is there some other that you want me to look up?

Senator HART. The staff indicates that it will check the transcript. I had the impression that earlier in the morning, there was reference to the possibility of additional information.

Mr. TURNER. If you want Mr. Schoenewaldt to come down, that is what I referred to, Senator Hart, that when he returns—

Senator HART. I think in addition to that, there was something.

Mr. TICK. If it shows in the record, I shall be glad to check out anything you might require of us.

Mr. CHUMBRIS. I was going to suggest if you have any additional data as to why that big jump between the second and third quarters of 1965, it might be good for the record, the jump in price. This was approximately a 150-percent jump in price in quinine and approximately 100 percent in quinidine.

Mr. TICK. That is for the industry as a whole, but I think the record will show that our prices did not increase that much.

Senator HART. Thank you, gentlemen.

Mr. TURNER. Thank you.

Senator HART. We will hear now as our concluding witness Dr. Shirley C. Fisk, Deputy Assistant Secretary of Defense in the area of health and medical care.

I know that Dr. Fisk has several other people accompanying him.

Doctor, perhaps you would identify them.

STATEMENT OF SHIRLEY C. FISK, M.D., DEPUTY ASSISTANT SECRETARY OF DEFENSE (HEALTH AND MEDICAL); ACCOMPANIED BY CAPT. L. K. THOMPSON, MSC, U.S. NAVY, ASSISTANT FOR MATERIEL, OFFICE OF DEPUTY ASSISTANT SECRETARY (HEALTH AND MEDICAL); HAROLD J. MARGULIS, ACTING DEPUTY EXECUTIVE DIRECTOR, PROCUREMENT AND PRODUCTION, DEFENSE SUPPLY AGENCY; COL. WILLIAM V. BREYFOGLE, MSC, U.S. ARMY, CHIEF MEDICAL PROCUREMENT DIVISION, DEFENSE PERSONNEL SUPPORT CENTER, PHILADELPHIA, PA.; CARL ROLLE, DOD STOCKPILE MANAGEMENT, OFFICE OF ASSISTANT SECRETARY OF DEFENSE, INSTALLATIONS AND LOGISTICS; AND CAPT. E. M. STANDISH, SC, U.S. NAVY, STAFF DIRECTOR, PROCUREMENT MANAGEMENT REVIEW DIVISION, OFFICE OF ASSISTANT SECRETARY OF DEFENSE, INSTALLATIONS AND LOGISTICS

Dr. FISK. Captain Thompson will sit with me. If you would like me to, I could introduce the rest of them in the back of the room.

Senator HART. I know we are indebted to those of your associates who are with you this morning for their considerate help.

Dr. FISK. Here on my right is Carl Rolle, who is in the Office of

Assistant Secretary of Defense. Sitting back in the room are Mr. Margulis, acting deputy executive director of procurement and production, Defense Supply Agency, and also Colonel William Breyfogle, chief of the medical procurement division of the Defense Personnel Support Center, Philadelphia, Pa., and Captain Standish, staff director of the Procurement Management Review Division, Office of Assistant Secretary of Defense (Installations and Logistics).

Senator HART. Doctor, while you are here, for the record, on behalf of the subcommittee let me thank all of those who were helpful to us.

Dr. FISK. Thank you very much, Senator.

Senator HART. Doctor, you have a statement which will be made a part of the record in full as though given. It is not long. If, as you go along, you care to supplement or expand it, you may do so.

Dr. FISK. Thank you very much, sir. I would like to read it.

Mr. Chairman, and members of the subcommittee, I am pleased to have this opportunity to present for your consideration a statement concerning quinine for the Department of Defense.

In the era following World War II cases of malaria among military personnel were at a low level, basic and applied research in malariology were decelerated and emphasis was placed on acute infectious disease common to this country, Europe, and southeast Asia. In World War II atabrine was used as a suppressant drug with great effectiveness. Following the war, other synthetic antimalarials including chloroquine and primaquine gave us increasingly effective tools against this worldwide endemic disease. The synthetic antimalarials were so effective against all known strains of malaria that world health authorities and our own malariologists considered that quinine was no longer needed. This determination resulted in removal of quinine from our supply list of drugs in 1955, and quinine in the national stockpile later being sold by the General Services Administration. Deliveries under the sales contract were extended over a period of several years.

In 1962 disturbing reports began to emanate from South America, Malaya, and Thailand, concerning a strain of falciparum malaria which was resistant to the synthetic antimalarials when used either as a suppressant or in treatment. Therapeutic trials and subsequent cases indicated this strain was very sensitive to quinine.

Under the current malaria suppressant regime with synthetic drugs now being followed, it is believed that most of the cases of benign vivax and malaria are being suppressed with a result that 90 percent of the cases now being diagnosed are malignant tertian (*P. falciparum*). A brief discussion of malaria resulting from this parasite follows:

From the standpoints of mission accomplishment and patient morbidity—mortality rates, falciparum malaria is potentially the most dangerous of all tropical diseases. It is an acute, severe, protean disease, beginning often with malaise, which may be followed by shaking chill and rapidly rising temperature, accompanied by headache and nausea and ending with profuse sweating. It also may begin with diarrhea, irrational behavior, or delirium, jaundice, and subnormal temperature. The duration of an untreated primary attack varies from a week to perhaps a month or several months; however, in very severe cases, falciparum malaria can result in death within 48 hours

after onset either due to cerebral or renal infestation by the parasite. Should the patient survive his initial attack, he is still at high risk since relapses are common and may occur at irregular intervals. Major complications, as mentioned above, are cerebral malaria and black-water fever carrying a mortality rate of over 60 percent. In approximately 90 percent of these cases a clinical cure of falciparum malaria is effected with quinine. Many of the remaining 10 percent require combinations of drugs for a clinical cure while some resist all forms of therapy.

With the emergence of this strain of malaria which was resistant to our synthetic drugs it became evident that we needed an adequate source of quinine for current and mobilization needs. Consequently on February 4, 1964, the Department of Defense requested the Director, Office of Emergency Planning, to halt sales of quinine from the stockpile and to establish a stockpile objective at the then remaining quantity of approximately 4,500,000 ounces. This action was taken because at that time we were, and even now must continue to be, extremely cautious of what may turn up in terms of additional resistant strains of malaria not only in Vietnam, but in other areas of the world.

Except for a possible but remote use of quinine as a prophylactic or suppressant, it now appears that the approximately 4 million ounces of quinine in the national stockpile is adequate to support Department of Defense needs for the foreseeable future and that it will provide the most economical and readily available source of this vitally important drug to meet Department of Defense requirements.

I would now like to discuss briefly the procurement history of quinine. The first attempt to purchase the drug after it was restandardized, and the stockpile had been frozen, was in February 1965 in quantities amounting to approximately 150,000 ounces. Requests for proposal were sent to 10 firms some of which are subsidiaries of foreign companies.

No offers were made by any of the firms receiving the request for proposals. Therefore, a request was made by the Department of Defense to the Director, Office of Emergency Planning, for release from the national stockpile of 150,000 ounces of quinine. Approval was obtained and release was effected on March 12, 1965. At that time agreement was entered into between the Defense Medical Supply Center, acting for the Department of Defense, and the General Services Administration whereby the released 150,000 ounces of quinine was considered as a loan and the Department of Defense was obligated to return to the national stockpile an equivalent quantity.

As a result of this agreement, action was taken by the Department of Defense to acquire the quinine for return to the stockpile and to procure additional requirements which had accumulated. There appeared to be no U.S. sources at this time.

In March 1965, the U.S. Air Force procurement office in Weisbaden, Germany, was contacted by the Defense Medical Supply Center and they made a concerted effort to locate quinine in Western Europe. They were successful in locating small quantities but upon inspection by technical representatives, these quantities were rejected as not being acceptable. Quinine from this source would have been accepted only if offered at reasonable prices.

In September 1965 additional requirements for quinine had accumulated as follows: For the Department of Defense 150,000 ounces to repay the stockpile; 130,000 ounces to meet current requirements; and 11,000 ounces for the Veterans' Administration, making a total of 291,000 ounces of quinine. At about this time the British West Indies Co., an importing company and not a normal dealer in drugs and biologicals, contacted the Department of Defense indicating that they had an agreement from a foreign source whereby they could obtain sufficient cinchona bark to produce in excess of 5 million ounces of quinine and 150,000 ounces of quinidine. This was the first indication that quinine might be available from commercial sources.

A request for a proposal was mailed to all firms on the bidders list, plus the British West Indies Co., for 291,000 ounces of quinine. The British West Indies Co. was the only firm to respond with a proposal. Their offer was \$3.50 per ounce for quinine and \$6 per ounce for quinidine with a 1-percent discount if payment were made within 10 days. These prices were considered exorbitant and procurement was terminated and an additional 240,000 ounces of quinine was obtained from the national stockpile.

We are continuing our effort to find more effective drugs for the control of malaria. The Army Medical Research and Development Command early in 1963 undertook measures designed to clarify and more fully explore the extent of the malaria problem as identified in late 1962. Throughout 1964 and to date that command has accelerated its program to exploit all means by which malaria control and treatment might be improved with special emphasis on falciparum malaria which is resistant to available synthetic drugs.

In determining our requirements, I assure you that the best professional judgments of the three medical services and their surgeon general were employed in arriving at our decision. Knowledge and experience in tropical diseases leads one to be more suspicious of the future than we are prone to be with diseases in the healthful environment of the United States. Malaria, long ago, considered of minor importance in the United States, must again be recognized as a potential danger because infected persons are returning to the United States from endemic regions and the vector is present in this country, namely the anopheles mosquito.

Your staff has been provided all available official Department of Defense public affairs releases and I can find nothing within these releases which would contribute to price increases. At no time so far as I can ascertain has there been an actual shortage of quinine within the Armed Forces. Our requirements have been satisfied from stockpile releases after we have found that it was not available commercially or that the prices, as currently quoted, were totally unreasonable.

In conclusion we believe we have pursued a sound course and our present service requirements are being adequately met from the national stockpile.

Senator HART. Thank you very much, Doctor. Before the staff goes into the narrower area that has been our concern here, I think this record will reflect all of the problems and virtues of having a national stockpile.

I think, now to return to the narrower subject, that you have laid to rest a current myth that there is a barn-burning demand for quinine

by the military. As I understand it, the shortage is not great and the stockpile appears adequate for as far down the road as you can see. Is that right?

Dr. FISK. As I mentioned in my narrative, with one conceivable potential problem we might run into, that was the only quibble.

Senator HART. That would be a possibility with respect to any of these health problems. A cautious physician would always make that footnote.

Dr. FISK. That is right, sir.

Senator HART. Mr. Cohen?

Mr. COHEN. Mr. Chairman, I have a chronology (Exhibit 43) that the staff has prepared here that might be helpful to put into the record.

Senator HART. Without objection.

(The document above referred to may be found in the appendix, p. 155.)

Mr. COHEN. Dr. Fisk, during the course of this set of hearings, there has been some suggestion that an international cartel might be at work here with the ability to control price and market and output. In exploring that problem, some of the dates that you have mentioned in your testimony, and some of the action that has been taken, might be useful to explore in terms of why, after a fairly stable price, this price suddenly starts to fluctuate upward as dramatically as it does.

Now, on the price rise chart—do you have a copy of this price rise chart?

Dr. FISK. Yes. I did have it.

Mr. COHEN. If you do not, it is probably the only document your able staff has not gotten.

Dr. FISK. I have it now.

Mr. COHEN. You will note that first price rise on April 17, 1964, while it looks small on the chart, is actually a price rise of about 20 percent. It took place on the same day that the stockpile was frozen.

Dr. FISK. I see that. I do notice, however, that the thing seems to be staggering up in a step-like fashion since January.

Mr. COHEN. This is 1964.

Dr. FISK. I am sorry. I thought you said 1965.

Yes, I see it.

Mr. COHEN. Now, you mentioned in your statement about the procurement efforts by the Defense Department to buy quinine in the early part of 1965, I believe that was March of 1965.

Dr. FISK. I believe that is so.

Mr. COHEN. The question has arisen as to what the impact might be of our Air Force procurement officers going throughout the world offering to buy quinine and, if, in fact, there was one source that was able to control the price and supply of that particular material. We have here a letter in our file (Exhibit 44),¹ from Boehringer Corp., who you know, is probably the second biggest processor in the world, next to the Dutch, to the S.S.T. Corp., which testified previously.

The letter says:

GENTLEMEN: The USAFE procurement center, Germany, Wiesbaden, has asked whether we can supply 150,000 ozs. percent 4.2 tons quinine sulphate. * * *

¹ See appendix, p. 156.

They go on to point out that it was indicated that the Army was ready to pay almost any price. Then it goes on—

To our great regret, however, we had to resign from offering since we could not even deliver 10 percent of the quantity for the rest of 1965.

We thought that you might perhaps know about any possible connection between the GSA and the USAFE procurement centers, which are most probably not restricted to Germany only.

It would appear from this communication that at least the impact upon the major suppliers was that they thought the situation was such that the Army was ready to pay almost any price for the available quinine.

Dr. FISK. What was the source of that letter you just read?

Mr. COHEN. This is a letter from Boehringer, a major supplier in Germany, to S.S.T. Corp., and it is dated March 15, I believe, 1965.

Dr. FISK. I will ask Colonel Breyfogle to speak to this.

But I would like to say first of all for the record the we have a requirement to replace any borrowing from the stockpile. So, therefore, the attempt to buy quinine is, I think, perfectly valid. If we are not able to find it within this country, we have authority to try to locate it in the European market. I believe, according to my information, that at no time was price discussed with any West European source of quinine.

Now, as to the actual actions that take place in this, if you wish, I will ask Colonel Breyfogle to speak to this. I am not in possession of these facts myself.

Colonel BREYFOGLE. The procurement office in Wiesbaden was requested to locate sources in Western Europe. We gave them our requirement. We asked them to locate sources only. Never was price discussed between our office—my office—and the Air Force procurement office in Weisbaden. As they located sources, we had our inspector visit these sources to inspect the quality. But I have no knowledge of saying that we would pay any price, because we did not say that to Wiesbaden. We asked them merely to locate sources, and then our inspector in Europe would take on from there.

Mr. COHEN. Of course, the effect of what the actual procurement officer does in the field is something that you would have no knowledge of?

Colonel BREYFOGLE. That is right.

Mr. COHEN. It is rather hard to go to a source and when he says, "Well, how much are you willing to pay for it?" then the procurement officer say, "Well, I do not know."

Colonel BREYFOGLE. We had telephone conversations with the procurement people in Wiesbaden and we told them we were looking for sources only, and we never discussed prices. They were told to not discuss prices.

Mr. COHEN. Of course, not being critical of how it was handled, but it appears the impact of procurement officers, in fact, going around and looking for available stocks—even if they said we cannot discuss prices—the impression that seems to have been left, at least in the minds of the second largest supplier in the world, was that the Army indicated they were willing to pay almost any price. If, in fact, the major processors believed that you had a serious problem in Vietnam in regard to falciparum malaria and your procurement officers were

going around the world looking for supplies and, in fact, the processors believed they were willing to pay almost any price to get this material, it would certainly explain why a person who had the supply might feel this was an opportune time to raise the price. Do you think that is a fair statement?

Colonel BREYFOGLE. I cannot comment upon what was in the mind of Mr. Boehringer.

Mr. COHEN. The reason I asked that, again looking at this chart (chart 1), in the middle—we have a fairly stable situation from April of 1964 to November of 1964. Then another small jump. Then, in February, another small jump. Then, starting in March, you will note that the price begins to go up dramatically, the price line runs almost straight up.

It was after this date that the really dramatic rises in the price of the processed material to the importers, which in turn was passed on to the ultimate buyer, occurred.

It has been suggested that one reason they felt safe in establishing those kinds of prices and pushing those kinds of prices up was the belief that the Army was willing to pay almost any price for the quinine and quinidine. Now, as you pointed out in your statement, however, it was decided at a later date to get all your future supplies of quinine and quinidine from the stockpile.

Is that correct?

Dr. FISK. That is correct.

Mr. COHEN. And your present intention, now, is to continue the use of the stockpile for that purpose?

Dr. FISK. Yes, sir.

Mr. COHEN. And you have approximately how many ounces in the stockpile?

Dr. FISK. Right now, I would say, 4 million ounces, roughly.

Mr. COHEN. With the footnote that you made to your statement, as the Senator pointed out, as far as you are concerned, that amount ought to be able to take care of any cases that might arise in the foreseeable future?

Dr. FISK. Except for the outside contingency that I mentioned.

Mr. COHEN. You talked about that, I believe, as a very remote kind of possibility.

Dr. FISK. I did, but we always have to consider it.

Mr. COHEN. Now during the time that the prices were rising, there was also literally a host of news stories that appeared in the press—particularly this one from Newsweek of December 4, 1965. There was another one from UPI, dated January 27, 1966; another one from the New York Times, dated March 16, 1966 (Exhibit 45)¹: They refer to Pentagon planners and Defense Department doctors, et cetera, as being extremely worried over this kind of resistant malaria. Most of the stories went on to point out that they cannot be treated effectively.

We have a whole file folder here full of stories that came out during this period, which, of course, helped to feed the notion that you really had a problem in Vietnam and that that problem was so bad that you were probably having to go on the market—

Dr. FISK. Mr. Cohen, if I might answer this question, I have re-

¹ See appendix, p. 156.

viewed all these news releases, and I can see nothing that could lead to the idea that we, as such, had influenced these price increases. These articles are all in the newspapers written by their reporters. The DOD, as such, has never given a news release on this.

Mr. COHEN. We understand that most of the sources quote Pentagon doctors or Pentagon planners. It is possible that some newspaper reporter calling up the Defense Department and saying, what is going on here, could get the answer.

Dr. FISK. I think if he reads any of the medical periodicals, he can see that there have been reports since back in 1962 about this potential problem in this area. It does not take much ingenuity to determine that this type of malaria could conceivably be a problem.

I do not see that this necessarily infers that the Defense Department has been screaming to the skies on this. I think to the contrary.

Mr. COHEN. Of course, unfortunately, sometimes in the minds of people reading the articles—

Dr. FISK. Sir, I am not able to control what the journalist wants to write on this in his newspaper.

Mr. COHEN. Of course, to the extent you are on the record today making this statement, I think it probably will influence what will be said about this in the future. It has been suggested that if that kind of statement had been made at an earlier date, it might have lessened the kind of atmosphere which allowed these price rises to take place.

Now, there is a recent press release, that I think appeared in the "Pink Sheet," that was attributed to the Defense Department, in which they stated that last year, in 1965, you had approximately 800 cases of malaria which had to be treated for the resistant strain. Is that an accurate figure?

Dr. FISK. I am not sure of that particular one. I know that this is the number credited for this—I believe it is 1964.

Captain THOMPSON. What is the year?

Mr. COHEN. 1965, I believe, is the article.

Dr. FISK. I think this is 1964, actually. I will not argue over the case, but I will be glad to provide the date for the record. I think the number of cases of this type of malaria in 1965 was probably in excess of 800.

Mr. COHEN. Would 800 be a fairly close figure, though?

Dr. FISK. No; I do not think it would be. I can provide the figure for you, I believe. I have it right here.

This is 1965. That would take us up to January 1965. The figure, if I may give you the rate—it is a little hard to say, because the rates vary each month. But it averaged out to about 67 per thousand—67 cases of falciparum per thousand per annum.

Mr. COHEN. About what percentage is that, do you know? That would be about 6.7 percent?

Dr. FISK. Approximately, yes.

Mr. COHEN. So that, assuming that you had 100,000 troops, that would be—you are talking about 6,000 cases per 100,000 troops? It would figure out to approximately that rate?

Dr. FISK. That was one of the higher months. Some of the other months were far lower than that. We are trying to get an average.

Actually, we had in toto, through December of that year, a cumulative total of about 2,300 cases.

Mr. COHEN. This is for the year 1965?

Dr. FISK. That is right.

Mr. COHEN. This will make unnecessary all my calculations here. So you had approximately 2,300 cases during the year 1965, and it is our understanding that a treatment for a single case of malaria for one soldier adds up to approximately 1.5 ounces of quinine, is that correct?

Dr. FISK. Yes, on an average this is true.

Mr. COHEN. 1.5 ounces per case.

Now, in addition, as we understand it, you are also working, as you state in your statement, on synthetics to replace quinine, is that correct?

Dr. FISK. That is correct.

Mr. COHEN. There have been reports recently that you have made some progress in this sort of research.

Dr. FISK. We have one that we are trying out at the present moment, which is diaminodiphenylsulfone, which is an antileprosy medicine. It was actually used in tuberculosis. It is a very good suppressant, perhaps better than chloroquine or primaquine. But there is no data that I have seen on this yet. It has not been tried long enough.

But I am sure that we have a research program which has been upgraded similar to the one we had in World War II. This is being run by Army research.

Mr. COHEN. Is it fair to say that one of the principal reasons for this research attempt to find a substitute for quinine, even with regard to the limited extent to which it is now being used, is because of what has been described by one doctor as the disagreeable reactions that are associated with the use of quinine?

Dr. FISK. Mr. Cohen, I would not agree completely with that statement. I know that you may quibble with this, have some reservation. I have had some little experience myself in the Belgian Congo in the last war, where we had only quinine at that time. Except for some allergic reactions, skin rashes which occurred in a very small percentage, quinine, by and large, is as symptomatic a drug to give for the prophylaxis of or the treatment, as any of the others.

Actually, I have a quotation here from a very well-known authority "Stitt" in this matter which I looked up. He states that quinine, except in rare cases of idiosyncrasy, is outstandingly nontoxic in effective doses. This is especially important both from the point of view of treatment and medical prophylaxis and there is little tendency for it to accumulate in the body.

It does have, without question, some side effects, the medical term being tinnitus. Occasionally, certain individuals can get some gastric disturbance, but this usually passes, and you may have transient vertigo.

But all of these reactions can be found in the synthetics.

Mr. COHEN. I do not quite understand. Are you saying—

Dr. FISK. I am saying that no drug that is given for anything is without its side effects. This goes even for aspirin. What I am saying is that quinine does have some side effects, but I do not consider them to be very severe.

Mr. COHEN. They have some side effects that are not present in the synthetics that you are now using, or you would not be using the synthetics, would you?

Dr. FISK. Oh, yes.

Mr. COHEN. I understood you went into a research program here to develop synthetics for quinine.

Dr. FISK. That is right.

Mr. COHEN. Is your testimony that the only reason for that is because it is a supply problem?

Dr. FISK. That is a major one; yes.

Mr. COHEN. What is another reason?

Dr. FISK. Another reason is that some of the synthetics we have developed are a better drug under usual circumstances in the past, than is quinine.

Mr. COHEN. Why is it better?

Dr. FISK. They have a better suppressive action, and they also, in vivax—we are getting aside from our direction. But take benign vivax and malariae that are found in southeast Asia. We have seen none of this in any of our troops, yet vivax ovale is the most common malaria in that part of the world. But this particular medicine, chloroquine, together with primaquine, completely eradicate the other two. The only difficulty that has arisen out of this is this peculiar strain of falciparum.

Mr. COHEN. The only drug being used for prophylactic purposes in South Vietnam is a synthetic?

Dr. FISK. Chloroquine and primaquine.

Mr. COHEN. You are trying to develop other synthetics so quinine will not have to be used in the falciparum malaria?

Dr. FISK. Yes.

Mr. COHEN. What will happen when you take alcohol and quinine together?

Dr. FISK. I do not know. It worked all right with me. I had no particular problems with it.

Mr. COHEN. The only reason I asked is, I talked with one medical researcher and he did not have your favorable response on the course of your research.

Dr. FISK. I think it depends upon the amount of alcohol you take rather than the quinine.

Mr. COHEN. Were you an officer in the service?

Dr. FISK. Yes; I was a medical officer.

Mr. COHEN. Your liquor might have been different from that available to us.

Dr. FISK. Ours was extraordinarily good in the Belgian Congo. We bought the best of Scotch, and it was cheap. It was not supplied by the United States, incidentally.

Mr. COHEN. I think for purposes of the record, you are aware, I suppose, that we have checked some authorities, such as William Bispham. Do you know Dr. Bispham?

Dr. FISK. No. I have talked with some other experts on the matter since I discussed this with you.

Mr. COHEN. Do you know Dr. Kennerly Marshall of Johns Hopkins University?

Dr. FISK. I know of him; yes.

Mr. COHEN. And, of course, you are acquainted with Drs. Goodman and Gilman, who wrote the *Pharmaceutical*—

Mr. FISK. I am acquainted with Dr. Gilman, not with Dr. Goodman.

Mr. COHEN. That is a recognized authority in the field?

Dr. FISK. Oh, yes.

Mr. COHEN. You are also acquainted, of course, with Dr. Coatney, who is chief of the laboratory of parasitical chemotherapy?

Dr. FISK. I spoke with one of his associates yesterday.

Mr. COHEN. You know Dr. Coatney, you have dealt with Dr. Coatney?

Dr. FISK. I say I spoke with one of his associates. Yes; I know Dr. Coatney.

Mr. COHEN. He is one of the recognized authorities on this?

Dr. FISK. Yes.

Mr. COHEN. I only ask for purposes of the record that, in regard to this question, certain excerpts be placed in the record on the toxicity of quinine (Exhibit 46),¹ and also Dr. Coatney's interview with our staff, which has been verified with him (Exhibit 47).²

Senator HART. Without objection.

Dr. FISK. I may say for the record, when you speak of toxicity of quinine, you must take into account dosage, blood level, and how it is used. This makes for a good deal of variance.

Mr. COHEN. I think the important thing for the record is the fact that the Defense Department is not in the market for quinine at the present time or for the foreseeable future; that you are using synthetics for prophylactic purposes in Vietnam, and only the quinine for treatment at the present time—and the amount used last year was approximately 3,350 ounces—and then you are also actively engaged in a research program to find the synthetics for the limited use you now have for quinine?

Dr. FISK. That is correct.

Mr. COHEN. I have no further questions.

Senator HART. Mr. Chumbris?

Mr. CHUMBRIS. Yes.

Doctor, one of the principal objectives of this hearing, as I understand it from the majority staff, in discussing the matter prior to the hearing, was to correct the misconception, if there is a misconception, that there is a shortage of quinine and quinidine throughout the world. Now, Mr. Cohen has asked you some questions about some press releases and some newspaper articles.

Now, if it should be brought to your attention that there is an article in the press that may have been misinterpreted and creates an atmosphere that there is a shortage, there would be an obligation on the Defense Department to try and correct that misconception, would there not?

Dr. FISK. I can answer for the Defense Department. If they were the source for these particular remarks, presumably, they would feel the need to make amends for the impression. But if they were not the source for impression, I have not found any evidence to support that view. My statement today represents the official DOD position that they have no shortage of quinine or quinidine as far as the armed services is concerned.

Mr. CHUMBRIS. If this rumor—just assume that it is a rumor—that there is a shortage due to different circumstances, and if that rumor

¹ See appendix, p. 156.

² See appendix, p. 158.

should come back and haunt your agency in obtaining quinine and quinidine and forcing you to pay \$3 or \$4 an ounce when you could have gotten it for 50 or 60 cents an ounce, it would affect your agency, would it not?

Dr. FISK. It not only would affect my agency, it would affect Health, Education, and Welfare, as well as the Public Health Service.

Mr. CHUMBRIS. Not counting what impact it has on the general public.

Dr. FISK. That is right.

Mr. CHUMBRIS. You stated that as far as Government needs are concerned, there is no shortage at this time.

Dr. FISK. That is right, as far as the Defense Department needs—

Mr. CHUMBRIS. Defense Department?

Dr. FISK. That is correct.

Mr. CHUMBRIS. Mr. Chairman, Dr. Fisk has just stated that as far as the Defense Department's needs are concerned, there is no shortage. I was wondering if we could ascertain for the record—

Dr. FISK. I think I could broaden my statement to include others. I shall turn this over to Mr. Rolle, if I may.

Mr. ROLLE. It depends on what you mean by saying there is no shortage. But we say that it has not been necessary for us to procure quinine in the commercial market at the presently exorbitant prices because we have been able to turn to the stockpile to fill our needs. Now, if the stockpile were not there, then yes, we would feel a shortage. But there is no shortage as far as we are concerned, because we have an assured supply.

Mr. CHUMBRIS. In Dr. Fisk's paper he states:

At no time, so far as I can ascertain, has there been an actual shortage of quinine within the Armed Forces. All requirements have been satisfied from stockpile releases after we had found that it was not available commercially, or that the prices as currently quoted were totally unreasonable.

Mr. ROLLE. I think that statement covers it completely. As I say, it depends utterly on what you mean by a shortage. We have not been hurting for it because we have had an alternate source to go to.

Mr. CHUMBRIS. May I ask the question on this stockpile? Who else has access to that stockpile besides the Defense Department?

Mr. ROLLE. The material can be released under the Stockpile Act by the President. I think the law speaks in terms of, "for purposes of the common defense."

Mr. CHUMBRIS. That is title 50 of the United States Code, which provides for the stockpile?

Mr. ROLLE. Right. I think it is section 5 that provides for emergency releases by the President. The release that was made recently, as well as the release that was made in 1965, was made under that authority at the request of the Department of Defense to meet our needs.

Mr. CHUMBRIS. Are you aware of how many times there has been a request to remove a certain amount of quinine or quinidine from the stockpile?

Mr. ROLLE. Yes, we made a request in 1965 for 150,000 ounces.

Mr. CHUMBRIS. 150,000 ounces?

Mr. ROLLE. Yes. At that time, not knowing whether the commercial shortage would or would not persist, we made the statement that

if desired, we will accept this as a loan rather than a release. It was given to us as a loan.

In 1966, we went back and we asked for two things: First, the conversion of the 1965 loans to an outright release; and, secondly, the release of an additional 240,000 ounces, which was approved.

Mr. CHUMBRIS. And this refers only to the Health and Medical Section of the Defense Department, is that correct?

Mr. ROLLE. Well, the material actually was turned over to the Medical Procurement Agency, who in turn will have it put into pills and whatever dosage forms they need for distribution.

Mr. CHUMBRIS. What I would like to get some information on would be how can we get something into the record which will clarify the atmosphere on the question of, is there a shortage of bark or is there a shortage of processed quinidine and quinine compounds; that type of thing. So that if there is no shortage, then it might get the matter in its appropriate place and, therefore, do something about stopping this continuous increase in the price of quinine and quinidine.

I understand that the price is still going up, even as of today.

Mr. ROLLE. Well, I do not think any of us would want to pose as experts on what the commercial situation is or whether there is or is not a genuine shortage of bark.

Dr. FISK. I should think the Department of Commerce, which is the one which is engaged in this matter, would be the one to do the research and study.

Mr. CHUMBRIS. I understand that you cannot, you alone. When I say I would like to see it get in the record, I mean, not by you alone, but by succeeding witnesses as these hearings continue.

Because I read here from an excerpt, an article that was written on January 3, 1965, which would indicate that the Defense Department and some of the Government agencies, themselves, thought that there was a shortage, which might have helped create this atmosphere. This is over a year and 4 months ago.

Mr. ROLLE. Well, first, when our procurement agency goes out with an invitation for bid and receives no proposals, we have to assume that there is a shortage.

Senator HART. Has it ever occurred to you that somebody might be withholding some?

Mr. ROLLE. This is possible. I would not want to speculate on whether this is true or not.

Senator HART. But when we talk about assumptions that one makes, there is necessarily an order of priority you give as to which is the likelihood, including the possibilities. If you ask for something and cannot get it, the possibility is that there is, in fact, supply, but it is being withheld, for good or bad reasons.

Mr. ROLLE. This is possible. But there is one point that, to my knowledge, has not come up in these hearings. Perhaps it has. This is the fact that prior to 1964, and in fact, even early in 1964, the U.S. Government, in the form of the General Services Administration, was delivering quinine into the market on these sales contracts. Now, the minute those contracts were canceled, this, in effect, had the same effect as though a substantial producer suddenly went out of business.

Now, I do not know whether this factor has been placed in your thinking or not. But the action of the Government in ceasing the

sale of material which was going out at the rate of something like 2 million ounces a year, as I understand it, in effect, would certainly tend to accentuate any shortage or conceivably could have created a shortage, which did not previously exist.

Senator HART. That was about 3 million ounces, was it?

Mr. ROLLE. Well, looking at the statistics, as to U.S. exports of quinine in—I do not have them with me, but in 1961, 1962, and 1963, I believe they were fairly substantial. We, of all people, were actually exporting quinine.

Senator HART. Dr. Blair?

Dr. BLAIR. I just want to add a few additional figures which go to the question of whether or not there is a shortage of quinine and quinidine. As indicated yesterday, we now have the figures for the first quarter of 1966 relating to imports into the United States of quinine (and other cinchona alkaloids, excepting quinidine) and also quinidine separately.

Taking quinine first, the 6 months' imports here total 1,363,000 ounces. That was the same order of magnitude as the full-year imports for 1956-60. With respect to quinidine, imports for this last quarter of 1965 and the first quarter of 1966 amounted to 1,000,067 ounces, which was greater than the full-year imports of any year prior to 1963.

Yesterday, we heard Mr. de Schepper of R. W. Greeff, testify as to the loss of markets which they, as importers, were suffering because of the substitution of other products for quinine by over-the-counter drug manufacturers and by soft drink manufacturers. So that insofar as quinine is concerned, there does not seem to be any increase in demand in this country; in fact, it is more likely that demand is decreasing. Yet, with 6 months' imports exceeding the normal year imports of 1956-60, we fail to note any price reduction.

On top of that, we learned from your testimony today that the Defense Department's actual purchases of quinine have been nonexistent, and that your intentions for the foreseeable future, except for a possible or remote contingency, are also to abstain from purchasing quinine in the market.

Under those circumstances, I wonder if any of you gentlemen have any observations as to why the price does not come down. What keeps it up? On the basis of the evidence presented here, there obviously is a considerable amount of quinine in this country in excess of what is being consumed by the military or by civilian demand.

Dr. FISK. The only thing I can answer to that is that I am a doctor, not an economist, and I would hope that you would provide the answer rather than myself, to this. I cannot answer it.

Dr. BLAIR. I try to specialize in medical matters.

In closing, Mr. Chairman, I would like also to note in this same connection that the Office of Emergency Planning has, I believe, certain priority of allocation powers which, if an emergency situation exists, can be utilized to assure the fulfillment of military requirements. In January of this year one soft drink company alone imported 35,000 ounces of quinine. On the basis of your treatment dosage of 1.5 ounces per patient, this would be enough quinine to treat approximately 23,000 members of our Armed Forces, or 10 times the number actually treated last year. In other words there are available the

powers of the Office of Emergency Planning to channel a product such as quinine away from less essential use, such as a mixer for cocktails, to what probably most individuals would concede is a more important use.

You are familiar with those powers?

(Dr. Fisk nods.)

Dr. BLAIR. Your nodding does not show up in the record, Doctor.

Dr. FISK. Yes.

Dr. BLAIR. Those powers have, in fact, been used to obtain quinine.

Dr. FISK. Yes.

Dr. BLAIR. That is all I have to say.

Senator HART. Mr. Cohen?

Mr. COHEN. I have nothing further.

I would just like to add to Mr. Rolle's remark about whether we considered the effect of the stockpile on the market, I think the testimony of the last 2 or 3 days takes into consideration all of the market factors, including that of the stockpile.

Mr. CHUMBRIS. Mr. Chairman, before we leave this, I would like to ask that before these hearings close, this subcommittee or the appropriate Government agency or department, trying to check out some of the rumors that have been submitted to us as the reasons why there may be a shortage. I think that is one of the best services that we could perform in this particular hearing, because it seems that some of these stories, as has been brought out today, and some of these articles have been created by misconceptions. If somehow or other, we could clear that up—

Senator HART. Hopefully, we have, or are in the process of doing it. We have a very clear indication, and I say this not in any criticism of those developing press releases in the Department of Defense, that some of the announcements created at least a psychological atmosphere which persuaded anybody who was sitting on a supply or could control a supply to stay put—that Defense would be in trouble. But I would hope that the very clear testimony of Dr. Fisk this morning would burst that balloon.

Dr. FISK. Senator Hart, if I may speak with one more word, I do not believe, and I am quite sure that the Defense Department in any of its press releases has, in no way, indicated that there is a shortage of quinine. I think the inference may have been taken by newspaper writers on their own initiative. But I am very certain that the Defense Department itself has never in any way issued any statements regarding any shortage of quinine.

Senator HART. I understand. I am not inferring that, in any way, or in the least. It may have been simply the activity of ranging around the world by procurement agents that created the psychological acceptance.

The committee will adjourn until Friday of this week, to resume at 11 that morning in room 2228.

Again, Doctor, our thanks to all of those who, in the Defense Department, assisted. I am certain I should mention by name Captain Thompson and Colonel Breyfogle.

Dr. FISK. Thank you very much, Senator.

(Whereupon, at 12:35 p.m., the above hearing was recessed, to reconvene at 11 a.m., Friday, May 20, 1966, in room 2228.)

PRICES OF QUININE AND QUINIDINE

MONDAY, MAY 23, 1966

U.S. SENATE,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:35 a.m., in room 2228, New Senate Office Building, Senator Philip A. Hart (chairman) presiding.

Present: Senator Hart.

Also present: S. Jerry Cohen, staff director and chief counsel; Dr. John M. Blair, chief economist; Dr. Walter S. Measday, economist; Peter N. Chumbris, chief counsel for minority; Patricia Y. Bario, editorial director, and Gladys E. Montier, clerk.

Senator HART. The committee will be in order.

This morning we feel ourselves fortunate to have, as scheduled, Dr. Walter Modell of the Cornell University Medical College, and we find that he is joined by another man familiar to the subcommittee, Dr. Lloyd C. Miller, secretary of the U.S. Pharmacopoeia Convention and director of its Committee on Revisions.

It is our understanding that Dr. Modell will describe a drug which, for some patients, can be used as a substitute for quinidine. Having listened to our beloved former subcommittee chairman pronounce some of these names over the years, I am not going to try to pronounce them.

This is a matter of importance to those of our older citizens who find themselves hard pressed by the soaring price of quinidine. The drug which he has suggested is available for substitution is procainamide. It is available under its trade name of Pronestyl at a savings of about a third under the price of quinidine. And under its generic name, a savings of two-thirds under the price of quinidine.

We realize that physicians may differ among themselves as to the merits and limitations of these two drugs and we nonprofessionals are not attempting to influence their professional judgment. It may be, however, that some physicians are not fully acquainted with the availability or properties of this newer lower priced substitute.

In asking Dr. Modell to testify we are calling upon a man who is certainly one of the country's leading authorities in the field. He is the chairman of the panel on cardiovascular diseases of the U.S. Pharmacopoeia. He is author of a chapter on drugs for diseases of the heart in the work "Drugs of Choice," of which he is also editor. "Drugs of Choice" is a standard reference for physicians everywhere.

In addition, Dr. Modell is a member of the Executive Committee and the General Committee on Revisions of the U.S. Pharmacopoeia

Convention, a member of the Advisory Committee on Admissions, National Formulary, and, as we recall from his testimony a year or more ago, the editor of *Clinical Pharmacology and Therapeutics*.

Certainly the committee is going to listen to one who is expert in the area of quinidine and we are appreciative that he would take the time from a very busy schedule to come.

We are also grateful that Dr. Miller would join him.

I think that following their presentation we will have a far better understanding of what may be available as an alternative to quinidine.

Dr. Modell and Dr. Miller.

STATEMENT OF DR. WALTER MODELL, DIRECTOR, CLINICAL PHARMACOLOGY, CORNELL MEDICAL COLLEGE, NEW YORK CITY; ACCOMPANIED BY DR. LLOYD C. MILLER, SECRETARY, U.S. PHARMACOPOEIA CONVENTION

Senator HART. Doctor, let me repeat our appreciation for your coming this morning. I mentioned in a pronunciation that I hope you were able to identify as this drug which has been described to us as a substitute for quinidine. Would you, Dr. Modell, explain the uses of this substitute, procainamide, with emphasis on the extent to which it is in fact available as a substitute for quinidine?

Dr. MODELL. Procainamide is a drug which is used in the treatment of irregularities in the rhythm of the heart. In certain forms of heart disease, the heart does not beat regularly but may beat irregularly and there are many types of such irregularities.

For the treatment of such irregularities, there are now on the market two drugs available. One is quinidine which has been used for 30-odd years or more and the other is procainamide, which is a more recent introduction.

Both of these drugs have precisely the same pharmacologic action so far as is known. They affect the heart in precisely the same way. It is to be expected, therefore, that there would be no evidence that one is preferable to the other. This turns out to be the case: procainamide can be substituted for quinidine in all instances in which quinidine is used.

Senator HART. How long has procainamide been available or known?

Dr. MODELL. I can guess pretty accurately, since the patent has just expired, it must be around 17 years.

Senator HART. We have been told by several of the smaller drug companies that they want to put procainamide on the market. The patent has expired. They described their problem this way, that the requirement of the Food and Drug Administration to produce duplicate clinical testing has inhibited them.

Now, as I recall, in the development of the Kefauver bill, without unanimity on the part of the Congress, but nonetheless a majority decided it would be required of the drug that it prove its efficacy as well as its safety, and FDA was required to obtain adequate clinical testing to establish these facts.

I assume that both facts, efficacy and safety, have been established with respect to procainamide.

For a new manufacturer to go on the market with it, notwithstanding the earlier clinical tests that established safety and efficacy, FDA asks that they, too, produce the identical kind of clinical testing that was required initially to establish that it was a safe and efficacious drug.

Are you familiar with this clinical testing argument that rages?

Dr. MODELL. Yes. I know the argument. I wonder, Senator Hart, if you could inform me on this matter. It is not my knowledge that procainamide ever had officially to demonstrate to the FDA its clinical effectiveness. It was introduced on the market before the Kefauver-Harris amendments to the Food and Drug Act and therefore it was only required to establish its relative safety. But there is, of course, a vast clinical experience with procainamide that demonstrates that it is effective.

Senator HART. I assume that is correct. I assume that, it being as old as it is, there is no formal proof of its effectiveness. But it is listed in your pharmacopeia.

Dr. MODELL. Oh, yes. And it is accepted as one of the effective drugs for treating cardiac arrhythmias.

Now, in answer to your question whether or not I think it is necessary for every company that comes out with procainamide to demonstrate once again its clinical effectiveness and its safety, I would say that if the product lives up to the standards that are set for it in the pharmacopeia, and established as legal standards, it would not be necessary. It would not even make sense to have the whole gamut of clinical testing repeated once more.

Senator HART. This, I think, is the attitude of the layman. It has been mine. But we are always a little hesitant to barge into a controversy, and in truth there is an element of professional qualification required to make the kind of judgment that it would be safe.

Dr. Miller, do you share the view just expressed by Dr. Modell with respect to the lack of necessity of running through the whole clinical testing procedure?

Dr. MILLER. Yes, I do, Senator Hart, on the ground that we try, in devising these monographs to present the tests and standards for the drugs in the United States Pharmacopeia to make certain they are adequate, for describing it, identifying it beyond any question that there could be any other compound than the one it is purported to be, and that the tests will be adequate to assure that it will have the clinical effect that is generally ascribed to that drug. We know, and particularly in the case of procainamide, of no deficiency at all in the USP standards.

Senator HART. One of the hard economic facts of life in this business is that to repeat the clinical testing required with respect to the initial introduction, would require in some cases many thousands of dollars; is this not correct?

Dr. MILLER. Dr. Modell can answer that much better than I, but there is no question but what a great many man-hours of very expensive talent are required to carry out clinical testing as we know it today. That perhaps was not required of procainamide when it came on the market in 1950, but if one includes both the animal testing, which is required for one even to begin clinical testing under the present Food and Drug Administration requirements, an immense amount of labo-

ratory and clinical work is required for almost any new drug application at the present time.

Senator HART. Am I correct also in the assumption—you mentioned the highly skilled personnel which are required—that there is such a demand for this skill that repetitious testing, is another undesirable aspect of the problem created?

Dr. MILLER. You are, but why don't you let Dr. Modell speak to that?

Senator HART. Fine.

Dr. MODELL. I think you are unlikely to get any of the better clinical pharmacologists to test a drug which is already well established unless they are looking for something entirely new. But no one who is as busy as most of the clinical pharmacologists who are examining the new drugs, would be willing to give up his time to the chore of repeating what is already well established. So that it would be hard to get good workers to do it.

Senator HART. Now, again as a layman, I look at your USP. And in the volume No. XVII on page 516, there is "procainamide hydrochloride." Is that what we are talking about?

Dr. MODELL. Yes.

Senator HART. And in smaller print, covering about three-fifths of the page, there is a detailed description, solubility, identification, and so forth, down throughout the caption, packaging, and storage. What does that tell the manufacturer or the physician?

Dr. MILLER. In our view it describes this article which, of course, has drug uses, sufficiently to distinguish it from any other crystalline powder that might come to hand. It describes its purity in such a way that the article which passes these tests is considered to be pure enough for medical purposes, and as I indicated a moment ago, we know of no deficiency in respect of these tests which could be pointed at as a failure to describe this article sufficiently for the purposes intended.

And we than go further and describe two forms of it. The forms the physician actually sees, that the pharmacist dispenses and the physician orders, the capsules, and what we speak of as the injection. The latter is the sterile form that can be given by hypodermic needle and those two monographs, we think, are adequate to describe this article just as completely as need be.

Senator HART. Now, do I have it straight that over the years the physical and chemical properties of this procainamide have been established? On page 516, the section you just described tells the world what procainamide is and anything that lays claim to be procainamide must meet this test.

Dr. MILLER. Yes.

Senator HART. While it is fair enough to ask of a new manufacturer whether he, in fact, meets these tests, the present requirement of FDA that he prove by animal and physical testing—clinical testing—that this is a drug that merits use, is to say to you people that your page here doesn't count, is that right?

Dr. MILLER. We think it has that effect. And, as you well know, the Food, Drug, and Cosmetic Act has a provision whereby the Administration, when it discovers an inadequacy in our USP standards may call that fact to our attention and give us a chance to improve the stand-

ards in any way that we see fit, or they can suggest improvements in respect to this. I may say with respect to any of the USP standards, FDA has not called our attention to deficiencies that we can correct.

Senator HART. Well, in short then if the drug meets these tests, the physical and chemical tests, it is procainamide, is that right?

Dr. MILLER. That is what we think; yes.

Senator HART. Does anybody quarrel with that?

Dr. MILLER. No, no.

Senator HART. And earlier testing established that it is a drug of merit?

Dr. MILLER. By that, you mean the tests by which it was first introduced in the market in 1950?

Senator HART. Yes.

Dr. MILLER. All I can say is that I assume the testing must have or the Food and Drug Administration would not have allowed the new drug's application to become effective.

Senator HART. Dr. Modell, do you have any comment?

Dr. MODELL. That it appears in the 17th edition of the United States Pharmacopoeia is an indication of how highly it is regarded. The Pharmacopoeia does not contain all the drugs that are available. It is a blue-ribbon list which means that in the opinion of the panel of experts, as well as the Scope committee of the United States Pharmacopoeia, it is considered an important and useful drug.

Senator HART. In my opening remarks, doctors, I suggested the possibility that the availability of the substitute which you have described as an all-purpose substitute for quinidine could become—that we could insure that it was known by physicians across the country. Impliedly, in that remark is a suggestion that perhaps it isn't so well-known.

Is my assumption correct, and if so, what can we do to make more broad the knowledge of its existence?

Dr. MODELL. I don't think your assumption is entirely justified. I think it is a well-known substitute for quinidine throughout the country. The manufacturer, of course, has helped in this respect. It is not unknown by any manner of means.

Senator HART. Are you familiar with whether my statement at the outset is correct; namely, that it is cheaper than quinidine?

Dr. MODELL. Are you directing the question to me?

Senator HART. Either of you gentlemen.

Dr. MODELL. I was handed a sheet by Dr. Blair this morning which indicates that dose for dose it is cheaper, but I had not known that before.

Senator HART. That reminds me of the exchanges we had a couple of years ago as to whether doctors really do have an awareness with respect to the economic impact of the prescriptions they write.

Dr. MODELL. They write them. They don't pay for them.

Senator HART. What was that?

Dr. MODELL. I say, they write the prescriptions but they don't pay for them.

Senator HART. Well, this will be a replay of an old record if we got on this subject, but I certainly wish that the medical schools could not only teach the use of good drugs but the costs thereof. The cost thereof to the ultimate user.

Since you have let out our secret, Dr. Blair has a list of prices; let's get them in the record.

Doctor?

Dr. BLAIR. Well, very briefly, Mr. Chairman, I would like to offer for the record a table that compares the retail prices of quinidine with procainamide on the basis of daily dosages. These are current prices. The price to the druggist per tablet for quinidine, regardless of whether it is obtained from a large trade name manufacturer or a smaller generic house, is now about the same. This was not the case as recently as the beginning of 1964 but because of the vast increase in the price in quinidine, the smaller companies can no longer undercut the large drug houses.

The price is roughly 6 to 7 cents per tablet. At a usage of three a day, that would work out to 30 to 33 cents, after allowing, of course, for the customary 40 percent markup on the retail price. And at four a day it would be 40 to 44 cents.

Most of the letters the subcommittee has received, Mr. Chairman, refer to a dosage of around four a day and to even higher amounts. That would make it, roughly, a cost of around \$15 a month for a medication that just a year ago may have cost a third or even less of that amount.

Now, with respect to procainamide, we have two prices. Squibb, the company that first put it on the market, sells it under the trade name, Pronestyl, at a price of 4 cents per tablet. Again allowing for the customary retail markup—which may be less in some stores and more in others—this would amount to a daily cost of about 20.1 cents at a dosage of three a day or 26.8 cents at a dosage of four a day. The 26.8 cents at four a day compares to 40 to 44 cents for quinidine. Thus, even when sold under a trade name, it can be seen that the price of procainamide is substantially lower than that of quinidine.

Now, it happens that there is a smaller drug manufacturer which is selling procainamide under its generic name at a price per tablet of 1.9 cents. This particular drug manufacturer sells its products to distributors who, in turn, make their sales to retailers. We have made an allowance for the customary 15 percent wholesaler's markup as well as the retailer's margin. This would translate into a daily cost at three a day, again allowing for the same retail markup, of 9.3 cents and at four a day, of 12.4 cents.

In substance, at a four-a-day dosage, we have a daily retail price range of 40 to 44 cents for quinidine; 27 cents for a trade-name brand of procainamide, and 12 cents for the procainamide sold under its generic name.

That gives one some indication of what the potential savings are through the use of procainamide, particularly when it is prescribed by its generic name.

(The table referred to follows:)

Retail prices of quinidine and procainamide, daily dosages, spring 1966

[In cents]

	Quinidine ¹ Lilly; Merrell; Parke, Davis; Davies, Rose; Bryant; and Premo	Procainamide ²	
		Squibb (Pronestyl)	Small drug company
Price to druggist per tablet.....	6-7	4.0	1.9
Price to consumer ³ per tablet.....	10-11	6.7	3.1
3 per day.....	30-33	20.1	9.3
4 per day.....	40-44	26.8	12.4

¹ 3 grain tablet.

² .25 gram capsule.

³ Assuming 40% markup on retail price.

Dr. BLAIR. It happens that other smaller drug manufacturers have gone to the Food and Drug Administration, stated that in view of the rising prices of quinidine, they wished to place their version of procainamide on the market, and have been informed that it would be necessary for them to duplicate at great expense, the animal and clinical studies which were undertaken, originally, more than 15 years ago.

If these companies make no claim for the effectiveness of the drug above and beyond those made by the company that has had it on the market for these many years, and assuming that such claims are well supported by substantial evidence, and if the small company's product meets the physical and chemical tests set forth in the United States Pharmacopeia, what is the need for this requirement of duplicate clinical testing? In this case the requirement, in effect, has been ignored by one company which has put the product on the market, presumably on the grounds that safety has already been established and that it is making no claims for effectiveness above and beyond those advanced by the original marketer.

Thus, Mr. Chairman, we have a somewhat confused situation whereby those drug companies who have come to the FDA and asked whether they can put procainamide on the market are informed that they must duplicate, at a cost to them of \$50,000 to \$100,000, animal and clinical testing already done. Yet, another drug company which apparently feels that such a requirement is unnecessary in view of the product's proven safety and its intention to limit its effectiveness, goes ahead and puts the drug on the market.

Isn't such confusion inevitable when each new drug application is, in effect, treated as if it were for a new chemical entity rather than an application by a manufacturer to produce a drug which has been marketed for years, is in the United States Pharmacopeia, whose safety has been established, and whose claims as to efficacy are not being transcended by the proposed applicant?

Senator HART. Doctor, I would ask you if you have any comment on that?

Dr. MODELL. Senator, so far as I know, the Food and Drug Administration has no system of deciding when a new drug becomes an old drug, and there surely have been many drugs that have died of old

age while still called new drugs by the Food and Drug Administration. In my dealings with the Food and Drug Administration I could find no statement or practice which determined when the Food and Drug Administration decided that experience with a drug was sufficient to take it out of the new drug category.

It doesn't make any sense. There ought to be a time when the total experience of the drug, clinically as well as in manufacture, places it in a category which makes it safe to take it out of the new category and put it into the old and established drug category.

Senator HART. Thank you.

We, as a subcommittee, have indicated that this particular aspect is a matter for staff study and we may indeed determine it is desirable to develop it in the future.

Our concern this morning was specifically with respect to the availability of a substitute. You have suggested that there is an available substitute, that it is a widely known drug, and the staff has indicated it is cheaper.

Before making further comments, I will ask Mr. Cohen if he has any questions.

Mr. COHEN. No, sir.

Senator HART. Mr. Chumbris?

Mr. CHUMBRIS. I just want to add to what you have just stated at this point, that the purpose of this morning's testimony is to bring to the attention substitutes for quinidine, because of the problem that has been created in the increased price of quinidine in the past year and a half.

I especially want to bring out that we don't want to lose sight of that fact and get into this issue of the rules and regulations and new law down at the FDA and the press is reporting that issue rather than the main question of this morning, and that is the question of, are there suitable substitutes to quinidine if, in fact, a shortage may exist? And we don't know for sure at this point whether there is a real shortage or whether there are factors which are withholding a certain amount of quinidine from the market.

I wanted to press that particular point at this time. We will get into that other issue, that the colloquy has brought out, in future hearings if the subcommittee feels that it is a matter that it should go into.

Senator HART. Doctors, thank you very much.

I have a brief statement to make at the close.

I would like to make clear my own conclusions.

First, with respect to the question of shortage of quinine and quinidine: as I read this record, based on the military usage of Vietnam last year, there is sufficient quinine for defense purposes in our stockpile for 1,142 years. And in my book there is no foundation for the current myth that the occurrence of a resistant strain of malaria among our Armed Forces in southeast Asia has caused a quinine shortage and thus skyrocketed the prices.

Here is the Defense Department's testimony that there were 2,300 cases of malaria which can only be cured with quinine out in Vietnam. The average dosage is an ounce and a half for the cure. That means 3,500 ounces were used by our military out there last year.

In the stockpile right now, there are more than 4 million ounces of quinine. That is pretty simple arithmetic from which you derive the

1,142 figure. And it assures us that, allowing for many possibilities, the Defense Department is conservative in the analysis that the quinine supply is adequate for the foreseeable future.

Now, there is another aspect of the hearings. Many people overlook the relationship between the antitrust and consumers' welfare. I wish they could read some of the letters we have received since these hearings began from those who depend on quinine for life. Here is a typical letter:

My problem is this, I spent all my savings, and am now drawing social security and a welfare grant which all amount to \$186. When I first became ill, I paid \$4.50 per hundred for quinidine, then about a year ago now the price advanced until the druggist told me that I would have to buy 1,000 and they would cost \$65, plus 2 percent tax. The price continued to advance and 2 weeks ago I paid \$81 for 1,000, and one druggist told my wife the next order he received he would have to sell them for \$126 per thousand.

Thus, I am at a loss to know what to do about my case. I cannot continue to pay these high prices for quinidine, yet my doctor tells me I cannot live without it.

And if there is no objection, I will make excerpts from other letters a part of this record (Exhibit 48).

(The material referred to may be found in the appendix, p. 159.)

Senator HART. It is my feeling that an impartial observer of these hearings can only conclude that there is no economic justification for the 300 percent rise in less than a year in the retail price of this essential drug.

Where does the blame lie? Principally in the operations of an international cartel, with the Dutch firm in the driver's seat, which is able to control world supply and prices of quinine and its derivative, quinidine. It is the same cartel and its individual members who were proceeded against by the Department of Justice and in 1928, a perpetual consent order directed them not to engage in a variety of restrictive practices relating to quinine. That order seems to have had little effect.

The record shows that Government officials from 1955 through early 1962, particularly in the State Department, rendered valuable assistance to the cartel in securing most of the quinine released from the U.S. stockpile, this at the expense of American small business.

Decisions with respect to the disposition of the quinine stockpile did not recognize the consequences on competition and the consuming public. Ignored were the prophetic words of the Department of Justice that—

It is our view that this proposed sale to a group of Dutch companies, which will in all probability be able to largely control the price and supply of quinine to all world markets, including the United States, raises serious antitrust problems.

The lesson here is clear. In any stockpile disposal, insistence should be made that antitrust aspects be recognized and competition should not be inhibited.

The Defense Department, through procurement procedures, contributed unwittingly to the problem by offering to buy quinine from the cartel, according to one of its members, "at almost any price."

The Department remained silent in the face of recurrent and exaggerated press reports of the demand for quinine because of the occurrence of a resistant strain of malaria among our Armed Forces.

These factors helped to create the psychological atmosphere in which the cartel was able to raise its prices repeatedly and dramatically.

The record shows, as I read it, that there are ample supplies of cinchona bark from which quinine is derived, that imports into this country are at near-record levels, that the Department of Defense has no intention of buying quinine at present prices and that the amount remaining in its U.S. stockpile should be adequate for all defense needs in the foreseeable future.

I would hope that the work of the subcommittee in bringing these facts to light will help to reduce prices to more normal levels.

However, we can't rely on this alone. The Justice Department should investigate the cartel's present activities to determine if violations of the 1928 consent decree have occurred—a decree which is still in full force and effect.

Today we have learned that there is a drug, procainamide, which, in many cases, is substitutable for quinidine. The Public Health Service and other appropriate Government agencies should make a determined effort to make this information available to the Nation's doctors in view of the present prices of quinidine.

Dr. Modell has assured us that he feels there is widespread knowledge of the existence of the drug and its suitability for substitution.

What I would like to see increased is the knowledge of the price disparity and of the economic consequences to the patient when a physician makes a determination as between these two available drugs.

At the same time, the Food and Drug Administration, as was indicated in the closing colloquy, ought to do everything possible to facilitate the applications of independent drug companies prepared to manufacture this procainamide, so that this market can be made more competitive.

And here is a good example of why, when we talk we talk about making market competitive, we are not engaging in an academic economics class discussion. One has only to reread the letter from that heart patient to understand what it is that we seek to obtain by a competitive market price.

This is true even in such things so unrelated to health as steel and hard goods.

The drama is less apparent because one's survival doesn't hinge on it, but the economic consequences are the same, whether it is a piece of steel or a drug, the availability of which determines one's life span.

I think that the aggressive Government action now can alleviate the situation faced by many Americans in their advancing years.

Let me read just one more excerpt from a letter. This is from a 71-year-old heart attack victim:

"I have quit taking them"—meaning the drug—"on account of the high price."

This is what these hearings are all about and what antitrust is supposed to be all about.

Now, I was advised this morning that we have had some correspondence from patients who have been told by pharmacists that they can buy quinidine only by purchasing a bottle of a thousand. Now, this heaps a burden on an already, on some occasions, overburdened consumer, and suggests the possibility that somebody is trying to clear out an inventory at high prices.

There are some very responsible trade associations who represent the pharmacists of this country. I hope they will flag this develop-

ment very early and make clear to any member who might be indulging in it that by no standards can such conduct be tolerated.

Senator Hruska would have been here if we had closed the hearings as scheduled on Friday but because of the transportation problem, Dr. Modell, that you had, we had to go over until today which explains his absence.

I would order the hearings adjourned and the record closed subject to the call of the Chair.

And I am reminded also that as is the practice, we ought to keep the record open for the submission of useful material for a reasonable period and it shall then be closed at the call of the Chair.

Thank you very much, Doctors.

(Thereupon, the hearing was concluded at 11 :25 a.m.)

EXHIBIT 1

DECREES AND JUDGMENTS IN CIVIL FEDERAL ANTITRUST CASES

Compiled by Matthew Miller and Angelo J. Maggio, Attorneys, Legal Procedure Unit, Antitrust Division, Department of Justice, July 2, 1890-January 1, 1949

UNITED STATES OF AMERICA *v.* N. V. AMSTERDAMSCH E T AL.

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK

In Equity No. 44-384

UNITED STATES OF AMERICA, PETITIONER

v.

N. V. AMSTERDAMSCH E CHININEFABRIEK, N. V. BANDOENSCHE KININEFABRIEK, N. V. NEDERLANDSCHE KININEFABRIEK, C. F. BOEHRINGER & SOEHNE, G. M. B. H., CHININEFABRIEK BRAUNSCHWEIG, BUCHLER & Co., VEREINIGTE CHININEFABRIKEN ZIMMER & Co., G. M. B. H., SOCIETE DU TRAITEMENT DES QUINQUINAS, A. TAILLANDIER, POINTET & GIRARD, PHARMACIE CENTRALE DES PHARMACIENS DE FRANCE, HOWARD & SONS, LTD., F. HOFFMAN-LAROCHE & Co., A. G. HOSHI, PHARMACEUTICAL COMPANY, LTD., MERCK & COMPANY, INC., NEW YORK QUININE & CHEMICAL WORKS, INC., R. W. GREEFF & Co., INC., R. W. GREEFF & Co., LTD., MALLINCKRODT CHEMICAL WORKS, INC., HOFFMAN LAROCHE CHEMICAL WORKS, INC., ARENT ROELF VAN LINGE (sued herein as Arent Roalf Van Linge), J. G. W. SIEGER, PIETER HAJONIDES VAN DER MUELEN (sued herein as Pieter Hajonides Van Der Meulen), S. VAN VELZEN CAMPHUIS, ROBERT H. DEGREEFF, EMIL BARRELL, ELMER H. BOBST and HENRI G. SENN, DEFENDANTS

FINAL DECREE

Now comes Charles H. Tuttle, United States Attorney for the Southern District of New York, and come also William J. Donovan, the Assistant to the Attorney General, Israel B. Oseas, W. Houston Kenyon, Jr., Porter R. Chandler, and Bethuel M. Webster, Jr., Special Assistants to the Attorney General, and move the Court for relief in accordance with the prayer of the petition herein, and the defendants named in the annexed consent appearing and consenting thereto, and no testimony having been taken, it is ORDERED, ADJUDGED AND DECREED as follows :

I. Definitions

(a) That whenever, in this decree, an injunction or restraint is laid upon one or more of the defendants herein, unless otherwise provided, such injunction or restraint shall extend to and be binding upon each and all of the defendants, whether acting jointly or severally, and shall extend to and be binding upon their agents, servants, officers, members, employees, assigns, and successors in interest and all persons acting by, through, under, or on behalf of or in co-

operation with any of them or claiming so to act, whether or not impleaded herein.

(b) Unless otherwise stated, the word "person" as used in this decree shall be deemed to include persons, firms, corporations, and associations.

(c) Whenever any person is forbidden to do any act or thing or to reach any result, such prohibition shall be construed to be an injunction against attempting singly or in concert with each other or others to do the act or thing or to reach the result forbidden by any means; and against agreeing with each other or with others to achieve the result or to do the act or thing forbidden; and against causing, persuading, or coercing in any manner any person whatever in any way to do any act or to achieve any purpose herein forbidden and/or declared to be illegal.

II

This Court has jurisdiction of the subject matter of the controversy herein and of the parties, and the petition states a cause of action under the Act of July 2, 1890, c. 647, Section 73 of the Act of August 27, 1894, c. 349, and Sections 2 and 3 of the Act of October 15, 1914, c. 323.

III

The defendants are perpetually enjoined, restrained and prohibited from:

(a) Fixing or maintaining resale prices, resale terms, resale discounts, resale allotments of territory or any resale restrictions or conditions whatever with respect to quinine derivatives sold to persons in or held within the United States.

(b) Restraining, preventing or hindering in any way the shipment and/or sale in the United States and/or the shipment or sale to, into, or from the United States of cinchona bark and/or quinine derivatives, except as provided in paragraph (f) following.

(c) Participating in any arrangement for the pooling or division of profits or territory with respect to or in consideration of any sales made within the United States.

(d) Discriminating in any way in sales made within the United States, between purchasers of quinine derivatives located within the United States when such discriminations are not based on:

- (1) Differences in quantities purchased;
- (2) Differences in costs of delivery;
- (3) Differences in competitive conditions in a particular locality;
- (4) Differences in grade or quality.

But no such discrimination shall be made for the purpose of restraining or destroying the trade of any competitor.

(e) Maintaining in force or carrying out within the United States, any existing contracts or entering into or carrying out within the United States, any new contracts or course of business on the condition, agreement or understanding that purchasers of cinchona bark and/or quinine derivatives shall purchase such bark and/or quinine derivatives only from the contracting party or parties or shall not use or deal in the products sold by a competitor.

(f) *Provided, however,* that nothing herein contained shall be construed to restrain or prohibit any defendant from doing any act or entering into any agreement which is entirely completed outside the United States and which does not require any act or thing to be done within the United States.

IV

Any defendant herein, or the Attorney General of the United States, shall have leave to apply to the Court for relief upon his petition that any plan, contract or course of business entered into pursuant to this decree is in violation of the provisions of said decree.

Jurisdiction of this cause is hereby retained by this Court for the purpose of taking such action as may become necessary or appropriate for the carrying out and enforcement of this decree and for the purpose of entertaining at any time hereafter any application which the defendants may make with respect to this decree.

Dated, September 20, 1928.

FRANCIS A. WINSLOW,
United States District Judge.

Extracts from the Indictment in *U.S.A. v. N. V. Amsterdamsche et al.* (In Equity No. 44-384) dated 3/30/28

42. The said N. V. Amsterdamsche Chininefabriek, N. V. Bandoengsche Kininefabriek, N. V. Nederlansche Kininefabriek, N. V. Nederlandsche Combinatie voor Chemische Industrie, Combinatie der Amsterdamsche, Bandoengsche & Nederlandsche Kininefabrieken, Semarangische Administratie Maatschappij, The Kina Bureau, R. W. Greeff & Co., Inc., R. W. Greeff & Co., Ltd., Arent Roalf Van Linge, J. G. W. Sieger, Pieter Hajonides van der Muelen, S. Van Velzer Camphuis, J. Gerritzen, J. C. A. Everwijn, H. A. van Overzee, W. F. van der Broek, G. W. Baron van Heeckeren, W. Suermondt, J. W. L. van der Linden, W. C. Loudon, and Robert H. DeGreeff, are made defendants hereto and are herein indicted; no person, firm or corporation other than those named in this paragraph being impleaded. The persons, firms and corporations named in paragraphs 2 to 42 inclusive are sometimes hereinafter referred to as conspirators.

43. All matters of fact in this indictment set forth are well known to the defendants and other conspirators above named.

44. Quinine derivatives are made from the bark of the cinchona tree. All cinchona bark used and available for use in the United States of America, is grown in a foreign country, to wit, Java; the said cinchona bark is there grown on plantations, which said plantations are owned and controlled by a large number of persons, firms and corporations, whose names are to the grand jurors unknown; such planters control through ownership more than 90% of the cinchona bark available for the United States, and have joined with the defendants and the other conspirators above named in the conspiracy herein described; the balance of the cinchona bark so produced is in part not available to, as well as insufficient to meet the needs of, consumers in the United States; a large and important part of the interstate and foreign commerce of the United States consists of the importation of cinchona bark so produced, into the United States, as in this indictment described, and the sale thereof and shipment thereof pursuant to such sales to purchasers located in States of the United States other than the State into which such cinchona bark was originally imported, and of the importation of quinine derivatives into the United States as aforesaid and the sale of the said quinine derivatives and shipment thereof pursuant to such sales, to numerous purchasers, located in States other than the State from which such derivatives are shipped by the sellers.

45. Except for the unlawful combination and conspiracy in this indictment described, the following separate business entities would be in free competition with each other in importing quinine derivatives into the United States, that is to say, in the sale and shipment thereof from the respective foreign countries in which their factories are located to and into the United States to buyers located in various States of the United States;

Hoshi Pharmaceutical Company, Ltd.

F. Hoffman LaRoche & Co., A. G. (also known as F. Hoffman-LaRoche & Co., Ltd., Co.).

C. F. Boehringer & Soehne, G.M.B.H.

Chininfabrik Braunschweig, Buchler & Co. G.m.b.H.

N. V. Nederlandsche Kininefabriek.

N. V. Amsterdamsche Chininefabriek.

N. V. Bandoengsche Kininefabriek.

46. Except for the unlawful combination and conspiracy in this indictment described, the following separate business entities would be in free competition with each other in the sale and shipment of quinine derivatives in trade and commerce among the several States of the United States; that is to say, in the sale of such quinine derivatives to buyers located in States of the United States other than the States wherein such business entities have their factories and/or warehouses and the shipment thereof pursuant to such sales from the point of manufacture and/or storage thereof to such buyers in other States of the United States:

Chininfabrik Braunschweig, Buchler & Co., G.m.b.H.

C. F. Boehringer & Soehne, G.m.b.H.

Merck & Company, Inc.

New York Quinine & Chemical Works, Inc.

R. W. Greeff & Company, Inc.

R. W. Greeff & Company, Ltd.

Hoffmann-LaRoche Chemical Works, Inc.

Mallinckrodt Chemical Works, Inc.

47. The defendants and the other conspirators above named, well knowing all matters of fact in this indictment set forth, continuously, for more than three years last past, have been and now are engaged within the Southern District of New York, in a conspiracy intended to restrain and which in fact, has been, and is in restraint of the lawful trade and commerce among the several States of the United States, and of the United States with foreign nations, as above described, in such imported cinchona bark and quinine derivatives;

intended to restrain and which in fact has been and is in restraint of the free competition described above and which, except for the said unlawful conspiracy would now exist in the aforesaid lawful trade and commerce;

intended to increase, and which in fact has increased the market price in all parts of the United States of cinchona bark and quinine derivatives imported and intended to be imported into the United States as aforesaid;

48. AND PURSUANT TO THE SAID CONSPIRACY and to attain the objects thereof, the defendants and other conspirators above named have, by agreement and in concert, used and now are using, among others, the following means and methods:

(a) Causing planters engaged in the production of cinchona bark as aforesaid, whose crops total in excess of 90% of the world's supply of such cinchona bark to restrict production thereof to an amount agreed upon by the defendants above named.

(b) Apportioning among the above named manufacturers of quinine derivatives (including the manufacturers above named who are engaged in importing the same from foreign countries into the United States and in selling and shipping the same in trade and commerce among the several States of the United States as aforesaid) all the cinchona bark so produced.

(c) Fixing prices at which cinchona bark and quinine derivatives were to be and are sold by all persons dealing therein, including the conspirators above named who are engaged in importing the same from foreign countries into the United States and selling and shipping the same in trade and commerce among the several States of the United States, as aforesaid.

(d) Fixing terms and conditions upon which (and no other) all manufacturers and consumers of cinchona bark and quinine derivatives (including the conspirators above named who are engaged in importing the same from foreign countries into the United States and selling and shipping the same in trade and commerce among the several States of the United States, as aforesaid) are permitted by the defendants to purchase, ship and sell and resell the same.

(e) Attempting to prevent and preventing by threats of depriving them of their supplies of bark and quinine derivatives, persons desiring to import quinine derivatives into the United States and desiring to sell and ship the same in trade and commerce among the several States, from so doing.

(f) Causing all the manufacturers of quinine derivatives in the world (including the manufacturers above named who are engaged in importing cinchona bark from foreign countries into the United States and those who are engaged in selling and shipping quinine derivatives in trade and commerce among the several States as aforesaid) to pool their profits under an arrangement known to them as the "Ausgleich", whereby the defendants allot quotas of bark and quotas of profit to each of the said manufacturers, and whereby manufacturers who sell less than their allotted quotas receive contributions from those selling in excess of their allotted quotas.

(g) Discriminating in price between different purchasers of quinine derivatives located in various States of the United States.

(h) Making contracts for the sale, and shipment pursuant to such sale, of cinchona bark and quinine derivatives with buyers located in States other than the place from which said bark and quinine derivatives are sold and shipped, and fixing sale and resale prices therefor, discounts therefrom, and giving rebates thereon, on the condition, agreement and understanding that the purchasers thereof should not deal in cinchona bark and quinine derivatives sold by competitors of the said conspirators.

(i) Coercing and attempting to coerce various persons, firms and corporation, including among others Merck & Company, Inc., and New York Quinine & Chemical Works, Inc., into becoming parties to and carrying out the conspiracy above set forth by threats of depriving them of their supply of cinchona bark and quinine derivatives if they should fail to do so.

49. And so the grand jurors aforesaid, on their oath aforesaid, do present that the defendants above named, at the time and place and in the manner and form

aforsaid, unlawfully have conspired to restrain the lawful trade and commerce among the several States of the United States, and of the United States with foreign nations as aforesaid, to restrain free competition therein, and to increase market prices therein in all parts of the United States in cinchona bark and quinine derivatives as aforesaid; against the peace and dignity of the United States and contrary to the form of the statute of the same in such case made and provided.

EXHIBIT 2

KUPFERMAN & PRICE,
New York, N.Y., March 28, 1962.

Re Invitation #MPAR-(S)-43, Dated February 23, 1962, Contract GS-OPP (S) 12954 (SCM).

Hon. BERNARD L. BOUTIN,
Administrator, General Services Administration,
General Services Building,
Washington, D.C.

DEAR SIR: This letter is addressed to the above bid which was opened at 11:00 A.M. on March 21, 1962. The property covered by the bid was approximately 4,762,279 ounces of quinine sulphate powder which was offered in five separate units.

We represent Hexagon Laboratories, Inc., a domestic small business which bid on all five quantities. This communication is both an objection and an appeal from the determination of the General Services Administration to reject our client's bid on Item #3.

As you may know there have been numerous prior bids for varying amounts of the government's quinine stockpile. Since the inception of the government's program of disposing of this stockpile our clients have been interested in obtaining a portion of this stockpile. I know that you must be familiar with the facts which prompted the decision of the government to permit the present quantity to be sold only to domestic small business. In effect the prior bids had been won by representatives of the world quinine cartel. This cartel which has its base in the Netherlands has had a history of improper activity and was enjoined in a 1928 United States District Court consent decree in the Southern District of New York. I will not burden you at this time with the facts concerning the opposition which my client and other American quinine users face in the form of this world quinine cartel. Several people in your Administration are familiar with the situation and it was a credit to your Administration that a determination was reached permitting only domestic small business to bid for this amount of quinine. I think that if you examine the history of this bidding you will find an illuminating series of facts with regard to both price and behavior.

The bid immediately prior to the instant one was won by a Dutch company (to the surprise of no one) by a bid of 20.6¢. This unusually high price (considering the prior bidding by this company) had the effect of creating an unfair and arbitrary "upset" price which small business subsequently had to approximate to have any hopes of winning the present supply. It is important to realize that our clients did approximate this amount. We bid on items 1, 2, 4 and 5 20.75¢ per ounce. On item #3 we bid 19.5¢ per ounce. We have just been notified by letter dated March 22, 1962 that our bid for Items # 1, 2, 4 and 5 has been accepted, but our bid for item #3 has been rejected. *For the reasons set forth below we believe that this determination should be reversed and our bid for item #3 accepted and our bids for items #1, 2, 4 and 5 rejected.*

The reasons prompting this request are as follows:

1. We were the successful bidder for all five items and in our bid we clearly state that "If successful on item #3 disregard other bids". Hence our instructions were not followed in this regard.

2. If the 19.5¢ bid was rejected because it was below the 20.6¢ price established by the Dutch then it seems improper to have established an upset price for domestic small business particularly when that price was set by a member of a world cartel fully capable of regulating the market price. The gearing of our bid price to the price established by the Dutch runs completely contrary to the practical problem which we have been facing since the inception of this bidding and contrary to the facts which prompted the Small Business Administration to come to our assistance, and which prompted the Comptroller General and your Administration to attempt to assist small business. In effect, you have

negated the positive effect of permitting small business to obtain this quinine by allowing the Dutch who control the world market price to determine what price would be successful in these bids.

3. I have been advised that at the opening of these bids a representative of the Dutch was present and was heard by several people to state that any bidding below the 20.6¢ established by the Dutch would not be accepted by the General Services Administration. This attitude seems to be presumptuous, ill advised and indicative of the problem we face.

4. By granting us the bid for item #3 the Government would in effect be disposing of a greater amount of the stockpile in compliance with the Administration's position, because not only is this a greater quantity than # 1, 2, 4 and 5, but Item #4 which has now been granted to us could be granted to another small business which had bid for this quantity.

5. The pattern of bidding which we followed had been discussed with various individuals in Washington and they concurred that this bidding would be acceptable. We bid a lower amount on Item #3 because it would necessitate more money and had we bid 20.75¢ per ounce for #3 the amount involved would have been in excess of our capacity. Further, the risk of not being able to use this additional amount over the next five years militated in favor of a slightly lower bid for this quantity.

6. As a domestic small business we have normal problems of financing. Obtaining 1, 2, 4 and 5 at a higher price imposes a considerable financial burden on our company and prevents our most effectually utilizing this raw material in our growth situation.

7. The entire process of bidding was both economic and prudent. We believe that the slightly lower bid of 19.5¢ would be successful because this 2.5 million ounces in #3 would not be so actively sought by other small business bidders. Hence, more prudent bidding was dictated. To now be faced with a determination that we did not meet the Dutch price when we had been informed that this disposition was for the benefit of domestic small business is both discouraging and contrary to our interpretation of the purposes of this special bid situation and the Administration's program of assistance to small business.

8. In addition to the actual cost of Items #1, 2, 4 and 5 there is an additional substantial cost in that the location of these items is considerably further away from New York than Item #3 and the freight charges will add considerably to our effectually utilizing this material for the development of domestic small business. As you can well understand as a small business we have our normal problems of financing. This entire method of financing appears to us to be unreasonable and difficult. Therefore, burdened by the additional cost per ounce for freight cost derogates considerably from the usefulness of making this quantity available to small business. We, therefore, request that you advise us of the methods to pursue to enable us to obtain more relaxed terms in the purchase of whatever quantity you ultimately allow us.

The above constitute the principal grounds for our requesting a reversal of the determination denying us the amount in Item #3. Speaking legally, I think that we should be able to rely solely upon point #1, above, in view of the fact that we were the successful bidder in item #3.

In closing, we are appreciative of all that your Administration has done to assist us and I am confident that after reviewing the above you will understand the equities which prompted this appeal.

Thank you for your attention.

Very truly yours,

ROBERT PRICE.

EXHIBIT 3

CHEMICAL SERVICE CORP.,
New York, N.Y., March 22, 1962.

Re Inv. #MPAR-(S)-43, Opening Date 3/21/62, Quinine Sulphate.

GENERAL SERVICE ADMINISTRATION,
Washington, D.C.

(Attention: Mr. Stanley B. Hanes, Chief Agricultural Branch).

DEAR MR. HANES: Reference is made to my visit with you yesterday after the above bid opening. The right of the Government to withdraw bids is conceded. However, the method of the offering in this case, and indicated rejection of bids, strikes us as being most unreasonable to say the least.

Here is a case where sale is restricted to small business; and in passing, it strikes us that what is considered small business is rather ridiculous, but we realize this is a matter of law, but most unreasonable, nevertheless.

What we take very serious exception to in this case, are the following:

1. A five year Letter of Credit, which for small business to obtain is almost impossible; banks generally refuse to issue such long credits especially to small business, which, in order to obtain such credit might have to deposit, to use the vernacular, an arm and a leg, or their right eye.

2. Notwithstanding the above Letter of Credit requirements, the amount of deposit of 20% which is required when the submission of bid would be held by the Government, with proportional credit on the amount of Quinine withdrawn each year. As shown you yesterday, if one would consider a deposit of \$100,000, the maximum credit per year against this deposit would be 20%; the value of this money on the basis of *only* 5% a year—and money is worth more than 5% a year to business whether it is large or small—would come to *close to* \$40,000, not peanuts for *small business*.

3. Another serious objection is that subsequent to the bidding we learned that a minimum price of .205 per ounce was set—this figure being based on a sale made to the Dutch syndicate of the previous 50%. Now, if this was the intention of the GSA, do you not think it would have been fair to small business (and every time we say small business we almost laugh at what is called small business) to apprise them of this condition, so that they would not have to break their backs and waste a lot of valuable time trying to arrange their financing; it took us almost a month to work out such financing, time we could ill afford to lose.

4. You indicated that the matter of setting terms of payment was out of your hands, but the matter of limiting withdrawal to 20% was done because of the *questionable value* of Quinine Sulphate some years hence. Because of this questionable value, and all the other conditions above referred to our own bids—the high ones in several cases—are very realistic ones indeed, and merit serious consideration.

Mr. Hanes, we have been in this Quinine Stockpile sales picture since the first offering, and want to add that you have done a terrific job for the Government in the handling of the liquidation of this Stockpile, in that after you rejected the first bids for the entire Stockpile, you subsequently broke it up into a number of parcels, and your return has been quite substantially more.

What we say here in relation to this week's offering is intended as constructive criticism with the hope that small business will be given a fair shake and not have almost insurmountable difficulties placed in their way.

Respectfully submitted,

J. STEBEL.

EXHIBIT 4

CHEMICAL SERVICE CORP.,
New York, N.Y., April 2, 1962.

Re Inv. #MPAR-(S)-46, Opening Date 4/30/62, Quinine Sulphate Powder.

GENERAL SERVICES ADMINISTRATION,
Washington, D.C.

(Attention: Mr. Stanley B. Hanes, Chief Agriculture Branch).

DEAR MR. HANES: We note that this proposal again calls for a five-year Letter of Credit, the objection to which we discussed with you at your office recently after the previous offering and which was subsequently covered by our letter to you of March 22nd.

There has also been no changes in your deposit requirements, which as indicated to you in our letter of March 22nd is high cost money and would result in a very substantial cost to a successful bidder even on a 5% interest value of such money.

Without waiving our strenuous objection to the five-year Letter of Credit, we feel that insofar as the deposit is concerned, that if anyone is successful in getting a Letter of Credit for such a period, this should encompass the entire amount of the bid, and when such Letter of Credit is received by you, the deposit made with the bid should be returned.

We have read the current proposal carefully (we hope), but fail to find anything in it restricting the bidding to small business in which case it strikes us here again the Dutch syndicate has all the advantages.

In passing, we overlooked mentioning to you in our letter of the 22nd that the representatives of the Dutch syndicate who had attended the previous opening on March 22nd, seemed to be the only ones that knew that there was an upset price as they openly mentioned at the time.

We fail to understand the reason so many extremely difficult conditions have been put in the sale of the Quinine since it was first offered. There has been and continues to be many sales by your agency of stockpile surplus such as rubber, tin, coconut oil, palm oil, etc., etc., and we do not recollect that any such sales had so many "strings" attached.

We write not so much by way of criticism, but with the hope that something constructive would develop in the interest of buyers such as we who have been purchasers of surplus materials from government facilities for perhaps 40 years and might thus be called "regular customers."

To summarize, we again repeat the following objections as made previously:

1. Long-term Letter of Credit requirements.
2. Deposit which will take the term of the Letter of Credit to finally liquidate and thus is high cost money.
3. No restriction to small business.

Finally, we should like to know whether or not you have again set an upset price, and if so, what this is.

Respectfully submitted.

J. STEBEL.

EXHIBIT 5

EXCERPTS FROM "CINCHONA—QUININE TO YOU"

[From Fortune, February 1934]

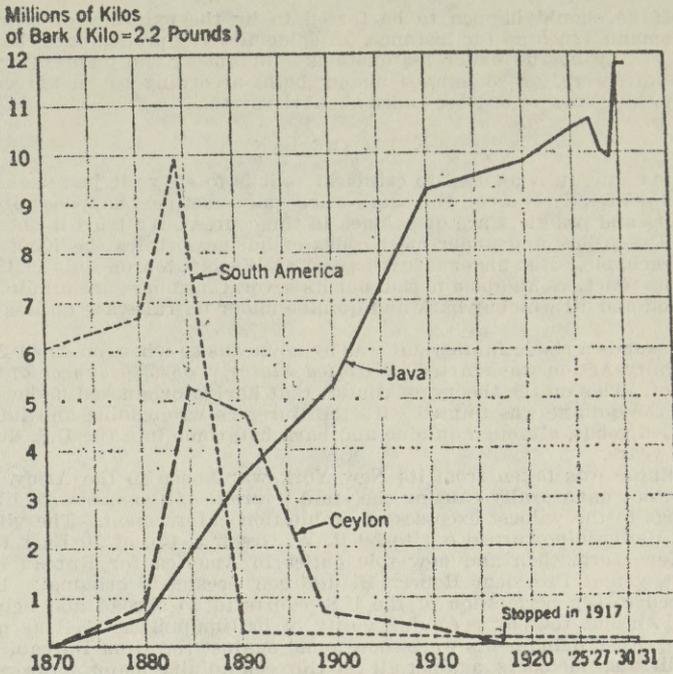
JAVA AND AMSTERDAM

There was no monopoly within faintest earshot when, in December, 1865, the one remaining living and priceless pound of Ledger seed came to Java's shore and sank into Java's earth. But the Dutchmen were lucky and always the Dutchmen took care, and eighteen months later the government cinchona plantations had 12,000 plants ready to be set out. Five years after that Java startled the world: the first analysis of the Ledger bark showed 8 per cent quinine. Later 11 and even 13.25 per cent were found in these extraordinary trees.

Which meant disaster to every private cinchona planter in India and the ultimate hopeless end of South American bark collecting. For no other bark, not gray bark, not even Cartagena, Loxa, yellow, or crown bark, nor any of a dozen other South American favorites, could show much over 3.5 per cent quinine, and most of them much less. The graph on page 83 shows what happened in the cinchona world, but it cannot express one's admiration for the unerring technical proficiency of the Dutch.

From the very beginning they were expert in coordinating horticulture, forestry, soil management, and chemistry. *Cinchona ledgeriana*, as the tree was officially named, turned out to have very special growth requirements if its quinine content was to be maintained. Like all other members of its genus, moreover, it was a bit casual in its sex habits, excessively likely to hybridize. So the Dutch learned to plant their trees in remote forest inclosures, proof against pollen pollution from inferior varieties left over from earlier attempts, and ideally situated for controlled hybridizing, of which the Dutch did a great deal. Within a few years they realized the great horticultural difficulties of maintaining such high, exciting quinine contents as 11 or 13 per cent, and developed a standard tree which could be counted on to yield between 5 and 7—still healthily above the next best on earth.

In 1874 they offered free seeds, grafts, and young trees of their improved stock to private planters. At first, with the British and their own former luck on their minds, the planters were a little leery of this dangerous commodity. But that didn't last: Witness today's 124 plantations and highly contented planters. Step across to Sumatra and note the young plantations that are beginning to flourish there. And, returning to Tjinjirean, take a good look at the government's original cinchona estate where to this day still stand some of those patriarchs of Dutch prosperity, the magical trees for which Manuel died. For there, in green flamboyant Java, live the heart and soul of the quinine monopoly.



The brain is housed in an unpretentious brick building in Amsterdam and is, of course, the Kina Bureau. Before there was such a Bureau, Javanese cinchona planters were by no means so prosperous. Very much like any other uncontrolled agricultural enterprise, they overexpanded. For years the ups and downs of the bark trade were downright tragic. And for many years the planters were at the mercy of the European quinine factories, especially of the two most important ones in Holland. The establishment in Java, in 1894, of the great Bandoengsche Kiniefabriek did much toward relieving that pitiless situation, and a few years later (about the time we were trust-busting with the original Roosevelt) the planters of cinchona and the manufacturers of quinine began to suspect there was no sense in fighting and perhaps a whole lot of sense in doing just the opposite. And thus the Kina Bureau came into existence. Not at once nor at anything like its present efficiency. It was born, like many another wise institution, out of throat cutting, and was at first the purely defensive gesture of a number of planters and manufacturers who had sense enough to save their hides. The Kina Bureau is frank to admit that there have been many disputes, some revolts, but such things aren't permanent. It took time, to be sure, to make it what it is today: perhaps the most scientific organization in existence for the controlled supply of a plant product and the controlled release of the material manufactured from it. But through experience Dutch quinine men have learned that it is wiser to live under its rules and profit by its strength than to die free, fighting it. The five elected planters and the five elected manufacturers and the gentleman whom they choose on a basis of impartiality are delegated, as we have said, absolute power. These eleven gentlemen operate, however, under a very strict code, the *Kina-Overeenkomst* (quinine convention), which contains in all some 208 articles, to say nothing of several supplements. More important than the details of this lengthy document is the flat fact that its operation controls all but a negligible fraction of the world's cinchona and quinine. Prices, discounts, territories, allotments, rebates for the difference in freight charges between bark and quinine, the percentage of quinine that the bark shall contain—all these and in fact all imaginably relevant matters are dictated by the Bureau. No manufacturer, no planter, is allowed to deviate from his agreed

quota. If he should happen to be forced to by the exigency of some unexpected demand (such as for instance, an epidemic) the profit above that which would normally accrue under his quota is split among the planters or among the manufacturers, or sometimes among both, according to an agreed ratio. There's nothing cursory or loose-ended about the system.

ENTER THE LAW

The Kina Bureau is as used to criticism as it is to envy; it just shakes it off and looks polite. It is much the same when (as sometimes happens) its rights and powers and practices are questioned in the courts. We tried it once.

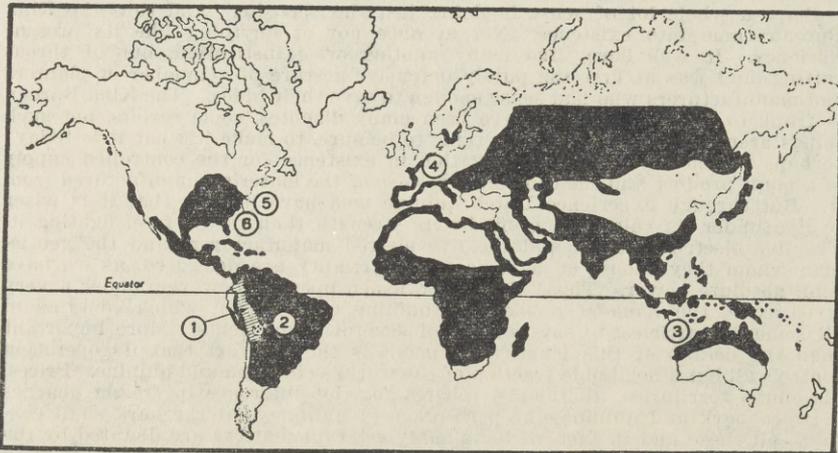
Under Dutch law and under most codes of business ethics the Kina Bureau is unimpeachable. But under a law passed at Washington on July 2, 1880, not only are its practices an abomination but its several members are criminals, and all who sell and all who buy bark and quinine under its rules are no less subject to blame.

If this sounds a shade fantastic it was by no means so when, on April 23, 1928, an Admiralty Action was started by *United States v. 383,340 ounces of quinine derivatives*. This on the theory, of course, that having originated under Bureau auspices, the quinine was tainted with the Bureau's wrongdoing and iniquitous as smuggled goods, although quinine and bark had come into the U.S. duty free for many years.

The quinine was taken from its New York warehouse to the Army base in Brooklyn, not unnaturally causing the staid *Journal of Commerce* to liken the proceedings to the wildest excesses of prohibition enforcement. The villainous owner of the quinine turned out to be R. W. Greeff & Co. of 10 East Fortieth Street, New York, then and now sole outlet in America for Bureau quinine. Overnight, genial President Robert H. deGreeff became a criminal. He was even forced to beg permission of the U.S. courts to go abroad and help settle the mess without thereby becoming guilty of bailjumping as well as quinine-peddling. Other indictments were soon found against the Kina Bureau, against all its individual members, against all the thirteen quinine manufacturers in the world except the two American ones (of whom more presently), and against everyone else instrumental in producing quinine under Kina Bureau rules.

Now the U.S. Department of Justice could never have initiated such proceedings in the absence of a complaint, and this, it turned out, was it:

Though nearly all plantations in Java operate under the Kina Bureau, one rather large one had long kept its freedom. It sent all its bark to the Hoshi Pharmaceutical Co., of Tokyo, an old and respected firm well-versed in the art of quinine extraction. Among Hoshi's customers was the importing-exporting firm of Hosken & Co., 56 Pine Street, New York, which paid a little less than the Bureau price for its Japanese quinine and thus handled, for some time, the only "bootleg" quinine in America.



But late in 1926 the independent plantation decided to join up with the Bureau, held up its bark shipments to Hoshi, and asked the Bureau price for them. In order to insure bark supplies Hoshi joined the Bureau too and thereafter of course charged the Bureau price for quinine. It was the stoppage of this cheap supply in 1927 that inspired Hosken & Co. to file a complaint to the U.S. of a "combination in restraint of trade" in quinine.

It was upon this complaint that the Department of Justice acted so oddly. Among the oddest of its actions was the great meeting "Wild Bill" Donovan called in Paris, in 1928, which was to be all sorts of a showdown. Quinine men turned up, not merely from Europe but from far Java, and Lawyer Oscar R. Ewing of Hughes, Schurman & Dwight, representing U.S. quinine "interests," and of course Wild Bill and his assistant, Israel B. Oseas. There was only one drawback: the representatives of the Kina Bureau, whose presence was essential to the gayety of the party, politely declined to eat cake at the American Embassy. At this embarrassing moment what should the resourceful hosts do? There being exactly nothing to do, the conference broke up and everyone concerned went back where, so to speak, he belonged. The Department of Justice found, ultimately, that it is difficult to dictate to a "combination in restraint of trade" over which it has no jurisdiction—especially when the U.S. happens to need what the combination happens to sell. Notwithstanding this, and the indictments, and the Paris fiasco, all of which it could have ignored, the Kina Bureau sent to Washington the two representatives who had declined to meet their officious friends in Paris.

They were Mr. A. R. vanLine and Mr. S. van Velzen Camphius. When these courteous "criminals" returned to Amsterdam all the indictments had been quashed. Mr. de Greeff's quinine had been restored to him, and the U.S. Department of Justice and the Kina Bureau filed copies of an esoteria document called the "Consent Decree." Just who did the consenting, and to what, meant very little to anyone.

For the Kina Bureau still functions, still sets the world price for quinine, and for bark. Under the decree, it is more "legal," if somewhat more cumbersome, to make contracts in Amsterdam than in New York. This seems to be the chief result of a case that perhaps had some nuisance value, and perhaps some value as the strongest "test case" the monopoly has even become involved in, but not much value else.

QUININE IN THE UNITED STATES

The use of quinine doesn't seem to grow with the population: the normal U.S. consumption holds at about 4,700,000 ounces a year. Slightly less than half of this is the Bureau quinine R. W. Greeff & Co. handles. Last March the price per ounce which, ever since 1922, had been forty cents, suddenly dropped to thirty cents. This has since, owing mostly to the strange nautch dance of the dollar, climbed to fifty-one cents an ounce. But much speculation ensued as to the reason for this sudden 25 per cent reduction. There never has been any real competition here. And none has come from England where, as interested Englishmen somewhat ruefully admit, "In Mincing Lane Quinine is now rarely mentioned."

EXHIBIT 7

DEPARTMENT OF STATE,
July 11, 1960.

MEMORANDUM OF CONVERSATION

Subject: Proposed Disposal of Excess Quinine from Strategic Stockpile.
Participants: W. F. Pelt, Commercial Secretary, Netherlands Embassy; Donald S. Spigler, CSD.

Copies to: E—Mr. Adair, E—Mrs. Donahue, OR—Mr. Bramble, CSD—Mr. Mel-
len, CSD—Mr. Hamilton, WE—Mr. Beaudry/Mr. Cromwell, Embassy The
Hague (2).

Mr. Pelt said he has consulted his Government concerning the proposed disposal of quinine, and that his Government appreciated the opportunity to express its views.

He stated that The Netherlands would have preferred a disposal plan spread over seven years rather than the five years proposed by the United States, but

would not raise a formal objection on this point. However, The Netherlands attached great importance to one provision which it would like to have us add to the disposal plan—a requirement that the successful bidder establish a letter of credit in advance to cover the entire quantity of quinine to be sold.

Mr. Pelt explained that this proposal, if adopted, would help rule out the possibility that an irresponsible speculator might purchase the quinine. Such a purchaser might find himself short of funds after having acquired a portion of the material, and have to dump his holdings on the market in order to obtain funds with which to acquire additional lots. *Comment:* The requirement would also tend to rule out bids by smaller firms with limited capital and less well established financial ratings, in favor of large organizations such as the Dutch quinine cartel.

I told Mr. Pelt that the decision by GSA concerning such details as letters of credit is not made until shortly before bids are solicited, which would be more than six months hence. I pointed out that with respect to the last offering of quinine GSA had imposed just this requirement, and possibly would do so again. I said that I would recommend that the Department suggest to GSA that the requirement be imposed in this case, but that I could give no assurance as to the outcome.

Mr. Pelt found the above approach acceptable, and said that his Government accordingly had no objection to the quinine disposal plan.

EXHIBIT 8

DEPARTMENT OF STATE,
July 15, 1960.

Mr. JOHN CROSTON,
Director, Economic and Marketing Research Division, Defense Materials Service, General Services Administration, Washington, D.C.

DEAR Mr. CROSTON: The Department of State has no objection to the disposal of approximately 13,860,000 ounces of quinine from the national stockpile, in accordance with the plan enclosed with your letter of May 27, 1960, as amended by your letter of June 8, 1960.

The Department recommends that the successful bidder or bidders be required to furnish a letter of credit in advance to cover the entire quantity of quinine involved in each sale, even though deliveries may be scheduled over an extended period. Such a provision would tend to rule out the possibility that a purchaser might find it necessary to sell initial acquisitions of the quinine at reduced prices in order to acquire funds with which to pay for additional lots. Adoption of this recommendation would thus help to ensure avoidance of market disruption.

Sincerely yours,

HARLAN P. BRAMBLE,
Acting Director, Office of International Resources.

EXHIBIT 9

U.S. GOVERNMENT,
GENERAL SERVICES ADMINISTRATION,
Washington, D.C., March 6, 1962.

MEMORANDUM

To: Mr. Henry Brodie, Director, Office of International Resources, Department of State.

From: Deputy Commissioner, Defense Materials Service.

Subject: Set-aside procedure pertaining to disposal of quinine.

In accordance with a telephone request from Mr. Bruce Hamilton of your staff, the following is submitted for your information.

Invitations to bid for quinine were issued on February 23, 1962, to the full mailing list maintained by Defense Materials Service. However, the bid invitation clearly noted on Page 3 that bidding on the quinine offered is restricted to those qualifying as small business concerns. The list includes all potential bidders, both big business and small business, and bidders of foreign and domestic domicile.

The invitation provides for the submission of sealed bids to be publicly opened and read aloud at 11 a.m., on March 21, 1962.

After the bids have been tabulated, and if Defense Materials Service considers the prices bid by the high bidders to be acceptable, this office will request a certification from the Small Business Administration that the high bidders fully meet the criterion as small bidders under the terms of the set-aside. For your official information only, our determination as to an acceptable price will be based on an upset figure equal to the lowest price accepted under the first unrestricted sale which was held on February 2, 1962.

JOHN G. HARLAN, JR.

EXHIBIT 10

MEMORANDUM FOR THE FILES

DEPARTMENT OF STATE,
March 9, 1962.

Subject: Dutch Interest in the Quinine Disposal.

Mr. Pelt of the Netherlands Embassy called, at his request on Mr. Spigler to keep him currently informed. He said that the American Company which is "friendly" to the Dutch Quinine Company has determined that it is ineligible to bid on that portion of the quinine set aside for bidding by American small business firms.

Although the Dutch firm is most interested in this quinine, Mr. Pelt was disposed to advise the firm not to attempt to find ways of participating in this small business offering. The position on this is based on the presumption that the GSA will have an upset price below which bids would not be accepted. He assumed that this price would be the price at which the quinine had been sold at the previous offering (in the previous sale the Dutch firm was the high bidder by a substantial margin). If this analysis is correct, Mr. Pelt felt reasonably certain that little, if any, quinine would be purchased by small business bidders and that the remainder would then be offered by GSA at a later sale on an unrestricted competitive bidding. Mr. Pelt asked whether Mr. Spigler could confirm or otherwise comment on this analysis. Mr. Spigler said he could not undertake to do that but that we would check with GSA and then express such comments as seem possible.

A day or two later, after discussing this matter with Mr. John Harlan, GSA, I phoned Mr. Pelt and said that our comment would be restricted to the following:

(1) The GSA was of course under obligation to maximize the return to the U.S. Government from disposal sales.

(2) If the GSA has an upset price below which it will not accept bids the GSA would not, as it were, tip its hand in advance to prospective bidders. Mr. Pelt said he thought he understood this statement and expressed his appreciation for getting it.

In a subsequent conversation with Mr. Harlan, GSA, he agreed that if a third sale of quinine became necessary after the small business sale had been held he would inform the State Department of the facts in a letter to Mr. Brodie. He would provide this information sufficiently in advance to permit consultations with the Netherlands Embassy.

(JBH).

EXHIBIT 12

15 U.S.C. 644

DETERMINATION OF AWARDS OR CONTRACTS

To effectuate the purposes of this chapter, small-business concerns within the meaning of this chapter shall receive any award of contract or any part thereof, and be awarded any contract for the sale of Government property, as to which it is determined by the Administration and the contracting procurement or disposal agency (1) to be in the interest of maintaining or mobilizing the Nation's full productive capacity, (2) to be in the interest of war or national defense programs, (3) to be in the interest of assuring that a fair proportion of the total purchases and contracts for property and services for the Government are placed with small-business concerns, or (4) to be in the interest of assuring

that a fair proportion of the total sales of Government property be made to small-business concerns; but nothing contained in this chapter shall be construed to change any preferences or priorities established by law with respect to the sale of electrical power or other property by the Government or any agency thereof. These determinations may be made for individual awards or contracts or for classes of awards or contracts. Whenever the Administration and the contracting procurement agency fail to agree, the matter shall be submitted for determination to the Secretary or the head of the appropriate department or agency by the Administrator. (Pub. L. 85-536, § 2 [15], July 18, 1958, 72 Stat. 395.)

I. STRATEGIC AND CRITICAL MATERIALS STOCK PILING ACT

53 Stat. 811, as amended (50 U.S.C. 98-98h)

* * * the natural resources of the United States in certain strategic and critical materials being deficient or insufficiently developed to supply the industrial, military, and naval needs of the country for common defense, it is the policy of the Congress and the purpose and intent of this Act to provide for the acquisition and retention of stocks of these materials and to encourage the conservation and development of sources of these materials within the United States, and thereby decrease and prevent wherever possible a dangerous and costly dependence of the United States upon foreign nations for supplies of these materials in times of national emergency.

SEC. 2. (a) To effectuate the policy set forth in section 1 hereof the President is hereby authorized and directed to determine, from time to time, which materials are strategic and critical under the provisions of this Act and to determine, from time to time, the quality and quantities of such materials which shall be stock piled under the provisions of this Act. In determining the materials which are strategic and critical and the quality and quantities of same to be acquired the Secretaries of State, Treasury, Agriculture, and Commerce shall each designate representatives to cooperate with the President in carrying out the provisions of this Act.

(b) To the fullest extent practicable the President shall appoint industry advisory committees selected from the industries concerned with the materials to be stock piled. It shall be the general function of the industry advisory committees to advise with the President and with any agencies through which he may exercise any of his functions under this Act with respect to the purchase, sale, care, and handling of such materials. Members of the industry advisory committees shall receive a per diem allowance of not to exceed \$10 for each day spent at conferences held upon the call of the President, plus necessary traveling and other expenses while so engaged.

SEC. 3. The President shall direct the Administrator of General Services to—

(a) make purchases of strategic and critical materials with due regard to the objectives set forth in section 1 of this Act and pursuant to the determinations as provided in section 2 hereof, which purchases (1) shall be made, so far as is practicable, from supplies of materials in excess of the current industrial demand and (2) shall be made in accordance with title III of the Act of March 3, 1933 (47 Stat. 1520), but may be made without regard to section 3709 of the Revised Statutes. A reasonable time (not to exceed one year) shall be allowed for production and delivery from domestic sources and in the case of any such material available in the United States but which has not been developed commercially, the President may, if he finds that the production of such material is economically feasible, direct the purchase of such material without requiring the vendor to give bond;

(b) provide for the storage, security, and maintenance of strategic and critical materials for stockpiling purposes on military and naval reservations or other locations, approved by the President;

(c) provide through normal commercial channels for the refining or processing of any materials acquired or transferred under this Act when the President deems such action necessary to convert such materials into a form best suitable for stock piling, and such materials may be refined, processed, or otherwise beneficiated either before or after their transfer from the owning agency;

(d) provide for the rotation of any strategic and critical materials constituting a part of the stock pile where necessary to prevent deterioration

by replacement of acquired stocks with equivalent quantities of substantially the same material with the approval of the President;

(e) dispose of any materials held pursuant to this Act which are no longer needed because of any revised determination made pursuant to section 2 of this Act, as hereinafter provided. No such disposition shall be made until six months after publication in the Federal Register and transmission of a notice of the proposed disposition to the Congress and to the Armed Services Committee of each House thereof. Such notice shall state the reasons for such revised determination, the amounts of the materials proposed to be released, the plan of disposition proposed to be followed, and the date upon which the material is to become available for sale or transfer. The plan and date of disposition shall be fixed with due regard to the protection of the United States against avoidable loss on the sale or transfer of the material to be released and the protection of producers, processors, and consumers against avoidable disruption of their usual markets: *Provided*, That no material constituting a part of the stock piles may be disposed of without the express approval of the Congress except where the revised determination is by reason of obsolescence of that material for use in time of war. For the purposes of this paragraph a revised determination is by reason of obsolescence if such determination is on account of (1) deterioration, (2) development or discovery of a new or better material or materials, or (3) no further usefulness for use in time of war.

SEC. 4. The President shall submit to the Congress, not later than six months after the approval of this Act, and every six months thereafter a written report detailing the activities with respect to stock piling under this Act, including a statement of foreign and domestic purchases, and such other pertinent information on the administration of the Act as will enable the Congress to evaluate its administration and the need for amendments and related legislation.

SEC. 5. The stock piles shall consist of all such materials heretofore purchased or transferred to be held pursuant to this Act, or hereafter transferred pursuant to section 6 hereof, or hereafter purchased pursuant to section 3 hereof, and not disposed of pursuant to this Act. Except for the rotation to prevent deterioration and except for the disposal of any material pursuant to section 3 of this Act, materials acquired under this Act shall be released for use, sale, or other disposition only (a) on order of the President at any time when in his judgment such release is required for purposes of the common defense, or (b) in time of war or during a national emergency with respect to common defense proclaimed by the President, on order of such agency as may be designated by the President.

SEC. 6. (a) Pursuant to regulations issued by the General Services Administration, every material determined to be strategic and critical pursuant to section 2 hereof, which is owned or contracted for by the United States or any agency thereof, including any material received from a foreign government under an agreement made pursuant to the Act of March 11, 1941 (55 Stat. 31), as amended, or other authority, shall be transferred by the owning agency, when determined by such agency to be surplus to its needs and responsibilities, to the stock piles established pursuant to this Act, so long as the amount of the stock pile for that material does not exceed the quantities determined therefor pursuant to section 2 hereof. There shall be exempt from this requirement such amount of any material as is necessary to make up any deficiency of the supply of such material for the current requirements of industry as determined by the Secretary of Commerce. There shall also be exempt from this requirement (1) any material which constitutes contractor inventory if the owning agency shall not have taken possession of such inventory, (2) such amount of any material as the President determines (i) are held in lots so small as to make the transfer thereof economically impractical; or (ii) do not meet or cannot economically be converted to meet stock-pile requirements determined in accordance with section 2 of this Act. The total material transferred to the stock piles established by this Act in accordance with this section during any fiscal year beginning more than twelve months after this Act becomes law shall not exceed in value (as determined by the Administrator of General Services on the basis of the fair market value at the time of each transfer) an amount to be fixed by the appropriation Act or Acts relating to the acquisition of materials under this Act.

(b) Any transfer made pursuant to this section shall be made without charge against or reimbursement from the funds available under this Act, except that

expenses incident to such transfer may be paid or reimbursed from such funds * * *

(e) Section 22 of the Act of October 3, 1944 (58 Stat. 765), is hereby repealed: *Provided*, That any owning agency as defined in that Act having control of materials that, when determined to be surplus, are required to be transferred to the stock piles pursuant to subsection (a) hereof, shall make such determination as soon as such materials in fact become surplus to its needs and responsibilities.

SEC. 7. (a) The Secretary of the Interior, through the Director of the Bureau of Mines and the Director of Geological Survey, is hereby authorized and directed to make scientific, technologic, and economic investigations concerning the extent and mode of occurrence, the development, mining, preparation, treatment, and utilization of ores and other mineral substances found in the United States or its Territories or insular possessions, which are essential to the common defense or the industrial needs of the United States, and the quantities or grades of which are inadequate from known domestic sources, in order to determine and develop domestic sources of supply, to devise new methods for the treatment and utilization of lower grade reserves, and to develop substitutes for such essential ores and mineral products; on public lands and on privately owned lands, with the consent of the owner, to explore and demonstrate the extent and quality of deposits of such minerals, including core drilling, trenching, test-pitting, shaft sinking, drifting, cross-cutting, sampling, and metallurgical investigations and tests as may be necessary to determine the extent and quality of such deposits, the most suitable methods of mining and beneficiating them, and the cost at which the minerals or metals may be produced.

(b) The Secretary of Agriculture is hereby authorized and directed to make scientific, technologic, and economic investigations of the feasibility of developing domestic sources of supplies of any agricultural material or for using agricultural commodities for the manufacture of any material determined pursuant to section 2 of this Act to be strategic and critical or substitutes therefor.

SEC. 8. For the procurement, transportation, maintenance, rotation, storage, and refining or processing of the materials to be acquired under this Act, there is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, such sums as the Congress, from time to time, may deem necessary to carry out the provisions of this Act. The funds so appropriated, including the funds heretofore appropriated, shall remain available to carry out the purposes for which appropriated until expended, and shall be expended under the direction of the President.

SEC. 9. Any funds heretofore or hereafter received on account of sales or other dispositions of materials under the provisions of this Act, except funds received on account of the rotation of stocks, shall be covered into the Treasury as miscellaneous receipts.

SEC. 10. This Act may be cited as the "Strategic and Critical Materials Stock Piling Act".

Approved July 23, 1946.

NOTE: The functions of the President under sections 2, 3, 4, 6, and 8 were delegated to the Director of the Office of Emergency Planning by section 402 of Executive Order No. 11051 of September 27, 1962 (27 F.R. 9683; 3 CFR), which also designated the Director of OEP as an agency for the purposes of clause (b) of section 5 to the extent of authorizing releases by the Administrator of General Services in the event of enemy attack.

2. SUPPLEMENTAL STOCKPILE

68 Stat. 456, as amended (7 U.S.C. 1704)

SEC. 104. Notwithstanding section 1415 of the Supplemental Appropriation Act, 1953, or any other provision of law, the President may use or enter into agreements with friendly nations or organizations of nations to use the foreign currencies, including principal and interest from loan repayments, which accrue under this title for one or more of the following purposes:

(b) To purchase or contract to purchase in such amounts as may be specified from time to time in appropriation acts, strategic or other materials for a supplemental United States stockpile of such materials as the President may determine

from time to time. Such strategic or other materials acquired under this subsection shall be placed in the above-named supplemental stockpile and shall be released therefrom only under the provisions of section 3 of the Strategic and Critical Materials Stockpile Act;

* * * * *
 Approved July 10, 1954.

3. TRANSFERS TO THE SUPPLEMENTAL STOCKPILE

70 Stat. 200, as amended (7 U.S.C. 1956(a))

* * * * *

SEC. 206. (a) Strategic and other materials acquired by the Commodity Credit Corporation as a result of barter or exchange of agricultural commodities or products, unless acquired for the national stockpile established pursuant to the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98-98h), or for other purposes shall be transferred to the supplemental stockpile established by section 104(b) of the Agricultural Trade Development and Assistance Act of 1954 (7 U.S.C. 1704); but no strategic or critical material shall be acquired by the Commodity Credit Corporation as a result of such barter or exchange except for such national stockpile, for such supplemental stockpile, for foreign economic or military aid or assistance programs, or for offshore construction programs, or to meet requirements of Government agencies.

* * * * *

Approved May 28, 1956.

PART 127—JOINT SET-ASIDES

Sec.

127.15 Statutory Provisions

127.15-1 General

127.15-2 Government Procurement Set-Asides.

AUTHORITY: Sections 127.15 to 127.15-2 issued under Pub. Law 85-536, sec. 5, 72 Stat. 385.

§ 127.15 *Statutory provisions.*

SEC. 15. To effectuate the purposes of this Act, small business concerns within the meaning of this Act shall receive any award or contract or any part thereof, and be awarded any contract for the sale of Government property, as to which it is determined by the Administration and the contracting procurement or disposal agency (1) to be in the interest of maintaining or mobilizing the Nation's full productive capacity, (2) to be in the interest of war or national defense programs, (3) to be in the interest of assuring that a fair proportion of the total purchases and contracts for property and services for the Government are placed with small-business concerns, or (4) to be in the interest of assuring that a fair proportion of the total sales of Government property be made to small-business concerns; but nothing contained in this Act shall be construed to change any preferences or priorities established by law with respect to the sale of electrical power or other property by the Government or any agency thereof. These determinations may be made for individual awards or contracts or for classes of awards or contracts. Whenever the Administration and the contracting procurement agency fail to agree, the matter shall be submitted for determination to the Secretary or the head of the appropriate department or agency by the Administrator.

§ 127.15-1 *General.* Set-asides are made by the Government for the purchase of property and services including, but not limited to, contracts for maintenance, repair, construction, research and development, and for the disposal of real and personal property, including timber and minerals.

§ 127.15-2 *Procedures*—(a) *Government procurement set-asides.* (1) Under agreements with Federal agencies, representatives of SBA are assigned to the major Federal procurement installations to screen purchase requirements.

(2) When a procurement or a class of procurements meets one or more of the statutory criteria and there are sufficient numbers of small business concerns considered capable of furnishing the property or services, at fair and reasonable prices, SBA representatives will initiate small business set-asides. Set-asides may be for entire procurements (called 100 percent set-asides) or for portions thereof (called partial set-asides). If the procurement officer does not agree to the set-asides, the SBA representative will attempt to resolve the disagreement with the Head of the local installation. Whenever the SBA representative and

the Head of the procurement installation fail to agree, the matter will be submitted for determination to the Secretary or Head of the procuring Department or Agency by the Administrator of SBA.

(3) In a 100 percent set-aside, the entire procurement is restricted to small business concerns and bids or quotations by large firms will be rejected as nonresponsive. It is SBA policy to request 100 percent set-asides when there is reasonable expectation that bids or proposals may be obtained from a sufficient number of responsible small business concerns so that awards will be made at reasonable prices.

(4) In a partial set-aside, only a portion of the procurement is restricted to small business concerns. It is SBA policy to request partial set-asides when (i) the procurement is not totally set-aside, (ii) it is severable into two or more reasonable lots, and (iii) two or more small business concerns are believed to have the technical competency and productive capacity to furnish a severable portion of the item being purchased by the Government. Insofar as practicable, the set-aside portion shall be such as to make the maximum use of small business capacity.

(b) *Property sales or disposal set-asides.* (1) Under agreements with Federal agencies, SBA assigns representatives to cover major property sales and disposal activities in the regions to screen inventory or proposed sales of real, personal and mixed property, including timber and minerals.

(2) SBA representatives review proposed sales or disposals of Government property, including cost factors and proposed sales method, for the purpose of assuring that a fair proportion of the property for sale or disposal shall be made available for purchase by small business firms, taking into consideration existing preferences and priorities. When SBA representatives believe there is a sufficient number of small business firms capable of competing for the purchase of such property at fair and reasonable prices, the SBA representatives will initiate small business set-asides. Set-asides may be for entire sales (called 100 percent set-asides) or for portions thereof (called partial set-asides). If the disposal officer does not agree to the set-asides, the SBA representative will attempt to resolve the disagreement with the head of the local disposal installation. Whenever the SBA representative and the Head of the disposal installation fail to agree, the matter shall be submitted for determination to the Secretary or Head of the disposing Department or Agency by the Administrator of SBA.

(3) Bids or quotations by firms not qualifying as small business concerns, on any portion of a set-aside property sale or disposal, will be rejected as nonresponsive.

(c) *Awards on procurements, sales or disposals partially set-aside.* (1) Under agreements with Federal agencies, when only one award is made on the unreserved portion (the portion that is open to both large and small bidders), the set-aside portion will be awarded at the same unit price as that paid or received by the Government on the unreserved portion. When multiple awards are made on the unreserved portion, the awards on the set-aside portion will be made at the highest unit price of the unreserved portion in case of purchases by the Government or at the lowest unit price in case of property sales or disposals by the Government.

(2) In partial set-asides involving Government procurement, negotiations for award of the set-aside portion will be conducted by the purchasing officer with responsible small firms who submit responsive bids or proposals on the unreserved portion within 120 percent of the highest unit price awarded on the unreserved portion, beginning with the firm that submitted the lowest bid or proposal.

(3) In partial set-asides involving Government property sales and disposals, negotiations will be conducted by the disposal officer with small firms that bid on the unreserved portion, beginning with the firm that submitted the highest bid on such unreserved portion.

(d) *Withdrawal of set-asides.* If prior to award, the contracting officer considers that procurement of the set-aside from a small business concern would be detrimental to the public interest (e.g., because of unreasonable price), the contracting officer will initiate a request to the SBA representative for withdrawal of the joint set-aside. If the SBA representative does not agree to the withdrawal, he will attempt to resolve the disagreement with the Head of the local procurement or disposal installation, as the case may be. Whenever the SBA representative and the Head of the local installation fail to agree, the matter will be submitted for determination to the Secretary or Head of the procuring or disposal Department or Agency by the Administrator of SBA.

(e) *Participation by small business concerns.* Small business concerns desiring to take advantage of the set-aside program should (1) determine which Government purchasing or disposal offices are most likely to buy items which they can supply or dispose of property they desire to purchase, (2) request placement on the bidders' lists maintained by such offices, and (3) bid competitively on these procurements and disposals. Information concerning counsel and guidance in connection with contracting with the Government, furnished by SBA, is set forth under § 124.8-4.

Effective Date: Dec. 31, 1958. Cite: 23 F. R. 10530.

EXHIBIT 13

[Western Union telegram]

WASHINGTON, D.C., November 18, 1959.

CHEMICAL SERVICE CORP.

New York:

Re your proposal to purchase Government stockpile quinine, please advise if you have any interest in purchasing 50 percent total quantity this material at fixed price 7 cents per ounce. Lot would be made up of approximately one-half of each type and form of the stockpile material. Delivery to be over period of 3 years. Answer required by close of business November 24.

H. F. HOLTZ, *Commissioner, DMS, GSA.*

EXHIBIT 14

OFFICE MEMORANDUM, U.S. GOVERNMENT

GENERAL SERVICES ADMINISTRATION,

September 7, 1956.

To: File—Quinine.

From: Harry LeBovit.

Subject: Meetings held on September 4 and 5 in regard to Quinine Disposal.

A meeting was held on September 4th with Messrs. Morin, Kurzius, Witt and myself for the purpose of discussing the contemplated disposal of surplus quinine from the stockpile. In addition, it was the purpose of this meeting to explore the aspects of a negotiated sale in order to know how to pursue scheduled discussions with the Dutch who are interested in negotiating for this quinine.

The meeting concluded in the general tone that Mr. Kurzius could give no official opinion on negotiation vs. advertised bids, and that in our anticipated conference with representatives of the Dutch Embassy and the State Department, scheduled for September 5th, we would have no power to negotiate. However, we could listen to any proposals that the Dutch representative would make.

The following day 9/5/56 a conference was held with Messrs. Moerell, First Commercial Secretary of the Netherlands Embassy, Brandon of the State Department, Morin, Witt and myself. Mr. Kurzius, who had been invited, did not attend.

There was some preliminary discussion about who would be authorized to negotiate—the U.S. Commercial Representative of the Dutch Quinine Bureau or the Embassy? Although the Dutch representative was not sure about this, it appeared that the Dutch Government prefers to have private business do their own negotiating and the Embassy representative could serve as an intermediary.¹ Mr. Moerell recounted that two or three large Dutch firms are dependent on the quinine business for their existence, and if GSA would attempt to sell quinine on the open market, give away prices, very similar to the experience GSA had with totaquine, would result.

In general, Mr. Moerell, summed up the position of the Dutch by saying they would be interested in the U.S. Government's quinine under two conditions: (1) that the Dutch be permitted to purchase the total quantity, and (2) that there be no general advertising of this sale through the Federal Register. (In other words—negotiated.)

Mr. Moerell said that the Dutch are trying to include other countries in this deal because the investment is quite large and they would like to spread it

¹ NOTE.—There seems to be some confusion regarding this. Please see Memorandum to File of 8/31/56 regarding my discussion with Mr. Vanderwater.

thinner. The Germans and Belgians have been approached and the German firms have indicated their willingness to join. The Belgians, on the other hand, are worried because of their interest in the Congo and the problem of disposing of their own production. The Dutch would also like to include any American firms interested in joining the group. (I know that they have approached several.) The Indonesians have a large interest in this sale because there would be little demand for bark during the disposal of United States Government stocks of quinine.

Mr. Moerell estimated that the world consumption of quinine is a bit smaller than the total U.S. stockpile. He estimated total world consumption to be 425,000 kilograms.

In response to a question by Mr. Morin with regard to the financial responsibility of the Dutch Quinine Bureau, Mr. Moerell said that the Dutch Government would be willing to give the necessary assurances of financial responsibility. It was agreed that in order to sum up the total negotiation the Netherlands Government would provide our State Department with a formal document indicating that they have been consulted with regard to the U.S. Government's desire to dispose of surplus quinine and that the Dutch private interest are desirous of negotiating for the stockpile in order to prevent their market from being disrupted. It was also agreed that the State Department and GSA would have the opportunity to review a draft of such note prior to the final version.

Mr. Moerell inquired what our reaction is to the proposal (attached) as discussed. We said that we would like to see the suggested seven (7) year period reduced, preferably cutting this period in half (3½ years). There has been some talk, previously, that the Dutch had acquiesced to five (5) years. Further that we found the proposed base price, minus 25%, rather vague and would like to see the charges against the base price spelled out either in percentage or in cents. It was also indicated that we thought the price which would result from the present offer would be excessively reduced from the real value of the material. We would like to see the inclusion of a proposal which would provide for the purchase of the entire GSA stocks at a fixed price but that the Dutch could have the option of removing and paying for small quantities periodically.

Mr. Moerell promised to provide us with general data on stocks of quinine and bark on hand in Indonesia and Holland and trade figures on sales and consumption.

EXHIBIT 15

GENERAL SERVICES ADMINISTRATION,
November 27, 1956.

CONFERENCES WITH DUTCH RE QUININE DISPOSAL

A meeting was held on November 20, 1956 in the office of Mr. F. W. Witt, Coordinator for Sales, with Messrs. Moerell and Verven of the Netherlands' Embassy, Mr. Brandon of the Department of State and Mr. Witt and the writer representing this Service.

The basis for this meeting had been provided in a conference of September 5, 1956 when the Dutch Representative promised to obtain data and a formal proposal for the purchase of quinine from the Stockpile, which would permit negotiations. Mr. Moerell thought that he could acquire the necessary information in a few weeks and supply it, in the form of a note, through the Department of State. Prior to the formal submission, it was agreed that we would have the opportunity to review the data.

When the information promised by the Dutch became overdue, I asked Mr. Brandon of the Department of State to follow up. Mr. Brandon called me on November 14th and stated that the information promised to us by the Dutch had not arrived from The Hague and a 10 day extension was requested. I told Mr. Brandon that in view of the numerous prior extensions and delays, no more time should be granted. Mr. Brandon communicated this to Mr. Moerell, who then promised that the information would be available on Monday, the 19th of November.

On the 19th of November, Mr. Brandon called and told me that the necessary documents were available and requested a meeting. This conference was scheduled for the 20th of November in order to permit time to review the proposal.

The discussion on the 20th centered on the general method of handling the disposal of quinine and the various formalities confronting this Service, preliminary to an actual sale. Now that the Dutch have provided a proposal, this would form the basis of a note to the Department of State, which in turn could then make a recommendation to GSA regarding the method of disposition.

It was made clear to the Dutch Representatives that the terms of the Dutch proposal served only as the foundation for negotiations and that nothing discussed at this meeting was to be construed to indicate acceptance or rejection of the proposal.

There was some discussion to ascertain the persons authorized to represent the Dutch and Mr. Moerell said that the quinine interests would designate non-government people for that purpose. Mr. Moerell raised some questions regarding the insertion of a notice in the Federal Register and felt that negotiations should occur prior to such insertion. It was then pointed out that no agreements or contracts could be concluded until the expiration of a 6 months waiting period. However, preliminary negotiations will take place prior to the notice in the Register as soon as the Dutch appoint their representatives authorized to negotiate.

EXHIBIT 16

GENERAL SERVICES ADMINISTRATION,
August 20, 1957.

The Honorable ATTORNEY GENERAL,
Washington, D.C.

DEAR MR. ATTORNEY GENERAL: The Office of Defense Mobilization advised General Services Administration by letter dated January 26, 1955, of its determination, pursuant to Section 2(a) of the Strategic and Critical Materials Stockpiling Act, 50 U.S.C. 98a(a), that the existing requirement for stockpiling quinine was no longer necessary because of obsolescence of quinine for use in time of war. Quinine heretofore stockpiled must be disposed of in accordance with Section 3(e) of the Strategic and Critical Materials Stockpiling Act, 50 U.S.C. 98b(e). This section requires that no disposition shall be made until six months after publication in the Federal Register and transmission of a notice of the proposed disposition to the Congress and the Armed Services Committee of each House thereof. This notice must contain the reason for the revised determination by the Office of Defense Mobilization, the amounts of the materials proposed to be released, the plan of disposition proposed to be followed, and the date upon which the material is to become available for sale or transfer.

On the basis of the revised determination by the Office of Defense Mobilization, General Services Administration published in the Federal Register (20 F.R. 2940; April 30, 1955) and transmitted to the Congress notice of a proposed disposition of approximately 7,618,272 ounces totaquine now held in the National Stockpile. Our attempts to sell the totaquine have, to date, been unsuccessful.

The balance of the quinine contained in the stockpile totals approximately 13,860,000 ounces and meets the requirements of U.S.P. XII. It was acquired by transfer as surplus from the Army, Navy, War Assets Administration and Reconstruction Finance Corporation and by purchase prior to World War II.

The Office of Defense Mobilization further requested in its letter that General Services Administration confer with the Departments of State and Commerce and the International Cooperation Administration in the development of the plan of disposal. The Department of Commerce (Business and Defense Services Administration) and the Department of Agriculture confirmed estimates made by the major quinine producers that world-wide consumption of quinine in 1956 was between 6,500,000 and 7,000,000 ounces and that consumption of quinine within the United States in 1956 was approximately 400,000 ounces. The Department of Commerce, by letter dated January 22, 1957, advised us that small quantities of quinine could be sold into domestic consumption if offered over a long period of time and estimated that at least 15 years would be required at the current domestic usage rate of quinine to dispose of the stockpile material. This estimate is felt to be optimistic. The International Cooperation Administration, by letter dated February 11, 1957, advised that quinine was an obsolete drug and that it had no prospect for utilization of the material. In addition, it should be stated that quinine is currently being sold under the requirements of USP XV and that it will be necessary for purchasers of the stockpile quinine to beneficiate the material up to the requirements of this latter specification. There were at one time two quinine processing factories located in the United States, one operated by Merck and Co., Inc., and the other by S. B. Penick & Co. Both of these factories have now been dismantled and converted to other uses.

On February 15, 1957, the Office of Defense Mobilization forwarded to us a letter from the Department of State, dated December 27, 1956, which enclosed a communication from the Netherlands Ambassador transmitting a proposal

from the Netherlands quinine interests to acquire all 13,860,000 ounces of quinine. Copies of this correspondence are enclosed herewith for your information. The Department of State later advised that the Netherlands quinine interstate referred to in the proposal are composed of the following firms: N. V. Amsterdamsche Chininefabriek, N. V. Nederlandsche Kininefabriek, N. V. Bandoengsche Kininefabriek.

Representatives of this Administration met with attorneys of the Antitrust Division of your Department to review possible antitrust implications prior to further negotiation with the Netherlands quinine interests. At this meeting our representatives were notified that most of the Netherlands, English and Western German quinine interests, including the three Netherlands firms referred to above, were defendants in an antitrust action (Equity No. 44-384) in the District Court of the United States for the Southern District of New York and that on September 20, 1928, a Final Decree was issued perpetually enjoining, restraining and prohibiting said defendants from fixing prices, restraining trade, participating in arrangements for the pooling of profits or territory, discriminating in sales between purchasers, etc. Jurisdiction of the cause was retained by the District Court for the purpose of taking such action as might become necessary or appropriate in carrying out the Decree and for the purpose of entertaining at any time thereafter any application which the defendants might make with respect to the Decree.

This Administration has determined that further negotiations with the Netherlands quinine interests respecting the sale of the stockpile quinine will result in a greater financial return to the Government than would be realized from sale into domestic consumption over a longer period of time. From conversations with its representatives, the Department of State has indicated that it would strenuously opposed domestic sales of the stockpile quinine as this would seriously disturb relations with the Netherlands Government and with the Government of the Republic of Indonesia. There are indications that domestic consumption of quinine is steadily declining and that this trend will continue, thereby further limiting any prospective domestic market for stockpile quinine.

I would appreciate any comments you may wish to make on the proposed sale of stockpile quinine to the Netherlands quinine interests. If you have no objection to the transaction, please advise whether favorable consideration, with regard to said transaction only, might be given to a petition by these firms for relief from the aforementioned Final Decree.

If your reply is in the affirmative, General Services Administration would then proceed with a disposal plan in accordance with the directive from the Office of Defense Mobilization and the provisions of the Strategic and Critical Materials Stockpiling Act.

Sincerely yours,

FRANKLIN G. FLOETE, *Administrator.*

EXHIBIT 17

OFFICE MEMORANDUM, U. S. GOVERNMENT

GENERAL SERVICES ADMINISTRATION,

August 10, 1956.

To: File—Quinine.

From: Harry LeBovit.

Subject: Quinine Disposal.

A meeting was held on June 29, (see memorandum to file dated July 2, 1956), in order to emphasize and end the delays caused by the State Department and the Business and Defense Service Administration in supplying this Service with recommendations regarding the disposal of quinine.

The above mentioned meeting resulted in an agreement that Mr. Weirich of BDSA would contact domestic users or manufacturers of quinine in order to ascertain their interest in it and whether an industry advisory committee would be required in order to place a notice in the Federal Register for this sale.

I have been in communication with Mr. Weirich on July 16, August 3 and August 7; at the last report, Mr. Weirich said that he has contacted both Merck and Company and S. B. Penick & Co.; both firms expressed no interest in the material and did not feel an industry advisory committee meeting would be required. I asked Mr. Weirich whether he could supply this Service with some kind of written recommendation so that we can proceed with this sale. He stated that such a recommendation could not be given until the State Department made their sug-

gestions with respect to the international impact of stockpile sales upon the market for this commodity. I reminded Mr. Weirich that we had been through that before and more than six (6) months have elapsed waiting for a recommendation from the State Department. The market for this commodity is constantly shrinking. Mr. Weirich insisted that I talk to the State Department again and let him know about the outcome.

On August 8 I telephoned to Mr. Nenner of the State Department and reviewed the status of the quinine situation. He told me that Mr. Brandon was handling this specific commodity and since he was on vacation until Monday the 13th he would give me an answer on Monday.

EXHIBIT 18

GENERAL SERVICES ADMINISTRATION,
August 12, 1958.

AMERICAN QUININE CO.,
New York, N.Y.

GENTLEMEN: Reference is made to your letter of August 4, 1958 with regard to the proposed disposal by the Government of quinine.

All information on the disposal of quinine is contained in the official notice published in the August 2 issue of the Federal Register, copies of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. at 15 cents per copy.

Sincerely yours,

JAMES J. ROMEO,
Acting Chief, Agriculture Branch.

EXHIBIT 19

BENDINER & SCHLESINGER INC.,
New York, N.Y., September 30, 1959.

CHEMICAL SERVICE CORP.,
New York 6, N.Y.

SAMPLES OF QUININE SALTS FOR U.S.P. TESTS

QUININE SULFATE POWDER (MERCK)

Description, pass, meets U.S.P. requirements.
Solubility tests (all), pass, meets U.S.P. requirements.
Identification tests, A.B.C., pass, meets U.S.P. requirements.
Water: 4.00 percent, pass, meets U.S.P. requirements.
Residue on ignition: 0.05%, pass, meets U.S.P. requirements.
Chloroform-alcohol insoluble, pass, meets U.S.P. requirements.
Readily carbonizable substances, pass, meets U.S.P. requirements.
Other cinchona alkaloids, pass, meets U.S.P. requirements.

QUININE HYDROCHLORIDE (MERCK). (POWDER)

Description, pass, meets U.S.P. requirements.
Solubility tests (all), pass, meets U.S.P. requirements.
Identification tests, AB, C, pass, meets U.S.P. requirements.
Water: 1.0%, pass, meets U.S.P. requirements.
Residue on ignition: 0.06%, pass, meets U.S.P. requirements.
Chloroform-alcohol insoluble, pass, meets U.S.P. requirements.
Barium, pass, meets U.S.P. requirements.
Readily carbonizable substances, pass, meets U.S.P. requirements.
Other cinchona alkaloids, pass, meets U.S.P. requirements.

Remarks

The Quinine sulfate and Quinine hydrochloride samples meet the requirements of the U.S.P.

Quinine sulfate tablets.—The quinine sulfate in the tablets was isolated and the base extracted according to the U.S.P. Method under "Capsules". The quinine alkaloid was reconstituted as the sulfate and the test for other alkaloids

made according to the tests for other cinchona alkaloids as given in the monograph under the corresponding salts.

Results as follows:

Quinine Sulfate Tablets (Norwich): Other cinchona alkaloids, none.

Evans Meltex Capsules: Other cinchona alkaloids, none.

Anacin #1499 Tablets: Other cinchona alkaloids, none.

Anacin Lot #2858 tablets: Other cinchona alkaloids, none.

Remarks

The tablets and capsules conform to the U.S.P. tests for "other cinchona alkaloids".

Respectfully submitted.

I. SCHWARTZ, *Chief Chemist.*

EXHIBIT 20

OFFICE MEMORANDUM, U.S. GOVERNMENT

GENERAL SERVICES ADMINISTRATION,

June 22, 1956.

To: File—Quinine.

From: Harry LeBovit.

Subject: Quinine Disposal.

Messrs. Vandewater of R. W. Greeff and Company, Inc., and J. H. Vanderheide of Fries Bros. Inc. connected with the Dutch quinine interests visited me on June 21st. The purpose of their call was to discuss the disposal of surplus quinine from the stockpile. Apparently they had been informed by the Dutch Embassy in Washington about State Department discussions regarding the future disposal of quinine from the stockpile and were concerned about the effect on the market such disposal would create.

The following data regarding quinine was provided by the visitors:

Currently quoted consumer price is 28¢ per ounce and the total world consumption at present is 350,000 kilograms. The Dutch are carrying about a two-year world supply in stock, (stored in Holland), and the plantations in Indonesia apparently have about a 10 to 15 year supply. By holding back on these stocks the Dutch are still able to protect the price to some extent. The Belgians are also in the quinine business which was started during the War when plantations were created in the Belgian Congo.

The gentleman proposed that the Dutch would be willing to take over the GSA surplus stocks over a period of 7 years on a year to year basis at a price commensurate with the prevailing market. They indicated that their books would be available for examination.

A second proposal was that the Dutch would be willing to exchange quinidine for the EPS stockpile of surplus quinine, or a third proposal—they would be willing to buy the entire quantity in the stockpile at a pre-arranged price. (They indicated that this would necessarily be much lower than the purchase price based on piecemeal acquisition).

They stated that if the quinine would be purchased from the stockpile by the Dutch, it would require reprocessing in order to bring it up to the quality of that used by the processors. The stocks held in the stockpile were purchased according to the specifications contained in U.S.P. 11 and 12.

Mr. Vandewater mentioned that a quantity of quinine was bought by the Treasury Procurement in 1940 under Public Law 117—76th Congress. Reference was made to Section 4 of this act which stated that this particular quinine could not be sold and could not be released for specific use in time of war or an emergency, etc. I told these gentlemen that I was not familiar with the background of the acquisition of the quinine referred to, however, it would appear that the disposal of this material would now be governed by Public Law 520, and that I would ask our attorneys to check on it. I requested them to submit their proposals in writing as soon as they could.

EXHIBIT 21

9. Now as to the price the U.S. Government can expect, one has to consider the fact that the quinine will have to be reworked. If the manufacturer-buyer should use the quinine for his USP XV sales only, the liquidation would take

far too long. The manufacturer has also to supply his customers a uniform quality, and this quinine, being manufactured 14 years ago, cannot satisfy the present requirements.

Further it has to be taken into account, that the manufacturer-buyer must reduce his own production, so as not to create extra competition. This reduction causes a higher costprice.

EXHIBIT 22

NEW YORK, N.Y., August 15, 1958.

GENERAL SERVICES ADMINISTRATION,
Washington, D.C.

(Attention: Mr. James J. Romeo, Acting Chief, Agriculture Branch.)

GENTLEMEN: We were astounded to read in the August 11th issue of the "Oil, Paint & Drug Reporter" that the General Services Administration was planning to make a deal with the European Quinine producers to sell the Quinine in the United States Government stockpile.

Apparently the quinine monopoly won't stay dead. For years the United States Government fought a losing battle against it and even had our world war effort hampered by it only a few years ago. Now an agency of the government is about to put it back in business!

What are the reasons given by the General Services Administration for refusing to sell to American firms? First, it says that demand in the U.S.A. is declining and that the European demand is relatively large. Large in relation to what? European demand has never been as large as the demand here, and European demand is declining also. The sales of the European producers have been greater because they sell to the tropical countries where the demand is great. So can we if we have the quinine.

The second statement by the General Services Administration is that there are no longer any facilities in this country for reprocessing quinine. This is absolutely false.

The third statement is that the quinine will have to be reprocessed to meet present standards. If the quinine has been properly stored this is only partially the truth. The requirements of the U.S. Pharmacopeia have been changed slightly since the quinine was stockpile, but much of it should easily pass the latest requirements. However, most of it will ultimately be sold in tropical countries where the standards in use have not changed. For example, large quantities are used in Africa where the Portuguese Pharmacopeia is used. It is doubtful whether any of the quinine in the stockpile would be reprocessed if sold to a European cartel.

If the past is any guide to the future, it is easy to learn what will happen. The cartel will buy the quinine at a low price from the General Services Administration. This will remove the only barrier to the operation of the old monopoly, because it cannot operate with a large supply hanging over the market. The price of quinine to the American buyers will immediately be raised. The millions of poor people in the tropics will again have to pay tribute to the monopoly and many of them will again be condemned to death because they cannot pay.

There is evidence tending to show that the European quinine producers have already made agreements to control the price and distribution of quinine and its related alkaloids. Congress has been investigating situations far less sinister than this. The Department of Justice has taken action against American Pharmaceutical manufacturers for far less cause than this. This is a situation which calls for drastic action without delay.

We urge you to reconsider your decision to sell the U. S. Government stockpile of quinine exclusively to European firms, and we ask that you let us know promptly of your decision.

Very truly yours,

AMERICAN QUININE CO.

EXHIBIT 23

FOOD AND DRUG ADMINISTRATION,

December 4, 1958.

Contract No. CS-OOP-22531 (SCM).

DIRECTOR,
 Inspection Division,
 Defense Materials Service,
 Washington, D.C.

GENTLEMEN: In an agreement dated August 21, 1958 and referenced as above, the Food and Drug Administration agreed to analyze certain samples of drugs.

The examinations of these samples of Quinidine Sulfate, Quinine Hydrochloride, Quinine Sulfate and Totaquine have now been completed. Original agreement with our Administration called for analyses of a total of 37 samples. Substantially more than this number were received in our laboratory.

In a telephone conversation between Mr. Edward Coombs of your office and M. D. Voth, it was agreed on October 9, 1958 that certain samples would not be analyzed. On October 28, 1958 in another telephone conversation it was agreed to not analyze any of the Totaquine tablets. Therefore, the two lots of Totaquine tablets from the Casad Warehouse, New Haven, Indiana, consisting of 524 cases, 24 bottles each and 424 cases, 24 bottles each were not analyzed. We did make an analysis of a total of 35 samples with qualitative tests for identity on a number of other subdivisions.

We are summarizing the results of examinations below. The first group includes Quinidine Sulfate, Quinine Sulfate and Quinine Hydrochloride. Each one of these items is currently official in the U.S.P. XV and examinations were made to check conformance of the samples with the standards outlined therein. Samples examined are as follows:

Item	Warehouse	Identification
Quinidine sulfate	Somerville, N.J.	GS-OOP-3480(SCM), composite.
Do	La Carne, Ohio	NSP-5(40), lot No. 84 M G.
Do	do	NSP-5(40), lot No. 23 M H O.
Do	New Bedford, Mass.	GS-OOP-7168, lot No. A-101.
Do	do	GS-OOP-2258, lot No. A-102. ¹
Do	Binghamton, N.Y.	ECA 12767, sample No. 5.
Do	do	ECA 23415, sample No. 6.
Do	do	ECA 607, sample No. 7.
Quinine hydrochloride	do	NSP 42, sample No. 3.
Do	do	NSP 4, sample No. 4.
Do	Mechanicsburg, Pa.	NSP 30, sample No. 11.
Do	do	NSP 28, sample No. 12.
Do	Stockton, Calif.	NSP 22, 26, lot No. 293154 comp. 8 bottles.
Do	do	ESP 22, lot No. 43002 comp. 4 bottles.
Do	La Carne, Ohio	NSP 36, sample No. 3.
Quinine sulfate	do	NSP 31, sample No. 1.
Do	do	NSP 4, sample No. 6.
Do	Mechanicsburg, Pa.	NSP 20, sample No. 9.
Do	do	NSP 28, sample No. 10.
Do	Binghamton, N.Y.	NSP 39, sample No. 1.
Do	do	NSP 43, sample No. 2.
Do	Pueblo Ordnance	Depot TPS 37129, lot No. 2465, sample No. 16.
Do	do	Depot TPS 37129, lot No. 2422, sample No. 17.
Do	do	Depot TPS 37129, lot No. 2356, sample No. 18.
Do	do	PO Mo CM 77, lot No. 9 D, sample No. 19.
Do	do	PO Mo CM 77, lot No. 208A, sample No. 20.
Do	do	PO Mo CM 77, lot No. RF 185A, sample No. 21.
Do	do	Box No. 630, sample No. 15.
Do	New Haven, Ind.	ESP 49, lot No. 42682, sample No. 4.
Do	do	SCMLS 2216, lot No. 9NKF 1081, sample No. 12. ²

¹ Some of this identification was on bottle but not on transmittal record.

² The identification above was on bottle but not on transmittal record.

Results of our examinations of the above identified samples showed that they all conformed to the requirements of the U.S.P. XV.

The second group of samples examined consisted of Totaquine. This article is currently official in the National Formulary Tenth Edition. The following sample of Totaquine examined were found to comply with the NF X requirements for description, loss on drying, residue on ignition, quinine content and total anhydrous crystallizable cinchona alkaloids.

Item	Warehouse	Identification
Totaquine.....	Binghamton, N.Y.	NSP 21, sample No. 8.
Do.....	La Carne, Ohio.....	NSP 36, sample No. 2.
Do.....	New Bedford, Mass.....	GS-OOP-2258(SCM), white drums 8631 and 7965. ¹

¹ The identification above was on bottle but not on transmittal record.

Two samples of Totaquine failed to comply with N.F. requirements for total anhydrous crystallizable cinchona alkaloids as follows: Sample from Mechanicsburg, Pa., identified NSP 28 Sample No. 13 was found to contain total alkaloids of 92.9%. The sum of the percentage of cinchonine, cinchonidine quinine and quinidine was 71.5%. The difference between these figures was 21.4% whereas the NF allows a maximum of 2% difference. In a similar fashion sample identified NSP 20 Mechanicsburg, Pa. sample No. 13 was found to show total alkaloids of 93.9% with the sum of percentages of cinchonine, cinchonidine quinine and quinidine of 76.9%, difference 17.0%.

There is a ready explanation for failure of these latter two samples of Totaquine to conform with the present NF X requirements. In the early stages of the manufacture of Totaquine during World War II production of this product was geared to conform with the requirements of the USP XII. These two samples conform with the official requirements that were in effect at that time. Subsequent developments in official requirements called for elimination of practically all of the amorphous alkaloids of cinchona that were previously permitted and, thereby, yielded a whiter and more acceptable product both from the esthetic and presumably from the physiological point of view.

In addition to the samples above reported, qualitative tests were made (organoleptic and thallioquin tests) on the following samples of quinine sulfate from New Haven, Indiana:

Sample No.—	Lot or batch
1.....	1-NKF- 562
2.....	4-NKF- 753
3.....	NKF 1242
4.....	8-NKF 942
5.....	11-NKF 1175
6.....	5-NKF 853
7.....	6-NKF 872
8.....	13-NKF 1268
9.....	1-NKF 568
10.....	10-NKF 113
11.....	8-NKF 975
13.....	2-NKF 607
14.....	12-NKF 1268
15.....	8-NKF 971
16.....	3-NKF 671

Also New Haven, Ind., NSP-49.

Sample No.—	Lot or batch
1.....	None.
2.....	40362.
3.....	KSJ.
6.....	Miscellaneous.
7.....	5-6694.
8.....	4-9528.
9.....	40361.
10.....	Various lots.

The qualitative tests indicated presence of quinine.

To recapitulate, of all the samples examined two Totaquines failed to comply with the current official standards. These two discrepancies, as have been pointed out, are quite apparently due to their manufacture at a time when less stringent standards were applicable.

We are attaching 1080 voucher billed for 60 hours @ \$5.00 per hour for a total of \$300.00. The time spent on these samples was somewhat more than the time

contracted for; however, since to a certain extent these samples were analyzed simultaneously with other work, we are billing for only 60 hours.

Attached are original copies of "Test Request and Sample Transmitted Record," forms on all above samples. If there are any questions regarding this work, please feel free to write us.

MENNO D. VOTH,
Chief Chemist, New York District.

EXHIBIT 24

SMALL BUSINESS ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR,
Washington, D.C., June 23, 1961.

Mr. MAURICE J. CONNELL,
Commissioner, Defense Materials Service,
General Services Administration,
Washington, D.C.

DEAR MR. CONNELL: On Monday, June 26, 1961 a conference was held by members of our respective staffs at the office of Mr. George K. Casto, Director, Project Administration Division, Defense Materials Service to discuss the feasibility of setting aside for exclusive small business bidding the remaining stockpile of quinine soon to be offered for sale.

Discussion brought out that the domestic market for quinine is between 750,000 and 1,000,000 ounces annually. On the other hand, several domestic small business firms have expressed to the Small Business Administration an interest in bidding on approximately four million of the nine million plus ounces of quinine sulphate to be offered for sale by the General Services Administration. The Defense Materials Service is primarily interested in disposing of the quinine at the highest price for the Government. It was pointed out that a partial set-aside for domestic small business bidding would tend to stimulate competitive bidding in the interest of obtaining maximum price. In consideration of all factors the Small Business Administration formally recommends that there be set-aside for exclusive small business bidding, as provided for by Section 15 of the Small Business Act, fifty (50) percent of the nine million plus ounces of quinine sulphate to be offered for sale by the General Services Administration.

Your counsel, Mr. Edwin Kurzius, asked that we provide you with a statement of conditions for eligibility to bid on Government property disposals. Accordingly, the following criterion applies to a partial set-aside. To be eligible for consideration for the set-aside portion of an item, the small business concern must have submitted a responsive bid on an item for disposal at a unit price not less than 80 percent of the highest unit price for such item awarded under the non-set-aside portion. Complete criteria for property sales set-asides for small business are now being prepared for inclusion in the Federal Procurement Regulations.

As requested, the following named firms have indicated to us an interest and desire to bid on the forthcoming quinine sale together with their estimated requirements over the next two years. A preliminary field check of the firms listed below indicates that each qualifies as a small business as defined by Small Business Size Standards, Part 121.3-9.

<i>Name and address</i>	[In ounces]	<i>Estimated requirements</i>
Hexagon Laboratories, Inc., 3536 Peartree Ave., New York, N.Y.	-----	2, 000, 000
Vitamix Pharmaceuticals, Inc., Lancaster Ave., at 51st St., Philadelphia, Pa.	-----	200, 000
Richlyn Laboratories, 3725 Castor Ave., Philadelphia, Pa.	-----	200, 000
Chemical Service Corp., 82 Beaver St., New York, N.Y.	-----	500, 000
American Quinine Co., 15 William St., New York, N.Y.	-----	1, 000, 000
Robin Pharmacal Corp., 30-30 Northern Blvd., Long Island City, N.Y.	-----	10, 000
Excel Pharmacal Co., Dempsey Ave., Edgewater, N.J.	-----	Not available.

We have advised our field offices to check promptly for additional small companies having an interest in bidding on the sale and will make available to you the firm names and estimated requirements as soon as received.

As explained at the Monday meeting, the SBA will undertake a credit investigation of bidders and will issue if requested a Certificate of Competency to those concerns qualifying under our regulations.

I certainly appreciate the cooperation of your office in this matter and look forward to favorable consideration of this recommendation.

Sincerely,

IRVING MANESS,
Deputy Administrator.

EXHIBIT 25

GENERAL SERVICES ADMINISTRATION,
July 26, 1961.

Mr. IRVING MANESS,
Deputy Administrator,
Small Business Administration,
Washington, D.C.

DEAR MR. MANESS: Your letter of June 28, 1961, formally requested that there be set aside exclusively for small business bidding, under the provisions of Section 15 of the Small Business Act, fifty percent of the approximately 9,524,000 ounces of quinine in the form of quinine sulphate to be offered for sale by General Services Administration from the national stockpile.

The sale of this quinine is to be made in accordance with the notice of plan of disposition published in the Federal Register pursuant to the provisions of Section 3(e) of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98b(e)). The notice, which was published in the Federal Register (25 F.R. 7556) on August 10, 1960, and transmitted to both Houses of the Congress, states that GSA proposes to transfer said quinine to other Government agencies or "to sell said quinine by formal advertising."

Section 3(e) of the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98b(e)) requires such a notice at least six months in advance of the disposition and further requires that "The plan and date of disposition shall be fixed with due regard to the protection of the United States against avoidable loss on the sale or transfer of the material to be released and the protection of producers, processors, and consumers against avoidable disruption of their usual markets." The publication of the notice of proposed disposition in the Federal Register and transmission of such notice to the Congress serves to give the widest possible publicity to the disposal.

The plan to sell quinine by formal advertising was developed as a result of an Industry Advisory Meeting held April 21, 1960, under the auspices of the Business and Defense Services Administration of the Department of Commerce. That meeting was held for the purpose of devising an acceptable method of "disposal of surplus quinine from Government stockpile" which would best protect industry from the disruption of the normal markets and at the same time prevent avoidable loss to the Government in the sale of the quinine.

This Industry Advisory Meeting, under the chairmanship of W. R. Koster, Chemical and Rubber Division, BDSA, was attended by representatives of BDSA, GSA, OCDM, Department of State, SBA and ICA, as well as by representatives of the principal industrial quinine users in the United States. Included among the industry representatives were representatives of Hexagon Laboratories, Inc., Chemical Service Corp. and American Quinine Co. The minutes of the Industry Advisory Meeting show that the group concluded that "... the offering should be made by the sealed bid method rather than a negotiated procedure" and that "The quinine should be put up for unrestricted bid by American and Foreign interests, provided payment is in U.S. dollars."

The regulations of SBA dealing with partial set-asides involving Government property sales and disposals which are published in the Code of Federal Regulations (Title 13, Chapter I, Section 127.15-2(c)(3)) state that "negotiations will be conducted by the disposal officer with small firms." The setting aside of approximately fifty percent of the quinine for small business bidding pursuant to those published regulations would place restrictions upon the sale which would be incompatible with the full, free and open competition that was contemplated by the Industry Advisory Meeting and by the notice published in the Federal Register. While the published notice can be changed by the publication of a new notice in the Federal Register and transmittal of it to the Congress, such a procedure would involve a six-months' delay with a possible loss of the favorable market that now exists for quinine.

You state that complete criteria for property sales set-asides for small business are now being prepared which will presumably restrict eligibility of small

business concerns to those which have submitted a responsive bid on an item at a unit price not less than 80 percent of the highest unit price for such item under the non-set-aside portion. Assuming that such criteria could be applied to a sale by "formal advertising", as now provided for in the published notice with respect to quinine, it is not clear how the regulations of SBA as now published can be departed from (see, in this connection, *Vitarelli v. Seaton*, 359 U.S. 535 (1959), *Service v. Dulles*, 354 U.S. 363 (1957), and *Watson v. U.S.*, 163 F. Supp. 755 (Ct. Cl. 1958)) or how the Government would be protected from avoidable loss unless the high bidder for the set-aside portion was willing to meet the price bid on the non-set-aside portion.

In view of these considerations, especially the requirements of Section 3(e) of the Strategic and Critical Materials Stock Piling Act, and other questions relating to the operation of the set-aside, we would appreciate an opportunity of discussing this matter in a conference with you at your earliest convenience.

Sincerely yours,

MAURICE J. CONNELL, *Commissioner*.

EXHIBIT 26

B. B. Wallace, Lynn R. Edminister, *International Control of Raw Materials*, Brookings Institution, Washington, D.C., 1930, pp. 349-351

CINCHONA BARK, QUININE (HOLLAND)

1892 Formation of first quinine accord of German and Dutch producers, resulting in rise of quinine prices and depression of prices of cinchona bark to the Javanese producers.

1894 Organization of Bandoeg factory in Java—destined to become the biggest single factor in the industry.

1913 First major quinine convention. Agreement between quinine manufacturers and producers of cinchona bark, guaranteeing a minimum price to producers of bark for a period of five years, obligating quinine factories to take over jointly the bark equivalent of 515,000 kilos of quinine sulphate, prohibiting planters from selling bark to other than contracting factories, and authorizing the East Indian government to put up a factory with a maximum capacity of 12,000 kilos per year to supply itself and the native population.

Establishment of the Kina Bureau at Amsterdam, with directorate of six members (three chosen by producers and three by manufacturers) and a neutral chairman, to direct the operation of the foregoing agreement, with full power to allot supplies of cinchona bark and to fix prices of quinine in all the markets of the world. This was the first really comprehensive quinine convention.

1918 Expiration of the 1913 agreement and conclusion of a second accord, through December, 1923, between the Dutch factories (with certain foreign interests remaining outside) and about 90 per cent of the Javanese growers.

1924 Renewal of quinine convention, covering period January 1, 1924, to December 31, 1928, and based in large measure upon negotiations during 1921 with the union of producers adhering to the second convention.

1928 Legal proceedings by the United States Department of Justice against the quinine monopoly, culminating in "consent decree" prohibiting it from engaging in monopolistic operations *within the United States*, such as fixing resale prices, allotments of territory, etc.

Convention of producers and manufacturers renewed for five years. Thus, the plantation harvesting, allocation, and prices of bark and the prices of sale and resale quinine are controlled from Amsterdam by a group of related organizations, dominated by the Dutch, in which nearly all Javanese planters and all the quinine manufacturers in the world, except in the United States, are interested.

W. L. HOLLAND, *COMMODITY CONTROL IN THE PACIFIC AREA*, STANFORD UNIVERSITY PRESS, 1935, PP. 293-297

CINCHONA RESTRICTION

In spite of the various measures taken by the Association of Cinchona Producers in Netherlands India, in order to limit production, the consequences of an over-production of cinchona have become more and more evident. The production of cinchona bark is twice as large as the consumption. The production

of sulphate of quinine from bark increased from 600,000 kg. in 1913 to 1,100,000 in 1932; meanwhile the yearly consumption remained steady at some 500,000 kg. The Netherlands Indian Government has thus felt obliged to interfere because it was to be expected that those producers not members of the Association of Cinchona Producers, and unwilling to limit the sale of their product, would seriously aggravate the over-production, and thus cause a dislocation of the world cinchona market. The maintenance of a regular cinchona production is of importance not only to Netherlands India, but, for obvious hygienic reasons, to the whole world. Therefore in December, 1933, two bills for regulating cinchona production were presented to the People's Council of Netherlands India, one proposing a restriction of the cinchona export, the other a restriction of the cinchona area.

A few remarks on the development of the cinchona industry in Netherlands India and on the history of the Cinchona Producers' Association may be useful as an introduction to the recent regulation. During the years 1884-1913 the cinchona market had suffered from heavy price fluctuations, which made cultivation very risky. Especially because cinchona cultivation requires the yearly investment of considerable capital, which yields no full return until after fifteen years, the uncertainties of the market often caused serious losses to the producers.

The Government encouraged cinchona cultivation in those years. In a few years the price per kilogram of sulphate of quinine fell from 51.50 to 18 guilders; in 1896 the price was as low as one-tenth of the price in 1884. In spite of the sharp fall in the price of bark, the manufacturers of quinine in Europe nevertheless realized a high price for their product. In order to restore the relation between the market price of bark and that of quinine, a quinine factory where the producers could sell their bark was established in Bandoeng in 1900. The reaction of the European factories was a lowering of the quinine price even below the cost price. In consequence of the low market price the area of the cinchona plantations was reduced; this resulted after some time in a shortage of quinine, which made the price rise. Again the plantations were extended, with the result that the market price decreased sharply once more. There can be little wonder that, in consequence of the repeated disappointments, private initiative was discouraged from cinchona cultivation in spite of the stimulation of the Government.

The Director of Agriculture considered a stabilization of quinine prices to be the only method to keep up a sound cinchona industry able to meet the increasing need of quinine. He convinced the planters of the benefits of an agreement with the manufacturers according to which the planters would obtain the security of realizing a price for their bark corresponding to the world consumption, and the manufacturers on the other hand could depend on a regular supply of bark at a price in a reasonable proportion to quinine prices. In 1913 the first Cinchona Agreement came into effect. An Association of Cinchona Producers was established with the purpose of regulating the sale of the cinchona bark in accordance with the market demand and of improving the market price in this way. This free Association, of which almost all the cinchona producers were members, had had favourable results in that it caused an improvement of the market price; it has, however, not resulted in a diminution of the cinchona production.

The danger of such a producers' agreement is the risk of a disproportionate inflation of the price. The Netherlands Indian Government, which produces 10 per cent. of the total production in its own plantation, foreseeing the danger of price inflation, consented to enter as a producer into the agreement, only on condition that every producer would co-operate to deliver the quinine at a low price in malaria territories, and with the proviso that the Government would terminate the partnership when it considered the agreement to be an impediment to a cheap quinine supply.

After difficulties, the cinchona producers in co-operation with their buyers stabilized the price in 1927 at 35.50 guilders per kilogram sulphate of quinine. This price is often considered to be too high in relation to the cost price. During the period 1928-1930 the area in Java planted with cinchona decreased from 17,260 to 16,140 hectares, that in Sumatra increased from 2490 to 2950 hectares; the decrease of the total area does not point to an extraordinarily remunerative industry.

In 1931 the Association of Cinchona Producers applied to the Health Organization of the League of Nations with the proposal to deliver a yearly quantity of 500,000 kg. of quinine at a price of 20 guilders instead of 35.50 guilders, on

condition that this quinine would not be sold, but would serve only to supply the natives in malaria countries. This quantity would be sufficient for 25 million malaria patients; however, hardly any use has been made of this offer up to the present.

When the results of the present Cinchona Agreement are considered, the advantages may be summarized as follows. The intermediate trade, which in former years kept large stocks of quinine in order to inflate the market price, has been eliminated from the market. The industry no longer suffers from heavy price fluctuations. The contract opens the possibility to supply the malaria territories with cheap quinine. The agreement has tried to regulate cinchona production in accordance with consumption; in this point, however, it has not succeeded. In fact, production has increased considerably, while the consumption has remained stationary, so that there is at present a considerable over-production.

In a case of over-production a restriction measure can only have any success when at the same time the planted area is not extended and when the cultivation methods do not lead to a higher production per hectare. But the potential production per unit has considerably grown in the course of years, and may be calculated at least at 50 per cent above the 1913 figure. Thus the disproportion between production and consumption has gradually increased since 1913, mainly as a result of this increase of the potential production; in 1944, of 580 tons of sulphate of quinine tendered, 450 tons were sold; in 1930, while 1020 tons were tendered, only 510 tons were sold.

The rather high cinchona price has stimulated outsiders to start cultivation, and thus the price regulations has had a reverse effect. The outsiders took advantage of the steady market price without having the drawbacks of the production restriction. When in 1932 the Cinchona Agreement was extended to 1938, this fact again caused an increase of the outsiders' plantations. This extension is considered too dangerous to the Netherlands Indian cinchona industry, though at present the Producers' Association controls 98 per cent, of the cinchona plantation. In fact the quantity of cinchona bark tendered on the free market by outsiders, and consisting partly of native bark, partly of bark from an unknown origin, is larger than 2 per cent of the production. When this quantity is calculated, at 3 per cent of the total potential production, and it is considered that the associated producers have sold in 1932 30 per cent of their potential production, it is clear that the outside production means at present almost 10 per cent of the production of the Cinchona Association. It is to be feared that, without a legal limitation, this percentage of the outsiders will quickly increase.

In order to prevent such an increase the Government felt obliged to draw up a scheme of regulation of the cinchona production which was laid down in the Cinchona Export Ordinance and the Cinchona Plantation Ordinance, coming into force in February 1934. These legal regulations covering all the producers, and thus equally dividing the disadvantages of restriction, may be supposed to avoid the serious failings of the free producers' association and, therefore, to be able to redress the balance between production and consumption.

The Cinchona Export Ordinance prescribes that for a number of years the export of cinchona bark will be allowed only with a license to be given by the Director of Agriculture, Industries and Commerce. It has been determined provisionally that the regulation will remain in force till March 1937; it will be continued or suspended by Government decree according to circumstances. The total quantity to be exported will be determined every year by Government decree; this quantity may, however, be raised in the course of a year whenever this seems desirable in view of the needs of consumers. The latter prescription in particular has been inserted with a view to the supply of cheap quinine to malaria territories. Moreover, the Governor-General may prematurely terminate a license year whenever the promise of the producers and manufacturers to deliver a yearly quantity of cheap quinine to the Health Organization of the League of Nations is not being observed. An Advisory Committee will be appointed to inform the Government as to the normal production of bark of each estate and the quantity to be allowed for sale.

The present quinine stock will be included in the total export quantity of the first restriction year. As regards contracts already concluded, a quantity amounting to 75 per cent., 50 per cent. and 25 per cent. respectively will be allowed in excess of the export quotas to be prescribed during the first three restriction years. The total export quantity to be fixed by Government decree for each restriction year will be divided among the cinchona estates according to their normal production, to be determined by the Director of Agriculture, In-

dustry and Commerce. The production regulation includes all the cinchona producers—namely, the members of the Cinchona Association, the producers who are not members, and the native producers.

The division of the export quantity differs as between the members of the Cinchona Association and the other producers; the quantity to be exported by the former is fixed as a whole by the Director of Agriculture and divided among the members by the Association; as to the other producers, the Director of Agriculture stipulates the quantity of the export license of each producer separately. It may be considered an advantage that the restriction will include the native producers, as otherwise wild native cultivation might partly frustrate the effect of the restriction. In the last few months of 1933 native cinchona plantations were strongly encouraged by Japanese. It still remains to be seen how far a control of the native cultivation will be practicable.

The export of cinchona seed and plant material will also be prohibited during the same period. The Cinchona Plantation Ordinance, passed at the same time, prohibits all extension of cinchona plantations; it is permitted to sow or to plant cinchona only when the new plantation replaces a previous cinchona area and does not exceed the area of that which has been pulled up. This prohibition will also apply to the native plantations. No decrees executing both the ordinances have yet been published (February 10, 1934), but it may be expected that in course of time the restriction measures will restore some degree of stability to the cinchona market.

EXHIBIT 27

DEPARTMENT OF STATE,
August 23, 1956.

BACKGROUND OF CARTEL DEVELOPMENTS IN THE QUININE INDUSTRY

Quinine is derived from cinchona bark which is found primarily in Indonesia and in Latin America. The Indonesian product is of much higher quality. Quinine is manufactured in Europe and the U.S., as well as Indonesia.

EARLY CARTEL ARRANGEMENTS

Although trade restrictions in this industry date back to 1892, the first effective international cartel was organized in 1913. In that year European and Indonesian manufacturers entered into an agreement with Indonesian planters¹ to protect their mutual interests. Under the agreement they organized a "Kina Bureau" to supervise its operation and settle any controversies which might arise. The Bureau was delegated the function of establishing bark delivery quotas among the various planters and fixing minimum prices for such deliveries. Under the agreement manufacturers were required to buy certain minimum supplies each year. If any manufacturer needed bark in excess of this minimum, the Bureau determined the extra amount that could be acquired. It also fixed sales prices which could be charged by manufactures for quinine. All bark was required to be shipped to the Bureau's agency at Amsterdam so that all world manufacturers, whether or not parties to the agreement, had to buy Java bark from the Bureau through this centralized source. Indonesian producers were allowed to purchase bark directly in Java provided its use was confined to Indonesia.

The Bureau was made up of representatives of planters and manufacturers in equal numbers, the latter consisting of members of Netherlands, England, France and Germany. Because of the inability of the French, British and German manufacturers to participate in negotiations during World War I, the Netherlands and Indonesian manufacturers represented the others in renewing the accord with the planters when it expired in 1918. It is known that they recognized the manufacturers exclusive representatives in negotiating the agreement's renewal in 1923 and again in 1928, the latter for a ten year period. Although the American manufacturers do not appear to have been parties to this cartel, they were dependent upon the Kina Bureau for cinchona bark. As a result of the cartel's restrictions, only three American firms produced quinine prior to and during World War II.²

¹ Indonesian manufacturers are in Bandoeng; cinchona is grown in Java.

² Merck, New York Chemical and Quinine, Graves.

U.S. ANTITRUST ACTION

The effects of the cartel arrangements between 1913 and 1928 led to a U.S. Federal Grand Jury investigation of the quinine market in the latter year. The Grand Jury brought an indictment which in itself described the effect of the prevalent cartel practices on U.S. availability.³ The charges cited a conspiracy among European manufacturers designed to deprive the U.S. market of the benefits of competition. They were specifically charged with price-fixing of cinchona bark and its derivatives, restrictions on quinine production, and attempts to coerce American manufacturers into becoming parties to restrictive agreements. There was further evidence that the Kina Bureau and its New York selling agency were enforcing a market-sharing arrangement for bark and its derivatives in the United States.

Although the Government claimed legal jurisdiction over the cartel in view of its effect upon the American market, it was clear that effective action would be difficult since the principal defendants remained outside the United States. However, a consent decree was negotiated with the principal defendants in 1928, whereby they refrained from fixing retail prices in the United States of cinchona bark or derivatives, dividing profits or territory within the United States, discriminating in price among purchasers within the United States, or maintaining in force and contracts which would deny purchasers the right to deal in the products sold by a competitor.

Throughout the 1930's American quinine manufacturers attempted to obtain permission from the Netherlands manufacturers to carry larger stocks in the United States, but such requests were invariably refused. During the Anti-Trust investigation, in order to provide a method of collecting fines in the event of a criminal conviction, the Government had seized stocks in the United States belonging to Netherlands manufacturers. Thereafter, the Dutch were reluctant to maintain stocks in the United States on their account. On the other hand, they refused to permit American manufacturers to maintain large stocks. Accordingly, American manufacturers attempted to develop a source of supply in Java independent of the cartel, but the Java planters refused to enter into any commercial relations which might antagonize the cartel participants.

Between the middle of 1940 and the end of 1941, American manufacturers and the Government made repeated efforts to increase substantially the cinchona stockpile in the United States. All such attempts, however, were resisted by the Kina Bureau and supplies were obtained only after lengthy negotiations. Following the Japanese attack on Pearl Harbor and the conquest of Java, the United States Government was forced to rely on the inferior Latin American bark.

PRESENT SITUATION REGARDING INTERNATIONAL CARTEL ACTIVITIES

The latest report in our files on the quinine cartel is a despatch (No. 1953, dated April 27, 1951) from The Hague. It gives no information on the specific international membership of the Kina Bureau but does indicate that, as of 1951, the Bureau was actively functioning. According to the despatch, "... the Kina Bureau is operating at this time in much the same manner as in previous years. The transfer of sovereignty of the Netherlands East Indies to the Indonesian Government has not affected their operations to any degree. The Kina Bureau has an agreement with the Indonesian Government whereby manufacturing and sales of quinine and related products are recognized to be a part of the Indonesian economic structure, and the Indonesian Government has delegated full responsibility and authority to the Kina Bureau to act as its agent in all matters concerning production and sales of quinine and related products. The Kina Bureau has long-term contracts with cinchona producers which, in practice, cover practically 100 per cent of the production. Under the new Indonesian Government there are no restrictions on cinchona sales to non-members of the cartel, but, as long as the Government (Indonesia) honors the present Kina Bureau contracts, there is, in practice, little or no cinchona bark available for sales to non-members of the cartel."

It would appear, in connection with the problem which IRD has raised, that it might be desirable to:

a. Request The Hague and Djakarta for any current information which may be available on the membership and international operations of the Kina Bureau.

³ *U.S. v. Amsterdamsche Chininefabriek et al.*, Eq. 44-384, Cr. 54-546 (Mar. 29-30, 1928).

b. Discuss informally with Justice the possible applicability of the 1928 Consent Decree to the problem. You may be interested to know that in June the Indonesian Commercial Counselor informally sought the Department's attitude towards the formation of a Consortium of Netherlands, Belgium and Indonesian interests to bid on and repurchase U. S. stockpile quinine. At that time, he did not mention Germany.

EXHIBIT 28

GENERAL SERVICES ADMINISTRATION,
December 19, 1956.

QUININE DISPOSAL—INTERDEPARTMENTAL MEETING

A meeting was held on Monday, December 17 in Mr. Witt's office, attended by Messrs. A. Wolfe, F. Talbott representing ODM; Miss Schick vice Mr. L. Weirich, BDSA; Mr. H. Brandon, State; Mr. Witt and the writer, to consider a note from the Netherlands Embassy conveying a proposal for the purchase of stockpiled quinine from GSA. Mr. Casto was invited but could not attend.

This meeting was intended to finalize the formalities requested by ODM for GSA to consult with the departments of State and Commerce before submitting a notice to the Federal Register advertising the sale of surplus quinine from the stockpile.

The insertion of the notice in the Register has been repeatedly delayed in order to permit the Department of State to contact the interested foreign governments concerned with this commodity. The Netherlands Governments expressed great interest and asked for time to submit an offer to GSA. This offer was formally presented to the State Department, with an accompanying note (November 26, 1956) copies of which were in turn supplied to GSA, BDSA, and ODM.

The meeting was held on the above date in order to obtain the recommendations of the interested agencies regarding the Federal Register notice. Mr. Brandon felt that by supplying the referenced note from the Dutch, the State Department has completed its responsibility and was willing to supply DMS with a letter stating simply that it has no further interest beyond having DMS consider this note.

Mr. Wolf thought that the State Department should come up with a positive recommendation and a course of action; and in his own case it was his opinion, after consulting with his legal department, that the best way to handle the quinine disposal would be through the presentation of a special bill to Congress requesting authorization to negotiate with the Dutch. If Congress should authorize such a negotiation, it would relieve the various government agencies from the responsibility involved in dealing with a cartel. At any rate, Mr. Wolf felt the State Department should advise, in a letter to GSA, that they have completed their exploration of the international market impact of GSA quinine disposal, and the EDSA representative said that she would also supply a letter to GSA with their own recommendations for the quinine sale.

It was decided that a bill should be prepared, together with the letters, and addressed to both Houses of Congress, seeking guidance on the disposal of quinine, all this to be on a confidential basis.

EXHIBIT 29

DEPARTMENT OF JUSTICE,
Washington, January 29, 1958.

HON. FRANKLIN G. FLOETE,
*Administrator,
General Services Administration,
Washington, D.C.*

MY DEAR MR. FLOETE: We are in receipt of your letter of August 20, 1957, addressed to the Attorney General, requesting comments on the proposed sale of stockpile quinine to the Netherlands quinine interests. Your request, we note, is not based on Section 207 of the Federal Property and Administrative Services Act (49 U.S.C.A. 488).

* * * * *

Your letter states the Office of Defense Mobilization advised General Services Administration by letter dated January 26, 1955 of its determination, pursuant to Section 2(a) of the Strategic and Critical Materials Stock Piling Act, 40 U.S.C.

98a (a), that the existing requirement for stockpiling quinine was no longer necessary because of obsolescence of quinine for use in time of war. You advised that the proposed purchasers are N. V. Amsterdamsche Chininefabriek, N. V. Nederlandsche Kininefabriek, and N. V. Bandoengsche Kininefabriek, all of the Netherlands.

These three firms were defendants in an antitrust action (Equity No. 44-384) in the District Court of the United States for the Southern District of New York. On September 20, 1928, a consent decree was entered in the case enjoining the defendants from certain actions and activities. The court retained jurisdiction.

Based on the facts and circumstances set forth in your letter, it is our view that the court would not look upon the proposed sale to the three above-named Dutch companies as violating the decree.

It is our view that this proposed sale to a group of Dutch companies, which will in all probability be able to largely control the price and supply of quinine to all world markets, including the United States, raises serious antitrust problems. However, the correspondence and documents enclosed with your letter indicate there are other important factors that have a bearing on the advisability of consummating this sale, which may, on balance, outweigh the antitrust considerations. We believe that the balancing of these factors is not the function of this Department.

Sincerely yours,

VICTOR R. HANSEN,
Assistant Attorney General, Antitrust Division.

EXHIBIT 30

DEPARTMENT OF STATE,
February 2, 1966.

QUININE

1. I do not think Amsterdam's 76 will change DOD's judgment about its needs for new procurement. Bruce Hamilton shares this judgment.

2. We think that there is a strong possibility that Combinatie is trying to lay the blame elsewhere for the present high prices, when a major part of the steep price rise is probably due to speculation. This may or may not involve Combinatie and the other major European processors.

3. There is little doubt that Indonesian bark production has declined, undoubtedly in part due to neglect of plantations but also in some measure due to a general decline in world demand for quinine since the 1930's. But Combinatie's claim that the GOI bans bark exports, though plausible and serving their own purposes, is not exactly true. The plausibility of the claim rests on a Sukarno announcement of such an embargo. In fact, however, Indonesian policy has been to retain the production from government estates for processing at BKF while permitting private entrepreneurs to export bark provided they supply an equal amount to BKF. According to the Embassy, even this last restriction is frequently evaded in practice and substantial quantities of bark produced by private enterprises (no figures available) are exported, a fact of which Combinatie must be aware.

EXHIBIT 31

OFFICE MEMORANDUM, U.S. GOVERNMENT

GENERAL SERVICES ADMINISTRATION,
July 2, 1956.

To: File—Quinine.

From: Harry LeBovit.

Subject: Interagency Meeting in Regard to the Disposal of Quinine.

Mr. Leonard Weirich called a meeting on June 29th at the BDSA for an interagency discussion regarding problems which have arisen with respect to the disposal of quinine from the stockpile.

This Service had requested this meeting because of the lengthy delays by the State Department in providing EPS with their recommendations as to the outcome of their conferences with various foreign countries producing quinine, and the repeated requests by the Department for extensions of time in regard to the disposal of this commodity.

I reviewed the general background of the quinine disposal problem to date indicating that the last interagency meeting was held on February 7, 1956. At that meeting it was decided that the impact of government quinine sales would not cause a significant impact on the domestic market. However, the effect on the international market could be serious, therefore, the State Department was asked to consult with the interested foreign countries and develop recommendations to the EPS. (See memorandum to file dated 2/7/56). No recommendations have been forthcoming and instead repeated requests for delay in the program were made by the State Department.

I also went over the details of my discussions with Messrs. Vanderwater and Vanderheide (see memorandum to file dated 6/22/56). The general procedure of selling quinine to a select group of interested buyers or countries by negotiation was considered. Mr. Brandon, Department of State, said that he had been in conference with the Indonesian representative and a proposal similar to that suggested by the Dutch, that interested countries should join to buy the U.S. government quinine in order to keep it off the market and prevent disruption of price levels, was presented.

It was finally decided that it would be improper to consider any negotiations with foreign countries representatives until our own domestic industry was consulted. For this purpose Mr. Weirich would explore, informally, the attitude of the most interested companies (such as Merck and Penick) and learn whether an industry advisory meeting should be held. The BDSA would then notify the EPS on a formal basis whether an industry advisory meeting will be necessary, and if held, what arrangements will be made.

The conferees present were: Messrs. Weirich and Kilgore—BDSA, Scott—Tariff, Talbott—ODM, Brandon—Department of State, Witt and LeBovit—EPS.

EXHIBIT 32

(8A)

GENERAL SERVICES ADMINISTRATION,
August 31, 1956.

DISCUSSIONS HELD IN NEW YORK CITY RE DISPOSAL PROGRAM

I spoke to Messrs St. Clair and Petgrave on August 23 with regard to the contemplated disposal program for quinine. A total of approximately 750,000 ounces was imported into the U.S. in 1955 and Penick handled 200,000 ounces of this quantity. Penick sells quinine at 32¢ per ounce in small packages. The last price which they paid was 28¢ per ounce less 10%.

These men felt that quinine disposal sales must be negotiated. Not only do these experts feel that this material should be negotiated but that the highest prices could be attained in such sales only if the entire quantity could be sold to one purchaser willing to pay a premium price to maintain the present market. The logical customer for this material would be the Dutch. . .

The Penick Company would like to acquire ½ million ounces from the stockpile. However, if this would create any problem in the negotiations with the Dutch, they feel it would be best for them to step aside and not interfere. If they could acquire ½ million ounces without creating any problems with the Dutch however, they would be willing to purchase this material at the same price for which the Dutch would buy it.

Mr. Petgrave is an expert on quinine and was responsible for the quinine operations during the war. He says that anyone purchasing the quinine from the stockpile will undoubtedly be required to rework the material—this is, to re-precipitate the quinine. In any event, the Government should only sell quinine "where is, as is." Therefore, the price to be expected in return for any sale of the Government surplus quinine will be affected by costs of ocean freight, reprocessing, and packaging in small containers.

If the quinine should be advertised openly, the complete market would be ruined for three or four years because the Dutch have only released sufficient stocks each year to maintain the present price. Actually there is a considerable amount of surplus quinine both in Holland and Indonesia. If the Dutch were to purchase stockpiled quinine it would mean that no bark from the Dutch East Indies would be required for many years until the U.S. Government stocks have been worked up and sold.

If the U.S. Government were to attempt to sell the surplus quinine on an advertised basis, bidders would try to obtain the quinine at a speculatively low

price. The Dutch would refrain from participation in such a sale. In attempting to sell by bids, it is estimated that not much more than $\frac{1}{2}$ million ounces could be sold at a reasonable price. After that the market would be ruined.

It was also suggested that the totaquine should not be included in the general consideration of the quinine sale since this would have a tendency to greatly dilute the price.

In the event that the entire quantity of quinine is not negotiated with one buyer and consideration is given to dealing with several buyers, it was suggested that a notice could be placed in the Federal Register stating that in order to avoid the disruption of normal channels of trade the entire quantity of quinine will be sold to the original contractors who produced and sold the material to the U.S. Government.

Note: August 24, 1956.

I spoke to Dr. D. Josephdwitz of the Sterone Corporation with regard to any possible interest his principal in Germany, Boehringer & Söhne of Mannheim, (one of the largest producers of quinine in Germany), may have in surplus stockpile quinine sales. I gave Dr. Josephdwitz the data regarding the quinine which he will forward to one of Sterone's representatives now in Germany and will try to obtain a proposal for us on the entire quantity.

I contacted Mr. I. Vandewater of the R.W. Greeff Co. on August 24 with regard to the quinine disposal to learn why we have no written proposal from the Dutch on the quinine disposal. (See memorandum of June 22, 1956 to file regarding visit of Messrs. Vandewater and Vanderheide of Fries Bros., Inc.) Mr. Vandewater promised to communicate with Holland and after receiving an answer we would discuss the matter further. I had a meeting with Mr. Vandewater on August 28, after he had received an answer from Holland. The Dutch apparently desire to keep any quinine transaction on an inter-governmental basis and R. W. Greeff Co. would help only on certain administrative details. Therefore, Mr. Vandewater said the Dutch Government felt that the proposal which they had given our Department of State through the Dutch embassy in Washington could be considered as still standing. The Department of State had received an informal proposal similar to ours. At that time we had been told that the Dutch would be willing to establish a base price to be paid for all of the U.S. stockpile of quinine. This price would be in effect a net export price from Holland less freight cost for transporting U.S. quinine. This price would be in effect a net export price from Holland less freight cost for transporting U.S. quinine to Holland and the cost for reworking such material (Oil, Paint and Drug Reporter shows quinine in 100 ounce cans at 28¢ per ounce in the U.S.) The first verbal proposal by the Dutch stipulated a seven-year program. However, when I told them that this appeared rather unreasonable they did drop the bid to five year. (When speaking to a representative of the Department of State, the Dutch mentioned a five-year period). When they suggested a five-year period I indicated that even that period was too long.

Mr. Vandewater said that the Dutch would only negotiate for the entire quantity since they must get complete control or they would not be interested in the quinine. Mr. Vandewater felt that the Dutch are willing to pay the highest possible price to prevent disruption of the market. Mr. Vandewater said that his company handled an import of 450,000 ounces into the U.S. in 1955 and thought an additional 300,000 ounces was imported into the U.S. from West Germany through Sterone, Huisking and S.S.T. Company. Any contracts for sales of quinine from the U.S. Government with the Dutch would be through direct contact as done previously when part of the stockpile was purchased.

On August 28 I contacted the Charles Huisking Co., importers of quinine. I spoke to Messrs. Kohler and Huisking. The principle of the company in Germany is the Buchler Khininefabrik in Braunschweig, Germany. Mr. Huisking said he would get in touch with this German firm to find out whether they would be interested in this material and contact us. His advice regarding disposal was that the U.S. Government should negotiate with producers abroad to buy all of the quinine surplus stocks.

I called Mr. Brandon of the State Department on August 29 in order to convey to him the information I had obtained in New York City regarding quinine and learn what has developed in the State Department on this subject. He told me that the Dutch talks with him were informal. However, he had written a note regarding the general plan proposed by the Dutch and he promised to provide this to me. He said he would get in touch with me to find out whether the em-

bassy has received any further information from the Netherlands on quinine. He called me back on August 30 and said the Dutch are still willing to negotiate on the basis of their previous proposal and he asked me what further steps should be taken. I suggested that it may be well to wind up this matter and meet with the Dutch as soon as possible. A notice must be inserted in the Federal Register.

A meeting has been called for September 5 at 10:00 a.m. and will be attended by M. H. E. Moerell of the Dutch Embassy and Mr. Brandon of the Department of State. A preliminary GSA meeting is scheduled for September 4 to obtain the views of the Legal and Fiscal Divisions.

(*Information Note:* According to a study made by World Health Organization of the United Nations, malaria, affects approximately $\frac{1}{8}$ of the total world population.)

EXHIBIT 33

R. W. GREEFF & Co., Inc.,
New York, N.Y., December 29, 1959.

Mr. FRANKLIN FLOETE,
Administrator of General Services,
Washington, D.C.

DEAR Mr. FLOETE: Last Thursday, Mr. de Schepper and I had the pleasure of talking to Mr. Holtz about the sale of the Quinine surplus stock. The meeting was arranged by the Netherlands Ambassador who had been approached by our Dutch Quinine friends on this matter and, since the Dutch were unable to come here on this short notice, we agreed to represent them as we have done in the past.

Mr. Holtz explained to us the considerations for allotting the entire stock to one group of American firms. Mr. Holtz also explained that the final decision in these matters is with you.

We should like to make the following observations on behalf of our Dutch friends.

Our Dutch friends have negotiated with your administration for the past three years.

They have freely and unrestrictedly furnished your administration with all factual and confidential information requested.

On November 5th, the Dutch bid 6.6¢ per ounce for the entire stock pile, the highest bid received by G.S.A. at any time.

On November 10th, one of your officials with whom negotiations had been conducted, informed us that the Dutch bid had been accepted and that the representative from Holland could come and pick up a contract.

When the representative arrived on November 13th, he was told that some complications had arisen and that the contract was not yet ready; no other explanation was given.

On November 19th, a telegram was received reading:

"Re your proposal to purchase Government stockpile quinine. Please advise if you have any interest in purchasing 50 percent total quantity this material at fixed price 7 cents per ounce. Lot would be made up of approximately one-half of each type and form of the stockpile material. Delivery to be over period of 3 years. Answer required by close of business November 24th".

As Mr. Holtz now explained, this seemed a way out to yield to pressure from so-called American group, who, incidentally, must have bid below the 6.6¢.

Again the Dutch went along with your proposal to buy 50% at 7¢ per ounce only to learn through the Washington lawyer for the Dutch—Mr. W. Blum—that the entire stock was to be sold to a group which we have some reason to believe includes at least some foreign interests.

Our Dutch friends, unable to understand this procedure, appealed to their Foreign Office and at the suggestion of the Netherlands Ambassador, the meeting of December 24th with Mr. Holtz took place.

Summarizing, the Dutch feel that in view of their past performance, and commitments made by G.S.A., they are entitled to at least 50% of the stockpile since they have made the highest bid and have at all times complied with all wishes of G.S.A.

Mr. Holtz has brought up the argument that American groups should be favored in this instance. We, ourselves, as an American firm established in 1918, the oldest and largest merchants in the Quinine business in the U.S.A., feel very strongly that only a sale to the Dutch will create less disastrous effects on world

markets. If it had been the intention of G.S.A. to restrict the sale to American firms only, the announcement published in the Federal Register of April 1st, 1959 should have said so and then we would have made a bid.

May we hear from you at the earliest opportunity.

Very truly yours,

I. VANDEWATER.

EXHIBIT 34

GENERAL SERVICES ADMINISTRATION,

March 3, 1959.

MEMO TO FILES

From: Chief, Agriculture Branch MPA.

Subject: Quinine—Discussion with Representatives of Dutch Interests. The Dutch were represented by Mr. Ira Vandewater, President, R. W. Greeff & Co., 10 Rockefeller Plaza, New York 20, N.Y., and Mr. J. H. Vander Heide of Fries Bros., Inc., Chemists, Carlstadt, N.J. GSA by Messrs. Dixon, Elson, Wickes, Wolfersberger and Hanes.

Mr. Wickes explained that because the current notice in the Federal Register was so phrased as to exclude sale to domestic buyers, the Administrator would withdraw such notice and re-advertise when a new plan, acceptable to him, was prepared. Mr. Wickes advised that a sale could not be effected until six months after the notice first appeared in the Federal Register; that GSA proposed to carry on negotiations with those interested in buying the quinine, during the six months publication period and hoped to be in a position to conclude a sale immediately thereafter with the person or firm whose proposal was deemed most favorable to or gave the highest return to the Government, with regard to protection of producers, processors and consumers against avoidable disruption of their usual markets.

The Dutch, sometimes, prior to the conference, had submitted a written proposal for the purchase of the entire quantity of quinine. The group then discussed this proposal in detail in an effort to clarify some of the terms of the proposal. This discussion brought out the following:

- (1) The Dutch were interested in the entire quantity—all or none.
- (2) The Dutch had made an agreement with the planters to give them a percentage of the sales proceeds. This was necessary to protect them against loss of production in sale of bark during the processing and sale of the stockpile quinine. They felt this agreement could be extended for a further six months period and they would make an effort to get such agreement—without it the Dutch could not undertake purchase of the quinine. The Dutch pointed out this large quantity of quinine coming on the market would necessarily, if proper safeguards and planning were not had in advance, disrupt the flow of bark, disrupt the processing plants and the market generally. Thus, there were different interests where approval must be had before the purchase was undertaken and each one must be compensated for the loss or disruption.
- (3) Much of the material could be used in its present form and in such case there would, of course, be no charge for processing in the formula—and the return to GSA would be greater.
- (4) The Dutch estimated, at the current market, the GSA would get at least 10–12¢; this would be increased to the extent processing was unnecessary, that further savings in handling, freight and other costs could be obtained.
- (5) Dutch had negotiated with Dutch steamers a low ocean rate of \$3.15 per 100 pounds a \$1.75 per cubic foot. Bottles would be shipped by footage and the bulk quinine by weight.
- (6) Dutch were reluctant to underwrite market price by giving net bid. They felt it would hold steady but must insure against decline if they determined to bid on "as is, where is basis": Their bid-a-guess would be about 6–8¢.
- (7) An American accounting firm to audit transaction would be satisfactory. The original proposal provided for an audit by a Dutch firm of GSA selection. Dutch said Price, Waterhouse and other American firms would be available and had experience in the such.
- (8) Any material of over 10 USP need not be reprocessed. Much of the quinine inventory is above 10 USP, thus the return to GSA could be somewhat better than originally thought.
- (9) All pills and tablets must be reprocessed.
- (10) Dutch would take all material from one warehouse, then proceed to ship material from another until cleared. The Dutch said they would want to

work closely with GSA in this connection to handle labor, shipments, as efficiently and economically as possible. They had in mind taking 500,000 ounces each three months at 2,000,000 ounces per year. This was the minimum but they possibly would draw much larger quantities per year, particularly since it now appears much of it would not need to be processed.

The Dutch asked for and Mr. Wickes undertook to obtain a more detailed description of the quinine in inventory. Upon receipt of this further data the Dutch will restudy the matter and submit a new proposal.

EXHIBIT 35

DEPARTMENT OF STATE,
January 20, 1966.

To: Department of State.

Info: Bonn, Frankfurt.

From: Amconsul Hamburg.

Subject: World-Wide Market Situation for Quinine and Related Products.

FOR COMMERCE

At the request of Amembassy Bonn an official of this Post recently spoke with Dr. Walter BUCHLER of *Buchler und Co.*, Braunschweig, about the present world-wide market situation and prospective market developments in the field of quinine and related products. Dr. Buchler provided the following information:

The world consumption of S.Q.7 (quinine sulfate) amounted to about one million kg. in 1939, but dropped to 300,000-400,000 kg. around 1950, before rising to the current rate of about 450,000 kg. annually. (One kg. of quinine anhydrous alkaloid=1.345 kg. S.Q.7.) There was an enormous overproduction of cinchona bark in Indonesia until 1962-63, when the Indonesian Government limited the amount planters were allowed to cut, and in 1964 manufacturers found they could no longer obtain unlimited supplies. Since the Dutch planters were forced to leave Indonesia around 1958, there is little information available about conditions there, though it is understood that many of the plantations have been transformed into tea estates or put to other uses. In many cases, small, poor-grade quantities of quinine products are presently manufactured in Djakarta.

In the Congo and what is now Rwanda and Burundi there were about 7000 hectares planted in 1955 of trees whose bark produced a yield of 8% to 10% of S.Q.7, as against only 6% in Indonesia. Since on the average 800 kg. of bark are produced per hectare, bark from the Congo-Ruanda-Urundi area produced perhaps 560,000 kg. of S.Q.7 in 1955. However, because of the world surfeit, the Belgian administration in the Congo encouraged planters to reduce the area devoted to cinchona trees to 2000 hectares between 1955 and 1960. Furthermore, in 1960 as the planters left the Congo they cut bark prematurely and did not replant. Thus there are few trees coming into production today, since it takes about six years before a tree produces a maximum yield of bark, though a small harvest can first be obtained after four years.

The price of S.Q.7 today is \$100 per kg., which is ten times greater than the 1960 price. In the U.S., where S.Q.2 is used instead of S.Q.7, the price is \$110, the difference being accounted for by the fact that S.Q.2 contains more quinine and less water than S.Q.7. To some extent the price increase in recent years is accounted for by increased manufacturing costs. For instance, on January 17 Buchler und Co. received a shipment from Ecuador of bark which will yield S.Q.7 at a rate of 2%. Transportation and processing costs for this low-yield bark are three times as high as they would be for high-quality bark.

Prices should remain high until around 1970 when the planting that is now going on at a tremendous rate will, barring unforeseen developments such as war or development of synthetics, bring prices down by perhaps 50%, though this is really impossible to predict with any certainty. In 1970 there may be about 5000 hectares in production, including 800-1000 in Guatemala, where Buchler und Co. has small but good plantations and the Dutch bought a plantation last year, 3000 hectares in the Congo, and 500 hectares in Rwanda. In addition there could be smaller amounts from the Ivory Coast, South Viet-Nam, and India, where the Government may be able to produce 500 tons a year of low-

quality bark with a yield of around 3%. Also, Indonesia could always stage a comeback.

Using normal conversion ratios, production in 1970 would come to 5000 hectares x 800 kg. per hectare = 4,000,000 kg. of bark, at an average yield of 8% = 320,000 kg. of S.Q.7. Actually, though, production should be substantially higher than this figure, since plantings being made now will be coming into maximum production.

Buchler und Co. normally produces about 60,000 kg. of S.Q.7 annually, part of which goes into the manufacture of 15,000 kg. of quinidine. At present, though, production is running below this figure because of supply difficulties. Buchler und Co. normally have a share of 18%-20% of the world market, and are the world's third-ranking producer, behind *Nadchem* of Amsterdam, which like Buchler has plantations in the Congo and Guatemala, and *Boehringer* of Mannheim, which owns the *Pharmakina* plantation in Bukavu in the Congo. Other major manufacturers are *Lake & Cruikshank* of Great Britain and the Djakarta firm *Bimckha*. Buchler und Co. could double its production if it saw fit by adding a night shift, and other manufacturers also have plenty of unused capacity.

WALTER J. MARX, *American Consul.*

EXHIBIT 36

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF EMERGENCY PLANNING,
April 17, 1966.

STOCKPILE OBJECTIVE ACTION V-276, QUININE

Pursuant to Section 2(a) of Public Law 520 (79th Congress), Reorganization Plan No. 1 of 1958, as amended, and Executive Order 11051, I have this date established a stockpile objective for quinine at 4,130,000 ounces (quinine sulphate).

EDWARD A. McDERMOTT, *Director.*

EXHIBIT 37

APRIL 17, 1964.

MESSRS. S.S.T. CORP.,
New York, N.Y.

INCREASE OF QUININE AND QUINIDINE PRICES

GENTLEMEN: We wish to inform you that owing to the steadily increasing prices for Cinchona bark we were compelled to fix new quotations for Quinine and Quinidine salts. The new prices for Quinine salts are 15% and the prices for Quinidine salts 20% higher than those handled so far. They will become effective on April 20th, 1964, i.e. that from this date onwards Quinine and Quinidine orders shall be executed at the increased quotations only.

We are preparing new price lists at present and shall airmail them to you with the least possible delay.

In view of the urgency and importance of the price increase we cabled you, this afternoon as under:

"14/-effective 20th increasing prices quinesalts fifteen percent quinidinesalts twenty percent stop new pricelists follow stop new cifprice quinesulfate nf U.S. dollar 15,50 perkilo quinidinesulfate U.S. dollar 33,34 including 100 ounces tins usual conditions stop do not accept orders at present quotations stop pending offers no longer valid"

We trust that you will understand our position and remain,

Sincerely yours,

C. F. BOEHRINGER & SOEHNE GMBH PPA.,

(Signed) JORGER.

(Signed) RENNER.

EXHIBIT 38

BUCHLER & Co. BRAUNSCHWEIG,
Braunschweig, April 20, 1964.

Messrs. CHAS. L. HUISKING & Co., Inc.,
New York, N.Y.

GENTLEMEN: We confirm our cable of April 17th, 1964 reading as follows:
"Immediately price increase quinine 15 percent sulfate 44 cents 2000 oz lots less plus ten percent quinidine 20 percent sulfate 95 cents under 500 ounces plus two cent further prices follow"

We are pleased to send you inclosed herewith the new price schedule for the increased prices for Quinine and Quinidine.

Very truly yours,

BUCHLER & Co.

EXHIBIT 39

DECEMBER 2, 1965.

Messrs. S.S.T. CORP.,
New York, N.Y.

INCREASE OF QUININE AND QUINIDINE PRICES

GENTLEMEN: With reference to our today's cable:

"-/8 Effective December 1 new prices Quininesulfate US dollars 213 Quinidine Sulfate US dollars 386 per one hundred ounces. Other conditions unchanged. Writing."

We should like to inform you that the steadily increasing prices for raw material compelled us to adjust our quotations for Quinine and Quinidine with the effect from December 1, 1965. The new prices are reading as under:

* * * * *

These quotations are to be understood: Free customers' domicile including 1% cash discount.

As usual they include 5% for you as well as 1% (Quinine) resp. 1/2% (Quinidine) to cover delivery charges.

The prices for Quinine Hydrochloride were mentioned just for the sake of completion and for the case that you should sell your small stock of this material to one or the other of your good customers. To judge from the present raw material situation it will hardly be possible to start the manufacture of Quinine Hydrochloride again in the near future.

Should our position change we shall, of course, instruct you accordingly.

Please keep us posted on all developments in your market so that we know what the others are doing. Many thanks and kindest regards.

Sincerely yours,

C. F. BOEHRINGER & SOEHNE GAMBH. i.V.
(S) RENNEN.
(S) SCHILZ.

EXHIBIT 40

NOVEMBER 9, 1964.

Messrs. S.S.T. CORP.,
New York, N.Y.

PRICE INCREASE FOR QUININE AND QUINIDINE SALTS

GENTLEMEN: In view of the continuously deteriorating supply position of raw materials for Quinine and Quinidine salts and the thus concurrent pressure on the prices of some raw materials, it has just been decided that a price increase of 25% on Quinine and 20% on Quinidine salts is to go into immediate effect. Furthermore, it was decided that this price advance shall be carried through more or less tacitly, as by proceeding in this manner we try our best to avoid that the suppliers of raw materials raise immediately their prices too. This, of course, cannot be entirely prevented but we wish to delay their action, at least.

For your advance information we cabled you today as follows:

"44/-Effective immediately increasing prices quinine twenty-five percent quinine twenty percent stop two thousand ounces up quinine sulfate 56 cents per ounce quinine hydrochloride 64,5 cents per ounce stop five hundred ounces up quinine sulfate 115 cents per ounce stop all including one thousand ounces drums and other conditions unchanged stop prices small quantities and packings writing stop please do not inform customers immediately but quote new prices only upon receipt of enquiries or orders".

We wish to confirm the above wording and beg to indicate the prices for the most important salts now valid as under:

* * * * *
As usual they include 5% for you as well as 1% (Quinine) resp. ½% (Quinine) to cover delivery charges.

Kindest regards.

Sincerely yours,

C. F. Boehringer & Soehne GMBH.
PPA. i.V.

(S) JÖRGER.

(S) RENNER.

EXHIBIT 41

JULY 23, 1965.

Messrs. S.S.T. CORP.,
New York, N.Y.

REQUEST FOR FUTURE REQUIREMENTS FOR QUININE AND QUINIDINE

GENTLEMEN: Although it is a rather theoretical question at the present time we should appreciate if you would tell us what quantities of Quinine and Quinine you could sell at the now valid prices if we had sufficient material.

Thanking you in advance for your early reply and for your endeavours, we remain,

Sincerely yours,

C. F. BOEHRINGER & SOEHNE GMBH PPA.

(Signed) JÖRGER.

(Signed) SCHILZ.

EXHIBIT 42

AMSTERDAM W., November 22, 1865.

Messrs. R. W. GREEFF & Co., INC.,
New York, N.Y.

S. B. PENICK & COMPANY—DISPOSITION OF CINCHONA PRODUCTS

GENTLEMEN: With reference to your letter of November 8 we inform you that we have examined whether we can use the surplus stock offered by Penick.

We will have to re-work the quantities, as decolouration etc. makes the sale as such impossible.

Moreover there are among the products as per specification many varieties which are not sold any longer and of which only the sulfate to be extracted, is important. The minor alkaloids are not interesting either, in view of our large stocks of raw product.

However in order to take the stock off the hands of Penick we are prepared to make a bid on the whole lot. For an amount of US\$ 3700—free works Marssen the goods can be delivered to us.

We should appreciate if you would approach Penick and looking forward to your news.

Very truly yours,

M. V. BUREAU VOOR DEN KININEVERKOOP BURAMIC.

EXHIBIT 43

QUININE CHRONOLOGY: DEPARTMENT OF DEFENSE AND
GENERAL SERVICES ADMINISTRATION

- Nov. 20, 1944 First placed on stockpile list with an objective of 7,400,000 ounces; subsequent reviews reduced the objective to 3,000,000 by the end of 1954.
- Jan. 18, 1955 Removed from the stockpile list by SOA-41, following IMAC review and recommendation.
- Feb. 15, 1957 GSA authorized to proceed with disposal of the inventory.
- Aug. 2, 1958 Federal Register (p. 5881)—notice by GSA of the proposed disposal of 13,860,000 ounces.
- Feb. 5, 1959 Federal Register (p. 874)—earlier disposal notice withdrawn by GSA after objection to disposal plan by an American firm.
- April 1, 1959 Federal Register (p. 2540)—revised notice by GSA of the proposed disposal of 13,860,000 ounces.
- Aug. 10, 1960 Federal Register (p. 7596)—further revise notice by GSA of the disposal. By early 1964 all but about 4.1 million ounces had been sold.
- Dec. 11, 1963 Armed Forces Epidemiological Board recommends that stockpile of quinine be maintained at adequate level.
- Dec. 19, 1963 File memo, J. H. Stehman, OEP, had been visited by Col. McKeen and Col. Peake, advised that DoD had asked GSA to hold up any further disposals of quinine. Were informed that stockpile objective would first have to be reestablished.
- Feb. 4, 1964 Letter from DoD to OEP formally requesting that disposals be halted, since current stockpile level was well below anticipated defense needs.
- Feb. 18, 1964 OEP replies to DoD, noting that after DoD's request another 1.2 million ounces had been released for outshipment in March, but that it may be possible to cancel the remaining contract deliveries.
OEP also writes to GSA to suggest that it might be appropriate "to make inquiries" about possibilities of canceling contracts for undelivered quantities (5.2 million oz.).
- Feb. 25, 1964 DoD replies to OEP, stating ". . . there was no intention that you would defer requesting GSA to take all feasible steps to freeze existing stockpile inventories."
- March 1964 992,000 oz. exported from U.S. to Netherlands.
- April 1964 250,000 oz. exported from U.S. to United Kingdom.
- April 17, 1964 Quinine replaced on stockpile list with an objective of 4,130,000 ounces by SOA-276, following IMAC review and recommendation.
- May 7, 1964 OEP directed GSA to defer further disposals of quinine and arrange cancellation of contract with respect to undelivered quantities.
- February 1965 First procurement, for 150,000 oz., attempted by DoD after quinine was returned to Federal Supply Catalog. No response from invitations to bid sent to 10 companies on the bidder list.
- Mar. 10, 1965 DoD requested OEP to take steps to release to the military 150,000 oz. of quinine to meet immediate needs which could not be satisfied by the market.
- Mar. 12, 1965 President authorized the loan to the military of 150,000 oz. of quinine from the stockpile.
- March 1965 USAP Procurement Center, Wiesbaden, directed to contact known West German and Dutch producers for direct purchase of 150,000 oz. Refusals from all firms approached. (In confirmation of this, Subcommittee files contain letter from Boehringer, Mannheim, to SST Corp., New York, dated March 15, 1965 stating that "It was indicated that they were ready to pay almost any price.")
- April 1965 DoD procurement target raised to 291,000 oz. (150,000 oz. for stockpile repayment, 130,000 oz. for current requirements, and 11,000 oz. for VA). Despite efforts of procurement personnel to locate sources of supply, no purchase commitments had been concluded by mid-January, 1966.
- Jan. 13, 1966 DoD canceled procurements of quinine, stating that "Future requirements will be satisfied from national stock piles of bulk materials, which have sufficient stocks to meet all Government needs."

EXHIBIT 44

MARCH 15, 1965.

S.S.T. CORP.,
New York, N.Y.

QUININE SULPHATE

GENTLEMEN: The USAFE procurement center Germany, Wiesbaden, has asked whether we can supply 150,000 ozs. % 4.2 tons Quinine Sulphate.

It was indicated that they were ready to pay almost any price.

To our great regret, however, we had to resign from offering since we could not even deliver 10% of the quantity for the rest of 1965.

We thought that you might perhaps know about any possible connection between the GSA and the USAFE procurement centers, which are most probably not restricted to Germany only.

Kindest regards.

Yours sincerely,

C. F. BOEHRINGER & SOEHNE GABH PPA.
(Signed) JORGER.
(Signed) RENNER.

EXHIBIT 45

MILITARY DEMAND FOR QUININE

(Extracts From News Stories)

"With a rapidly escalating war in a tropical area like Vietnam it probably was inevitable that U.S. troops would run into an old enemy—malaria. But few persons—medical or otherwise—predicted the dilemma that now faces U.S. medical authorities.

At midweek, Army officials admitted the possibility of an epidemic among troops in Vietnam. Many types of malaria are found in Southeast Asia." (Business Week, December 4, 1965).

"A Vietnam jungle mosquito that breeds 'upside down' is giving Defense Department doctors almost as much worry as wounds inflicted by Communist Viet Cong guerrillas."

* * * * *

"The new kind of malaria also has played an important role in drastic increases in quinine and quinidine prices.

* * * * *

"Some pentagon planners were described as having an 'absolute shaking fit' over the idea of a large number of troops being infected where they cannot be treated effectively." (United Press International, January 27, 1966.)

"The resistant malaria has been so serious in Vietnam that by last November American military doctors there feared they would soon be evacuating more sick than wounded soldiers." (New York Times, March 16, 1966.)

EXHIBIT 46

TOXICITY OF QUININE

Excerpts from Medical Literature

Treatment of Resistant Strains.—The appearance of strains of *P. falciparum* responding only to quinine has been reported since 1959. After 48 hours of unsuccessful treatment with chloroquine, quinine should be substituted, and 650 mg should be given every eight hours for from seven to as many as 28 days. The urinary output should be measured and the drug should be temporarily discontinued if oliguria develops. An infrequent but serious complication of falciparum malaria treated with quinine is blackwater fever, an acute intravascular hemolytic disorder.

All patients should have blood films examined for parasites at least weekly for six weeks after a clinically favorable response to detect recurrences due to resistant strains * * * (Medical Letter, March 25, 1966)

TOXICITY OF QUININE

The administration of quinine, even in therapeutic doses, is frequently followed by symptoms which are classed under the name of "cinchonism," and are undoubtedly toxic in character in susceptible persons, though more disagreeable than dangerous. These symptoms consist of ringing in the ears, a feeling of constriction in the head, headache, slight deafness and mild vertigo. But in susceptible patients toxic symptoms are increased if the dose is increased, and become alarming, and death has followed. Serious symptoms are intense vertigo, mental confusion, deafness, cyanosis, amblyopia, hemoglobinuria, and convulsions, ending in failure of the heart and respiration, coma, and death. Severe toxic symptoms are not often encountered, but the physician must keep in mind that they may occur. If such symptoms are noted in their incipency, they may be averted by reducing the dose of quinine to a very low point and increasing it gradually, thus making the patient more tolerant. The writer has observed two cases of complete amblyopia in patients who took small doses of ten grains each in treatment of a cold. (William N. Bispham, *Malaria*, Ch. X, Reviewed by Dr. E. Kennerly Marshall, Jr. Professor of Pharmacology and Experimental Therapeutics, Johns Hopkins Univ., School of Medicine, Baltimore, Maryland. Williams & Wilkins Co., 1944.)

Toxicity.—Inasmuch as the toxic reactions to quinine and to the other alkaloids of cinchona are essentially similar, the description of quinine toxicity will serve for the entire group. It is sometimes difficult to distinguish between true quinine toxicity and complications of the diseases for which the drug is given. Also, quinine poisoning is occasionally difficult to differentiate from reactions resulting from hypersensitivity.

Symptoms.—Poisoning by quinine is usually due to clinical overdosage or to idiosyncrasy. The fatal oral dose of quinine for adults is approximately 8 grams. Survival has been reported after the ingestion of much larger amounts, but absorption may have been incomplete.

When quinine is repeatedly given in full doses, a typical group of symptoms occurs to which the term cinchonism has been applied. The syndrome of cinchonism is caused not only by the cinchona alkaloids but also by the salicylates and cinchophen. In its mildest form it consists in ringing in the ears, headache, nausea, and slightly disturbed vision; but when medication is continued or after large single doses, symptoms also involve the gastrointestinal tract, the nervous and cardiovascular systems, and the skin.

Hearing and vision are particularly disturbed. Functional impairment of the eighth nerve results in tinnitus, decreased auditory acuity, and vertigo. The visual signs are those of blurred vision, disturbed color perception, photophobia, diplopia, night blindness, constricted visual fields, scotomata, and mydriasis. The terms "quinine amblyopia" and "quinine amaurosis" have arisen as a result of the frequency of the above visual findings in the more severe grades of intoxication. Considerable investigation into the mechanism of optic and auditory nerve involvement has failed to establish whether quinine exerts its deleterious action secondarily through vascular changes in the retina and organ of Corti or through a primary injury to ganglion cells and nerve fibers. Attention has been directed repeatedly to the marked spastic constriction of the retinal vessels. The retina is ischemic, the discs are pale, and retinal edema may ensue. In severe cases, optic atrophy results. Degenerative changes in the spiral ganglion cells similar to those noted in the ganglion cells of the retina lend support to the belief that the cellular injury from quinine is direct. Perhaps both vascular and neural components of injury are involved. The use of quinine during pregnancy is thought to be a cause of congenital deafness or blindness in the offspring; however, this view has been challenged.

Gastrointestinal symptoms are also prominent in cinchonism. Nausea, vomiting, abdominal pain, and diarrhea result from the local irritant action of quinine, but the nausea and emesis have also a central basis. The *skin* is often hot and flushed, and sweating is prominent. Rashes frequently appear: they are papular, scarlatiniform, or urticarial in character. Angioneurotic edema, especially of the face, is occasionally observed.

Central nervous system symptoms are noted in severer grades of poisoning, particularly headache, fever, vomiting, apprehension, excitement, confusion, delirium, and syncope. *Respiration* is first stimulated and then becomes shallow and depressed. The skin becomes cold and cyanotic as poisoning progresses, the body temperature and the blood pressure fall, weakness is extreme, the pulse is feeble, coma ensues, and death occurs from respiratory arrest. *Death* may result in a few

hours or be delayed a day or two. If the patient recovers, symptoms usually disappear completely except that there may be variable degrees of residual optic and auditory damage in some cases.

At times, *renal* damage may be caused by quinine, and anuria and uremia may ensue. *Acute hemolytic anemia* is a rare complication of quinine therapy; it apparently is caused by the drug only in pregnant women or in patients with malaria. Quinine is also capable of causing *hypoprothrombinemia*; the simultaneous administration of vitamin K counteracts the prolongation of the prothrombin time. Rarely, quinine may cause symptomatic purpura in hypersusceptible individuals, by a thrombocytolytic action. In a few instances, the drug appears to have caused agranulocytosis. Abortion may result from quinine overdosage, but this is not necessarily due to an oxytocic action of the drug. The alkaloid may cause *asthma* in hypersensitive individuals. Transient *ventricular tachycardia* may rarely be observed after massive acute overdosage.

(Louis S. Goodman and Alfred Gilman, *The Pharmacological Basis of Therapeutics*, 2d ed., The Macmillan Company, 1960, pp. 1197-1198.)

EXHIBIT 47

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY,
May 17, 1966.

MEMORANDUM

To: S. Jerry Cohen, Esq., Staff Director and Chief Counsel.

From: John M. Blair, Chief Economist.

Subject: Interview with Dr. G. Robert Coatney on February 21, 1966.

Dr. Irene Till and I conducted an interview with Dr. G. Robert Coatney, Chief of the Laboratory of Parasitological Chemotherapy, the National Institute of Infectious and Allergic Diseases, National Institutes of Health, Bethesda, Maryland. What follows is a transcription of the notes which I took during the interview. This afternoon I read these notes back to Dr. Coatney over the phone and he confirmed that they represented an accurate presentation of his views.

Quinine is not used as a prophylactic drug because (a) it is more expensive, (b) it has to be given every day, and (c) it is much more toxic than the synthetics.

The synthetic antimalarials (of which the principal ones in use today are Chloroquine (Winthrop) and Camoquine (Parke, Davis)) are highly efficient (except against the resistant strains) and being made synthetically from coal-tar derivatives are produced easily and cheaply. They are almost completely non-toxic at the dosage level used to prevent malaria. At present prices quinine costs about \$4 per day per person, in contrast to around 35 cents for the synthetics.

In contrast to the synthetics, the use of quinine generally produces a number of disagreeable reactions, the most prevalent of which are nausea, vomiting and loss of balance, which, though extremely unpleasant, are reversible. The most important irreversible side effect is atrophy of the optic nerve, but this only infrequently develops during the customary 10-14 day treatment.

Under the conditions of the Vietnam war, the task of getting the soldiers to take Chloroquine once a *week* is at best difficult. The problems of getting them to take a drug with such disagreeable reactions as quinine each day would be immense.

Individuals differ somewhat in their sensitivity to quinine. One of NIH's own physicians, Dr. Chin, who was testing the effect of various drugs on malaria in prisoner volunteers, contracted a resistant strain. Being quite sensitive to the drug, he absolutely refused to take quinine after the first day.

While quinine has generally proved to be effective in treating falciparum malaria once it is contracted, there have been a number of cases in which the drug has not proved to be effective.

Figures on the use of quinine in the treatment of malaria overstate the incidence of the disease. This is because of the fact that to play safe the Army doctors, confronted with a case of malaria, now assume that it is due to resistance and not to failure on the part of the soldier to take his weekly dosage of a synthetic. This practice stems from the fact that falciparum is a very dangerous form of malaria. However, unlike the much more common form of malaria, vivax, it is not recurrent.

Considerable progress has been made in developing new synthetics or combinations thereof which are effective against falciparum malaria once contracted. Some appear to have the promise of being just as effective as quinine, if not more so, with a much lower incidence of disagreeable reactions. Less progress, however, has been made in the development of a synthetic which can be used as a prophylactic against falciparum. The objective is to get a drug that will be as effective as a prophylactic against the resistant strain as Chloroquine used to be.

EXHIBIT 48

Excerpts From Letters on Rising Cost of Quinine and Quinidine

"I have to take 4 quinidine a day. On April 13, 1966 I was forced to purchase 1,000 quinidine 3 mg. for \$75. I could not get them any cheaper. A few of the drug stores were out of them.

"This price of \$75 was a great shock and surprise to me. The previous purchase I made was January 19, 1965 at which time I only paid \$13 for a 1,000 prescription.

"I am paying the \$75 on time. I only hope by the time I need a refill—I have to take them the rest of my life—the price will be greatly reduced. But I am afraid this is only wishful thinking.

"May God bless you and your committee."

"P.S.—I feel very sorry for the people who have to take 12 pills a day."

"I am one of the retired people who have to take 6 tablets a day to keep my heart beating regularly and last year I paid \$15 a thousand for the 3 oz. tablets. Last fall the price went to \$30 a thousand and the other day I priced it and it has gone up to \$110.

"I'll need a supply by the end of summer and I dread to have to pay 11¢ a tablet when last year I only had to pay 1½¢ a tablet and I wasn't on retirement pay last year. At the inflated price of 11¢ a tablet with having to take 6 a day this amounts to \$19.80 a month out of my \$132.50 social security check."

"A little over a month ago I could purchase 100 pills for \$15. My last order a few days ago now costs me \$20. Having to take two of these every day, being retired on a set income, what can be done to give us some relief on this price. Some days I have to take three and this goes for a number of our members. With other medication some of us have to use, our bills run as high as \$50 per month, with no relief in sight."

"I am compelled to use this drug for a heart condition since 1955 and always bought the drug from \$2 a hundred until a year ago, when the price went up to \$5 and now it is \$10 a hundred, and the worst part of all is the pharmacist is unable to buy it from the drug companies."

"My mother, age 79, lives with me and is subject to attacks of paroxysmal tachycardia and has been taking 3 gram tablets of quinidine for the last few years. The price was \$9 per 200 tablets, but suddenly it went up to \$22 per 200 and the druggist said it might go higher."

"Please inform your Committee that the price of the quinine that I pay for my treatment is as follows:

"Quinaglute, \$27.50 per hundred; Cardioquin, \$16.00 per hundred.

"My total medication bill for the month is approximately \$40. My druggist informs me next time the price will be higher.

"I'm on social security pension and receive \$100 per month. It is very difficult to live this way.

"Please do investigate these prices."

"Last year the price per M rose from \$16.00 to \$34.00 for a purchase last fall. My last purchase—after considerable shopping—was \$64.00."

"I am a heart patient and depend on quinidine to regulate my heart beat, since the price went up my doctor put me on half doses—taking a chance."

"In the last year we have had to pay about \$300 worth of necessary drugs.

"He (my husband) spent sixteen more days in the hospital in April 1966. On his release, he was handed five prescriptions which, when filled, amounted to \$41.55. One of these was Quinaglute Duratabs which cost \$21 for 130 tablets. We feel this cost was outrageous."

"On March 20, 1964 I had a heart attack. After 5 weeks of intensive care in the hospital I was released. On leaving the hospital my doctor prescribed quinidine as one of the drugs to be taken. On April 24, 1964 I went to my family drug store with a prescription for the quinidine pills. The druggist charged me \$7.00 for the pills. The past 2 months the druggist has been charging me \$14.00 for the same number of quinidine pills."

"My daily dose has gone from 25¢ a day to 75¢ . . ."

"I purchased quinidine for \$3.20 and just one month later it cost me \$6.40 for the same amount.

"Now I call that unreasonable and unjustified.

"It cost me \$12.80 a month out of a pension of \$115.00 besides the doctor's fee. Help."

"In the last year my bottle of 100 pills has gone up from \$5.00 to \$10.60.

"My husband is retired and we are on a pension. Never having worked except as a homemaker, I depend on his pension."

"The last time I had my prescription filled for quinidine about one month ago, I paid \$13.95 for 200 tablets—exactly *four times* what I had paid for this same quantity one year ago! And, mind you, this was the price from a *Discount Drug Store!*"

"I must have from 3 to 4 tablets of quinidex each day, and these cost at least 20¢ each and in some drug stores they are 24¢ each, and there are many like myself who must take this drug as long as they live."

"I wish to thank you; I am a heart patient. I had been getting 100 tablets for less than \$2.00. When Viet Nam War started price went up to \$8.00 a hundred. My latest bill for the same tablets (quinidine) was \$10.00.

"I was 84 April 13th, I hadn't taken doctor's medicine before having a stroke in 1959. Have had two serious heart attacks since.

"Thanking you again."

"I wish to advise you regarding the cost of quinidine, which I take for a heart condition.

"I get 200 tablets and they cost me \$16.40. Another drug store wants \$20.00 for 200 tablets. I get them cheaper (?) by getting 200 at a time.

"I think the above prices are outrageous and thought you might like to know what the drug stores are charging for this medication."

APPENDIX 1

TABLE 1.—*Quinine and quinidine—Notification of price changes by Boehringer to S.S.T., 1964 and 1965*

[Price per ounce]

Date	Quinine ¹	Quinidine ¹
Jan. 1, 1964.....	\$0.375	\$0.78
Apr. 20, 1964.....	.435	.945
Nov. 4, 1964.....	.560	1.15
Feb. 10, 1965.....	.673	1.381
Mar. 5, 1965.....	.840	1.725
Apr. 26, 1965.....	1.18	2.42
May 28, 1965.....	1.654	3.39
Nov. 29, 1965.....	2.13	3.86

¹ In quantities of 2,000 ounces and over.

Source: Correspondence from Boehringer to S.S.T.

TABLE 2.—*Production and exports of cinchona bark, Indonesia and Congo*

[In metric tons]

Year	Indonesia		Congo	
	Production	Exports	Production	Exports
1959.....	4,044	2,853	680	1,537
1960.....	3,624	1,816	450	1,369
1961.....	2,873	344	90	4
1962.....	2,087	476	173	418
1963.....	2,063	1,506	222	400
1964.....	2,500	(¹)	601	567
1965.....	2,500	(¹)	700	(¹)

¹ Not available.

Sources: Republic of Indonesia. Production: 1958-62, Biro Pusat Statistik; 1963-65, Embassy of the Republic of Indonesia, Washington, D.C. Exports: 1958-62, Biro Pusat Statistik; 1963, British Chamber of Commerce in Indonesia.

Republic of the Congo (Léopoldville). Production: 1958-59, Kingdom of Belgium, Ministère des Affaires Africaines, La situation économique du Congo-Belge et du Ruanda-Urundi en 1959; 1960 estimated on basis of 1955-59 trend; 1961 estimated on basis of bark in OPAK warehouses in 1962; 1962-65, releases from OPAK warehouses reported by Association des Entreprises de l'Est du Congo. Exports: 1958-59, Bulletin mensuel du commerce extérieur du Congo-Belge et du Ruanda-Urundi; 1960-63, Bulletin trimestriel du commerce extérieur de la République du Congo; 1964, Association des Entreprises de l'Est du Congo.

TABLE 3.—*Stockpile release, exports to Netherlands and imports from United States, 1961-64, quinine and totaquine ¹*

[In metric tons]

Quantities released from U.S. stockpile ¹	460,144
Exports from United States to the Netherlands ¹	440,081
Imports from the United States.....	423,788
By the Netherlands.....	260,000
By West Germany.....	163,788

¹ Quantities released and exports to the Netherlands includes 217 metric tons of Totaquine.

Source: Stockpile releases: General Services Administration. Exports to the Netherlands: Bureau of the Census FT-410. Import figures: Compiled by Legislative Reference Service, Library of Congress.

TABLE 4.—Imports and average unit values, quinine and cinchona alkaloids (except quinidine), and quinidine, 1956-65

Year	Quantity (thousand ounces)	Average unit value (dollar per ounce)	Year	Quantity (thousand ounces)	Average unit value (dollar per ounce)
Quinine and cinchona alkaloids, except quinidine:			Quinidine:		
1956	1,260	0.209	1956	849	0.593
1957	1,384	.292	1957	816	.674
1958	1,359	.264	1958	980	.700
1959	1,448	.211	1959	979	.686
1960	1,395	.243	1960	928	.696
1961	1,667	.353	1961	1,048	.730
1962	1,816	.348	1962	1,008	.737
1963	1,137	.274	1963	1,410	.710
1964	1,834	.328	1964	1,607	.844
1965	1,802	1.233	1965	1,409	2.356

Source: 1956-63: Bureau of the Census FT 110; 1964-65: Special Tabulation by Bureau of the Census.

TABLE 5.—Quinine and quinidine imports and average unit value, by quarters, 1964 and 1965

Quarter	Quantity (thousand ounces)	Value per ounce	Quarter	Quantity (thousand ounces)	Value per ounce
Quinine:			Quinidine:		
1964: I	432	\$0.364	1964: I	335	\$0.754
II	429	.404	II	290	.786
III	331	.388	III	386	.909
IV	308	.406	IV	596	.907
1965: I	168	.569	1965: I	236	.976
II	267	.793	II	288	1.182
III	360	1.530	III	312	2.809
IV	600	2.212	IV	574	3.223

Source: Special tabulation by Bureau of the Census.

TABLE 6.—Net income from quinine and quinidine, R. W. Greeff and S.S.T. Corporations, quarterly, 1964 (average) and 1965

[Dollars in thousands]

	R. W. Greeff	S.S.T.
1964, quarterly average	\$5.96	\$1.93
1965: I	12.4	8.2
II	53.4	38.9
III	64.2	24.2
IV	27.1	16.0

Source: Reports by companies to subcommittee.

JUNE 16, 1966.

HON. DOUGLAS MACARTHUR II,
Assistant Secretary for Congressional Relations, Department of State, Washington, D.C.

DEAR MR. MACARTHUR: I have your letter of June 10, 1966 enclosing a copy of a note from the Netherlands Ambassador to the Secretary of State concerning the recent hearings by the Antitrust and Monopoly Subcommittee on prices of quinine and quinidine. I presume that your purpose in transmitting a copy of the note was to have it included in the record of the hearings. Unless I hear from you to the contrary, it will be so included.

Thank you for your courtesy in transmitting the note to me and for the other assistance rendered to the Subcommittee in connection with its investigation of quinine and quinidine.

Sincerely yours,

PHILIP A. HART, Chairman.

DEPARTMENT OF STATE,
Washington, June 10, 1966.

HON. PHILIP A. HART,
Chairman, Subcommittee on Antitrust and Monopoly, Committee on the Judiciary,
U.S. Senate.

DEAR MR. CHAIRMAN: I am enclosing a copy of a note from the Netherlands Ambassador to the Secretary of State in which he refers to the proceedings of the Subcommittee on Antitrust and Monopoly of the Senate Committee on the Judiciary which took place May 16 through May 23, 1966. The Ambassador refers to the attention paid during these hearings to the interest taken by the Netherlands Government in 1956 and subsequent years in the disposal of surplus United States stocks of quinine. At his request, I am drawing this note to your attention.

If I can be of any further assistance, please do not hesitate to let me know.
Sincerely yours,

DOUGLAS MACARTHUR II,
Assistant Secretary for Congressional Relations.

The Netherlands Ambassador presents his compliments to the Honorable, the Secretary of State, and has the honor to inform Mr. Dean Rusk that he has taken note of the proceedings in the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary of the U.S. Senate from the 16th till the 23rd of May concerning the prices of quinine and quinidine.

In view of the attention paid in the course of these proceedings to the interest taken by the Netherlands Government in 1956 and subsequent years in the matter of the disposal of the quinine stocks from the U.S. strategic stockpile, the Ambassador wishes to state the following.

1. The Netherlands is traditionally an important producer of quinine and related products, considerable quantities of which are being exported.

2. As a result of the decision taken by the U.S. Government in 1956 to dispose of not less than fourteen million ounces of quinine from the strategic stockpile, a new and uncertain element was introduced on the world market for this product. A precipitated sale of the aforesaid quantities could have led to a sudden collapse of prices, causing great and possibly lasting injury to Netherlands quinine interests.

3. In view of this threat the Netherlands Government pleaded with the U.S. Government to prevent a disruption of the market by arranging for an orderly disposal of the strategic stockpile. After preliminary talks the then Netherlands Ambassador on November 26, 1956 transmitted a note to the then Acting Secretary of State, Mr. Hoover, in which the delicate situation that would be created by a disposal of the quinine stocks as contemplated by the General Services Administration was fully explained. This note also put forward a constructive proposal made by the Netherlands quinine interests for the purchase of the U.S. quinine stock. The said interests believed that this proposal would offer a means of alleviating the very serious consequences the liquidation of these stocks could have for the whole quinine industry.

4. In the course of the following negotiations between the General Services Administration and the private Netherlands quinine producers, the efforts of the Netherlands Government were solely directed towards promoting the orderly disposal of the stockpile and assuring that the Netherlands quinine interests would be given a fair and equitable treatment with regard to the possibility of acquiring part of the quantities offered for sale.

The Netherlands Ambassador would feel obliged if, through the kind offices of Mr. Rusk, the above could be brought to the attention of the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary of the United States Senate.

Washington, D.C., June 7, 1966.

U. S. SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY,
May 26, 1966.

Mr. CHARLES F. FORT,
President and General Manager,
Food Town Ethical Pharmacies, Inc.,
Baton Rouge, La.

DEAR MR. FORT: I have received your telegram advising that you are interested in appearing before the Senate Antitrust and Monopoly Subcommittee to testify

in connection with the hearings scheduled by Senator Hart, Chairman, on the price increase of quinine and quinidine.

I have checked with the Subcommittee in this connection, and was advised that four days of hearings were scheduled, and held, on May 16, 17, 18 and 23. No further hearings have been scheduled at this time; however, I have been told that the record has been left open and if you wish to submit a statement, this statement will be included in the record of hearings and the Subcommittee will be happy to consider the evidence submitted. For your further information, and because of your interest, I am enclosing copies of press releases furnished me by the Subcommittee which include the announcement of witnesses scheduled and the opening and closing statements by Senator Hart.

If I can be of any further assistance to you, please do not hesitate to let me know, and with kindest regards and best wishes, I am

Sincerely yours,

ALLEN J. ELLENDER,
U.S. Senator.

BATON ROUGE, LA., May 23, 1966.

U.S. Senator ALLEN ELLENDER,
The Congress, Washington, D.C.:

Reference is made to correspondence from Food Town Ethical Pharmacies, incorporated beginning early in 1965 urging action by the Federal Government to alleviate the additional suffering by heart patients resulting from the 500% price increase in the cost of quinidine sulfate and quinine derivatives. Reports indicate hearings scheduled by Senator Philip A. Hart, chairman, anti-trust and monopoly subcommittee. As result of our fight against these high prices our files contain facts which may be of value. Have wired Senator Hart for opportunity to appear before subcommittee. Would appreciate your assistance. Thank you.

CHARLES F. FORT,
President, Food Town Ethical Pharmacies, Inc.

E. R. SQUIBB & SONS, INC.,
New York, N.Y., June 10 1966.

Hon. PHILIP C. HART,
Chairman, U.S. Senate Subcommittee on Antitrust and Monopoly, Committee on the Judiciary, Washington, D.C.

DEAR MR. CHAIRMAN: We are delighted to have had the opportunity to review the record of hearings dealing with procainamide on May 23, 1966 before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, United States Senate and we welcome the opportunity to supplement the testimony and commentary therein. May we respectfully request that this letter be made part of that record.

Procainamide, manufactured by Squibb, has been available under the trademark Pronestyl since it was first introduced to physicians for prescription use in 1950. The drug was a development of original Squibb research.

In the intervening years, Pronestyl has been employed by physicians in the management of patients with the primary indication of cardiac arrhythmia. (For completeness of the record, the appropriate descriptive pages from the Squibb Product Reference Guide are attached. The Reference Guide is supplied to physicians and pharmacists by the company.)

Over the years, Squibb has continuously maintained the availability of pronestyl in two different strengths for oral administration and in a 10% sterile aqueous solution for injection. The injectable is most frequently used in the hospital but is often carried by the physician in his bag for emergency administration. Approximately 85% of the use of Pronestyl capsules is by patients who obtain the oral form of the drug from a retail pharmacy after having been given a prescription by a physician. Conversely, only about one seventh of this use arises in hospitals although, of course, this segment probably represents a higher proportion of initial administration to patients who then return to ambulatory, at-home care.

The patient with heart disease receiving a prescription for the drug needs immediate supply, and wide distribution is critical to assure the physician that he can properly manage the patient's condition. Squibb has maintained the oral forms in continuous distribution in retail pharmacies for ready availability when needed.

During these approximately sixteen years since its introduction, Pronestyl (procainamide Squibb) was never covered by a patent—as incorrectly reported in the hearing record—and any other company wishing to fulfill the appropriate requirements of the Food and Drug Administration could have introduced procainamide for sale. None did.

Over the last two years, with the increase in quinidine prices to manufacturers and to patients, the use of Pronestyl has become greater; obviously, some physicians who had preferred to administer quinidine have chosen now to change their patients to Pronestyl, making their new choice on the balance of drug effectiveness and cost.

In recent months, therefore, for any organization whose business is mainly in the formulation of dosage forms, there arose a new economic attraction in the possibility of introducing procainamide. As noted above, this could have been done at any time after 1950 with appropriate FDA approval.

In 1965 there appeared procainamide capsules offered by one formulator at a price quoted at 1.9 cents per capsule in the Committee Hearing record for May 23, 1966. While this figure appears to be accurate, it should be made clear for the record that this price per capsule applies when bulk packaging of 50,000 capsules is purchased—presumably for repackaging by still some other organization. Hence, it is a major error to compare the per capsule price in bulk purchases of 50,000 to Squibb's per capsule price in finished packages of 100, ready for dispensing at retail and for which distribution cost is maintained by Squibb.

To engage in original research and development of drugs and to maintain their availability when needed, where needed, and in the appropriate forms for the physician's choice is Squibb's kind of business. In contrast, to make available after sixteen years only the most likely to be used procainamide capsule (excluding both the other oral potency and the less used but critical injectable dosage form), to make available only bulk packaging of 50,000–500,000 capsules, to maintain no ready retail stocks for swift patient access, to be responsive only to a developing economic attraction, such activity clearly constitutes another kind of business which is in no way comparable to Squibb's.

The increase in Pronestyl use over the last few months has made some manufacturing economies possible. Because of these, and in anticipation of further economies from added increases in use resulting from the Committee's request to the Public Health Service to communicate to physicians on the use of procainamide, Squibb reduced its price to hospitals and retailers on June 1. Should some new development bring about a new trend to lowered use of Pronestyl, the economies now present in Pronestyl manufacture will dwindle and the Pronestyl price may later have to be readjusted. In any case, it is clear that a Squibb price varying from three to four cents per capsule depending upon temporary economies is far less important to the patient and to the physician than having the drug properly available for use.

The most expensive drug is the one not available at the time of need—true for most patients, particularly true when heart disease is involved. In the case of Pronestyl, Squibb has admirably fulfilled its obligation—first-rate quality, flexibility in choice of appropriate dosage form, ready patient access when the drug has been prescribed, fair price—all related to the fact that Squibb performed the research which brought this therapeutically valuable drug into being in the first place.

We trust this added information will be a useful supplement to the record of hearings on May 23, 1966 and will be appreciative of the inclusion of this letter.

Sincerely yours,

EDMUND R. BECKWITH, Jr.

E. R. SQUIBB & SONS, INC.,
New York, N.Y.

IMPORTANT PRICE ANNOUNCEMENT ON PRONESTYL® CAPSULES SQUIBB
PROCAINAMIDE HYDROCHLORIDE U.S.P.

DEAR DOCTOR: Squibb announces a price reduction of 25% on Pronestyl Capsules.

The recent increased use of Pronestyl has generated a modest improvement in manufacturing efficiency and expected further increases in prescription use cause us to anticipate added production savings. On this basis, Squibb as elected to pass the savings generated along to the patient.

Pronestyl has been a reliable antiarrhythmic agent for over 15 years and is available in both an 0.25 and 0.5 Gm. capsule designed to simplify the management of ventricular extrasystoles and tachycardia and may be of value in auricular arrhythmias of recent origin.

We are enclosing full prescribing information for your convenience in initiating therapy.

E. R. SQUIBB & SONS, INC.,
New York, N.Y.

IMPORTANT PRICE ANNOUNCEMENT

DEAR PHARMACIST: Squibb announces a price reduction of 25% on Pronestyl (procainamide) Capsules. Your new costs, effective June 1, 1966, are as follows:

List	Description	Size	Old price	New price
7585 Rx.....	Pronestyl 0.25 gm.....	100	\$4.00	\$3.00
7588 Rx.....	do.....	1,000	36.00	27.00
7575 Rx.....	Pronestyl 0.5 gm.....	100	7.20	5.40

Recent increased use of Pronestyl has generated a modest improvement in manufacturing efficiency and expected further increases in prescription use cause us to anticipate added production savings. On this basis, Squibb has elected to pass the savings generated along to the patient.

Your Squibb representative will contact you with respect to an adjustment on your present shelf stock.

Pronestyl, in all its dosage forms, will be actively detailed and promoted through journal ads and professional mailings. This price reduction will also be the subject of an announcement letter which will be sent to physicians early in June.

We very much appreciate your cooperation in this price reduction and look forward to your support.

Very sincerely yours,

C. E. RICHARDSON,
Market Services Manager.

PRONESTYL® CAPSULES, PARENTERAL SOLUTION

SQUIBB PROCAINAMIDE HYDROCHLORIDE U.S.P.

Pronestyl (Procainamide Hydrochloride U.S.P.) is *p*-amino-N-(2-diethylaminoethyl)-benzamide hydrochloride, the amide analogue of procaine hydrochloride. It is available as gelatin capsules supplying 0.25 and 0.5 Gm. for oral use and as a 10% sterile aqueous solution (100 mg./cc.) for parenteral use. The parenteral solution also contains 0.9% benzyl alcohol and 0.09% sodium bisulfite as preservatives; pH has been adjusted to 4.5-5.7 with hydrochloric acid or sodium hydroxide.

Action: Procainamide depresses the excitability of cardiac muscle to electrical stimulation, and slows conduction in the atrium, the bundle of His, and the ventricle. The refractory period of the atrium is considerably more prolonged than that of the ventricle. Contractility of the heart is usually not affected, nor is cardiac output decreased to any extent unless myocardial damage exists. In the absence of any arrhythmia, the heart rate may occasionally be accelerated by conventional doses, suggesting that the drug possesses anticholinergic properties. Larger doses can induce atrioventricular block and ventricular extrasystoles which may proceed to ventricular fibrillation. These effects on the myocardium are reflected in the electrocardiogram; a widening of the QRS complex occurs most consistently; less regularly, the P-R and Q-T intervals are prolonged, and the QRS and T waves show some decrease in voltage.

The action of procainamide begins almost immediately after intramuscular or intravenous administration. Plasma levels after intramuscular injection are at their peak in 15 to 60 minutes. Following oral administration, plasma levels of the drug are comparable to those obtained parenterally, and are maximal within an hour; therapeutic levels are usually attained in half that time.

Procainamide is less readily hydrolyzed than procaine, and plasma levels decline slowly—about 10 to 20% per hour. The drug is excreted primarily in the urine, about 10% as free and conjugated *p*-aminobenzoic acid and about 60% in the unchanged form. The fate of the remainder is unknown.

Advantages:

The action of procainamide on heart muscle and its effects on the electrocardiogram are strikingly similar to those of quinidine.

Procainamide does not cause headache, tinnitus, deafness and disturbed vision which may result from larger doses of quinidine.

Procainamide may be given to patients who are sensitive to quinidine.

Procainamide may stop arrhythmias that have not responded to quinidine.

Procainamide possesses antiarrhythmic activity similar to that of procaine.

Procainamide is considerably more stable in the body than procaine.

Unlike procaine, procainamide does not cause central nervous system stimulation in conscious patients.

Procainamide, unlike procaine, is effective orally as well as parenterally.

Indications: The effects of Pronestyl are more beneficial in ventricular than in auricular arrhythmias. Ventricular extrasystoles and ventricular tachycardia are controlled within an hour after oral or intramuscular administration, or within a few minutes after intravenous infusion.

Digitalis-induced ventricular extrasystoles and tachycardia may at times be suppressed by careful and judicious administration of the drug. Pronestyl may also be of value in the control of an auricular arrhythmia, particularly if the condition is of recent development. Atrial fibrillation of short duration may be converted to a normal sinus rhythm, and chronic atrial fibrillation may occasionally benefit as well. Pronestyl is also worthy of trial in paroxysmal atrial tachycardia that cannot be controlled by reflex vagal stimulation or other measures.

Correction of cardiac arrhythmias which may occur during anesthesia constitutes an important indication for procainamide. The drug is especially valuable with cyclopropane anesthesia, and for intrathoracic surgery, endotracheal intubation, or surgery in cardiac patients for whom the incidence of potentially severe arrhythmias is high. It may be given prophylactically before surgery to patients with known heart conditions or to those undergoing thoracic surgery.

Contraindications: The only absolute contraindication to the use of procainamide is hypersensitivity to the drug, and in this connection, possible cross sensitivity to procaine and related drugs must be borne in mind.

Adverse Reactions and Precautions: Intravenous use of procainamide may produce transient but at times severe lowering of blood pressure, particularly in conscious patients. Intramuscular injection is less likely to be accompanied by serious falls in blood pressure, and hypotension following oral administration is rare. Serious disturbances of cardiac rhythm such as ventricular asystole or fibrillation are also more common with intravenous administration. Precautionary measures to be followed during intravenous injection are given in the paragraph on *Administration and Dosage*.

During administration of the drug, evidence of untoward myocardial responses should be carefully watched for in all patients. In the presence of an abnormal myocardium, procainamide may at times produce untoward responses. In atrial fibrillation or flutter, the ventricular rate may increase suddenly as the atrial rate is slowed. If myocardial damage exists, ventricular tachysystole is particularly hazardous. Correction of atrial fibrillation, with resultant forceful contractions of the atrium, may cause a dislodgement of mural thrombi and produce an embolic episode. However, it has been suggested that in a patient who is already discharging emboli, procainamide is more likely to stop the process than to aggravate it.

Attempts to adjust the heart rate in a patient who has developed ventricular tachycardia during an occlusive coronary episode should be carried out with extreme caution. Caution is also required in marked disturbances of atrioventricular conduction such as A-V block, bundle branch block, or severe digitalis intoxication, where the use of procainamide may result in additional depression of conduction and ventricular asystole or fibrillation.

Large oral doses of procainamide may sometimes produce anorexia, nausea, urticaria, and/or pruritus. A syndrome closely resembling lupus erythematosus has been reported in connection with maintenance procainamide therapy: another report has described a patient with a unique reaction comprising chills,

nausea, vomiting, abdominal pain, fever, acute hepatomegaly and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. The possibility of such untoward effects should be borne in mind. Agranulocytosis has occasionally followed the repeated use of the drug. Therefore, routine blood counts are advisable during maintenance procainamide therapy. The patient should be instructed to report any soreness of the mouth, throat, or gums, or any symptoms of upper respiratory tract infection. If any of these occurs, and leukocyte counts indicate cellular depression, procainamide should be discontinued and appropriate treatment should be instituted immediately.

Overdosage: The principal complications arising from drug abuse are ventricular tachycardia and severe hypotension. These may appear when the drug is taken to excess, when the rate of administration is too rapid, or when drug accumulation occurs in patients on normal dosage with both kidney and liver disease.

Treatment for accidental or intentional overdosage and for complications resulting from drug accumulation or too rapid administration is essentially symptomatic and supportive. In case of recent overdosage of the capsules, prompt gastric lavage, dilution of the stomach contents to delay absorption, or stimulation of vomiting should be attempted if the patient is conscious. In all patients an open airway should be maintained to preclude the possibility of respiratory difficulty. In severe hypotension the proper measures for management of circulatory shock should be instituted, e.g., intravenous fluids or vasoconstrictors employed as indicated by the physician. If electrocardiographic tracings give evidence of impending heart block, such as prolongation of the P-R interval or widening of the QRS complex, procainamide therapy, if being administered parenterally, should be discontinued at once.

Administration and Dosage: Oral administration is preferred. When parenteral therapy is necessary, intramuscular administration is the method of choice. *Intravenous use should be limited to extreme emergencies.*

Oral dose: For ventricular tachycardia, an initial dose of 1 Gm. followed by 0.5 to 1 Gm. every 4 to 6 hours is recommended. The suggested dosage for runs of ventricular extrasystoles is 0.5 Gm. every 4 to 6 hours.

In auricular arrhythmias, an initial dose of 1.25 Gm. may be followed in 1 hour by 0.75 Gm. if there have been no electrocardiographic changes. A dose of 0.5 to 1 Gm. may then be given every 2 hours until the arrhythmia is interrupted or the limit of tolerance is reached. Suggested maintenance dosage is 0.5 to 1 Gm. every 4 to 6 hours.

Intramuscular dose: If the oral route is not feasible, 0.5 to 1 Gm. may be given intramuscularly, repeated every 6 hours until oral therapy is possible.

Intravenous dose: The usual intravenous dose for ventricular arrhythmias ranges from 0.2 to 1 Gm.; for auricular arrhythmias the intravenous dose averages 0.5 Gm. although up to 1 Gm. may be required.

Caution: Intravenous use of procainamide is accompanied by a hypotensive response, sometimes precipitous. For this reason, the intravenous dose should not exceed 1 Gm., and should be diluted to permit greater control of infusion rate. It should be administered at a rate not exceeding 25 to 50 mg. per minute. Intravenous infusion should be monitored electrocardiographically, so that the infusion may be stopped when the arrhythmia is interrupted or when excessive widening of the QRS complex or prolongation of the P-R interval suggests the occurrence of myocardial toxicity. Patients should be kept in a supine position and blood pressure should be measured almost continuously during the infusion. If the fall in blood pressure exceeds 15 mm. Hg the infusion should be temporarily discontinued. Solutions of Phenylephrine Hydrochloride Injection U.S.P. or Levarterenol Bitartrate Injection U.S.P. should be available to counteract severe hypotensive responses.

Surgical Use. For arrhythmias occurring during surgery, the suggested parenteral dose is 0.1 to 0.5 Gm., preferably given intramuscularly.

For prophylactic use before surgery, an oral or intramuscular dose of 1 to 2 Gm. may be given 1 to 2 hours before induction of anesthesia, followed by two intravenous doses of 0.5 Gm. each, the first given one-half hour before induction and the second given during induction. If indicated, an additional intravenous dose of 0.5 Gm. may be given during thoracotomy.

Supply: Pronestyl Capsules (two-piece, yellow), 0.25 Gm., bottles of 100 and 1000; 0.5 Gm., bottles of 100. Keep and dispense in tightly closed containers.

Pronestyl Injection, vials of 10 cc. Store at room temperature.

Note: The solution is sensitive to oxidation so that if air is injected into the vial when the dose is withdrawn, the remaining solution may turn yellow or amber. This does not affect the therapeutic effectiveness of the drug. Discard solutions darker than light amber or discolored in any other way.

AUGUST 15, 1966.

STAFF MEMORANDUM
RE: PRICE CHARTS

Memorandum to: S. Jerry Cohen, Esq., chief counsel.

From: John M. Blair, chief economist.

Subject: Letter to Chairman Hart of June 10, 1966, from E. R. Squibb & Sons, Inc., re price of procainamide.

The letter of Squibb concedes that procainamide can be purchased in bulk from a smaller drug manufacturer for 1.9¢ per capsule. The manufacturer will pack the capsules in bottles of 100 for an additional charge of \$.13, making a total of approximately 2.0 cents—capsuled, bottled and ready for shipment.

What happens after the product leaves the manufacturer is a matter of conjecture. In sales to retailers a mail-order house may add on a relatively small markup; a drug company employing detail men would no doubt use a larger mark-up. In retrospect, it may be that my "customary" wholesalers allowance for the distributor (15%) was too low; at the same time my allowance for the retailer (40% on the retail price) may well have been too high.

Two firm conclusions, however, do emerge from the data: (a) Until the 25% price reduction made by Squibb shortly after the hearings, the smaller manufacturer's price was about half that charged by Squibb, and (b) it should now be possible to obtain procainamide, under its generic name or as Squibb's Pronestyl, at prices substantially below the price of quinidine.

LETTER FROM THE AMERICAN HEART ASSOCIATION, INC.

NEW YORK, N.Y., July 15, 1966.

HON. PHILIP A. HART,

*Chairman, Subcommittee on Antitrust and Monopoly,
Senate Judiciary Committee,
Washington, D.C.*

MY DEAR SENATOR HART: I am Dr. Lewis E. January, Professor of Medicine at the University of Iowa and President-Elect of the American Heart Association. I wish to submit to you a statement on behalf of the American Heart Association dealing with the rising price and the apparent threat to the supply of the drug quinidine.

It is my understanding that the Subcommittee on Antitrust and Monopoly of the Senate Judiciary Committee, of which you are the chairman, has concluded hearings on matters relating to this problem. I regret that the American Heart Association was unable to present its views at the hearing since we do have an appropriate responsibility to patients and to physicians alike in all matters which affect the welfare of people with heart disease. For this reason I respectfully request that the following statement be made part of the official record of the above mentioned subcommittee.

It is widely acknowledged that quinidine is the most effective drug for the control of many of the irregularities of heart action. While it is true that the more recently introduced drug, procainamide hydrochloride (Pronestyl) has the same general effectiveness, there are sufficient important differences between the two to make it essential that both be available. For example, there is evidence to indicate that quinidine is more effective against atrial arrhythmias, particularly atrial flutter and atrial fibrillation, while procainamide is more effective against ventricular arrhythmias. The long-term use of quinidine is considered by many as not only more effective but safer than procainamide. Quinidine is essential for the maintenance of normal heart rhythm after the electric counter-shock treatment of arrhythmias because procainamide sometimes is ineffective.

Each drug may have serious toxic effects, some of which are related to over-dosage and some to the individual's hypersensitivity. Some of the toxic effects of the two drugs overlap, but also some are different and patients sensitive to one drug can at times be treated with the other. Thus, both drugs should be easily available.

A serious generalized systemic disease (systemic lupus erythematosus) recently has been recorded in some patients taking procainamide on a long-term basis, but it is not known to occur from quinidine.

Finally, a very large number of physicians in this country have a therapeutic preference for quinidine and over a period of many years have developed great skills in its usage. This alone justifies the need for an ample stockpile of the drug and at a cost which is feasible for patients who need it.

We believe it would be a great fallacy to consider procainamide a substitute for quinidine. Furthermore, there should be no implication that the availability and the lower cost of procainamide makes quinidine superfluous. This point of view could no more be justified than the presumption that the discovery of antibiotics with similar effects to penicillin have made the latter unnecessary.

We wish to emphasize that we believe a serious disservice to the public and to the medical profession will result if quinidine becomes unavailable or too costly to be commonly prescribed.

Respectfully yours,

LEWIS E. JANUARY, M.D.



