

PERSONNEL OF THE COMMISSION

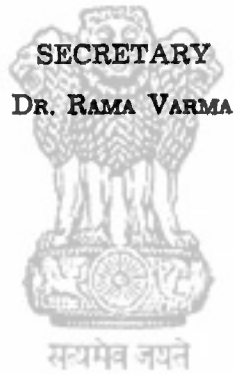
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PANEL FOR THE INQUIRY

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GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY
(DEPARTMENT OF HEAVY INDUSTRIES).

New Delhi, the 28th September, 1957.

RESOLUTION

Tariffs.

No. 8(1)-T.R./57.—The Tariff Commission has submitted its Report on the continuance of protection to the Titanium Dioxide Industry on the basis of an inquiry undertaken by it under Sections 11(e) and 13 of the Tariff Commission Act, 1951. Its recommendations are as follows :—

- (1) Protection to the industry should be continued for a further period of four years, i.e., till 31st December, 1961.
- (2) The rates of protective duty should be as proposed in the Finance Bill (No. 2) of 1957, namely, 35 per cent *ad valorem* (preferential) and 45 per cent *ad valorem* (Standard).
- (3) With a view to conservation of foreign exchange, imports of anatase titanium dioxide should be permitted only to actual users to the extent required to fill the gap between internal production and actual demand and imports of the rutile type of pigment should be carefully regulated to the extent of actual requirements of such consumers as cannot make use of the anatase type. Imports of lithopone should be strictly regulated in such a manner as to make the product available only for paint formulations in which titanium dioxide is not found suitable on technological grounds and for *bona fide* users only.
- (4) Government should view with favour the company's expansion plans covering both types of titanium dioxide.
- (5) Government should expedite decision on the issue of grant of licence for importing the requisite machinery for a 50 ton per day sulphuric acid plant to be erected at the factory site of Travancore Titanium Products Ltd.
- (6) Supply of ilmenite should be made to Travancore Titanium Products Ltd., after recovery of the "basic charge". An undertaking should be given to the company that the recovery price will remain frozen for a period of four years subject to any escalator clause that may be necessary.
- (7) The Kerala State Government should take adequate steps to maintain the canal from Alwaye to Trivandrum free from congestion and in navigable condition at all times throughout the year.

2. Government accept recommendations (1) and (2) and the necessary legislation will be undertaken in due course.

3. Government have taken note of recommendation (3) and it will be taken into consideration along with other relevant factors while formulating the import policy from time to time.

4. Government has taken note of recommendation (4). As regards recommendation (5), Government's decision has already been communicated to Travancore Titanium Products Ltd.

5. The attention of the Kerala State Government is drawn to recommendations (6) and (7).

ORDER

ORDERED that the Resolution be published in the *Gazette of India* and a copy of it be communicated to all concerned.

S. RANGANATHAN,
Secretary to the Government of India.



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REPORT ON THE CONTINUANCE OF PROTECTION TO THE TITANIUM DIOXIDE INDUSTRY

The claim of the titanium dioxide industry to protection or assistance was first referred to the Tariff Commission by the Government of India in the Ministry of Commerce and Industry by their Resolution No. I-T(21)/52, dated 15th November, 1952. The Tariff Commission submitted its Report in July, 1953 recommending *inter alia* the conversion of the then existing revenue duty of 25·2 per cent preferential into an equivalent preferential protective duty, the standard rate to be fixed in accordance with the terms of the Indo-British Trade Agreement of 1939. The Commission also recommended that a review of the case should be undertaken by it before the end of 1954. Both the recommendations were accepted by Government and protective duty at the rate of 25·2 per cent *ad valorem* preferential and 35·2 per cent *ad valorem* standard was accordingly fixed on titanium dioxide by the Indian Tariff (Third Amendment) Act, 1953. By the Finance Act of 1954 the protective duty was increased to 25·2 per cent *ad valorem* plus one-fourth of the total duty preferential, and 35·2 per cent *ad valorem* plus one-fourth of the total duty standard. As the Commission was unable to undertake an inquiry into the case before the end of 1954 protection at the then existing rates of duty was extended by one more year, i.e., till 31st December, 1955 by the Indian Tariff (Third Amendment) Act, 1954, on the recommendation of the Commission. The second inquiry into the case of the industry took place in January 1955 and a report was submitted to Government in March, 1955 recommending continuance of protection to the industry at the then existing rates of duty for two more years, i.e., up to 31st December, 1957. The Government of India in the Ministry of Commerce and Industry by their Resolution No. 8(1)TB/55, dated 2nd July, 1955 accepted the recommendation. The period of protection was extended up to 31st December, 1957 by the Indian Tariff (Second Amendment) Act, 1955. As regards the quantum of protection, it was decided, with the concurrence of the Commission, that the protective rates of duty on titanium dioxide should be fixed at 34 per cent *ad valorem* preferential and 44 per cent *ad valorem* standard and that the item should be exempted from surcharge. The above rates of protective duty were brought into force with effect from 2nd July, 1955 by the Government of India in the Ministry of Commerce and Industry by their Notification No.-8 (1)TB/55, dated 2nd July, 1955. In the Finance Bill introduced in the Lok Sabha on 15th May, 1957 it has been proposed that the rates of duty on titanium dioxide should be revised to 35 per cent *ad valorem* preferential and 45 per cent *ad valorem* standard.

2. The protection granted to the titanium dioxide industry is scheduled to lapse on 31st December, 1957. The present inquiry has, therefore, been undertaken by the Commission under Section 11(e) read with Section 13 of the Tariff Commission Act, 1951, which empowers the Commission to inquire into and report on any further action required in relation to the protection granted to

an industry, with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

3. On 25th February, 1957, the Commission issued a press note inviting producers, importers and consumers to

Method of inquiry. obtain the relevant questionnaires from the Secretary to the Commission and furnish replies thereto. A list of producers, importers, consumers

and associations to whom the Commission's questionnaires were issued and from whom replies were received is given in Appendix I. The Collectors of Customs at different ports were requested to furnish information relating to c.i.f. prices of latest imports of titanium dioxide separately for anatase and rutile varieties. The Chief Industrial Adviser, Ministry of Commerce and Industry, Development Wing was requested to furnish a detailed memorandum on the present position of the industry. The Secretary to the Government, Development Department, Kerala State was addressed for a detailed memorandum on the present position of the industry with particular reference to the supply position of raw materials required by the industry. A letter was addressed to Messrs. T. T. Krishnamachari & Co., Selling Agents for Travancore Titanium Products Ltd., asking them to furnish information regarding their estimates of demand for titanium dioxide and the steps taken by them to popularise the use of titanium dioxide and to overcome the difficulties experienced by consumers due to shortage of the material. The Indian Government's Trade Representatives in the U.K., U.S.A., Japan and West Germany were requested to furnish data regarding the current f.o.b. prices of titanium dioxide in those countries. Shri K. R. Damle, Chairman and Shri C. Ramasubban, Member, visited the factory of Travancore Titanium Products Ltd., Trivandrum on 3rd May, 1957, while Dr. S. K. Muranjan, Member, visited the same factory on 4th May, 1957. Shri N. Krishnan, Senior Cost Accounts Officer, and Shri P. M. Menon Assistant Cost Accounts Officer, visited the factory from 30th April to 2nd May, 1957 and from 25th April to 3rd May, 1957 respectively for examining the cost of production of titanium dioxide. A public inquiry into the industry was held at the Commission's office on 28th May, 1957. A list of persons who attended the public inquiry is given in Appendix II.

4.1. We set out below the recommendations made by the Commission in its last Report (1955) and indicate the extent to which they were implemented.

4. Recommendations made by the Commission in its last Report (1955).

4.2. "The Travancore Titanium Products Ltd., should be permitted during the period of continuance of protection to restrict its production to the anatase type alone and the country's needs of rutile pigment should be met from import".

"Until such time as the Travancore Titanium Products Ltd., are not in a position to manufacture rutile type of pigment, imports of this material should be carefully regulated and permitted only to the extent of actual requirements of the consumers"

Travancore Titanium Products has stated that its production was confined to the anatase type only and that limited imports of the rutile type were allowed by Government. The Company has further stated that this has assisted it considerably in conserving its resources and in achieving maximum production.

4.3. "Government should give their attention to the question of securing general acceptance of the practice of sale of paints by volume instead of by weight and examine the feasibility of undertaking legislation to this effect"

The Development Wing has stated that this question came up for discussion at a meeting of the Planning Commission when representatives of both the associations of the paint industry, namely, the Paint Federation and the Indian Paint Manufacturers Association were present. Both the associations were in favour of the adoption of a uniform practice of sale of ready mixed paints by volume measure. The member firms of the Paint Federation would seem to be willing to follow the method of sale of paints by volume if it is ensured that all paint manufacturers would do likewise. They, however, feel that as the bulk of the business in the bazar is still transacted by weight, there is no other way to bring about the change except by resorting to legislation. The Indian Paint Manufacturers Association, however, appears to have shifted ground and considers that it would be advisable to continue the existing practice of selling paints and varnishes by weight as well as by volume measure. There is, therefore, disagreement between the two important sections of the industry on this question. The view held by the Development Wing is that there can be no enforcement by legislation of the practice of sale of paints by volume, particularly when an important section of the manufacturers is not in favour of the change. In this connection Travancore Titanium Products has stated that this recommendation has had one desirable effect, viz., that Government purchases of liquid paints are made on the basis of volume.

4.4. "If the technical investigation of the financial effects of installing a 25 ton sulphuric acid plant at the factory of Travancore Titanium Products Ltd., shows that installation of such a plant would ultimately result in reducing the cost of production of titanium dioxide appreciably, the Government of India should, in consultation with the Travancore-Cochin Government, consider the feasibility of providing the requisite finance to Travancore Titanium Products Ltd., for the installation of a 25 ton sulphuric acid plant at their own factory"

The Development Wing has stated that Travancore Titanium Products Ltd., has been permitted under the Industries (Development and Regulation) Act, 1951 to instal a 50 ton per day sulphuric acid plant.

4.5. "Ad hoc licences to actual users of lithopone should be carefully screened and the tendency to use lithopone extensively, discouraged"

The Development Wing has stated that *ad hoc* licences for imports of lithopone to actual users have been granted in such a way that the quantity recommended for import has been progressively reduced from year to year as can be seen from the table below :—

Year	Quantity recommended for import
	Tons
1954	680
1955	365
1956	206

Travancore Titanium Products Ltd., Trivandrum has also agreed that imports of lithopone have been progressively reduced and that complete replacement of lithopone by titanium dioxide would be ultimately possible.

4.6. "Statistics of imports of titanium dioxide should be maintained separately for rutile and anatase types of pigments".

In the monthly returns of imports relating to protected commodities furnished to the Commission by the Director-General of Commercial Intelligence and Statistics imports are recorded separately for anatase and rutile varieties from May, 1955.

4.7. "The Travancore-Cochin State Government should render assistance to the Company to eliminate delays in the transport of sulphuric acid due to congestion in the canal from Alwaye to Trivandrum".

Travancore Titanium Products Ltd., has stated that no effective measures have been taken by the State Government with regard to the above. Throughout 1955 and more especially in 1956 serious delays in transit down the canal were experienced on account of landslides, silting up of the canal bed and flooding. In 1956 it was necessary to resort to lorry transport from Quilon for a period of 3 weeks on account of two landslides which occurred in the Quilon-Trivandrum Section. The Company has stated that these difficulties, apart from involving the Company in considerable additional expenses, affected its production also.

4.8. "Ilmenite sands which are owned by Government should be made available to Travancore Titanium Products Ltd., after recovering the "basic charge" of Rs. 14.77 only per-ton".

Travancore Titanium Products has stated that this recommendation has also not been implemented by the State Government. Ilmenite sands continued to be supplied to the Company at Rs. 27 per ton N.A.W. Further the Company has been recently informed by the State Government that for 1957 ilmenite would be supplied to it

at a price equal to 50 per cent of the price charged for export purposes from time to time. We are informed that this would work out to Rs. 33.33 per ton N.A.W. The Company has stated that this announcement from the State Government would mean an increase in the price of ilmenite instead of a decrease as recommended by the Commission. This question is discussed further in paragraph 7.1.1.

4.9. During the period of protection the Travancore Titanium Products Ltd. should strengthen their financial position by wiping out their losses, by repaying a part of the loan taken from the Industrial Finance Corporation together with interest thereon, and by building up reserves".

Travancore Titanium Products has stated that it repaid 3 instalments of Rs. 2 lakhs each towards the loan of Rs. 15 lakhs from the Industrial Finance Corporation (two instalments up to the end of 1956 and the third in March, 1957). From a comparative statement of the financial position of the Company as at the commencement of 1954 and as at the end of 1956 it is observed that there has been an increase in the net worth of the Company to the extent of Rs. 23 lakhs within a period of 3 years. We are informed that this amount has been set apart for financing the Company's expansion scheme. No dividends have been declared.

5.1. Travancore Titanium Products Ltd., Trivandrum continues to be the only unit manufacturing titanium dioxide in the country, with authorised capital of Rs. 75 lakhs and paid-up capital of Rs. 73,10,670 held as follows :—

Name of shareholding interest	Value of capital held (Rs.)	Percentage of capital held to total capital
State of Kerala	38,25,000	52.3
British Titan Products Ltd.	16,55,600	22.6
A. & F. Harvey Ltd.	9,97,320	13.7
Madura Mills Co., Ltd.	4,00,000	5.5
Hopkin and Williams (Trav.) Ltd.	2,66,680	3.6
Associated Mineral Co., Ltd.	1,30,640	1.8
Other individuals	35,430	0.5
TOTAL	73,10,670	100.0

A comparative statement of the financial position of the Company as at the beginning of 1954 and as at the end of 1956 is given below from which it will be seen that considerable improvement has taken place in its financial position, and its net worth has increased by

Rs. 23 lakhs during three years of regular production, the deficit of Rs. 14.98 lakhs at the commencement of 1954 having been turned into a surplus of Rs. 8.11 lakhs at the end of 1956.

	Book value at the begin- ning of 1954	Book value at the end of 1956
	Rs.	Rs.
1 Fixed assets	59,55,882	43,78,134
2 Current assets	8,55,305	52,14,502
3 Total assets	68,11,187	95,92,636
4 (a) Loans and Liabilities (short term)	9,98,244	3,69,899
(b) Loans (long term) . . . . .	..	11,00,000
5 Balance being net worth	58,12,943	81,22,737
6 Paid up capital including amount of forfeited shares	73,11,691	73,11,691
7 Balance (Surplus + Deficit —)	(—)14,98,748	(+) 8,11,046

5.2. During the year 1954 the Company's production of pigment found sale inside the country to the extent of 708 tons and in the export market to the extent of 437 tons. During the year 1955 internal sales aggregated 1142.46 tons, and exports aggregated 662.70 tons while during 1956 internal sales amounted to 1620.42 tons and exports had to be limited to the extent of 131.23 tons, as the demand from industries consuming the pigment inside the country could not be met fully. As a result of the marked increase in the internal demand the Company has formulated a scheme of expansion for increased production of anatase pigment and fresh production of rutile pigment, integrated with which is a proposal for installing a 50 ton per day sulphuric acid plant at the factory site. The proposal for expansion is to increase anatase production to about 2700 tons per annum as soon as possible, and, in the meantime, to procure the necessary additional plant and equipment for the manufacture of rutile pigment. Subject to import licences being made available in time, the Company expects to achieve the following production targets for the next three years.

	1957	1958	1959	1960
	Tons	Tons	Tons	Tons
Anatase	1800 to 2000	2000 to 2400	2600	1800
Rutile	Nil	Nil	300	1800

We were informed by the Company's representative at the public inquiry that after the additional plant and equipment has been installed fully in 1960, the proportion of anatase and rutile could be varied according to the necessities of the situation then subsisting.

5.3. The expansion programme will involve an outlay of approximately Rs. 75 lakhs, and will take about 18 months to two years to become effective. The Company expects to mobilise its internal

resources for meeting expansion needs to the extent of about Rs. 40 lakhs, and has applied to the Industrial Finance Corporation for a loan of Rs. 36 lakhs to meet the balance required. Negotiations in this regard are reported to be taking place between the Company, the Kerala State Government and the Corporation.

6.1. The rated capacity of the Company continues to be 1800 tons per annum. The production (which is confined to anatase type of pigment) during the years 1954, 1955 and 1956 was 1369.5 tons, 1808.4 tons and 1700.375 tons respectively. The reasons for the Company's inability to produce to the full extent of its capacity in 1956 were twofold, viz., (i) a forced shut-down in the month of March for about 15 days on account of failure in the supply of electricity, and (ii) a shut-down for a like period in October on account of a strike among the majority of the Company's staff and workers. The production during the first four months (January to April) of 1957 was 135.3 tons, 133 tons, 150 tons and 50.4 tons respectively. The low volume of production in April last was due to the stoppage in the supply of sulphuric acid by Fertilisers and Chemicals (Travancore) Ltd., which was faced with a labour strike in its factory. It will be observed from the above data that production at the optimum level of between 1800 to 2000 tons per annum can be maintained by the factory only if there is an uninterrupted supply of electricity, sulphuric acid and other raw materials, and also provided labour plays its part.

6.2. Sales of the pigment inside the country during 1954, 1955 and 1956 were of the order of 708 tons, 1142.46 tons and 1620.42 tons respectively, and exports during the three years aggregated 437 tons, 662.70 tons and 131.23 tons respectively. The figures relating to the supply of the pigment to the different consuming interests in the country are given below as they would help in framing estimates of the probable demand in future.

(Figures in tons)

Serial Number.	Name of the consuming industry	1954	1955	1956
1	Paint	374	608	782
2	Rubber	105	129	228
3	Linoleum	8	19	13
4	Leather and Polish	4	12	22
5	Plastics	2	5	13
6	Soap	6	24	28
7	Ink (Printing)	25	39	51
8	Paper . . . . .	..	19	7
9	Rayon	8	16	35
10	Ceramics	1	..	..
11	Electrodes	2	2	3
12	Textiles	26	47	125
13	Enamelware	21	26	46
14	Cosmetics	1	..	1
15	Miscellaneous	5	12	5
16	Dealers	120	184	255
17	Laboratory and Research	1	..	7
TOTAL		708	1,142	1,620½

7.11. *Ilmenite*.—Both in our 1953 Report as well as in our 1955 Report we recommended that supplies of ilmenite

7. *Raw materials*. sands should be made to the Company by the State Government (which owned the deposits) against recovery of the 'basic charge' of Rs. 14·77 per ton in order that the cost of production of the pigment may be kept as low as possible. It was our view that as the State Government owned 51 per cent of the shares in the Company it should be willing to implement a recommendation which, in our considered judgement, had a high priority in our composite scheme of protection for the industry. The State Government, however, decided to recover from the Company a 'Naked at Works' price of Rs. 27 per ton instead of the 'basic charge' of Rs. 14·77, so that during 1954, 1955 and 1956 the Company had to pay Rs. 37·92, Rs. 40·36 and Rs. 40·36 per ton respectively for ilmenite delivered at its factory after incurring bagging, delivery and transport charges. For the year 1957 the Company was informed by the Kerala State Government that a further increase in price raising it to 50 per cent of the price charged for export purposes from time to time had been decided upon. On this basis the 'Naked at Works' price would now amount to Rs. 33·33 per ton while the final price at the factory would aggregate about Rs. 47·80 per ton. This even does not appear to be the final position regarding ilmenite. We are informed by the Company that the ownership of ilmenite deposits has passed into the hands of a new Corporation (Travancore Minerals Private Ltd.) which is owned by the Central Government, and that the Special Officer in charge of this Corporation has demanded from the Company an assurance that it would pay the full export price of 100 shillings per ton (Rs. 66·66) for all future supplies as 'N.A.W.' price instead of Rs. 33·33 per ton. On the basis of a N.A.W. price of Rs. 66·66 the price at factory site would amount to about Rs. 80·85 per ton. The Company has advised us that it proposes to make representations in the matter for restoration of '*status quo ante*' in price and has urged that we should support its case.

7.1.2. When recommending a low price for ilmenite in our 1953 Report we laid stress on the need for keeping the cost of production of titanium dioxide as low as possible to ensure its wider domestic application. Although our integrated scheme of protection was implemented only in parts, considerable progress was achieved during the last three years as regards the increase in domestic demand. Even so, the stage has not yet been reached when it can be said with certainty that the pigment, at its present selling price, can compete in the internal market with the available alternative pigments. We would also lay stress on the fact that titanium dioxide is an industrial raw material which is used in processing industries like paints, rubber, textiles, printing ink, enamelware, soaps, leather and linoleum, and that in any scheme formulated for its protection, priority should be given to maximise the concessions in raw material prices that can be conceded by the State, before calling on the consuming industries or consumers to bear the burdens of protection. There is, therefore, a continuing case for reducing the cost of production of the pigment. The Company has been making continuous efforts to effect economies in the cost, but has to face several other items of increases over which it has no control. The *only* advantage enjoyed by the indigenous titanium dioxide factory over its foreign competitors in the rest of the world is its proximity to ilmenite, and it will, indeed,

be unfortunate if it is not allowed to enjoy this advantage through a concession in the price which it has to pay for the raw material, such concession being limited, at current levels of production to about 3950 tons only as against exports to pigment manufacturers in other parts of the world aggregating 246,196 tons in 1955 and 283,201 tons in 1956. If Travancore Titanium Products is given assistance in full measure to lower its cost of production and expand its capacity, it will be in a position to enter the export market for titanium dioxide and earn valuable foreign exchange. We observe that during the last three years the Company has adhered strictly to the obligation to keep its selling prices in fair relation to its cost of production and, therefore, feel confident that the effect of any concession granted to it in the price of ilmenite will be duly passed on in the selling price of the pigment. We, therefore, recommend that the supply of ilmenite should be made to Travancore Titanium Products Ltd., after recovery of the "basic charge" and that an undertaking should be given to the Company that the recovery price will remain frozen for a period of four years subject to any escalator clause that may be found necessary. The second part of the above recommendation is in recognition of the principle that a commercial undertaking which has large expansion plans before it has to have some assurance of being able to control its cost of production during the period of expansion.

7.2.1. *Sulphuric acid.*—This raw material is still being obtained by the Company from Fertilizers and Chemicals (Travancore) Ltd., by country craft, the cost per ton landed at the factory being about Rs. 191. Having satisfied itself that some economies could be achieved by producing the acid at its own plant located in its factory site, and mainly with a view to be rid of the uncertainties of regular supply which are contingent on two factors, namely, uninterrupted production at the factory of the suppliers (FACT Ltd.) and uninterrupted maintenance of facilities for canal transport from Alwaye to Tri-vandrum, the Company has placed orders for a sulphuric acid plant with accessories for producing 50 tons of acid per day. The delivery of the plant is expected to be approximately ten months from the date of the receipt of the licence by the suppliers in Germany. The application for a capital goods licence for Rs. 15 lakhs was submitted to the Central Government in November, 1956 and is pending sanction.

7.2.2. From what we have stated in paragraph 6.1, it will be observed that loss of production to the extent of about 100 tons of pigment took place in April last (as a result of a strike in FACT Ltd.) when the supply of sulphuric acid was interrupted. It is, therefore, a matter of great importance to the Company that it is assisted to expedite erection of a sulphuric acid plant at its factory site. We recommend that Government should expedite decision on the issue of grant of licence for importing the requisite plant.

7.3. The Company has represented to us that the difficulties of canal transport have not lessened, and that serious delays have occurred during the past two years as a result of landslides, silting up of the canal bed and flooding. We have no doubt that the Kerala State Government is fully aware of the vital necessity to keep the main waterway in the State in perfect trim, in order that industries established in the State may be in a position to utilise this cheap medium

of transport for carrying raw materials from the interior as also to send finished products to Cochin port, Travancore Titanium Products will require the use of the canal to an increasing extent in the years to come for conveying sulphur from Cochin port (for its acid plant when it is erected) and for sending the titanium pigment to Cochin port for distribution in upcountry centres. We, therefore, recommend, once again, that the Kerala Government should take adequate steps to maintain the canal from Alwaye to Trivandrum free from congestion and in navigable condition at all times throughout the year.

8.1. In our 1953 Report we estimated the then annual demand for titanium dioxide between 400 and 500 tons and expected that, with the gradual replacement of other white pigments like lithopone, zinc oxide and white lead by titanium dioxide it could be stepped up to 650 to 900 tons per annum. True to our expectations the demand for titanium dioxide in 1954 went up to 910 tons of which 708 tons were met by indigenous production and 202 tons by imports. In our last Report (1955) we estimated the then annual demand at 1100 tons (900 tons anatase and 200 tons rutile) and the future demand at increased quantities of 20 per cent each year. These proved to be under estimates as the internal consumption in 1955 aggregated 1428 tons (1142 tons from indigenous production and 286 tons from imports) while that in 1956 aggregated 1859 tons (1620 tons from indigenous production and 239 tons from imports). It is necessary to bear these data in mind while making a fresh assessment of demand, as also the fact that since the latter part of last year the demand for the pigment has been more than the available indigenous supply. The indigenous production of titanium dioxide during the months of January to April 1957 amounted to 468 tons, and imports during January and February were about 30½ tons, but it would seem that the aggregate quantity of available pigment has not met fully the needs of consuming interests.

8.2. The Development Wing estimates the current demand for the year to be of the order of 2600 tons of which it is expected that 400 tons will be for the rutile type. It expects that the demand by 1960 will go up to 3600 tons of anatase and 1200 tons of rutile. The Travancore Titanium Products has estimated, on the basis of a market survey conducted by its Selling Agents that the demand during 1957 will aggregate 2400 tons (1950 tons for anatase and 450 tons for rutile), and that during 1958 to 1960 the demand will be as follows:

	1958	1959	1960
	Tons	Tons	Tons
Anatase	2100	2300	2400
Rutile	550	700	900
TOTAL	2650	3000	3300

These estimates were discussed fully at the public inquiry and attention of the representatives of the interests present was drawn to the figures of consumption (relating to the years 1954, 1955 and 1956) of

the several consuming industries as given in paragraph 6.2. above. It was agreed generally, that in the face of the unforeseen pattern of increasing demand by certain major industries, (e.g. Paint, Rubber and Textiles) it was impossible to make an accurate forecast of future demand, but that it would be safe to place current demand (1957) at 2600 tons of which 2200 tons will be for the anatase type and 400 tons for the rutile type. As regards future demand we agree with the Development Wing's estimate that by the end of 1960, the anatase type of pigment may be required to the extent of 3600 tons and the rutile type of pigment to the extent of 1200 tons.

8.3. In view of what we have stated above, we consider it to be very necessary that Travancore Titanium Products should proceed with the implementation of its expansion plans with the utmost expedition. The favourable conditions which were created for the Company during the period of protection enjoyed by it so far have resulted in strengthening its finances to the extent that, on its own admission, it is in a position to meet more than half the cost of its present scheme of expansion from the internal resources that are available to it now and such as will accrue from its continued working on the existing favourable conditions; as far the balance it has applied to the Industrial Finance Corporation for a loan of Rs. 36 lakhs. As it is in the interest of the country's expanding economy that the Company's production capacity should increase, if possible, threefold by the end of 1960, and such increase would result in saving foreign exchange, we recommend that Government should view with favour the Company's expansion plans covering both types of titanium dioxide.

8.4. In the meantime, we recommend that with a view to the conservation of foreign exchange, imports of anatase titanium dioxide should be permitted only to actual users to the extent required to fill the gap between internal production and actual demand. Similarly imports of the rutile type of pigment should be carefully regulated to the extent of actual requirements of such consumers as cannot make use of the anatase type. It is necessary to remember, in this connection, that owing to restriction of imports and an excess of demand over supply, there was a noticeable tendency in recent months for small quantities of the pigment being sold by dealers at premium prices to small users. The position regarding lithopone is stated to be similar. Although imports were carefully regulated in the country during 1954, 1955 and 1956 and actual imports took place to the extent of 1250 tons, 729 tons and 417 tons respectively, some lots would appear to have been sold at prices as high as Rs. 2000 per ton while the landed cost is reported to have been in the region of only Rs. 700. We, therefore, recommend that imports of lithopone should be strictly regulated in such a manner as to make the product available only for paint formulations in which titanium dioxide is not found suitable on technological grounds and for bona fide users only.

9. The quality of indigenous titanium dioxide (anatase) is considered by the majority of users to be satisfactory. A few vague complaints have been made by certain consumers, but on careful examination we find little or no substance in them. The

Company has been in contact with special users like Vitreous Enamellers and Rayon Manufacturers through its technical salesmen and has endeavoured to meet their requirements as fully as possible. The Company has also been forwarding regular samples of its production to the British Titan Products Ltd., in the United Kingdom and obtaining its assurances that the standard of quality is being adequately maintained. The Development wing has expressed satisfaction with the quality of the product and we have seen enough evidence of due care and diligence being exercised by the Company in supplying an approved type of pigment suited to the requirements of consumers.

10.1. Messrs. T. T. Krishnamachari & Co., are the sole selling agents for Travancore Titanium Products from 10th May, 1954. The Selling Agents have their own godowns at Bombay, Calcutta, Delhi and Madras where stocks of the pigment are held. Despatches of titanium dioxide are made by Travancore Titanium Products Ltd., to the above-mentioned godowns weekly or fortnightly for supply to consumers. The selling prices are fixed by the Company and sales are effected only at these prices which were as follows:—

From May, 1954 to July, 1956	Rs. 135 per cwt. at Selling Agents' godowns at Bombay/Calcutta/Madras.
	Rs. 130 per cwt. f.o.r. Trivandrum.
From July, 1956	Rs. 140 per cwt. at Selling Agents' godowns at Bombay/Calcutta/ Madras.
	Rs. 135 per cwt. f.o.r. Trivandrum.

10.2. The Selling Agents are reported to have taken active steps to popularise the use of titanium dioxide among consumers through intensive personal propaganda for which purpose they have employed two technologists who were trained in the Technical Sales Service Laboratories of the British Titan Products Ltd. One of them is posted at Calcutta and the other at Bombay. It is stated that a third technical salesman will be sent to the United Kingdom for similar training in the near future and will be posted at Madras to cover the area in the South. In addition, a comprehensive booklet dealing with the varied uses of titanium dioxide has been published by the Company and is being distributed by the Selling Agents along with other types of specialised literature.

10.3. During the course of our inquiry we received several complaints to the effect that consumers were not able to get their requirements of titanium dioxide in full, that there were delays in effecting supplies, and that the sole distributors had taken recourse to a system of quotas to satisfy indentors. We have investigated the position fully and are satisfied that no blame can be apportioned either to the producing Company or to the sole distributors. The pigment was in short supply during the latter portion of 1956 as a result of interruptions to production (paragraph 6.1) and the increase in demand was unforeseen. In the circumstances the sole distributors, in consultation with Travancore Titanium Products and with the latter's

permission, established quotas to individual consumers, on the basis of previous offtake, and effected supplies in as equitable a manner as was found possible. They maintained prices at the level fixed by the Company, and no one has complained that a higher price was charged. Some parties have stated that they bought the pigment from dealers at as high a price as Rs. 224 per cwt. but that was because dealers who received supplies for sale to small users exploited the situation unscrupulously. The sole distributors have since stopped supplies to dealers and have restricted them to actual users only.

11.1. *Imports.*—Imports of titanium dioxide are not separately recorded in the Accounts relating to the Foreign Trade and Navigation of India. However, pursuant to the Commission's recommendation in its Report of 1953, the Director-General of Commercial Intelligence and Statistics has been furnishing information, relating to imports of titanium dioxide in his monthly returns relating to protected commodities from February, 1954. The Commission in its second Report on the industry (1955) further recommended that these statistics should be maintained separately for anatase and rutile types of pigments. This was also accepted by the Government of India and in the monthly returns from May, 1955 statistics of imports of anatase and rutile varieties are recorded separately. The following statement gives the quantity and value of imports of titanium dioxide during 1954 (February to December), 1955 and 1956 as recorded in the monthly returns:—

Year	Quantity		Value	
	Tons		Rs.	
1954 (Feb.—Dec.)	201.75		5,10,807	
1955	285.70		7,80,208	
1956	239.20		7,75,474	

The break-down of imports into anatase and rutile is available from May, 1955 onwards which is given in the following table:—

	Quantity		Value	
	Rutile	Anatase	Rutile	Anatase
	Tons	Tons	Rs.	Rs.
1955 (May—Dec.)	139.20	11.15	3,96,539	44,625
1956	238.05	1.15	7,56,498	18,976

11.2. *Import control policy.*—During the years 1955 and 1956 licences for imports of titanium dioxide were granted only to actual users on an *ad hoc* basis. The same policy was continued during the last licensing period, namely, January—June 1957.

12. Travancore Titanium Products Ltd., Trivandrum started exports only from July, 1954. The following statement shows the quantity of titanium dioxide exported by the Company during the years 1954, 1955 and 1956 to different countries :—

Country to which exported	Quantity exported in tons		
	1954	1955	1956
1. United Kingdom	405	572	130
2. Norway . . . . .	..	65	..
3. New Zealand . . . . .	..	10	..
4. Burma . . . . .	..	8	..
5. Pakistan	2	4.7	..
6. Australia	30	3.0	..
7. Argentina . . . . .	..	..	1.23
TOTAL	437	662.70	131.23

As internal demand increased considerably during 1956 the Company cancelled the export orders which it had on hand and confined its sales to the internal market.

13. Titanium dioxide is assessed to duty under Item No. 30(14) of the First Schedule to the Indian Tariff Act, 1934, the relevant extract from which is reproduced below :—

Item No.	Name of article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rates of duty
				The United Kingdom	A British Colony	Burma	
<hr/>							
30(14)	Titanium Dioxide—						
	(a) of British manufacture.	Protective	34 per cent <i>ad valorem</i>.	..	..	..	December 31st, 1957.
	(b) not of British manufacture .	„	44 per cent. <i>ad valorem</i>.	..	..	..	December, 31st, 1957.

In the Finance Bill introduced in the Lok Sabha on 15th May, 1957 it has been proposed that the rates of duty on titanium dioxide should be revised to 35 per cent *ad valorem* preferential and 45 per cent *ad valorem* standard.

14.1. Our Senior Cost Accounts Officer has examined the cost of production of titanium dioxide at the factory of Travancore Titanium Products and has submitted to us his Report, a copy of which has been forwarded to Government as a confidential enclosure to this Report. The period investigated covered the twelve months, ended 31st December, 1956. It will be seen from our last Report (1955) that the figures indicated by us as our estimate of cost for an output of 1800 tons was Rs. 114·279 per cwt., the actual figure of cost for the year 1956 on the achieved production of 1700·375 tons was Rs. 115·03 per cwt. It is thus seen that the Company's costs were kept under effective control and, if the set-backs suffered by the Company which resulted in shrinkage of production to the extent of about 100 tons is taken into account, some measure of economy was actually achieved by the company.

14.2. With the data obtained we have attempted to estimate the future costs applicable for the years 1957 and 1958 beyond which we are unable to project owing to the uncertainties of the Company's expansion programme. The factors assumed by us in framing our estimates are as follows:—

- (a) Production during 1957 is expected to be about 1800 tons and that in 1958, 2200 tons, subject to the proviso that the expansion, envisaged meantime, takes place.
- (b) Prices of raw materials have been assumed at Rs. 47·80 per ton for ilmenite and Rs. 190·50 per ton for sulphuric acid. The ilmenite price has been worked out on the basis of Rs. 33·33 (N.A.W.) but this is, by no means a settled factor. Allowances have been made for increases in freight, excise duties, customs duties, etc., which have taken place recently.
- (c) Depreciation has been calculated on the increased block is expected to be operative in 1958:
- (d) Interest on working capital has been allowed at 5½% on an amount equivalent to four months' cost of production, and return on block at 10% on original values.
- (e) A sum of Rs. 40 per ton has been allowed as margin for contingencies, but this may not be found to be adequate if fresh unforeseen increases have to be met in relation to raw material costs, or capital cost of expansion.
- (f) A sum of Rs. 156 per ton has been allowed as freight and delivery charges weighted on the volume of sales in Bombay, Calcutta, Delhi and Madras.

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15. Information relating to c.i.f. prices, customs duty, clearing charges and landed costs of imported titanium dioxide as furnished by the Collectors of Customs is given in Appendix III. Owing to a ban on imports, recent c.i.f. prices of anatase pigment were not available. Since anatase is the only variety that is produced in the country, we have obtained f.o.b. prices of this pigment from the Indian High Commission in U.K., the Indian Embassy in U.S.A. and one importer, and these data are also given in the Appendix. The lowest f.o.b. price of £ 167 per ton (or Rs. 111-33 per cwt.) related to the anatase pigment manufactured by British Titan Products Ltd., U.K. After adding to this amount £ 15 towards marine freight and insurance the c.i.f. price at an Indian port works out to £ 182 per ton or Rs. 121-33 per cwt. Inclusive of clearing charges, which have been estimated at Rs. 1-25 per cwt., the landed

cost without duty of the anatase pigment of U.K. origin comes to Rs. 122.58 per cwt. This figure tallies with the one furnished by the representative of the Paint Federation during the public inquiry.

16. The following table provides a comparison of the fair ex-works price (inclusive of freight and delivery charges) of indigenous titanium dioxide with the landed cost of imported pigment from the United Kingdom.

	Rs. (per cwt.)
(i) Fair ex-works price inclusive of freight and delivery charges	127.94
(ii) C.i.f. price (Paragraph 15)	121.33
(iii) Clearing charges	1.25
(iv) Landed cost without duty	122.58
(v) Excess of fair ex-works price over landed cost	5.36
(vi) The above excess as percentage of c.i.f. price	4.4%

17.1. Travancore Titanium Products has enjoyed the benefits of protection for about three years and a half and has not only shown significant progress during the period but has also fulfilled the obligations of a protected unit in commendable manner. It has undertaken large expansion schemes for which its planning appears to be on well thought out lines as was mentioned by its representative at the public inquiry, viz., that, subject to Government's approval, it will erect integrated Additional plant, machinery and equipment for raising its capacity to 3600 tons per annum of anatase and rutile pigments in such proportion as would meet the needs of the country by 1960, but would carry out the work in such a way as to make it possible for further expansion to produce 5400 tons or even 7200 tons of pigment with small increases in capital cost. It is envisaged that the projected expansion would be warranted for meeting internal demand, but even otherwise, there are export possibilities which can be definitely counted upon. The Company would, therefore, require continuance of protection and State assistance for a further period of four years, and, we accordingly recommend that protection to the industry be continued till 31st December, 1961. During this period we propose to keep a watch over the performance of the industry and ensure that consumers' interests are adequately safeguarded.

17.2. As regards the rate of protective duty we recommend that the rates proposed in the Finance Bill (No. 2) of 1957, namely, 35 per cent *ad valorem* preferential and 45 per cent *ad valorem* standard be continued during the period of protection. Our reasons for making this recommendation, despite the fact that the percentage of excess of the indigenous fair ex-works price over landed cost of the imported pigment (as indicated in paragraph 16) is only 4.4 are as follows :—

17.2.1. The current foreign prices of titanium dioxide have been influenced by a world wide scarcity of the pigment which is in such short supply that imports are difficult to obtain. At the same time

every country that is producing titanium dioxide is reported to be increasing its production, and, it is expected that in about a year more manufacturing units will catch up on increased demands when prices are likely to come down. In 1954 West German and U.K. pigment was available at round about Rs. 100 per cwt. and it was only in 1955 and 1956 when scarcity conditions had set in that the price started going up. The present c.i.f. price is, therefore, not a guide for a long term assessment of future prices.

17.2.2. As long as our imports are to remain controlled to the extent of filling the gap between internal demand and internal supply, there will be a tendency for licensees to sell the pigment at high prices and indent for increased quantities. It is as well that import duties should be maintained at proposed levels as a check on extravagant import applications or even anti-social tendencies.

17.3. We have no reason to fear that Travancore Titanium Products will take undue advantage of the high protective duties, and, in any case, we shall not hesitate to undertake an investigation into its costs and selling prices as soon as a *prima facie* case is established by consuming interests for such an investigation.

18. Our conclusions and recommendations are summarised as under :—

(1) Supply of ilmenite should be made to Travancore Titanium Products Ltd., after recovery of the "basic charge". An undertaking should be given to the company that the recovery price will remain frozen for a period of four years subject to any escalator clause that may be necessary.

Summary of conclusions and recommendations.

[Paragraph 7.1.2]

(2) Government should expedite decision on the issue of grant of licence for importing the requisite machinery for a 50 ton per day sulphuric acid plant to be erected at the factory site of Travancore Titanium Products Ltd.

[Paragraph 7.2.2]

(3) The Kerala State Government should take adequate steps to maintain the canal from Alwaye to Trivandrum free from congestion and in navigable condition at all times throughout the year.

[Paragraph 7.3]

(4) The demand for titanium dioxide during 1957 is estimated at 2600 tons of which 2200 tons will be for the anatase type and 400 tons for the rutile type. By the end of 1960 the demand is likely to increase to 3600 tons of anatase type and 1200 tons of rutile type.

[Paragraph 8.2]

(5) Government should view with favour the Company's expansion plans covering both types of titanium dioxide.

[Paragraph 8.3]

(6) With a view to conservation of foreign exchange imports of anatase titanium dioxide should be permitted only to actual users to the extent required to fill the gap between internal production and actual demand and imports of the rutile type of pigment should be carefully regulated to the extent of actual requirements of such consumers as cannot make use of the anatase type. Imports of lithopone should be strictly regulated in such a manner as to make the product available only for paint formulations in which titanium dioxide is not found suitable on technological grounds and for *bona fide* users only.

[Paragraph 8.4]

(7) Protection to the industry should be continued for a further period of four years, i.e., till 31st December, 1961.

[Paragraph 17.1]

(8) The rates of protective duty should be as proposed in the Finance Bill (No. 2) of 1957, namely, 35 per cent *ad valorem* preferential and 45 per cent *ad valorem* standard.

[Paragraph 17.2]

19. We wish to express our thanks to the representatives of the producing firm, consumers and the sole distributors for furnishing us with valuable information on various aspects of the industry and for assisting us in completing this inquiry.

Acknowledgements.

K. R. DAMLE,
Chairman.

C. RAMSUBBAN,
Member.

S. K. MURANJAN,

RAMA VARMA,
Secretary.

Member.

BOMBAY :
Dated 3rd July, 1957.

APPENDIX I

(Vide Paragraph 3)

List of firms or bodies to whom questionnaires were issued and from whom replies were received.

*Those who replied in detail.

†Those who replied stating that they are either not dealing in the product or are not interested.

PRODUCER:

*Travancore Titanium Products Ltd., Kochu Veli, Trivandrum, Kerala State.

EXPORTERS:

- *1. New Standard Chemicals Co. Private Ltd., 281, Samuel Street, Vadgadi, Bombay.
- *2. Chika Private Ltd., Industrial Assurance Bldg., Churchgate, Bombay-1.
3. Bangur Bros. 14, Netaji Subhas Road, Calcutta.
- †4. Imperial Chemical Industries (India) Ltd., I.C.I. House, 34, Chowringhee, Calcutta.
- *5. Addisons Paints and Chemicals (Private) Ltd., Sembiam, Madras-11.
6. P. C. Chanda and Co. Ltd., P2, Mission Row Extension, Calcutta-1.
7. Sepulchre Bros. (India) Ltd., Taj Building, 210, D. Naoroji Road, Bombay.
8. Noble Paint and Varnish Co. Ltd., Fergusson Road, Lower Parel, Bombay-13.
9. Macfarlane & Co. Ltd., 25, Netaji Subhas Road, Calcutta-15.
10. Hoyle, Robson, Barnett and Co. (India) Ltd., 7, Council House Street, Calcutta-1.

CONSUMERS:

1. Elephant Oil Mills Private Ltd., P. O. Box No. 663, Rustom Building, Churchgate Street, Bombay.
- *2. Goodlass Wall Private Ltd., P. O. Box No. 699, Forbes Building, Home Street, Bombay-1.
3. Lakaki Works Private Ltd., Lonavala, Poona (District), Bombay State.
- *4. Mercury Paints and Varnishes Private Ltd., Agar Bazar, Off Cadell Road, Dadar Bombay-28.
5. Hindustan Paints, Colour and Varnish Works, Katni, Jabulpore District.
- *6. Addisons Paints and Chemicals Private Ltd., Sembiam, Madras-11.
7. Titan Paints Varnish Co. Ltd., Podanur, Coimbatore (District), South India.
8. Nagrath Paints Ltd., 46, Fazal Ganj, Kanpur.
- *9. The Alkali and Chemical Corporation of India Ltd., 34, Chowringhee, Calcutta-16.
10. British Paints (India) Ltd., 32, Chowringhee, Calcutta-16.
- *11. Calcutta Paint Colour and Varnish Works, 8, Chunapukur Lane, Bow Bazar, Calcutta-12.
- *12. Hoyle, Robson, Barnett and Co. (India) Ltd., 7, Council House Street, Calcutta-1.
- *13. Jenson and Nicholson (India) Ltd., 2, Fairlie Place, Calcutta-1.
14. Macfarlane and Co. Ltd., 25, Netaji Subhas Road, Calcutta-15.
15. P. C. Chanda and Co. Ltd., P-2, Mission Row Extension, Calcutta.
16. Shalimar Paint, Colour and Varnish Co. Private Ltd., 6, Lyons Range, Calcutta-1.

CONSUMERS—contd.

- *17. Coyates of India Private Ltd., 3, Canal East Road, Ultadanga, Calcutta-14.
- 18. Rainbow Ink and Varnish Mfg. Co. Ltd., 133, Vakola, Santa Cruz, Bombay.
- *19. Firestone Tyre and Rubber Co. of India Ltd., Hay Bunder Road, Sewree, P.O. Box No. 197, Bombay.
- 20. Travancore Rubber Works, P. O. Box No.15, Trivandrum.
- *21. Dunlop Rubber Co. (India) Ltd., Dunlop House, 57-B, Free School Street, Calcutta-16.
- *22. Bata Shoe Co. Ltd., Batanagar, 24 Parganas, Calcutta.
- 23. National Rubber Manufacturers Ltd., Leslie House, 19, Chowringhee, Calcutta-13.
- *24. India Linoleums Ltd., 8, Royal Exchange Place, Calcutta-1.
- 25. Bengal Enamel Works Ltd., 60/2, Dharamtala Street, Calcutta.
- *26. Sur Enamel and Stamping Works Private Ltd., 24, Middle Road, Entally, Calcutta-14.
- 27. Indian Enamel Works Ltd., Sir P.M. Road, Bombay.
- 28. Godrej Soaps Ltd., 316, Delisle Road, Jacob Circle P.O., Bombay-11.
- *29. National Rayon Corporation Ltd., Mohone, Kalyan.
- 30. Travancore Rayons Ltd., Rayonpuram P. O., Kerala State.
- *31. B. I. United Shoe Material Co., Pipal Mandi, Agra.
- *32. Kores (India) Private Ltd., Plot No.10, Off Haines Road, Worli, Bombay-18.
- *33. Anglo Dutch Paint Colour and Varnish Works (Private) Ltd., 50, Najafgarh Road, Industrial Area, New Delhi.
- *34. Calico Mills, Post Box No. 12, Ahmedabad.
- *35. East India Paint and Chemical Works Private Ltd., 103A, Surendranath Banerjee Road, Calcutta-14.
- *36. International Rubber and General Industries Ltd., Alkarim Manzil, 2nd Floor, Palton Road, Bombay-1.
- *37. Indian Cable Co. Ltd., 9, Hare Street, Calcutta-1.
- *38. Empire Chemical Co., 14-B, Gobra Gorosthan Road, Calcutta-14.
- 39. J. B. A. Printing Inks Ltd., Bombay-Agra Road, Bhandup, Bombay-40.
- 40. Kohinoor Paint Colour and Varnish Works, 155, Katra Baryan, Delhi-6.
- 41. Modi Spinning and Weaving Mills Co. Ltd., Modinagar (U.P.)
- 42. Mysore Paper Mills Ltd., Bhadravati, Mysore State.
- *43. Noble Paint and Varnish Co. Ltd., Fergusson Road, Lower Parel, Bombay-13.
- *44. National Insulated Cable Co. of India Ltd., Post Box No. 594, Stephen Hou 4, Dalhousie Square, Calcutta-1.
- *45. Sirsilk Ltd., P. O. Sirpur, Kaghaznagar (Hyderabad-Dn.).
- *46. Titaghur Paper Mills Co. Ltd., Chartered Bank Building, Calcutta-1.
- *47. Tata Oil Mills Co. Ltd., Bombay House, Bruce Street, Bombay-1.
- *48. Western India Paint and Colour Co., 19, Venkatachala Mudali Street, Madras-3.
- *49. Hindustan Oil Mills, Babula Tank Cross Lane, Imamwada Road, Bombay-9.
- *50. Hindustan Lever Ltd., Scindia House, Ballard Estate, Bombay-1.

CONSUMER ASSOCIATIONS:

- *1. Indian Paint Manufacturers Association, Indian Exchange, India Exchange Place, Calcutta-1.

CONSUMER ASSOCIATIONS—*contd.*

- *2. Paint Federation, Post Box No. 280, Royal Exchange, Calcutta.
- *3. Association of Rubber Manufacturers in India, 57-B, Free School Street, P. O. Box No. 391, Calcutta.
- *4. Indian Rubber Industries Association, 7, Homji Street, Bombay.
- *5. Vitreous Enamellers' Association, 60/2, Dharamtala Street, Calcutta-13.
- *6. Indian Soap and Toiletries Makers' Association, P-11, Misson Row Extension, Calcutta.
- †7. Indian Paper Makers' Association, Royal Exchange, P. O. Box No. 280, Calcutta.
- †8. Indian Paper Mills Association, 23-B, Netaji Subhas Road, Calcutta.
- 9. Silk and Art, Silk Mills Association, Podar Chambers, Parsee Bazar Street, Fort, Bombay.
- 10. All India Plastic Manufacturers' Association, Chowpatty Chambers, Sandhurst Bridge, Bombay.
- *11. Indian Paint and Allied Industries Association, C/o. Wakefield Paints Private Ltd. "Dhan-nur", 15/16, Sir P. M. Road, Fort, Bombay.

SELLING AGENTS:

- * T. T. Krishnamachari and Co., Vulcan Insurance Building, Veer Nariman Road Churchgate Reclamation, Bombay-1.



APPENDIX II

(Vide Paragraph 3)

List of persons who attended the Commission's public inquiry

PRODUCER :

- | | | | |
|---|---|---------------------|--|
| 1. Mr. J. A. Andrew
2. Shri N. A. V. S. Kannan
3. Shri R.V. Nair. | } | <i>Representing</i> | Travancore Titanium Products Ltd.,
Kochu Veli, Trivandrum-7, Kerala
State. |
|---|---|---------------------|--|

SELLING AGENTS :

- | | | | |
|--|---|-------|---|
| 1. Shri V.S. Aiyer
2. Shri A. K. Nair
3. Shri M. G. Gadgil | } | . . . | T. T. Krishnamachari and Co., Vulcan
Insurance Building, Veer Nariman Road,
Churchgate Reclamation, Bombay-1. |
|--|---|-------|---|

CONSUMERS AND IMPORTERS :

- | | | | |
|---|-------|-------|--|
| 1. Mr. P. Y Scarlett
2. Shri C. H. Choksey | } | . . . | Paint Federation, Post Box No. 280, Royal
Exchange, Calcutta. |
| 3. Dr. M. B. Ichaporia | . . . | . . . | Indian Soap and Toiletries Makers' Associa-
tion, P-11, Misson Row Extension, Calcutta,
and
The Tata Oil Mills Co. Ltd., Bombay House,
Bruce Street, Bombay-1. |
| 4. Mr. Blackwood | . . . | . . . | Association of Rubber Mfrs. in India,
57-B, Free School Street, P. O. Box
No. 391, Calcutta. |
| 5. Shri R. A. Mehta | . . . | . . . | Indian Paint and Allied Industries' Associa-
tion, C/o. Wakefield Paints Private Ltd.,
Dhan-nur, 15/16, Sir P. M. Road, Fort,
Bombay-1. |
| 6. Shri A. H. Srikanta Iyer | . . . | . . . | The All India Plastic Mfrs. Association,
Chowpatty Chambers, Sandhurst Bridge,
Bombay-7. |
| 7. Shri R. A. Taraporewalla | . . . | . . . | Hindustan Lever Limited, Scindia House,
Ballard Estate, Bombay-1. |
| 8. Shri K. N. Bhatt | . . . | . . . | The New Standard Chemicals Co. Private
Limited, 281, Samuel Street, Vadgadi,
Bombay-3. |
| 9. Shri A. C. Shah | . . . | . . . | The National Rayon Corporation Limited,
Ewart House, Bruce Street, Bombay-1. |
| 10. Shri M. D. Lali | . . . | . . . | Addisons Paints and Chemicals (Private)
Ltd., Sembiam, Madras-14. |

GOVERNMENTS DEPARTMENTS :

- | | | | |
|--------------------------|-------|-------|---|
| 1. Shri N. Srinivasan | . . . | . . . | Development Wing, Ministry of Commerce
and Industry, Govt. of India, Shahjahan
Road, New Delhi. |
| 2. Shri P. T. Koman Nair | . . . | . . . | Government of Kerala, Industries Depart-
ment, Trivandrum. |
| 3. Shri A. B. Rao. | . . . | . . . | Indian Standards Institution Branch office,
Bombay. |
| 4. Shri Nerurkar | . . . | . . . | Collector of Customs, Bombay. |

APPENDIX III

(Vide Paragraph 15)

Statement showing f.o.b. quotations, c.i.f. prices, customs duty, clearing charges and landed costs of imported titanium dioxide (Per Cent.)

Serial Number.	Source of information	Origin of import	Date of import	Type & specification	C.i.f. price	Customs duty.	Clearing Charges.	Landed cost.
1	2	3	4	5	6	7	8	9
Collector of Customs, Bombay								
		U. S. A.	25-9-56	Rutile grade .	Rs. 203.25	Rs. 89.43	Rs. 10.16	Rs. 302.84
		Germany	12-1-57	Do. .	263.33	115.87	13.17	392.37
		U. K.	29-1-57	Do. .	162.67	55.31	8.13	226.11
		Japan	7-2-57	Tipague	160.67	70.69	8.03	239.39
		U. S. A.	7-2-57	Rutile grade .	154.67	68.05	7.73	230.45
		Do. .	13-2-57	..	167.24	73.59	8.36	249.19
		Western Germany	14-2-57	Rutile grade .	200.00	88.00	10.00	298.00
		U. S. A.	15-2-57	R. A. 50	156.26	68.75	7.81	234.82
		U. K.	9-3-57	Rutile grade .	185.33	63.01	9.27	257.61
Collector of Customs, Calcutta								
		U. S. A.	3-3-56	Rutile .	112.00	..	..	..
		Do. .	23-10-56	Do. .	218.62	..	..	..
		Do. .	20-11-56	Do. .	183.50	..	..	..
		Do. .	4-1-57	Do. .	165.56	..	..	..
		U. K.	8-11-56	Rutile .	134.56	..	..	..
		Do. .	7-11-56	Do. .	114.00	..	..	..
		Do. .	4-1-57	Do. .	114.81	..	..	..
		Western Germany	24-12-56	Do. .	204.00	..	..	..

3	Collector of Customs, Madras	U. S. A.	27-11-56	Rutile	..	154.00	..
4	The High Commission of India, London	U. K.	May, 1957 (Quotation)	Rutile grade Anatase grade	..	121.33*	..
5	The Indian Embassy, Washington	U. S. A.	June, 1957 (Quotation)	Rutile grade Anatase grade	..	146.37*	..
6	Chika (Private) Ltd., Bombay	West Germany	May, 1957 (Quotation)	Rutile grade Anatase grade	..	135.67	..
					..	125.67	..

*These are f.o.b. quotations.

